

Archaeological Excavation at the Woolf Institute Westminster College Cambridge



Excavation Report



May 2016

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Archaeological Excavation at the Woolf Institute, Westminster College, Cambridge


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Summary

Between June and July 2015 OA East conducted an excavation within the grounds of the Woolf Institute, Westminster College, Cambridge. The site, which is located just under 100m to the south-west of the (later) walled area of the Roman town known as 'Duroliponte', revealed a fairly dense sequence of settlement-related features spanning the Roman and post-Roman periods.

Ceramic evidence indicates that this predominantly agricultural settlement was probably established in the very latest Iron Age to Early Roman period (AD30-60), with the absence of samian in the earliest features, comprising a series of enclosure/field ditches, suggesting a pre-Conquest origin. The site appears to have been re-organised fairly rapidly after the mid 1st century, with the cutting of numerous narrow north-east to south-west aligned gullies. Other settlement-related features include the remains of at least two probable agricultural structures, one containing a hearth or oven, along with numerous pits. This was followed by a change and possible decline in activity in the mid 2nd to 3rd century, represented by the cutting of two parallel boundary ditches and a well; the latter truncating one of the earlier structures. Evidence for activity after the 3rd century is limited to a few surface finds of coins and two inhumation burials. The burials are not well-dated but their presence suggests that the site was located on the edge of any contemporary settlement (and possibly a cemetery of unknown extent) at this time.

In general, this site probably represents part of a small farming community, which also undertook some low-level metalworking, that developed within the immediate hinterland of the Roman town.

Despite the close proximity of an Anglo-Saxon cemetery to the south of the site, the evidence for activity of this date is limited to a single possible pit that truncated one of the burials. Medieval and later activity was represented by a few pits, layers and finds: evidence that is consistent with the site being located within fields and subsequently gardens until the construction of the college in the late 19th century.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 An archaeological excavation was conducted by Oxford Archaeology East (OA East) at the Woolf Institute, Westminster College, Cambridge (TL 4433 5904; Fig. 1; Plate 1). This was undertaken in advance of the construction of a new building comprising study centre, library, radio and television studio, meeting rooms, seven study bedrooms and two fellows flats, in addition to alterations to the Grade II listed boundary wall, external works and tree and shrub planting. The excavation follows an archaeological evaluation that was carried out by Cambridge Archaeological Unit (CAU) in April 2013, which identified significant remains of Romano-British date (Collins 2013).
- 1.1.2 This archaeological excavation was undertaken in accordance with a Brief issued by Kasia Gdaniec (Gdaniec 2014) of Cambridgeshire County Council (CCC; Planning Application 14/0922/FUL), supplemented by a Specification prepared by OA East.
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CCC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 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 area to be developed is located within the grounds of the Woolf Institute at Westminster College, Cambridge on the corner of Madingley Road and Lady Margaret Road. The area is a flattened artificial terrace averaging 10.76m OD, with the natural topography sloping downwards from the north-east. The underlying bedrock geology is blue-grey Gault formation clay (BGS 1981).
- 1.2.2 A borehole survey undertaken in March 2013 recorded Glacial Till over the Gault formation in six of the seven boreholes drilled across the Proposed Development Area (PDA; Geotechnical and Environmental Associates (GEA) 2013). Three of the boreholes (BHs 2, 4 and 6) were located within the archaeological excavation area. With the exception of BH2, Glacial Till was encountered below made ground and comprised firm pale grey and pale brown or orange brown silty sandy slightly gravelly clay and was found to extend to a maximum depth of 1.9m. Below the Glacial Till, or in the case of BH2 directly below the made ground, firm grey silty clay (Gault) was encountered.
- 1.2.3 Groundwater was encountered in BHs 2 and 6 and recorded as slight seepages at a depth of 0.5m in the made ground, and at 2.6m in the Gault formation. This survey indicated that the seepages (perched water) would also take place at the boundary between the Glacial Till and the Gault clay.
- 1.2.4 The archaeological evaluation took place in mid April 2013 and the report recorded that both evaluation trenches suffered from significant ground-water seepage (Collins 2013, 3). During the course of the subsequent excavation ground water seepage was noted at the base of those features that were deeper than 0.50m.

1.3 Archaeological and Historical Background

1.3.1 Prior to the start of the evaluation stage, an assessment was made of the data held in the Cambridgeshire Historic Environment Record (CHER) for a c.0.2km-0.3km area around the site, in addition to a study of the historic map sequence for the area (Collins 2013, appendix 6.5 and figures 1, 4, 5 and 6). The following section is based on this assessment as well as the WSI (Atkins 2015), with some additions and updates.

Pre-Roman

1.3.2 Prior to the Late Iron Age, there appears to have been relatively limited activity within this part of Cambridge. A scatter of Palaeolithic flakes and a hand axe have been found at Arbury (CHER 19259) and Observatory Hill (CHER 04410), while Mesolithic flint scrapers have been recovered at Queens College (CHER 05916).

1.3.3 To the south of the site, at Burrells Field, a curvilinear ditch produced flints probably of later Neolithic or Early Bronze Age date (CHER 11515). Bronze Age activity is represented by a pit that was revealed during excavations at the Kings Garden Hostel (Dodwell 2001) and two ditches of possible Bronze Age date found at Fitzwilliam College, where part of a possible structure of later Bronze Age date was also identified (CHER 15416). At land adjacent to No. 68 Castle Street, occupation layers, metallised surfaces and cut features were revealed, some of which may date to the Late Bronze Age/Early Iron Age (CHER 15498).

1.3.4 A possible Belgic settlement of the late 1st century BC appears to have been located at the site of Shire Hall, Castle Hill (to the north of the current site), represented by a number of hut enclosures and associated features spanning at least three phases (Alexander and Pullinger 2000). This extensive settlement, which was probably sited to command the River crossings and trackways to Godmanchester and the Fens, has been traced extending over seven acres and is listed by Cunliffe as a possible *oppidum* (Cunliffe and Rowley 1976). Other Iron Age settlement remains, including a large probable defensive ditch, have been found in the vicinity; the latter had been re-cut many times and was apparently still visible when the Roman main road (the *Via Devana*) was laid down over it (CHER 08768a).

Roman (Fig. 1 and Appendix D)

The Roman town and road network

1.3.5 Shortly after the Roman conquest, a fort or military post may have been established on the crest of Castle Hill, represented by a series of enclosure ditches alongside a well and two iron smelting furnaces (Alexander and Pullinger 2000). Evidence of settlement was also found to the south-west, in the form of timber lined wells, pits, ditches and the remains of a dwelling (Alexander and Pullinger 2000).

1.3.6 Although the evidence for the fort is not conclusive (Taylor 2000), it appears to have been established next to a track that would become Akeman Street, in order to guard the River crossing. This track would eventually become a major road (the road followed the present-day Stretten Avenue, Carlton Way and Mere Way running north-east past Landbeach before joining the present A10 and on towards Ely and the Fens).

1.3.7 In 2015, OA East carried out an archaeological excavation in advance of the construction of a pit for a new lift shaft in the basement of Shire Hall, Castle Hill. This revealed a sequence of Early Roman boundary ditches that appear to have been associated with occupation in an enclosure dating to the mid 1st century AD.

- 1.3.8 During the final phase of occupation a gravel surface was laid over the infill of the enclosure, indicating that the settlement had spread beyond the original confines of the enclosure (Rees 2015).
- 1.3.9 Early in the 2nd century on the western side of Castle Hill, single room wattle and daub houses were built with associated yards, pits and wells. A probable mansio with hypocaust was also evident, along with a subterranean feature containing animal sacrifices and high status artefacts that was most probably a shrine (Alexander and Pullinger 2000).
- 1.3.10 In 2002 and 2003 evaluation and a subsequent excavation were undertaken at the Cambridge Folk Museum, in advance of the redevelopment and extension of the museum. The evaluation revealed evidence of successive backyard deposits, and at a greater depth, stone and mortar structures of probable Roman date (Dickens and Armour 2002). Subsequent excavation revealed a sequence of intensive activity, interspersed with periods when the area was given over to gardening or horticulture. The earliest evidence comprised remains of a mid 1st to mid 2nd century Roman timber building fronting the road, with a neonatal burial interred in the rear of the structure. This road may mark the earliest post-Conquest route into Cambridge (Cessford 2003).
- 1.3.11 The current site is located less than 100m outside and to the south-west of the walled area of the Roman town (*'Duroliponte'*), centred on Castle Hill. The stone walls around parts of the town probably date to the mid 4th century and encompassed an area of c.8.6 hectares (Atkins 2015). The defences comprised a 12m wide ditch, a 2-3m wide stone wall and an internal rampart bank with four gates (Alexander and Pullinger 2000). The rampart of the town was uncovered in a small excavation in 1983 nearly 100m to the north-east of the site (CHER 05030 and 08770; CBA 1984).
- 1.3.12 The site is located to the east of the projected course of the Roman road known as Akeman Street and to the south of another road, the *Via Devana*. Evidence of a further Roman road was found c.50m to the west of the site (TL 442 590) during the laying of a sewage trench (CHER 05123; Browne 1974, map 1 no.35). The alignment of the road does not seem to have been recorded, but it presumably led from the town to pass just to the west of the excavation area.
- 1.3.13 Close to the site, parts of the Roman settlement have been found that extended beyond the walled area of the town. In 1896, c.70m north-west of the site, excavations recorded the remains of two buildings, an industrial or domestic kiln or oven and large quantities of artefacts, including 1000 sherds of Roman pottery (CHER 04690; MacAlister 1896). About 100m to the west of the site, pits/wells and a probable skeleton were found in c.1893 (CHER 04598; MacAlister 1896). Roman pottery has been recovered from less than 50m to the south of the site (TL 443 590; CHER 05125a; Fox 1923), and within layers c.50m to the east of the site (CHER 08407).

Post-Roman

- 1.3.14 Anglo-Saxon pottery and burials have been recorded (CHER 05125b; Fox 1923) less than 50m to the south of the site at the Saint Johns Cricket Field (TL 443 590). Saint Peter's Church 200m to the east may have been a Middle Saxon minster church (Collins 2013, section 6.5, no. 9). A few Saxo-Norman pottery sherds have been found in a small excavation in 1983 approximately 100m to the north-east of the excavation area, at Pound Hill (CHER 08770; CBA 1984).
- 1.3.15 The medieval town of Cambridge appears to have been located more than 100m to the north-east of the site, which lay within the town's West Fields; the presence of a few medieval pottery sherds from this area may be the result of manuring scatters.

- 1.3.16 In the post-medieval period, the town expanded and the 1688 David Loggan and the 1798 William Custance maps show the site as no longer under fields. In the 17th century the site lay mainly within gardens (adjacent to a large building on its eastern side), a situation that continued into the 18th century (Collins 2013, fig. 4). The site was still within gardens by the time of the 1st Edition Ordnance Survey map of 1888, although the large building previously shown to the east had disappeared to be replaced by smaller structures (Collins 2013, fig. 5). These are called Richmond Gardens on Spalding's town map of 1898 (Collins 2013, fig. 5).
- 1.3.17 Westminster College, a theological college of the United Reformed Church, was built between 1897-1899, directly to the east of the site after the land was gifted by the Smith sisters (Thompson 2008). A number of fragments of pottery vessels and fragments, all of which are Roman with the exception of one Saxon cremation urn, were found during the excavations for the foundations of the College. These finds have since been transferred to the Library (see Appendix B.3 for catalogue and discussion).
- 1.3.18 Since the establishment of the college, the area of the site has continued to be used as gardens, although it has been subject to landscaping and terracing (Collins 2013, 2).

1.4 The Evaluation

- 1.4.1 An archaeological evaluation was carried out by Cambridge Archaeological Unit (CAU) from the 15th April to the 17th April 2013 (Collins 2013). Two 10m long trenches were excavated at right angles to each other, providing a 3.8% sample of the area. Trench 1 was excavated slightly further north than originally planned due to the presence of services. A total of 15 deposits from four features were excavated and recorded, from which pottery, animal bone, worked stone and metalwork were recovered.
- 1.4.2 Trench 1 contained three Romano-British ditches: F.100, F.102 and F.103. Ditch F.100 was orientated north-west to south-east and was cut by ditch F.103 towards its eastern end. It was a moderate sized ditch which contained a moderate to high number of artefacts. Trench 2 contained a continuation of ditch F.102 in Trench 1, which was cut by small pit, F.101. Due to the angle of the ditch, only a partial slot was excavated in ditch F.102, and its full depth was not reached. However, several sherds of Early Romano-British pottery and animal bone fragments were recovered from it. Pit F.101 was infilled with dark grey clay silt and contained a small quantity of Early Romano-British pottery, animal bone and oyster shell (Collins 2015).

1.5 Acknowledgements

- 1.5.1 OA East would like to thank Westminster College, who funded the work, and Deacon and Jones LLP who commissioned the work on their behalf. The site was managed by Aileen Connor and Robert Atkins. The site supervisor was Steve Graham. The fieldwork was carried out by Katherine Hamilton, Paddy Lambert, Andy Greef, Mary Andrews, Lukas Barnes, Ashley Pooley and Rebecca Jarosz-Blackburn. OA east would also like to acknowledge the assistance of David Joyce, Gareth Pearce, Paul Halliday and Sandra Morley. The site was surveyed by David Brown. The brief was written by Kasia Gdaniec of Cambridgeshire County Council who also monitored the work. Thanks are also extended to the various specialists, the illustrators and the editor.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The original aims of the project were set out in the Brief (Gdaneic 2014) and further refined in the Written Scheme of Investigation (Atkins 2015).

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.

2.2 Regional Research Aims

2.2.1 During the Iron Age/Roman transition is there any evidence of a seamless transition or change in the use of land or farmstead or continued occupation of the site, but a change in building types or agricultural practices (Medlycott, 2011).

2.3 Site Specific Research Objectives

2.3.1 The following research priorities were recorded in the Brief (Gdaniec 2014). This Brief highlighted the issues raised in Medlycott 2011.

2.3.2 Establishing sequential land use: 3rd century decline? The pottery from the evaluation indicates an assemblage of Late Iron Age and Roman pottery spanning the 1st century BC to the 2nd century AD. Determining whether there was an event, or a series of events that may have prevented occupation beyond this period is an objective of the investigations. Did the enclosing of the 'upper town' have a negative impact on settlements that existed in the immediate vicinity?

2.3.3 Is there any further evidence to support the 1st century origins of Roman Cambridge (in addition to the excavations at Castle Street in 2005? (Medlycott 2011) and what were the urban limits of Roman Cambridge.

2.3.4 Environmental reconstruction: can the landscape be modeled and how was its transformation brought about by the settlement's inhabitants.

2.4 Methodology

2.4.1 The methodology followed that outlined in the Brief (Gdaniec 2014) and specified in the Written Scheme of Investigation (Atkins 2015).

2.4.2 The excavation was in a tightly enclosed area, bounded by trees especially on its western and southern side and there was the possibility of services running through the excavation area. These conditions affected how the site was excavated and are therefore detailed below.

2.4.3 A Tree Protection Plan (TPP) was created for the site (David Brown Landscape Design, June 2014) that recorded those trees that were to be retained and these were located around the southern, western and northern boundaries of the site. In front of these trees, a protective fence was constructed.

- 2.4.4 In addition there were areas of 'no-dig' construction and temporary surface protection within the south-eastern part of the development area. Eight trees were proposed for removal on the eastern part of the site, and this area was also used for construction access.
- 2.4.5 Machine excavation was carried out by a 14-tonne 360° excavator using a c.2m-wide flat bladed ditching bucket under the constant supervision of a suitably qualified and experienced archaeologist. To minimise damage to the College's grounds, the excavator had low-pressure rubber tyres, rather than tracks.
- 2.4.6 The site was excavated in two halves (north and south) due to issues associated with limited space to store the spoil. The area where spoil could be deposited within the site was extremely small due to the large number of protected trees within the site, and this was compounded by the c.1.3m average thickness of colluvium and made-ground which had to be machined off and stored within the excavation area.
- 2.4.7 The northern half of the excavation area was machined first with spoil stored on the southern half. Once completed, the northern half was backfilled and the southern area excavated with the spoil stored in the northern half. Finally when this area was excavated, the southern half was backfilled.
- 2.4.8 A small area measuring 2m by 2m was excavated by machine in the area of the machine ramp between the north and south halves of the site to complete the excavation of the entire area.
- 2.4.9 The site was secured using Heras fencing. Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.4.10 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.4.11 A total of 25 environmental samples were taken of various volumes from ditch slots and pits containing noticeable organic components. In addition, samples were taken from the two inhumations burials identified on site,. Samples were also taken from the contents of two possible cremation vessels and the ditch fills surrounding them.
- 2.4.12 Site conditions were mainly dry. Although it rained during the excavation, the surface dried out quickly. Ground water collected at the base of features deeper than 0.50m, but this did not prove to be too problematic.

3 RESULTS

3.1 Introduction

- 3.1.1 A notable density of features, predominantly ditches but also pits and postholes, was present across the site. The overwhelming majority of the features encountered were from the Latest Iron Age to Romano-British period, with a small number of features identifiable as post-Roman. Within these two broad periods, several sub-phases of activity have been identified.
- 3.1.2 Detailed soil descriptions are included in the text where appropriate, although in general the deposits encountered during excavation comprised single fills of similar pale to dark grey brown silty or sandy clays with occasional small stone inclusions. A full context list can be found in Appendix A, with Specialist reports provided in Appendices B and C.
- 3.1.3 Trench depth from the top of the modern layers to the top of the natural varied from 0.94m in the north-east corner of the trench to 1.26m at the south-west corner. The features cutting the natural were overlain by a thin layer of mid grey silt clay and successive layers of post-medieval levelling and garden layers.

3.2 Period 1: Latest Iron Age to Romano-British

Phase 1.1: Latest Iron Age to Early Roman (AD30-60)

- 3.2.1 This earliest phase of activity is represented by two ditches that may have formed part of an enclosure or field system, and a number of postholes possibly indicating the presence of an adjacent fenceline. These were all located in the southern half of the site. Pottery recovered from these features is fresh and in relatively good condition, and comprises wheel-made Romanizing wares that are datable to the transitional period of AD30-60. No samian was found within these deposits which may suggest that this activity was largely pre-Conquest in date (see Lyons, Appendix B.1).
- 3.2.2 A narrow north-west to south-east oriented ditch (**488**) was revealed extending across the entire width of the site for approximately 13m, with a clear change of direction towards the south-east at its eastern extent. The ditch, which was initially investigated during the evaluation as F. 100 (Collins 2013, 3 and fig. 2) was excavated in six places: **201** filled by 200, **213** filled by 211 and 212, **488** filled by 489, **573** filled by 571 and 572, **576** filled by 574 and 575 and **605** filled by 606 and 607. It was U-shaped in profile with a width that ranged from 0.50m to 0.83m and a depth from 0.17m to 0.45m. The sequence of ditch fills was generally consistent throughout with an initial fill of green grey clay silt that produced pottery (0.073kg), and an upper fill of mid grey brown clay silt that contained a larger assemblage of pottery (5.699kg). This ditch was truncated by numerous later north to south-aligned ditches spanning Periods 1.2-1.3 (see below).
- 3.2.3 Presumably contemporary with (but possibly slightly later than) ditch **488** was a north-east to south-west aligned ditch (**593**) located in the south-west corner of the site. This ditch was exposed for approximately 10.5m and was excavated in three places: **593** filled by 594, **610** filled by 611 and **612** filled by 613. The width of the ditch ranged from 0.45m to 0.65m, whilst its depth was between 0.05m to 0.14m. The disuse fills were all light grey brown clay silts containing pottery and animal bone. There was no evidence for the continuation of the ditch beyond the point where it intercepted the ditch **488** and it may conceivably have formed a partition within a larger enclosure. This ditch, which was truncated by two probable Late Roman burials (see below) also produced a single sherd of intrusive medieval pottery from **610**, fill 611.

3.2.4 Of note within ditch **488** was the presence of a Roman pottery vessel (SF38) at the base of the ditch, that was similar to the vessel found in Period 2.1 ditch **312**, which cut this ditch (see below). Initially thought to be possible cremation burials, subsequent examination found no trace of burnt bone in either of these pots. Vessel SF38, of which the body and base survived, was placed at the point where the ditch (**605**) intersected with north-to-south aligned ditch **593**. The locations of both these vessels (see below) at significant points along the ditch is suggestive of deliberate deposition, possibly as a votive deposit or termination rite (see Appendix B.1). Another find of note from this part of the ditch was a rather poorly preserved Colchester brooch (SF35), a type which has continental origins, was already in use, and being made in Britain, before the arrival of the Romans, and continued in popularity well into the middle years of the 1st century AD.

3.2.5 Located adjacent to ditch **593** in the south-west corner of the site was line of three postholes (**583** filled by 584, **589** filled by 590 and **608** filled by 609) that are likely to have been associated. They formed a probable fenceline parallel to and on the western side of the ditch, possibly indicating that the main settlement area lay to the west. The postholes had diameters of between 0.35m and 0.53m and their depths ranged from 0.05m to 0.18m. All the postholes contained a single fill of silty clay, two of which (**583** (0.008kg) and **589** (0.003kg)) contained small quantities of Early Roman pottery.

Phase 1.2: Early Roman (mid 1st to mid 2nd century AD)

3.2.6 A second phase of activity was characterised by a series of intercutting gullies and ditches running in a broad north-east to south-west alignment along the length of the site. These gullies and ditches cut across the earlier ditches and indicate a level of reorganisation in this phase, which represents some fairly intensive activity given the recutting of some ditches and the higher quantities of finds, particularly pottery. In addition to the remains of possible structures, a number of pits and a well provide more definitive evidence for settlement in this phase.

Structure 1 and other possible structural features

3.2.7 An L-shaped group of postholes located in the north-west corner of the excavation area may represent part of a structure. As this possible structure was only partly exposed within the excavation area, and the northern extent was truncated by a later feature (**411**), its full plan is not discernible.

3.2.8 The main element comprised a line of four postholes (**450** (filled by 449), **456** (filled by 457 and 458), **420** (filled by 421) and **473** filled by 474)) that extended for approximately 4m on a north-east to south-west orientation. Probably associated with these were two postholes located to the north-west: **356** (filled by 357) and **354** (filled by 388), possibly forming the foundation for part of a wall set at right angles. The sub-circular postholes were generally similar in appearance, measuring between 0.3m and 0.5m wide and between 0.06m and 0.45m deep with fairly steep sides and rounded bases.

3.2.9 The only posthole to contain evidence of packing was **354**, which cut posthole **356**. The clay packing or lining survived at the base of this posthole, which was notably more substantial than the others at 0.5m wide and 0.45m deep; presumably because it once held a load-bearing post. Posthole **356** contained 0.036kg of late 1st to mid 2nd century pottery, while the main fill of the later posthole (**355**) contained 0.007kg pottery ranging from the mid 1st to late 2nd century.

- 3.2.10 Possibly associated with Structure 1, or more likely forming a separate structure, were a further four postholes and a gully located to the south: **332** filled by 333, **338** (filled by 339) and **408** (filled by 410), **591** (filled by 592) and gully/slot **597** (filled by 595 and 596) extending to the south-east. The circular postholes all had broadly similar widths (0.2m to 0.37m) and depths (0.16m to 0.18m) and contained single mid grey silt clay fills with no evidence of post-pipes or packing. Pottery was recovered from all three posthole fills, comprising 0.027kg from 333, 0.003kg from 339, 0.020kg from 410 and 0.346kg from 592; all dating to the mid 1st to mid 2nd century. Several of the postholes (**332**, **408** and **591**) also produced small amounts of bone (some burnt) and fired clay (from **591**).
- 3.2.11 The 0.5m-wide gully or slot (**597**) was aligned north-west to south-east and extended for 1.4m before being truncated by a later ditch. Cut at its western end by posthole **591**, it had steep sides and a rounded base (0.16m deep) and contained two dark grey clay silt fills (595 and 596). The latter produced a moderate group of pottery (3.4kg) datable to the mid to late 1st century in addition to 0.3kg of animal bone and an iron spike or punch (SF54).

Structure 2: possible kitchen or workshop

- 3.2.12 A further possible structure was identified at the eastern edge of the site, comprising a group of six postholes: **306** (filled by 305), **314** (filled by 313), **622** (filled by 621), **624** (filled by 623 and 625), **632** (filled by 631) and **634** (filled by 633). These appear to have formed an arc seemingly surrounding or associated with a shallow sub-circular pit (**310/618**) that may have been the remains of a hearth or oven.
- 3.2.13 The widths of the postholes ranged from 0.38m to 0.50m and their depths from 0.07m to 0.20m. The postholes all contained a single dark grey clay silt fill with no evidence of a post-pipes or packing. Only one of these postholes (**306**) produced pottery, comprising a single sherd dating from the mid 1st to mid 2nd century.
- 3.2.14 Pit (**310/618**) had a diameter of 3m and was 0.13m deep with a U-shaped profile. It contained three fills: the initial fill (630) was a dark grey clay lining, above which was a dark reddish brown sandy clay lining (629 and 309) with evidence of burning and a moderate amount of charcoal and fired clay. All the pottery (0.576kg) from the feature came from the final disuse fill (617), a dark grey brown silt clay, containing early to mid 2nd century pottery. Combined, these features probably represent the remains of a small structure housing a hearth or oven, although an environmental sample (Sample 10 from 309) only contained a single charred grain in addition to charcoal and fragment of animal bone (see Appendix C.2).

Miscellaneous postholes and associated structures in the northern part of the site

- 3.2.15 Located close the north-west edge of the excavation were two large postholes/small pits (**463** and **465**), both with identical diameters (0.70m) and similar depths (0.16m and 0.20m respectively). Both features, which were truncated by a later ditch, contained single fills (464 and 466) with no evidence of a post-pipe or packing. A total of 0.011kg of pottery was recovered from **465** that dates from the mid 1st century.
- 3.2.16 A scattered group of postholes was identified in the north-east part of the excavation that probably represent one or more structures. At the southern extent of the group was a small posthole (**472** filled by 473) measuring 0.3m wide and 0.15m deep, which produced a single nail that is not closely datable. To the north of this was a line of three postholes (**341** filled by 340, **343** filled by 342, **406** filled by 407) aligned roughly north-west to south-east with a further pair (**451** filled by 462 and **460** filled by 461) located roughly 5m further to the north.

These postholes varied in width from 0.42m to 0.65m whilst their depths were between 0.10m to 0.19m. Pottery was retrieved from two of the fills: 340 (one sherd dating to the mid to late 1st century) and 462 (0.029kg dating to the mid 1st to mid 2nd century).

- 3.2.17 Two small postholes (334 and 336) located in the north-east corner of the site may have been associated with a short length of gully or slot (**346**) to the immediate west. The postholes measured 0.2m and 0.25m wide and 0.09m and 0.18m deep respectively, while too little feature **346** was very truncated but survived for a length of 0.6m and was 0.23m wide and 0.23m deep. None of these features produced finds.

North-east to south-west aligned ditches and associated features

- 3.2.18 The earliest ditch in this sequence (**304**) was a slightly curving feature that was revealed over a distance of 7.60m along the eastern side of the excavation, seemingly truncating Structure 2. The ditch was excavated in four slots: **304** filled by 303, **443** filled by 442, **520** filled by 521 and **620** filled by 619. Its width ranged from 0.7m to 1m and its depth from 0.26m to 0.46m, with a U-shaped profile. A single fill of grey brown clay silt was present that contained a small quantity of animal bone in addition to pottery. The latter ranges in date from the mid 1st to mid 2nd century and was recovered from fills 303 (0.883kg), 442 (0.883kg) and 619 (0.137kg).
- 3.2.19 Ditch **304** was cut by a slightly sinuous ditch (**312**) at its southern end, and which also appeared to truncate the edge of Structure 2. This ditch followed a broadly similar south-west to north-east alignment to **304**, over a distance of 14.5m before terminating. The ditch was excavated in five sections: **312** filled by 311, **504** filled by 505, **509** filled by 518, **557** filled by 556, **565** filled by 564 and 563. It measured between 0.40m to 0.75m wide with a U-shaped profile: its depth maintained an average of 0.30m other than at the terminus, where it was 0.18m deep.
- 3.2.20 An initial fill of green grey clay silt (564) was identified in one of the sections and this produced small quantities of fired clay, slag and animal bone, in addition to 1.510kg of 1st to mid 2nd century pottery. The latter includes an almost complete pottery vessel (SF36) at the base of the ditch that may conceivably have originated from earlier ditch **488** (see above). This earlier ditch produced a similar vessel and both objects may represent some form of votive deposit. Overlying this initial fill was a disuse deposit of brown grey clay silt (311, 505, 518, 556 and 563) that contained 0.275kg of mid 1st to mid 2nd century pottery, in addition to small quantities of animal bone, slag and fired clay. Of note is collection of juvenile sheep bone from ditch **565**.
- 3.2.21 Located a few metres to the west of **312** was another narrow ditch or gully (**562**) that was excavated in two sections: **562** (filled by 560 and 561) and **616** (filled by 615). The gully, which was truncated by another ditch (**344**), appeared to turn north-westwards but its course could not be traced any further. This gully had a U-shaped profile and was 0.40 wide with an average depth of 0.22m. It contained two fills comprising an initial deposit of dark grey brown silt clay (561) overlain by a backfill of blue grey silt clay (560 and 615). A single sherd of mid 1st to mid 2nd century pottery was retrieved from the later fill (560), in addition to a scrap of animal bone.
- 3.2.22 This gully was cut by a more substantial ditch (**344**) that was exposed along the entire length of the site for approximately 23m. The ditch was excavated in several sections along its length: **344** (filled by 345), **395** (filled by 396), **422** (filled by 423 and 424), **555** (filled by 553 and 554), **568** (filled by 566 and 567), **602** (filled by 603 and 604) and **626** (filled by 635). The width of the ditch, which had a U-shaped profile, varied from 0.70m to 1.20m while it was between 0.22m to 0.55m deep.

It contained two fills: an initial deposit of dark grey clay silt (423, 554, 567, 603) that was overlain by a disuse fill of mid grey clay silt (345, 396, 424, 553, 568, 604, 635).

- 3.2.23 Pottery was retrieved from both fills of the gully and comprises 0.050kg from the lower fill and 0.053kg from the upper fill, all of which (with the exception of a single sherd dating to the 3rd century) falls within the mid 1st to 2nd century date range. A single sherd of medieval coarse ware was also recovered from one slot (**602**, fill 604) that was clearly intrusive.
- 3.2.24 A narrow gully (**552**) was revealed to the immediate west of **344** and **312**, extending for a distance of 16m before being truncated by a Period 1.3 ditch. The gully was excavated in three places: **552** (filled by 551), **558** (filled by 559) and **570** (filled by 569). Its width ranged from 0.30m to 0.40m, whilst its depth measured between 0.24m and 0.9m, with fairly steep sides and a U-shaped profile. The gully contained a single fill consisting of brown grey clay silt. Pottery weighing 0.075kg was retrieved from two contexts (551 and 569) and dates from the mid 1st to mid 2nd century.
- 3.2.25 Approximately 3.5m to the west of and parallel to **552** was another gully (**323**) that was exposed over a distance of 15m before terminating. Three slots were excavated across the gully: **323** (filled by 324), **522** (filled by 523) and **614** (filled by 538). At its southern end the gully was 0.60m wide, narrowing to 0.30m at its northern terminal, while its depth ranged from 0.30m to 0.07m. It had a U-shaped profile and its single fill produced small quantities (0.218kg) of Early to Mid Roman pottery (from 523), a small amount of animal bone and a small intrusive fragment of post-medieval peg tile.

Pits located in the eastern part of the site

- 3.2.26 Towards its northern end, ditch **312** was truncated by a shallow sub-circular pit (**628**) which had a diameter of 0.94m and was 0.20m deep. It contained a single fill of dark blue grey clay silt (627) that produced 0.029kg of pottery with a date range from the mid 1st to 3rd century, in addition to small quantities of daub, animal bone and burnt flint. This pit was cut by ditch **344** on its western side.
- 3.2.27 A second pit (**508**) cut ditch **312** to the south of pit **628**. This pit was sub-circular in plan with a width of 0.90m and a depth of 0.50m. The pit contained two fills: an initial fill (516) of blue grey silt clay and an upper fill (515) which contained pottery dating from the mid 1st to the mid 2nd century and a small quantity of animal bone.
- 3.2.28 Positioned at the northern terminal of gully **312** was a small sub-circular pit (**402**) that measured 0.84m long, 0.52m wide and 0.32m deep. It contained two sandy clay fills (419 and 403) the earliest of which produced a single sherd of Early Roman pottery.
- 3.2.29 This pit was truncated by a much larger sub-circular pit (**399**) that was 2.00m long, 1.00m wide and 0.54m deep with a single fill (400) of grey sandy clay. The pottery from this fill (0.067kg) ranged in date from the mid 1st to the mid 2nd century; other finds comprise a small amount of animal bone and some burnt flint.
- 3.2.30 Located in the north-eastern corner of the site were two adjacent pits (**327** and **329**), separated by just 0.20m. Both were sub-circular in plan with U-shaped profiles and were relatively shallow at 0.2m and 0.3m deep respectively, with broadly similar widths of 0.88m and 0.82m. Pit **329** contained a single fill (330) of grey brown silt clay that produced a single 1st century pottery sherd. The more northerly pit (**327**) had a lower fill (331) and an upper fill (328) of silt clay. The upper fill contained a small quantity of animal bone in addition to pottery (0.013kg) datable to the mid 1st to mid 2nd century. This pit was truncated by Period 1.3 gully (**325**).

Intercutting pits to the west of ditch 344 (Plate 2)

- 3.2.31 A cluster of five sub-circular pits (**444**, **459**, **475**, **476** and **639**) was identified in the north-east quadrant of the site (Figs 4 and 5) directly adjacent to ditch **344**. Whereas most of the other pits were discrete examples, all of the pits in this cluster were inter-cutting and two (**459**, **444**) were both steep-sided and noticeably deeper than the surrounding features.
- 3.2.32 Pit **459** was stratigraphically the earliest of the five pits with a width of 1.1m and depth of 0.80m, with a rounded profile. This pit contained six fills (477, 478, 479, 480, 481 and 482), with evidence comprising slump deposits of sand silt at both its base (482) and midway up from the northern side of the cut (480) suggesting that it may have remained open for a while. All of the other fills were a mixture of silt clays. The earliest fill (482) contained a single sherd of mid 1st to mid 2nd century pottery. The next fill 481 contained pottery (0.116kg) from the same date range, while the final fill (477) contained 0.02kg of mid 1st century pottery. Other finds include very small quantities of animal bone and fired clay.
- 3.2.33 To the north, pit **459** was truncated by two shallow pits, both measuring 1.5m wide with rounded profiles. Pit **476** (filled by 483) was 0.10m deep, while pit **448** was 0.22m deep (filled by 447, 452, 453); the fills in these features were all dark grey brown silt clays. Pit **476** contained 0.028kg of 1st to 2nd century pottery, while the c.0.3kg of pottery from **448** dates from the mid 1st century; other finds include small quantities of animal bone and fired clay from **448**.
- 3.2.34 The final pit in the sequence (**444**) was the largest and most easterly of the cluster. It measured 1.96m wide and 2.10m long, with a depth of 0.95m. This steep-sided sub-circular pit had a rounded profile and contained three fills (453, 454, 455) of dark brown grey silt clay. The earliest fill (455) contained a small amount of animal bone and three sherds of pottery from the mid 1st to mid 2nd century; while fill 454 contained a single sherd of pottery dating from the 2nd to possibly 3rd century.

Pits and other features located to the west and north of gully 323

- 3.2.35 A number of sub-circular pits were recorded in the western part of the site, several of which were truncated by later features. Generally these pits all shared similar characteristics in that they were broad (widths ranging from 0.60m to 2.05m), shallow (0.17m to 0.30m) with gently-sloping sides.
- 3.2.36 Pit **599** was the most southerly of this group, most of the eastern half of which had been truncated away by a Period 1.3 ditch; it was also cut by small east to west running gully or slot (**597**) (see above). Its surviving dimensions were 0.60m wide with a depth of 0.17m. It was filled with a dark green grey silt clay (598) containing 0.108kg of mid 1st to mid 2nd century pottery and a small amount of animal bone.
- 3.2.37 Located immediately to the north of pit **599** (and also truncated by the Period 1.3 ditch) was a large elongated pit (**319**). This feature had a rounded profile and survived to a width of 0.66m and depth of 0.20m. Its fill (320) comprised a dark grey brown sand clay that produced a small amount of animal bone.
- 3.2.38 To the east of (and also truncated by) the later ditch were the remnants of another probable shallow pit (**321**) of which very little survived, measuring 0.88m wide and 0.20m deep. It contained a single mid brown sandy clay fill (with some charcoal flecks) (322) that produced a few sherds of mid to late 1st century pottery (0.109kg) in addition to a small quantity of animal bone and slag.

- 3.2.39 An elongated, shallow sub-circular pit **393/404** measuring 2.3m long with a surviving width of 1.5m and depth of between 0.14m to 0.22m was located to the north of **321** and was also truncated by the later ditch. This pit contained a single fill of dark grey clay silt and was excavated in two slots (**393** filled by 394 and **404** filled by 405).
- 3.2.40 A relatively large assemblage of finds was recovered, including 0.24kg of pottery (all dating from a mid 1st to 2nd century), animal bone and part of a quern stone (SF48).

Phase 1.3: Middle Roman (2nd to 3rd centuries)

- 3.2.41 The main features of this phase were two wide and deep boundary ditches (**389** and **350**) that were recorded running along the entire length of the site. The other notable feature was a possible well (**411**) that had been sunk in the north-west corner, on the site of Period 1.2 Structure 1.

Parallel ditches 350 and 389

- 3.2.42 Two similar ditches (**350** and **389**) exposed for c. 22m were aligned north-east to south-west in the western half of the site. They were parallel and adjacent to each other, separated by a distance of 1.10m to the south and widening to 2m in the north. Both ditches cut across the Period 1.1 and 1.2 features, suggesting some change or reorganisation at this time, although the alignment continued that established in Period 1.2.
- 3.2.43 Fills within ditch **350** (Figs 2, 5 and Plate 3) comprised an initial slumped deposit (351 and 352) extending down both sides of the cut, consisting of grey silty clay containing small amounts of animal bone in addition to pottery (0.159kg) datable to the 1st to 2nd century. This was followed by blueish grey silty clay (353/525/580) which produced pottery (0.21kg) ranging in date from the 1st to late 2nd centuries, in addition to small amounts of animal bone. The subsequent fills comprised a yellow grey sandy clay (317/318/468/526) containing pottery (0.385kg) from the 1st to late 2nd centuries, alongside small quantities of slag, shell and animal bone. This was overlain by a brownish grey silt clay (316/469/470/581) containing pottery (0.465kg) from the 1st to early 3rd centuries, in addition to small amounts of animal bone, slag, Roman tile and lava quern (SF39). The final disuse fill was a dark brown grey clay silt (527/528/582/600) that produced a moderately large assemblage of pottery (1.898kg) ranging in date from the mid 1st to the 3rd century, including samian, alongside small quantities of animal bone (some burnt), slag, shell and tile.
- 3.2.44 Ditch **350** had previously been investigated in the evaluation as F103 (cut **209** filled by 206, 207 and 208; Collins 2015:4). It was subsequently excavated in six sections: cut **315** filled by 316, 317 and 318; **350** filled by 351, 352 and 353; **467** filled by 468, 469 and 470; **524** filled by 525, 526, 527 and 528; **579** filled by 580, 581 and 582 and **601** filled by 600). The ditch was steep sided throughout with a U-shaped profile and ranged in width from 1.20m at its northern end to 2.90m at the southern end; its depth varied from 0.70m at its northern point to 1.02m at its southernmost extent.
- 3.2.45 Some of the pottery is likely to have been reworked from the fills of the many earlier features that it cut, although the latest pottery found suggests that it remained open until the early 3rd century. Of note from one of the ditch fills (317) was part of a possible ceramic crucible (see Appendix B.12).
- 3.2.46 Ditch **389** to the immediate east had previously been partially excavated as F102 (cut **205** filled by 204) during the evaluation. The full depth of the ditch at this time was not reached, although several sherds of Romano-British pottery and fragments of animal bone were recovered (Collins 2015, 4).

During the excavation the ditch was investigated in three sections: cut **389** (filled by 390, 391 and 392), **412** (filled by 413 and 414) and **588** (filled by 585, 586 and 587). The ditch was steep-sided with a U-shaped profile, ranging in width from 1.29m to 1.90m wide and depth from 0.50 to 0.62m.

- 3.2.47 The fills included an initial slump deposit, on the east side of the cut, comprising a dark grey silt clay (390/413/587), only one of which (413) produced finds comprising pottery (0.014kg) dating from the mid 1st to mid 2nd century and a small amount of animal bone. This was followed by disuse fills (391/392, 414 and 585) of mid grey clay silt. These fills contained pottery (0.463kg) ranging from the 1st to 2nd centuries, including decorated samian, much of which may be residual from earlier features that the ditch truncated (**488** and **552**). A small amount of intrusive medieval pottery (0.030kg) was also retrieved from the final upper disuse fill of one of the ditch sections (**389**, fill 392) dating from the mid 11th to 12th centuries.
- 3.2.48 Where the ditch was excavated during the evaluation it was found to have been cut by a small pit (F:101; cut **203** filled by 202) that contained an infill of dark grey clay silt which produced Romano-British pottery.

Well/Pit 411

- 3.2.49 A possible well (**411**; Fig. 5 and Plate 4) was located in the north-west corner of the site. This large sub-circular feature, which measured 2.6m wide and 1.3m deep, had steep sides and a concave base. It contained a sequence of 11 yellow or blue grey silty clay fills (425, 426, 427, 428, 429, 430, 431, 432, 433, 434 and 435), including possible remnants of a lining. The latter may be represented by three deposits located at the base of the cut, which included a very strong organic component of degraded wood (430, 432, 434). There was also evidence of slumping from the north side of the well (429), possibly indicating that the well was in use for long period before gradually silting up.
- 3.2.50 The pottery from the earliest fill (0.090kg; from fill 432), has a date range from the 1st to 2nd centuries, while pottery recovered from the subsequent fills (middle fill 427 (0.065kg) and uppermost fill 428 (0.008kg)) all has a similar date range. This pottery is generally in small quantities and is likely to be largely residual in this context. Other finds from the fills include small quantities of animal bone, shell and tile.
- 3.2.51 Environmental samples from the well contained a large assemblage of charred cereal processing waste in addition to carbonised cereal grains of emmer and spelt wheat, perhaps indicative of an Early Roman date (see Appendix C.3). No evidence of any waterlogged preservation was found.

Miscellaneous features

- 3.2.52 Located in the north-east corner of the site was a ditch (**325**) aligned north-west to south-east that was excavated in three sections (**325** filled by 326, **348** filled by 349 and **445** filled by 446). The ditch, which was exposed for 2m before terminating, measured between 0.55m and 0.82m wide and from 0.12m to 0.23m deep. Its single fill, a light grey brown silt clay, contained pottery (0.371kg) dating from the mid 1st to mid 2nd century, in addition to a small amount of animal bone. The pottery is likely to be residual, possibly reworked from the Period 1.2 features (e.g. **348**) that ditch **325** truncated.
- 3.2.53 A final feature in the Period 1.2 cluster of intercutting pits, located in the north-eastern quadrant of the site, was pit **475**; excavated to a depth of 0.70m.

This sub-circular steep-sided feature was 2.05m wide, with a rounded profile and contained four fills (484, 485, 486 and 487). The earliest recorded fill (484) was a thin tip layer of yellow grey sand clay on the southern edge of the pit, and was the only fill to produce finds. The latter included pottery (0.045kg) ranging in date from the 2nd to 3rd centuries, in addition to a small amount of animal bone and fired clay. All the other fills comprised dark brown grey sand clays, all also seemingly originating from the southern edge of the pit.

- 3.2.54 Cutting the southern part of ditch **389** were a pit (**534**) and a posthole (**532**). Sub-oval pit **534** was 1.64m wide and 0.24m deep and its single fill (533) comprised a dark grey clay silt containing no finds. It was truncated by sub-circular posthole **532** with a diameter of 0.60m and a depth of 0.25m; no evidence of either a post pipe or packing was present. Its single fill (531) was a dark grey clay silt containing pottery (0.040kg) dating from the 2nd century, and a small amount of animal bone.

Phase 1.4: Late Roman (late 3rd to 4th centuries)

- 3.2.55 The features associated with this phase comprise two inhumation burials (Sks 503 and 542) located in the south-west corner of the site.
- 3.2.56 Grave cut **501** (Fig. 3) was a sub-rectangular cut which measured 2.72m in length and 1.22m in width with a depth of 0.19m. The grave was aligned north-west to south-east and contained the moderately well-preserved remains of one individual (Sk 503); seemingly an adult female (see Appendix C.1). The skeleton was laid supine with the head to the east and turned to the south and arms crossed over the pelvis.
- 3.2.57 Radiocarbon dating was carried out on the left femur of the skeleton. The results were a 95.4% probability of the individual being from 250 to 390 AD and a 68.2% probability that the individual lived between 210 to 430 AD (Appendix G).
- 3.2.58 Six iron nails (SFs 18-22 and 31) were identified around the skeleton providing evidence for the location of a coffin within the grave. The back fill of the grave (502) was a silty clay containing residual Roman pottery (0.431kg) dating from the mid 1st to 2nd centuries. Other finds include fragments of animal bone and tile; the latter from surface cleaning.
- 3.2.59 Grave cut **540** (Fig. 4) was located approximately 6m to the north-west of **501** and was also sub-rectangular in plan, measuring 1.94m long and 0.92m wide with a depth of 0.18m. The cut was aligned south-east to north-west, and in contrast to Sk 503, the skeleton (an adult male) was laid in an extended supine position with the head to the west and turned to the north-east. Generally only the upper elements of the skeleton survived, with parts of the lower left arm, pelvis and legs - apart from some of the left foot bones - not being present (see Appendix C.1).
- 3.2.60 Radiocarbon dating was carried out on the left femur of the skeleton. The results were a 95.4% probability of the individual being from 250 to 390 AD and a 68.2% probability that the individual lived between 210 to 430 AD (Appendix G).
- 3.2.61 Eight iron nails were identified around the skeleton, providing evidence for the presence of a coffin within the grave. The backfill (541) of the grave was a silty clay containing mixed finds including Roman pottery (0.132kg) dating from the mid 1st to 2nd centuries, in addition to intrusive fragments of (0.095kg) of post-medieval CBM, pottery, animal bone and slag. These finds probably represent a mixture of residual finds from the underlying Period 1.1 ditch fills and later intrusive material from pit **543** and/or post-Roman agricultural activities.

3.2.62 A number of poorly-preserved Late Roman coins were found unstratified but are indicative of some activity in the 3rd and 4th centuries in the vicinity of the site (see Appendix B. 3).

3.3 Period 2: Post-Roman

Phase 2.1: Anglo-Saxon (AD 410-1066)

3.3.1 Despite the proximity of Anglo-Saxon burials close to the site, there was only a small amount of evidence for activity in this period. During the construction of the college an Anglo-Saxon funerary urn was recovered (Appendix B.2), although its exact provenance remains unknown.

3.3.2 The excavation revealed a single possible feature (pit **543**) that may date to this period, which truncated the lower part of Period 1.4 grave **540**. This sub-circular pit was 1.00m in diameter with a total depth of 0.15m and contained two fills (544 and 545). In addition to the 0.015kg of mid 1st to 2nd century pottery recovered from the upper fill (544), was a single, small (16mm in diameter) stone object (SF32): a possible bead perhaps dating from the Early to Mid Anglo-Saxon period. Whilst it is possible that this object may be intrusive, its presence within a feature that disturbed a probable Late Roman burial suggests that it may indeed be of Anglo-Saxon origin.

Phase 2.2: Medieval (AD1066-1500)

3.3.3 The Roman features were sealed by a layer of compact mid grey silt clay (302/415/441/514) that was on average 0.20m thick and may be the remains of a medieval water-lain silt.

3.3.4 A steep-sided and flat-based sub-circular pit (**308**; Plate 5), with a diameter of 0.61m and a depth 0.26m was located close to the eastern edge of the excavation area. The fill of this feature comprised a dark grey brown silty clay (307) which contained a mass of butchered horse bones that were found on the south and east sides of the pit. The type of butchery may be indicative of marrow extraction. Although no pottery was present, small fragments of late medieval and (presumably intrusive) post-medieval brick and roof tile fragments along with some lime mortar, were recovered.

3.3.5 Small amounts of medieval pottery were also present within the fills of a number of Roman ditches (**344**, **593** and **389**) and were presumably intrusive from later agricultural use of the site.

Phase 2.3: Post-medieval to Modern (AD 1500 - present)

3.3.6 Located in the south-east corner of the site was a group of features, the earliest of which was a shallow pit (**500**) that measured 2.5m wide and 0.30m deep and cut through layers sealing the Roman features. Its fill (507) was a dark grey silt clay which contained the remains of a horse that were mixed with finds of (earlier) Roman and later date. Although a single nail possibly of medieval origin (Appendix B.5), and two two medieval pottery sherds (mid 12th to 15th century) were recovered, the remainder of the 0.113kg of pottery dates from the mid 16th to 18th century.

3.3.7 This pit was cut by another, smaller pit (**550**) on its northern side that measured 0.70m wide and 0.28m deep. Its clay silt fills (548 and 549) contained fragments of pottery (0.007kg) ranging in date from the late 16th to late 17th centuries, in addition to small quantities of animal bone and brick/tile.

3.3.8 Located on the edge of this group was a shallow (0.02m) amorphous depression (**547**), the single fill (546) of which comprised a brown grey silt clay that produced two pottery sherds dating from the late 16th to late 17th centuries.

Whilst clearly from the same period as the adjacent two post-medieval pits, the relationship of this feature to the other pits remains uncertain.

Layers

- 3.3.9 The medieval layer was overlain by a layer of dark grey silt clay with a high percentage of gravel (416/440/513) that was on average 0.30m thick and contained modern coal fragments and traces of brick. Above this (only visible along the western baulk of the site) was a layer of dark yellow clay sand with a high proportion of gravel and stones (637) that was on average 0.12m thick. This deposit probably represents the remains of the documented 18th century path that was aligned north to south. This was sealed beneath a 0.12m thick layer of mid grey clay silt (512) containing frequent patches of modern mortar and plaster dating from at least the later 19th century. This was overlain by a layer (301/417/439/511) of brown grey sandy silt containing brick, modern mortar and plaster that was on average 0.12m thick. At the top of the sequence was a 0.30m thick topsoil (300/418/438/510) of brown grey silt sand containing frequent fragments of modern coal.

3.4 Finds Summary

Pottery (Appendix B.1, B.2, B3 and B.4))

- 3.4.1 A total of 1,851 sherds, weighing 27,404g (16.56 estimated vessel equivalent (EVE)), of Early to Mid-Roman pottery was recovered, mostly from ditches, but also from pits and other features. The assemblage is significantly abraded with an average sherd weight of only c.15g. The majority of the assemblage is locally produced wheel made utilitarian coarse ware vessels largely comprising jars and bowls, also handmade storage jars. The post-Conquest coarse wares are supplemented by a small amount of imported Gaulish fine table wares consisting of Samian from several factories.
- 3.4.2 A small assemblage of post-Roman domestic pottery consisting of 56 sherds, weighing 0.798kg, was recovered from features and layers across the site, some of which appears to have been intrusive. The condition of the overall assemblage is moderately abraded, with the average sherd weight from individual contexts being small to moderate at 14g.

Other Finds (Appendix B.5 to B.13)

- 3.4.3 Other assemblages recovered included a small group of metalwork and stone objects, comprising 55 fragments of ironwork, nine items of copper alloy and part of a stone bead. Five of the nine copper-alloy objects recovered are coins, all in relatively poor condition. All are of 3rd or 4th-century date. A rather poorly preserved Colchester brooch came from ditch **605** (fill 606). The ironwork is largely confined to hand-forged nails deriving for the most part from coffins associated with skeleton 503 (grave **501**) and skeleton 542 (grave **541**).
- 3.4.4 Other finds include of flint (0.035kg), shell (0.12kg), metalworking debris (1.928kg; suggesting potential copper working occurring on site), Roman (one sherd) and post-medieval glass (0.159kg), lime mortar (0.115kg), Roman and post-Roman brick and tile (2.836kg), baked clay (1.039kg) and worked stone (3.305kg), including quernstone and clay tobacco pipe (0.024kg).

Human Skeletal Remains (Appendix C.1)

- 3.4.5 Skeleton 503 is in moderate condition and is that of an adult (probable) female with an estimated stature of 155cm. Few pathological changes were observed, although healing periostitis was present on the distal femur.

While dental health appears to have been fairly poor with caries, periodontitis and ante-mortem tooth loss of the lower right molars. Skeleton 542 was only partially preserved but is that of an adult male. Healed rib fractures were observed on the left hand side, while dental health was again poor with a higher number of caries observed, although less ante-mortem tooth loss than seen in skeleton 503.

Faunal Remains (Appendix C.2)

- 3.4.6 Animal bone weighing 15.308kg was recovered, the condition of which is on the whole good with moderate levels of fragmentation. There is a fairly even distribution of cattle, horse and sheep with a much lower occurrence of pig, bird and dog. In general this assemblage would seem to represent domestic waste.

Environmental Samples (Appendix C.3)

- 3.4.7 A total of fourteen bulk samples were taken from features, with an additional twelve samples taken from the two graves (**501** and **540**) and from a possible cremation (**605**) to maximise the recovery of human skeletal remains. The bulk samples were largely unproductive with only occasional charred grains and legumes present. The exception being the two samples from well **411** which contained carbonised cereal grains of emmer and spelt wheat. The samples taken from the possible cremation only produced sparse charcoal and those from the grave fills were devoid of preserved plant remains.

4 DISCUSSION AND CONCLUSIONS

4.1 Late Iron Age to Roman transition

- 4.1.1 The earliest features comprise ditches and an associated fenceline in the southern part of the site, possibly forming part of an enclosure or field system. Pottery (predominately storage jar fragments) recovered from the Period 1.1 features and those that cut them is in relatively good condition, and comprises wheel-made Romanizing wares that are datable to the transitional period of AD30-60. It is of note that no samian was found within these deposits, which may suggest that this activity was largely pre-Conquest in date (see Lyons, Appendix B.1). Pottery (also storage jar fragments) attributed to the latest Iron Age was also retrieved during the evaluation from F103 (cut **209**), although it was clearly residual in this context as this was part of Middle Roman (Period 1.3) ditch **350**. Another contemporary find was a Colchester brooch that was found in ditch **605** and is a type of brooch that was already in use before the arrival of Rome, and continued in popularity well into the middle years of the 1st century AD (see Appendix B.1).
- 4.1.2 Noteworthy are the three postholes (**608**, **589** and **583**) in the south-western corner of the site, aligned adjacent and parallel with ditch **583**. These may represent a fenceline and their position perhaps indicates that any contemporary settlement was located to the south or west of the site.
- 4.1.3 Although no definitely Iron Age finds were recovered, there remains the possibility that an Iron Age settlement was located in the vicinity, given the small size of the excavation area. In terms of pottery, it appears that there was a seamless transition between the very latest Iron Age and Early Roman use of ceramics by the occupants of the site. A significant Iron Age settlement (a possible oppida) is known to have been established 500m to the north of the site, at Castle Hill and Mount Pleasant (Alexander and Pullinger 1999, 17). This settlement, which would later develop into the Roman town, may have been sited to command the river crossings and trackways to Godmanchester and the Fens (see Section 1.3 above).

4.2 Early Roman settlement (mid 1st to 2nd century AD)

- 4.2.1 Reorganisation of the site seems to have occurred fairly rapidly after the mid 1st century, with the cutting of numerous narrow north-east to south-west aligned gullies across the earlier enclosure/field ditches. Other settlement-related features include two possible structures, including a possible hearth or oven (?kitchen), along with numerous pits. Ceramically, the transition between Romanising grog-tempered and Roman primarily sand-tempered cordoned wide mouthed vessels is clearly evident within the pottery assemblage from the site. This period assemblage contains the largest quantity of pottery, also the most diverse range of fabrics and forms, and it is in this period that samian wares appear for the first time.
- 4.2.2 Structure 1 located in the north-west corner of the site may represent the partially-exposed and truncated remains of a rectangular building, although its alignment is somewhat at odds with the prevailing north-north-east to south-south west axis of the main ditches in this phase. This may have had a more agricultural rather than domestic function, although small quantities of late 1st to mid 2nd century pottery were recovered from some of the postholes.

- 4.2.3 Structure 2 located close to the eastern edge of the site may represent a small structure housing or partly enclosing a hearth, oven or perhaps a small furnace. At 3m in diameter it would be too small for a dwelling but may conceivably have been a kitchen or workshop, although the environmental evidence for this was not particularly compelling. Fragments of possible oven superstructure in nearby pits and ditches may conceivably have originated from this feature. The presence of quernstone fragments in a contemporary pit (**404**) indicates that crop processing and grinding was being undertaken within the site.
- 4.2.4 Whilst it is conceivable that the postholes and possible slot located towards the centre of the site may represent a further structure or structures, too little survived to support this interpretation due to later truncation.
- 4.2.5 The narrow shallow gullies (**312, 304, 323, 344, 552, 562, 593** and possibly **319**) from this phase are all on a similar orientation and may have demarcated narrow cultivation strips, or may represent boundaries and/or trackways. Although more than one phase of gully is evident, suggesting that they were redefined, the pottery associated with these features all ranges in date from the mid 1st century onwards. Similar features have been found at the Roman settlement at Radwinter, where there may have been a series of small fields or paddocks parallel to the Roman road leading from the settlement towards Wixoe (Havis 2001, 241). At the current site, if these were agricultural strips they would have presumably have extended between the *Via Devana* to the north of the site and the road identified by Alexander 50m to the west (see Section 1.3 above).
- 4.2.6 The evidence from Westminster College appears to reflect that found at other Roman towns (Burnham 1995, 10), although it is often difficult to identify individual farms inside these settlements, especially as excavations within towns are generally limited in terms of size or coverage. Many towns appear to have had ranges of buildings that often occupied enclosed strips, suggesting that some of the inhabitants were producing their own food, including keeping/rearing domestic fowl, pigs and other smaller animals (Burnham and Wachter 1990, 44-45). Other such examples of this type of agricultural practice include Great Dunmow (Essex), where similar strips were up to 100m long (Drury 1976, 124).
- 4.3 Mid-Roman reorganisation (2nd to 3rd century)**
- 4.3.1 Further change is indicated in this phase, by which time the structures had been abandoned and two large boundary ditches were laid out over the series of parallel gullies, with a well located to the west. Although the two new ditches (**350** and **389**) followed the alignment established in the previous phase, they were far more substantial than the earlier gullies and are likely to have demarcated a boundary, possibly defining the eastern extent of the settlement in this phase. The majority of the pottery within these ditches, however, dates to the mid 1st to mid 2nd century and may be largely residual, although it is possible that the main period of activity associated with these features did not continue for much longer than the late 2nd century. By this period, the fully Roman and standardised Sandy grey ware fabrics form the majority of the pottery within the period group assemblage.
- 4.3.2 The ditches may conceivably have demarcated the boundary between the settlement and agricultural land supporting the Roman town. The pottery and animal bone which was recovered from these ditches indicates that they may have been used as a dump for domestic waste whilst they were open. They were at least partially infilled by the 3rd century, as pottery of this date was present within the upper fills of the ditches.

- 4.3.3 An alternative interpretation is that these ditches formed part of a new larger enclosure with the small ditch (325) located at right angles in the north-east corner of the site forming an entrance way and/or partition. Ditch 350 directly to the west of 389 may conceivably represent a slightly later redefinition of this boundary after the earlier ditch silted up. If this was the case, these ditches may have been part of the move towards larger enclosures and increased livestock farming (see below).
- 4.3.4 Contemporary with this phase of activity was the possible pit well (411) located in the north-western corner of the site. Large, steep and relatively deep (1.3m), this feature appears to have been in use from the mid 1st to at least the mid 2nd century before being allowed to silt up. The presence of slump fills and the environmental evidence indicates that the well may have been a relatively short-lived feature that had been allowed to dry up (Appendix C.3), after which it was presumably backfilled. The pottery from the well is predominantly from the mid 1st to mid 2nd centuries, with only three sherds being retrieved (from one of the final upper disuse fills, 425) having a potential date range into the 4th century. This is consistent with the overall trend towards reduced activity at the site as a whole from the mid 2nd century onwards.
- 4.3.5 Although little evidence for contemporary occupation or structures was found within the site, the well presumably served a settlement that may have been located to the west of the site. It may also have been used to provide water for livestock, rather than any immediate domestic settlement. The dominance of butchered cattle bone within the faunal assemblage reflects the preference for cattle, that were introduced from the continent, as the Roman settlement became more established (Appendix C.2). This in turn may have led to the adoption of larger enclosures to accommodate an increase in stock-keeping at this time.
- 4.3.6 Any adjacent settlement may have formed part of an agricultural hinterland being farmed by the inhabitants, perhaps in part to provide food for the growing town of 'Duroliponte' to the north-east. Certainly the bulk of the pottery assemblage is consistent with being the buried fragmentary remains of domestic rubbish, although the core of the settlement lay beyond the confines of the site from the Mid-Roman period.
- 4.4 Later Roman contraction (mid 3rd to 4th century)**
- 4.4.1 The only coins retrieved from the site were all from the 3rd or 4th century but these were all surface finds and could not be associated to particular features. In addition, some features, such as pits 454 and 484, produced pottery from the 3rd century, suggesting that there was some limited activity continuing into the Late Roman period, but at a considerably reduced level to that which had preceded it. This suggests that the enclosing of the 'upper town' may indeed have had a negative impact on the activities in the more peripheral settlement areas such as at the Westminster College site. This situation, however, may also reflect the broader decline and contraction witnessed at this time.
- 4.4.2 This general picture of a decline in activity at the site is confirmed by the pottery assemblage recovered not only during these excavations but also during the original construction of the college (Appendix B.2). All of the fine ware pottery found dates from the 1st and 2nd centuries with a reasonable proportion of local coarse wares from the mid 3rd to 4th century, possibly indicative of a more localised economy at this time.
- 4.4.3 Analysis of the pottery assemblage supports the theory that the population of *Duroliponte* seems to have contracted (Alexander and Pullinger 1999: 80-82) within the 3rd century, becoming more concentrated within the town walls during the 4th century.

One of the research objectives was to determine if occupation of the site was directly impacted by the enclosure of the Roman town within the 4th century. Whilst no specific event or series of events can be directly attributable to the site, the evidence from the excavation corresponds to the general trend of reduced activity within Roman Cambridge from the late 2nd century onwards. Pottery use and deposition at the site was clearly in decline after the mid 2nd century. There was a decrease in the deposition of fresh pottery and increasing levels of residual material. During the last phase of Romano-British activity, only 98 sherds (0.563kg) were recovered and these were all from grave fills.

Late Roman burials

- 4.4.4 The only features assigned to the Late Roman phase are the two inhumations located in the south-western corner of the site. These are primarily assigned to this period based on the recognised chronological shift from cremation burial to inhumation burial, which combined with the absence of grave goods, would indicate that these individuals were interred in the late 3rd or 4th century. This interpretation would be in keeping to the findings to the south-east, where a Roman cemetery was excavated at Jesus Lane, (Alexander, Dodwell and Evans 2003). Additional confirmation of this interpretation of the burials was provided by the radiocarbon dating evidence for both of the individuals that firmly placed them within the Roman period (95.4%) with a strong probability (68.2%) that both burials originate from 210 to 430AD (Appendix G).
- 4.4.5 The overwhelming majority of the pottery from the Westminster College grave backfills is from the 1st and 2nd centuries, which is clearly reworked from the earlier ditch fills that these burials cut, while the few sherds of medieval pottery and post-medieval CBM are likely to be intrusive as a result of later activity on the site.
- 4.4.6 There is no evidence to suggest the individuals at Westminster College were of a particular status, however the pathologies exhibited by the skeletons may be consistent with manual labour and possibly working on the land. As was found at the Jesus Lane cemetery excavation, the skeletons appear to have been buried within wooden coffins, given the presence of numerous nails. Whilst it is possible that one of the burials could be Christian (503) due to its east to west orientation, the other burial has exactly the opposite orientation and so the interpretation remains uncertain.
- 4.4.7 These burials were in close proximity to a possible small Roman cemetery north-west of the site (TL 44125 59240), where pottery dating from the 2nd to 4th century was recovered from a boundary ditch. The latter was interpreted as a cemetery rather than a settlement boundary as there were no associated features within the enclosure area. It is possible that the inhumations at Westminster College may have been located on the edge of a similar burial enclosure (possibly associated with the 'road' identified to the west of the site). Too little was exposed to be certain, and there is no direct evidence to associate any of the boundary ditches with the burials, although it is possible that the two large parallel (Period 1.3) ditches may have continued in use into this period, albeit largely silted up. The inhumations may have formed part of a small burial ground on the edge of the farm or settlement, but without further excavation this is impossible to substantiate.

4.5 The Economy of the Roman settlement

- 4.5.1 The faunal evidence from Westminster College includes horse, cow and sheep/goat: a range of animals that is fairly typical for the period in this region.

In the Early Roman period there appear to have been at least one structure located within one of a series of individual plots. At some point, possibly by the late 1st century, there may have been a move away from these small scale farming strips towards larger enclosures. This may have been the result of changes in agricultural techniques, such as was found at Wixoe where there was evidence for larger enclosures that were probably for the keeping of stock such as cattle and sheep, rather than growing arable crops (R. Atkins pers. Comm.).

- 4.5.2 Some indication that crop-processing was being carried out in the earlier Roman phases was provided by the environmental samples (notably from the well which produced emmer and spelt wheat) in addition to fragments of quern. The identification of both emmer and spelt wheat is significant as emmer wheat became less common in the Roman period when it was replaced by spelt as the favoured variety for large-scale cultivation. Its presence at Westminster College confirms the early establishment of the site during the early 1st century. The lava quern stone would have been imported from the Rhineland while the Gritstone was sourced from the Pennines (Appendix B.13).
- 4.5.3 There is limited evidence from the site to indicate that some other specific activities were being undertaken here during the Roman period. Although no traces of iron-working or hammerscale were recorded within the environmental samples, metalworking debris (1.848kg) was retrieved from various features (mostly Early Roman ditches) across the site. Parts of a possible crucible (0.207kg) were also recovered from one of the ditches (317), while several pieces of metalworking debris contained vitrified clay lining possibly from a hearth base or crude crucible (Appendix B.12). Combined, this suggests that some metalworking, probably copper alloy working, was being undertaken on or near the site in the first two phases of its occupation; perhaps associated with the possible hearth or oven within Structure 2. The later produced 12 pieces of daub that may have derived from a superstructure. The group of shallow intercutting pits in the northern half of the site may conceivably have been shallow quarries for the extraction of clay or other materials.
- 4.5.4 The faunal assemblage with its even spread of horse, cow and sheep/goat represents domestic waste associated with a predominantly agricultural community: the dominance of butchered cow bone has already been noted.
- 4.5.5 There was little evidence of any surviving high status metalwork: a rather poorly preserved Colchester brooch (SF35) came from ditch **488** (cut **605** fill 606).
- 4.5.6 The majority of the pottery from the excavation was locally produced utilitarian reduced coarse wares, the dominant form being sandy grey ware jars and storage jars. Whilst there are some sherds from the wider Roman Empire, including samian from Gaul and Nene valley fine ware, there is nothing to indicate any particularly high status settlement within the immediate vicinity of the excavation area.

Evidence of ritual?

- 4.5.7 Of interest were the two coarse Sandy grey ware vessels (SFs 36 and 38) seemingly deliberately deposited in significant locations within two separate ditches. Most probably these vessels represent votive deposits similar to that recorded in central Cambridge (Taylor 1999, 79-80). Although it is possible that these may have been cremation vessels, no evidence was found to support this interpretation.

4.6 Post-Roman Activity

- 4.6.1 The evidence for Anglo-Saxon activity at the site is surprisingly sparse considering the close proximity of the Anglo-Saxon cemetery at the Saint Johns Cricket Field directly south of the site. A cremation urn dating to the 5th to 6th century was apparently recovered during the construction of the college foundations during 1887 to 1899 (see Appendix B.2), while the only feature identified during the current excavation was a pit (543) that cut one of the Late Roman burials (542). The pit contained a bead that has been tentatively dated to the Early to Middle Saxon period. Whilst it is possible that the Saint Johns cemetery may have extended further north, possibly as far as the current location of the college buildings, there is no evidence to suggest that the cemetery extended westwards to within the area of the excavation itself. Clearly any associated settlement was located elsewhere at this time, which combined with the absence of funerary remains means that the site cannot add anything significant to the understanding of the development of the Saxon settlement at this point.
- 4.6.2 Direct evidence for medieval activity at the site is scant. The only potential medieval feature on the site was located on the eastern edge of the excavation, and comprised a pit containing a notable quantity of horse bones. Although late medieval finds were associated with this, the presence of some possibly intrusive post-medieval CBM may indicate that it represents later activity. The evidence from this feature may hint at tallow or glue making being carried out in the vicinity of the site (Appendix C.2); further horse remains were identified within a post-medieval pit located at the south-eastern corner of the excavation area
- 4.6.3 In addition to a horseshoe, the only other identifiable late medieval or early post-medieval find (SF11) was retrieved from the topsoil and comprises a hooked clasp. These objects, used in pairs and joined by a chain to close loose garments, are relatively common finds, popular from the late 15th to the early 17th century.
- 4.6.4 The small medieval and post-medieval pottery (and other finds) assemblage appears to represent domestic background rubbish that has been reworked in later periods (Appendix B.3), with some becoming incorporated into the upper fills of the some of the Roman features. Whilst this indicates that there was some medieval occupation in the vicinity of the site, it is likely that this was at some distance from the site.
- 4.6.5 There was no further evidence of any significant activity occurring within the area of the site until the expansion of Cambridge in the later 17th century 1688, when the site became part of the formal gardens, later known as Richmond Gardens in the 19th century. The next major development was the construction of Westminster College from 1897, to the east of the site.

4.7 Conclusion

- 4.7.1 In conclusion, the evidence indicates that the site represents an agricultural hinterland settlement established in the latest Iron Age (AD30-60) that developed outside the main focal area of Roman Cambridge. This evidence tends to indicate that there was not significant urban expansion of the town into this area. Located south of the *Via Devana* and east of Akeman Street, the primary function of the site was agricultural, perhaps in part to serve the needs of the inhabitants of '*Duroliponte*'.
- 4.7.2 Ceramic analysis indicates that the 1st and 2nd centuries were the most intensive period of activity with a noticeable 'drop off' occurring at the end of the 2nd century, in line with the general trend noted for Roman Cambridge. The pottery assemblage as a whole is very similar to other groups excavated in the area and is consistent with the record of ceramic goods manufactured, used and deposited in this locality at this time.

- 4.7.3 The presence of the two burials (most probably from 230 to 350 AD) indicates a possible Roman cemetery being established at the western edge of the site near to the roadside in the late 3rd to 4th century. During the post-Roman period, the site was largely given over to fields and then gardens until the construction of the college between 1897 to 1899.
- 4.7.4 Despite the relatively small area investigated, the excavation has revealed a fairly intensive level of Romano-British activity and provided new evidence for the origin and extent of Romano-British settlement in this part of Roman Cambridge.

4.8 Significance

- 4.8.1 The excavations at Westminster College make a valuable contribution to the study of Roman settlement and local economy, and to some extent the understanding of the development of Roman Cambridge. The site generally seems to fit the pattern of development exhibited elsewhere within both Cambridge and the wider area, being established in the very latest Iron Age, with expansion and consolidation during the 1st and 2nd centuries AD followed by possible contraction and decline in the 3rd and 4th centuries. The latter may have been effected by the enclosing of the upper town in the 4th century, or may reflect wider economic and social developments at this time.
- 4.8.2 The non-urban or commercial character of the Westminster College site suggest that the Roman town did not extend this far to the south-west from the nucleus at Castle Hill.
- 4.8.3 In terms of agricultural economy, the site also seems to follow the general patterns of seen in other Roman settlements in the region, with a similar mixed arable and pastoral farming regime and types of landholding patterns.
- 4.8.4 The relative density and nature of features revealed by the excavation indicates the potential for additional Roman settlement remains to be present within the vicinity, with the added likelihood of further burials.
- 4.8.5 Whilst not particularly extensive, there is evidence for late medieval and early post-medieval activity occurring within the (eastern) vicinity of the college site, possibly involving tallow or glue making.

APPENDIX A. CONTEXT INVENTORY

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
200	201	fill	1.1	ditch	0									488
201	201	cut	1.1	ditch	0	0.55	0.17				linear	steep	concave	488
202	203	fill	0	pit	0			dark grey	clay silt					101
203	203	cut	0	pit	0.9	0.7	0.17				sub-circular		concave	0
204	205	fill	0	ditch	0									389
205	205	cut	0	ditch	0	0.6	0.3				linear	steep	concave	389
206	209	fill	0	ditch	0									350
207	209	fill	0	ditch	0									350
208	209	fill	0	ditch	0									350
209	209	cut	0	ditch	0	1.7	0.88				linear	steep	concave	350
211	213	fill	1.1	ditch	0									488
212	213	fill	1.1	ditch	0									488
213	213	cut	1.1	ditch	0	0.75	0.45				linear	steep	concave	488
214	0	layer	0	layer	0									0
215	0	layer	0	layer	0									0
300	0	layer	2.3	layer	0		0.3	dark grey brown	sandy silt					0
301	0	layer	2.3	make up	0		0.3	mid to dark brown	sandy silt	clay and orange gravel patches. Some brick and modern bottles (c. 1900)				0
302	0	layer	2.3	colluvium/su bsoil	0		0.3	dark grey-brown	silty clay	-				0
303	304	fill	1.2	ditch	0	1	0.46	mid grey-brown	silty clay	no inclusions. Moderate-large quantity of finds, some unabraded				304
304	304	cut	1.2	ditch	0	1	0.46				linear	moderate to steep	flattish	304
305	306	fill	1.2	pit	0.56	0.44	0.14	mid-dark brown	silty clay	-				306
306	306	cut	1.2	Pit/post hole	0.56	0.44	0.14				sub-circular			306
307	308	fill	2.2	pit	0	0.61	0.26	dark grey brown	silty clay	-				0
308	308	cut	2.2	pit	0	0.61	0.26				sub-circular	steep	flattish	0
309	310	fill	1.2	pit	1	0.44	0.28	darrk brown	silty clay	c. 20% fired clay, c. 5% charcoal + small stones				310

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
310	310	cut	1.2	pit	1	0.44	0.28				incomplete (? sub-circular)	moderate	flattish	310
311	312	fill	1.2	ditch	0	0.75	0.18	mid grey brown	silty clay	-				312
312	312	cut	1.2	ditch	0	0.75	0.18				linear	moderate	shallow concave	312
313	314	fill	1.2	pit/post hole	0.44	0.4	0.12	mid-dark grey brown	silty clay	-				306
314	314	cut	1.2	pit/post hole	0.44	0.4	0.12				sub-circular	moderate	flattish	306
315	315	cut	1.3	ditch	0	1.2					linear	steep, straight	not reached	350
316	315	fill	1.2	ditch	0	1.2	0.36	dark brownish grey	sandy clay	occ sub-rounded pebbles				350
317	315	fill	1.3	ditch	0	0.3	0.2	mixed light yellow and light greyish blue. Occ mid grey streaks	sandy clay	occ chalk flecks				350
318	315	fill	1.3	ditch	0	0.72	0.3	mid-light grey	sandy clay	occ gravel, increasing towards base				350
319	319	cut	1.2	ditch	0	0.66	0.2				linear	shallow	concave	0
320	319	fill	1.2	ditch	0	0.66	0.2	mid-dark greyish brown	sandy clay	occ sub-rounded stones				0
321	321	cut	1.2	pit/hollow	1.27	0.94	0.22				sub-circular	shallow	unknown (truncated/unclear)	0
322	321	fill	1.2	pit/hollow	1.27	0.94	0.22	mid-dark brownish grey	sandy clay	occ sub-rounded flints, lens of charcoal				0
323	323	cut	1.2	gully	0	0.3	0.07				linear	shallow, concave	concave	323
324	323	fill	1.2	gully	0	0.3	0.07	mid-dark grey	sandy clay	occ large pebbles				323
325	325	cut	1.3	gully	0	0.56	0.23				linear	moderate slope	flat	325
326	325	fill	1.3	gully	0	0.56	0.23	light greyish brown	silty clay	-				325
327	327	cut	1.2	pit	0	0.88	0.2				curvilinear	sloping	flat	0
328	327	fill	1.2	pit	0	0.88	0.2	light grey-brown	silty clay	-				0
329	329	cut	1.2	pit	0.7	0.82	0.3				curvilinear	moderate slope	shallow concave-flat	0
330	329	fill	1.2	pit	0.7	0.82	0.3	light grey-brown	silty clay	-				0
331	327	fill	1.2	pit	1	0.12	0.18	light yellowish/brownish grey	silty clay	-				0
332	332	cut	1.2	post hole	0	0.35	0.15				circular	moderate, straight	concave	0

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
333	332	fill	1.2	post hole	0	0.35	0.15	dark grey	sandy clay	occ sub-angular flint pebbles				0
334	334	cut	1.2	post hole	0.15	0.2	0.09				circular	steep	concave	0
335	334	fill	1.2	post hole	0.15	0.2	0.09	light brown	silty clay	-				0
336	336	cut	1.2	post hole	0.18	0.25	0.18				sub-circular	moderate slope	concave-flat (irreg)	0
337	336	fill	1.2	post hole	0.18	0.25	0.18	light greyish brown	silty clay	-				0
338	338	cut	1.2	post hole	0	0.4	0.08				circular	shallow, concave	concave	0
339	338	fill	1.2	post hole	0	0.4	0.08	mid-dark grey	sandy clay	occ subangular pebbles				0
340	341	fill	1.2	post hole	0.65	0.5	0.19	dark grey brown	silty clay	v rare small stones (<30mm)				0
341	341	cut	1.2	post hole	0.65	0.5	0.19				oval/sub-circular	steep	flattish	0
342	343	fill	1.2	pit/post hole	0.75	0.65	0.15	mid-dark grey brown	silty clay	-				0
343	343	cut	1.2	pit/post hole	0.75	0.65	0.15				sub-circular	steep-v steep	flat	0
344	344	cut	1.2	ditch	0	0.8	0.28				linear	moderate slope	irreg concave	344
345	344	fill	1.2	ditch	0	0.8	0.28	light grey brown	silty clay	-				344
346	346	cut	1.2	pit/post hole	0.6	0.23	0.23				truncated/incomplete	moderate slope	irregular	0
347	346	fill	1.2	post hole/pit	0.6	0.23	0.23	dark greyish brown	silty clay	-				0
348	348	cut	1.3	ditch	0	0.55					linear	moderate slope	concave	325
349	348	fill	1.3	ditch	0	0.55		light grey brown	silty clay	-				325
350	350	cut	1.3	ditch	0	1.3	0.7				linear	steep	concave	350
351	350	fill	1.3	ditch	0		0.7	dark grey	silty clay	v small stones/gravel				350
352	350	fill	1.3	ditch	0		0.7	light grey with white mottling	silty clay, 10% chalk	rare, randomly placed small stones				350
353	350	fill	1.3	ditch	0		0.7	mid grey	silty clay	rare randomly placed small stones				350
354	354	cut	1.2	post hole	0	0.4	0.45				curvilinear	steep	concave	0
355	354	fill	1.2	post hole	0		0.4	dark grey brown	silt clay					0
356	356	cut	1.2	pit	0.5	0.4	0.34				sub-rectangular	steep	flat	0
357	356	fill	1.2	pit	0		0.34	dark grey brown	silt clay					0
388	354	fill	1.2	post hole	0		0.41	light brown grey	silt clay					0
389	389	cut	1.3	ditch	0	1.5	0.62				linear	steep	concave	389
390	389	fill	1.3	ditch	0		0.62	dark grey	silt clay					389

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
391	391	fill	1.3	ditch	0		0.42	light grey	clay silt					0
392	389	fill	1.3	ditch	0		0.36	mid grey	clay silt					389
393	393	cut	1.2	pit	2.42	0.94	0.22				sub-circular	steep	concave	0
394	393	fill	1.2	pit	0		0.22	dark grey	clay silt	small stones-rare-random				0
395	395	cut	1.2	ditch	0	0.96	0.55				linear	moderate	concave	344
396	395	fill	1.2	ditch	0		0.35	dark grey	sand clay					344
397	397	cut	1.2	ditch	0	0.24	0.14				linear	steep	concave	0
398	397	fill	1.2	ditch	0		0.14	dark grey, orange mottling	sand clay	small stones-rare-random, flint				0
399	399	cut	1.2	pit	2	1	0.54				sub-circular	steep	concave	0
400	399	fill	1.2	pit	0		0.54	mid grey	sand clay	small stones-rare-random, flint				0
401	395	fill	1.2	pit	0		0.24	mid grey	sand clay					0
402	402	cut	1.2	pit	0.84	0.52	0.32				sub circular	steep	concave	0
403	402	fill	1.2	pit	0			mid grey	sand clay					0
404	404	cut	1.2	pit	2.42	1.5	0.14				sub-circular	moderate	concave	0
405	404	fill	1.2	pit	0		0.14	dark grey	clay silt	small stones-rare-random				0
406	406	cut	1.2	post hole	0	0.56	0.1				circular	steep	concave	0
407	406	fill	1.2	post hole	0		0.1	mid grey brown	clay silt	smasll angular stones-rare-random				0
408	408	cut	1.2	post hole	0	0.35	0.11				circular	steep	concave	0
409	408	fill	1.2	post hole	0			mid grey brown	silt clay	moderate angular stones-random-moderate				0
410	408	fill	1.2	post hole	0			mid grey orange	clay silt					0
411	411	cut	1.3	pit	2.2	2.6	1.3				sub-circular	steep	concave	0
412	412	cut	1.3	ditch	0	1.29	0.5				linear	steep	concave	389
413	412	fill	1.3	ditch	0		0.14	light yellow	silt clay	small stones-moderate-random				389
414	412	fill	1.3	pit	0		0.36	mid brown grey	silt clay	small stones-occasional-random				389
415	0	layer	0		0		0.44	dark brown grey	clay silt	medium stones-moderate-random				0
416	0	layer	0		0		0.2							0
417	0	layer	0	layer	0		0.16							0
418	0	layer	0		0		0.2							0
419	402	fill	1.2	pit	0		0.18	light grey, yellow mottling	sand clay	small angular stones +flint-well sorted-moderate				0
420	420	cut	1.2	post hole	0	0.3	0.18				circular	steep	concave	436

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
421	420	fill	1.2	post hole	0		0.18	mid grey brown	clay silt	small stones-rare-random				436
422	422	cut	1.2	ditch	0	0.8	0.3				linear	steep	concave	344
423	422	fill	1.2	ditch	0		0.3	dark grey	clay silt					344
424	422	fill	1.2	ditch	0		0.2	light grey	clay silt					344
425	411	fill	1.3	pit	0		1.6	dark grey	silt clay	small stones-rare-random				0
426	411	fill	1.3	pit	0		0.44	dark blue grey	silt clay					0
427	411	fill	1.3	pit	0		0.48	light brown grey	silt clay					0
428	411	fill	1.3	pit	0		0.52	light brown grey	silt clay	small stones-rare-random				0
429	411	fill	1.3	pit	0		0.9	dark blue grey	silt clay					0
430	411	fill	1.3	pit	0		1.08	dark blue grey	silt clay					0
431	411	fill	1.3	pit	0		1.11	light yellow grey	silt clay					0
432	411	fill	1.3	pit	0		1.4	dark blue grey	silt clay					0
433	411	fill	1.3	pit	0			light yellow grey	silt clay					0
434	411	fill	1.3	pit	0		1.3	dark blue grey	silt clay					0
435	411	fill	1.3	pit	0		1.4	light yellow grey	silt clay					0
436	436	cut	1.2	post hole	0	0.3	0.21				circular	steep	concave	436
437	436	fill	1.2	post hole	0		0.21	light yellow grey	silt clay	small stones-occasional-random				436
438	0	layer	2.3	layer	0		0.16	dark grey brown	sand silt					0
439	0	layer	2.3		0									0
440	0	layer	0	layer	0		0.2							0
441	0	layer	0	layer	0		0.31							0
442	443	fill	1.2	ditch	0		0.38	light grey	clay silt					304
443	443	cut	1.2	ditch	0		0.38				linear	steep	concave	304
444	444	cut	1.2	pit	0	2.05	0.95				sub-circular	steep	concave	0
445	445	cut	1.3	ditch	0.8	0.82	0.12				linear	steep	concave	325
446	445	fill	1.3	ditch	0		0.12	mid brown grey	silt clay	small stones-moderate-random				325
447	448	fill	1.2	pit	0		0.15	dark grey brown	silty clay	gravel-rare-random				0
448	448	cut	1.2	pit		1.5	0.25				sub-circular	steep	concave	0
449	450	fill	1.2	post hole	0		0.06	dark grey	clay silt					450
450	450	cut	1.2	post hole	0	0.32	0.06				sub-circular	moderate	concave	436
451	451	cut	1.2	post hole	0	0.55	0.14				sub-circular	steep	concave	0

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
452	448	fill	1.2	pit	0		0.1	mid grey brown	silt clay	small stones and gravel-rare-random				0
453	448	fill	1.2	pit	0		0.4	dark brown	silt clay	gravels-rare-random				0
454	444	fill	1.2	pit	0		0.4	dark brown grey	silt clay	gravel and chalk-rare-random				0
455	444	fill	1.2	pit	0		0.42	mid grey	clay	chalk flecks-rare-random				0
456	456	cut	1.2	post hole	0						circular	steep	concave	436
457	456	fill	1.2	post hole	0	0.2	0.06	dark grey	clay silt					436
458	456	fill	1.2	post hole	0		0.06	light grey	clay silt					0
459	459	cut	1.2	pit	0	1.1	0.8				sub-circular	steep	concave	0
460	460	cut	1.2	post hole	0	0.42	0.16				sub-circular	steep	concave	0
461	460	fill	1.2	post hole	0		0.16	mid grey	clay silt					0
462	451	fill	1.2	post hole	0		0.14	mid grey	clay silt					0
463	463	cut	1.2	post hole	0	0.7	0.16				circular	moderate	concave	
464	463	fill	1.2	post hole	0		0.16	light yellow brown	silt clay	small stones-rare-random				
465	465	cut	1.2	pit	0	0.7	0.2				circular	moderate	concave	0
466	465	fill	1.2	post hole	0		0.2	light yellow brown	silt clay	small stones-rare-random				0
467	467	cut	1.3	ditch	0	1.76	0.8				linear	steep	concave	350
468	467	fill	1.3	ditch	0		0.2	mid yellow grey	sand clay	small stones-rare-random, charcoal flecks				350
469	467	fill	1.3	ditch	0		0.3	dark brown grey	silt clay	small stones-moderate-random				350
470	467	fill	1.3	ditch	0		0.36	dark brown grey	silt clay	small stones-rare-random				350
471	472	fill	1.2	post hole	0		0.15	dark brown	silt clay					0
472	472	cut	1.2	post hole	0	0.3	0.15				sub-circular	steep	concave	0
473	473	cut	1.2	post hole	0	0.3	0.09				circular	steep	concave	436
474	473	fill	1.2	post hole	0		0.09	dark grey	clay silt					436
475	475	cut	1.3	pit	0	2.05					sub-circular	steep	concave	0
476	476	cut	1.2	pit	0	1.5	0.08				circular	shallow	concave	0
477	639	fill	1.2	pit	0		0.28	dark grey	sandy clay					0
478	459	fill	1.2	pit	0		0.18	light grey yellow	sand clay					0
479	459	fill	1.2	pit	0		0.24	mid grey	sand silt					0
480	459	fill	1.2	pit	0		0.08	light white yellow	clay					0
481	459	fill	1.2	pit	0		0.28	dark grey	sandy clay					0
482	459	fill	1.2	pit	0		0.3	light white yellow	clay					0

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483	476	fill	1.2	pit	0		0.08	mid brown grey	sandy clay					0
484	475	fill	1.3	pit	0		0.48	dark brown grey	sand clay					0
485	475	fill	1.3	pit	0		0.56	dark brown grey	sand clay					0
486	475	fill	1.3	pit	0		0.1	dark brown orange	sand clay					0
487	475	fill	1.3	pit	0			light yellow grey	sand clay					0
488	488	cut	1.1	ditch	0	0.68	0.17				linear	moderate	concave	488
489	488	fill	1.1	ditch	0		0.15	mid brown grey	sand clay	flint nodules-moderate-random				488
490	488	fill	1.1	ditch	0		0.17	light yellow grey	sand clay					0
500	500	cut	2.2	pit	0.9	2.5	0.3				sub-circular	gentle	concave	0
501	501	cut	1.4	pit	1.92	0.68	0.19				curvilinear	steep	concave	0
502	501	fill	1.4	grave fill	0		0.19	mid yellow grey	silt clay	stones-occasional				0
503	501	HSR	1.4	grave	1.92	0.68	0.19							0
504	504	cut	1.2	ditch	0	0.4	0.3				linear	steep	concave	312
505	504	fill	1.2	ditch	0		0.2	mid brown grey	silt clay	medium stones-moderate-random				312
506	504	fill	1.2	ditch	0		0.1	mid orange brown	clay sand	large stones-moderate-random				304
507	500	fill	2.2	pit	0		0.3	dark grey brown	silt clay	small stones-rare-random				0
508	508	cut	1.2	pit	0		0.5				sub-circular	steep	concave	0
509	509	cut	1.2	ditch	0	0.72	0.3				linear	steep	concave	312
510	0	layer	0	top soil	0		0.15	light brown grey	silt sand					0
511	0	layer	0	layer	0		0.65	light white grey	sand silt					0
512	0	layer	0	layer	0		0.2	mid brown grey	sandy silt	chalk				0
513	0	layer	0	layer	0		0.25	dark blue grey	clay silt					0
514	0	layer	0	layer	0		0.2	mid blue grey	clay silt					0
515	508	fill	1.2	pit	0		0.35	mid dark grey	sand clay	sub-angular flint nodules-moderate-random				0
516	508	fill	1.2	pit	0		0.42	mid blue grey	clay	clay sand				0
517	0	layer	0	layer	0		0.06	mid orange	sand clay	ocasional flint random				0
518	509	fill	1.2	ditch	0		0.27	mid brown grey	sand clay	sub angular flints-occasional-random				312
519	509	fill	1.2	ditch	0	0.55	0.14	mid yellow grey	sand clay	occasional sub-rectangular flint pebbles				0
520	520	cut	1.2	ditch	0		0.26				linear	steep	concave	304
521	520	fill	1.2	ditch	0		0.26	mid brown grey	sand clay	flint-moderate-random				304
523	522	fill	1.2	ditch	0			mid grey brown	clay silt	occasional small stones				323

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
524	524	cut	1.3	ditch	0	2.9	1.02				linear	sttep	concave	350
525	524	fill	1.3	ditch	0		1.02	light blue grey	silt clay	small stones-occasional-random				350
526	524	fill	1.3	ditch	0		0.84	light grey yellow	silt clay	occasional chalk flakes-random-				350
527	524	fill	1.3	ditch	0		0.27	dark brown grey	clay silt	small stones-frequent-random-charcoal				350
528	524	fill	1.3	ditch	0		0.36	dark grey brown	clay silt	small stones-frequent-random-charcoal				350
529	529	cut	1.3	ditch	0	0.6	0.5				linear	steep	concave	389
530	529	fill	1.3	ditch	0		0.5	mid grey brown	silt clay	small stones-occasional-random				389
531	532	fill	1.3	post hole	0		0.34	dark grey	clay silt	small stones-rare-random				0
532	532	cut	1.3	post hole	0	0.6	0.24				circular	steep	concave	0
533	534	fill	1.3	pit	0		0.24	mid grey	clay silt	small stones-rare-random				0
534	534	cut	1.3	pit	1.2	0.88	0.24				sub-circular	steep	concave	0
535	535	cut	1.3	ditch	0		0.22				linear	steep	concave	323
536	614	fill	1.2	ditch	0		0.18	mid brown grey	silt clay					488
537	614	fill	1.2	ditch	0		0.2	grey + orange mottling	silt clay + sand	small stones-rare-random				488
538	535	fill	1.3	ditch	0		0.14	light brown grey	silt clay	small stones-random-rare				0
539	535	fill	1.3	ditch	0		0.24	mid brown orange	silt clay					539
540	540	cut	1.4	grave	1.5	0.9	0.18				sub-rectangular	moderate	concave	0
541	540	fill	1.4	grave	0		0.18	dark grey brown	clay silt	small stones-rare-random				0
542	540	HSR	1.4	skeleton	0		0.18							0
543	543	cut	2.1	pit	0	0.3	0.15				linear	gradual	concave	0
544	543	fill	2.1	pit	0		0.08	light yellow grey	clay	flint-rare-random				0
545	543	fill	2.1	pit	0		0.15	light yellow grey	sandy clay	small stones-rare-random				0
546	547	fill	2.2	pit	0	1.7		dark brown grey	clay silt	occasional sub-round stones				0
547	547	cut	2.2	tree throw	0						indeterminate			0
548	550	fill	2.3	post hole	1	0.7	1.2	dark brown grey	clay silt	occasional-sub-angular flint				0
549	550	fill	2.3	post hole	0.9	0.6	0.18	light grey green	clay silt	occasional flint				0
550	550	cut	2.3	post hole	0	0.7	0.28				sub-rectangular	moderate	concave	0
551	552	fill	1.2	ditch	0		0.24	mid grey	clay silt	small stones,rare,random				552
552	552	cut	1.2	ditch	0	0.3	0.22				linear	steep	concave	552
553	555	fill	1.2	ditch	0		0.3	light grey	clay silt	medium stones-rare-random				344
554	555	fill	1.2	ditch	0		0.54	dark grey	silt clay	small stones-rare-random				344

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
555	555	cut	1.2	ditch	0	1.2	0.54				linear	steep	concave	344
556	557	fill	1.2	ditch	0		0.3	mid grey	clay silt	small stones-random-rare				312
557	557	cut	1.2	ditch	0	0.42	0.3				linear	steep	concave	312
558	558	cut	1.2	ditch	0	0.38	0.12				linear	steep	concave	552
559	558	fill	1.2	ditch	0		0.12	mid brown grey	silt clay	small and large inclusions-random-moderate				552
560	562	fill	1.2	ditch	0		0.16	dark blue grey	silt clay	small stones-rare-random				562
561	562	fill	1.2	ditch	0		0.22	dark grey brown	clay silt	small stones-rare-random				562
562	562	cut	1.2	ditch	0	0.4	0.22				curvilinear	steep	concave	562
563	565	fill	1.2	ditch	0	0.7	0.2	dark brown grey	clay silt	small stones-rare-random				312
564	565	fill	1.2	ditch	0		0.35	mid green grey	clay silt	small stones-rare-random				312
565	565	cut	1.2	ditch	0	0.7	0.35				linear	steep	concave	312
566	568	fill	1.2	ditch	0		0.22	dark brown grey	clay silt	occ charcoal,small stones-rare-random				344
567	568	fill	1.2	ditch	0		0.9	mid blue grey	clay silt	small stones-rare-random				344
568	568	cut	1.2	ditch	0	1	0.31				linear	steep	concave	344
569	570	fill	1.2	ditch	0		0.9	dark blue grey	clay silt	small stones-occasional charcoal				552
570	570	cut	1.2	ditch	0	0.4	0.9				linear	steep	concave	552
571	573	fill	1.1	ditch	0		0.14	mid grey brown	clay silt	flinty pebbles-rare-random				488
572	573	fill	1.1	ditch	0		0.13	light green grey	clay silt	small stones-occasional-random				488
573	573	cut	1.1	ditch	0	0.5	0.27				linear	moderate	concave	488
574	576	fill	1.1	ditch	0		0.15	mid grey brown	clay silt					488
575	576	fill	1.1	ditch	0		0.11	light green grey	clay silt	occasional charcoal,small stones-rare-random				488
576	576	cut	1.1	ditch	0	0.5	0.24				linear	steep	concave	488
577	577	cut	1.1	ditch	0	0.6	0.12				linear	steep	concave	0
578	577	fill	1.1	ditch	0		0.12	dark grey brown	clay silt	frequent gravel				0
579	579	cut	1.3	ditch	0	2.5	0.9				linear	steep	concave	350
580	579	fill	1.3	ditch	0			mid blue grey	clay	small stones-rare-random				350
581	579	fill	1.3	ditch	0			dark brown grey	silt clay	small stones-rare-random				350
582	579	fill	1.3	ditch	0			dark green grey	clay silt	small stones-rare-random				350
583	583	cut	1.1	post hole	0	0.5	0.09				circular	gradual	concave	0
584	583	fill	1.1	post hole	0		0.09	dark blue grey	silt clay					0
585	588	fill	1.3	ditch	0		0.5	dark green grey	clay silt	small stones-rare-random				389

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
586	588	fill	1.3	ditch	0		0.7	light green grey	silt clay	small stones-rare-random				389
587	588	fill	1.3	ditch	0		0.56	dark green grey	clay silt	small stones-rare-random				389
588	588	cut	1.3	ditch	0	1.9	0.7				linear	steep	concave	389
589	589	cut	1.1	post hole	0	0.53	0.1				sub-circular	shallow	concave	0
590	589	fill	1.1	post hole	0		0.1	mid yellow brown	silt clay	small stones-rare-random				0
591	591	cut	1.2	post hole	0	0.37	0.18				sub-circular	moderate	concave	0
592	591	fill	1.2	post hole	0		0.18	dark blue brown	clay sand	small stones-rare-random				0
593	593	cut	1.1	ditch	0	0.62	0.14				linear	steep	concave	593
594	593	fill	1.1	ditch	0		0.14	mid brown grey	clay sand	small stones-moderate-random				593
595	597	fill	1.2	ditch	0		0.13	dark grey brown	clay silt	medium ang stones-random-rare				0
596	597	fill	1.2	ditch	0		0.22	dark grey	clay silt	small stones-rare-random				0
597	597	cut	1.2	gully	1.4	0.5	0.22				linear	steep	concave	0
598	599	fill	1.2	pit	0		0.17	dark green grey	silt clay	small stones-moderate-random				0
599	599	cut	1.2	pit	0	0.6	0.17				sub-circular	moderate	concave	0
600	601	fill	1.3	ditch	0			dark grey brown	clay silt	occasional small stones-moderate-random,charcoal				350
601	601	cut	1.3	ditch	0						linear	steep	concave	350
602	602	cut	1.2	ditch	0	0.7	0.46				linear	steep	concave	344
603	602	fill	1.2	ditch	0		0.46	mid brown grey	clay silt	small stones-rare-random				344
604	602	fill	1.2	ditch	0		0.36	dark brown grey	clay silt	small stones-rare-random				344
605	605	cut	1.1	ditch	0	0.83	0.25				linear	moderate	concave	488
606	605	fill	1.1	ditch	0			dark grey brown	clay silt	small stones-frequent-random				488
607	605	fill	1.1	ditch	0	0.83	0.25	light yellow grey	clay sand	small stones-moderate-random				488
608	608	cut	1.1	post hole	0	0.34	0.05				circular	gradual	concave	0
609	608	fill	1.1	post hole	0		0.05	light grey brown	clay silt	small stones-random-moderate				0
610	610	cut	1.1	ditch	0	0.45	0.05				linear	gradual	flat	593
611	610	fill	1.1	ditch	0		0.05	light grey brown	silt clay	occasional small stones				593
612	612	cut	1.1	ditch	0	0.65	0.08				linear	gradual	concave	593
613	612	fill	1.1	ditch	0		0.08	light brown grey	clay silt	small stones-occasional-random				593
614	614	cut	1.2	ditch	0	0.42	0.18				linear	steep	concave	488
615	616	fill	1.2	ditch	0		0.09	dark blue grey	silt clay	small stones-rare-random				562
616	616	cut	1.2	ditch	0	0.3	0.08				linear	steep	concave	562

<i>Context</i>	<i>Cut</i>	<i>Category</i>	<i>Phase</i>	<i>Feature Type</i>	<i>Length</i>	<i>Breadth</i>	<i>Depth</i>	<i>Colour</i>	<i>Fine component</i>	<i>Coarse component</i>	<i>Shape in Plan</i>	<i>Side</i>	<i>Base</i>	<i>Group Number</i>
617	618	fill	1.2	hearth	0		0.05	dark brown grey	silt clay	small stones-random-rare				310
618	618	cut	1.2	hearth	1.2	0.9	0.14				sub-circular	steep	concave	310
619	620	fill	1.2	ditch	0		0.22	dark grey	clay silt	small stones-rare-random				304
620	620	cut	1.2	ditch	0	0.7	0.34				linear	steep	concave	304
621	622	fill	1.2	pit	0		0.07	dark grey	clay silt	small stones-rare-random				306
622	622	cut	1.2	pit	0	0.38	0.07				circular	steep	concave	306
623	624	fill	1.2	post hole	0	0.25	0.2	dark grey	clay silt	small stones-rare-random				306
624	624	cut	1.2	post hole	0	0.5	0.2				sub-circular	steep	concave	306
625	626	fill	1.2	ditch	0		0.23	mid blue grey	clay silt	small stones-rare-random				0
626	626	cut	1.2	ditch	0		0.22				linear	steep	concave	344
627	628	fill	1.2	pit	0		0.1	dark blue grey	clay silt	small stones and flint-rare-random				0
628	628	cut	1.2	pit	0	1.22	0.1				sub-circular	moderate	concave	0
629	618	fill	1.2	hearth	0		0.1	dark red brown	sand clay	small stones-rare-random				310
630	618	fill	1.2	hearth	0		0.15	dark grey	clay silt	small stones-rare-random				310
631	632	fill	1.2	post hole	0		0.04	mid grey brown	clay silt	small stones-rare-random				306
632	632	cut	1.2	post hole	0	0.25	0.04				circular	steep	concave	306
633	634	fill	1.2	post hole	0	0.3	0.08	mid grey brown	clay silt	small stones-rare-random				306
634	634	cut	1.2	post hole	0	0.3	0.08				circular	steep	concave	306
635	626	fill	1.2	post hole	0		0.18	dark grey	silt clay	small stones-rare-random				344
636	620	fill	1.2	ditch	0		0.34	mid grey	clay silt	small stones-rare-random				0
637	0	layer	0	surface (external)	0		0.68	dark yellow	clay sand	gravel and small stones-v frequent-random				0
638	620	fill	1.2	vessel	0			dark grey brown	clay silt	small stones-rare-random				0
639	0	fill	1.2	cremation ?? ??	0			mid green grey	clay silt	small stones-rare-random				0

APPENDIX B. FINDS REPORTS

B.1 Romano-British Pottery

By Alice Lyons

Introduction and methodology

- B.1.1 A total of 1,851 sherds, weighing 27,404g (16.56 estimated vessel equivalent (EVE)), of early to mid-Roman pottery was recovered during an archaeological evaluation and excavation at Woolf Institute, Westminster College, Cambridge. Pottery was recovered from 80 cut features (115 deposits) mostly from ditches, but also from pits and other features (Table 1).
- B.1.2 The majority of the pottery is consistent with deposits of dumped material and was not therefore recovered *in situ*, indeed the assemblage is significantly abraded with an average sherd weight of only c. 15g. It should be noted, however, that two vessels (SF 36 & 38) may have been deliberately placed within ditches **488** and **312** (discussed below).

Feature	Sherd Count	Weight (g)	EVE	Weight (%)
Ditch	1373	22444	1371	81.90
Pit	226	2560	155	9.34
Hearth	25	576	8	2.10
Grave	98	563	37	2.06
posthole	86	496	14	1.82
Unstratified	27	486	8	1.77
Gully	4	135	39	0.49
Pit/hollow	9	110	6	0.40
Layer	3	34	18	0.12
Total	1851	27404	1656	100.00

Table 1: Pottery from features

- B.1.3 The pottery was analysed following the guidelines of the Study Group for Roman Pottery (Darling 2004). The total assemblage was studied and a catalogue was prepared. The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. The sherds were counted and weighed to the nearest whole gram and recorded by context. Decoration, residues and abrasion were also noted. Local (Farrar, Hull and Pullinger 1999; Anderson with Brudenell 2010), regional (Thompson 1982) and national (Tomber and Dore 1998; Tyers 2006) publications were used for identifying the fabrics and forms.
- B.1.4 OA East curates the pottery and archive.
- B.1.5 A total of 12 broad fabric families were recorded (Table 2).
- B.1.6 The majority of this material comprises locally produced utilitarian reduced coarse wares. Indeed, coarse Romanising sandy grey wares jars and storage jars dominate the assemblage, although more typically Roman Sandy grey wares are also common.

- B.1.7 Some material was traded from other regional centres and the wider Roman empire. Olive oil amphora was traded from Southern Spain and a small number of Gaulish fine samian table wares were also found. A very few fragments of fine wares produced in the Nene Valley, near Peterborough, were also recognised.

Fabric	Abbreviation	Sherd Count	Weight (g)	EVE	Weight (%)
Coarse sandy grey ware	SGW(ROMANIZING)	1030	16111	8.16	58.8
Sandy grey ware	SGW	428	4410	4.30	16.10
Horningsea sandy coarse ware	HORN	66	3656	1.24	13.35
Sandy oxidised ware	SOW	141	1455	0.49	5.30
Sandy red ware	SREDW	59	645	0.21	2.35
Fine grey ware	GW(FINE)	75	484	1.58	1.77
Shell tempered ware	STW	24	234	0.17	0.85
Verulamium white ware	VOW	3	173	0.14	0.63
Spanish amphora	BAT AM	2	127	0.00	0.46
Nene Valley grey ware	NVGW	1	44	0.11	0.16
Samian	SAM	17	40	0.05	0.14
Nene Valley colour coat	NVCC	5	25	0.11	0.09
Total		1851	27404	16.56	100.00

Table 2: Summary of the Roman pottery fabrics and forms, listed in descending order of weight (%)

The Fabrics (listed in alphabetical order)

Coarse sandy grey ware: SGW(ROMANISING)

- B.1.8 A broad group of locally produced sand tempered fabrics which are inconsistently fired and range from black to mid grey in colour, some with oxidised surfaces. The fabric also includes common fine flint, sparse silver mica and grog (Gibson and Lucus 2002, 126, Rom1).

- B.1.9 Vessel types: butt beaker 3.13, jar 4.4, 4.5, storage jar 4.14, wide mouthed jar 5, 5.3, 5.4, cup 6.19, dish 6.21.

Fine grey ware: GW(FINE)

- B.1.10 This is a dark brownish grey fabric with a similar or darker surface; it is hard with a smooth fracture and it has a smooth to soapy feel. This is a fabric colloquially referred to as 'London ware' (Tyers 1996, 170-171); it was made at several centres including West Stow and Wattisfield in Suffolk, the Nene Valley, also London. Vessels in this fabric are good quality and often copied early Roman samian forms (Anderson with Brudenell 2010, fig. 11, no. 4).

Vessel types: beaker 3.13, 3.14, cup Dr24/25 copy

Horningsea sandy coarse ware: HORN

- B.1.11 Typically, this fabric has a brown-grey colour, it contains abundant quartz, sparse iron and limestone, also silver mica inclusions (Tomber and Dore 1998, 116).

- B.1.12 Handmade thick sherds are generally associated with large storage jars with a distinctive out-turned rim; combed decoration is sometimes present (Anderson with Brudenell 2010, fig 11, no 6).

Vessel types: storage jar 4.17

Nene Valley colour coat: NVCC

- B.1.13 Pale cream-to-orange fine ware sherds, decorated with a range of self-coloured slips (Tomber and Dore 1998, 118).

Vessel types: beaker 3.3, jar 5.3

Nene Valley grey ware: NVGW

- B.1.14 Pale cream-to-pale grey sherds with a grey surface. This material was first produced in the second quarter of the 2nd century, continuing throughout the 3rd century, but appears to have ceased production in the 4th century (Perrin 1999, 78–87).

Vessel types: dish

Samian: SAM

- B.1.15 A distinctive glossy red fine table ware fabric, often relief-decorated (Tomber and Dore 1998, 25–41). A variety of southern (SAM SG), central (SAM CG) and eastern (SAM EG) Gaulish samian was recovered, of which south Gaulish was the most common.

Fabric	Form	Sherd count	Weight (g)	EVE
SAM SG	?Rittering 8, Dr37	10	20	0.05
SAM CG	Dr35, Dr37	5	19	0.00
SAM EG		2	1	0.00

Table 3: The samian fabrics, list in chronological and factory order

Sandy grey ware: SGW

- B.1.16 A light brown to dark grey fabric that contains abundant well-rounded quartz and sparse mica (Perrin 1996, 120). It is a utilitarian fabric that was used to produce most jar and bowl forms during the Roman period. The source of this material is unknown, and could originate from anywhere within a radius of twenty to thirty miles- perhaps further if water transport was available (*ibid*, 121).

Vessel types: beaker 3.3, 3.13, 3.14, jar 4.5, 4.14, 4.17, 5.3, dish 6.18, 6.21, bowl Dr37 cop.

Sandy oxidised ware: SOW

- B.1.17 A group of locally produced sand tempered fabrics consistently fired to a pale buff colour. This includes a range of fabrics from fine white wares which may be Gaulish imports, to Sandy oxidised wares that can vary in colour from very pale brown to creamy white (Andrews 1985, 94–5, OW2).

Vessel types: miscellaneous flagon, bag-shaped beaker 3.6, cup Dr24/25 copy wide mouthed jar 5.3, mortaria 7

Sandy red ware: SREDW

- B.1.18 A variety of early Roman Sandy red fabrics were also recorded. Some were fairly fine beakers the majority, however, were coarse jar and storage jar types.

Vessel types: miscellaneous beaker, jar/bowl and storage jar

Shell tempered ware: STW

- B.1.19 A group of locally produced reduced fabrics which contain fossilized clay as a natural component of the clay. The Lower Nene Valley is known to have been a production centre for shell-tempered storage jars (Perrin 1996, 119–20) between the late Iron Age and 3rd century AD. Numerous unsourced local production sites, however, would have exploited the Jurassic shelly clay beds throughout the Roman period (Hull and Pullinger 1999, 142; Tomber and Dore 1998, 115).

Vessel type: jar 4.4, 4.5, bowl 6.15

Spanish amphora: BAT AM

- B.1.20 Self-coloured large storage vessels used for transporting luxury goods (Tyers 1996, 87; Tomber and Dore 1998, 84-85).

Vessel types: globular olive oil amphora DR20

Verulamium white ware: VOW

- B.1.21 This is a white-to-pale yellow fabric with significant amounts of quartz, giving it a gritty appearance. This pottery is rarely decorated and is nearly always found fumed or with a soot residue, suggesting it was a utilitarian form that was frequently used for cooking (Tomber and Dore 1998, 154; Tyers 1996, 199-201). Similar fabrics are known to have been produced into the 2nd and 3rd centuries in the Northampton region and at also nearby at Godmanchester, Cambridgeshire (Lyons in prep).

Vessel types: miscellaneous flagon 1, also bead and flange mortaria 7

The Forms

Flagon

- 1 Miscellaneous flagons
- 1.3 Disc rim flagons (Jackson and Potter 1996, 52)
- 1.5 Hofheim type, single (Stead and Rigby 1986, 191) and double (*ibid*, 229) handled flagons with cylindrical necks and out-curved lips, triangular in section

Beaker

- 3 Miscellaneous beakers
- 3.3 Indented or folded beakers, miscellaneous or indeterminate

- 3.6 Bag-shaped beakers (Perrin 1996, 233)
- 3.13 Butt beaker (Stead and Rigby 1986, 339)
- 3.14 Globular beakers with an everted rim (Perrin 1996, 18; 62; 63; 67)

Medium mouthed jars and storage jars

- 4 Miscellaneous medium-mouthed jars
- 4.4 Jar with short angular neck, lid-seated or flattened rim (Perrin 1996, 387; Anderson with Brudenell 2010, fig 11, no 10)
- 4.5 Medium-mouthed jar, short neck, rolled and generally undercut rim and globular body (Rogerson 1977, 43; 93; 115; 202)
- 4.13 Medium-mouthed jar, rounded body and simple everted rim (Rogerson 1977 5; Martin 1988, 250; 251)
- 4.14 Large storage vessels, miscellaneous or indeterminate
- 4.17 Classic Horningsea-type storage jar with an out-sized, out-turned rim (Anderson with Brudenell 2010, fig 11, no16; Perrin 1996, fig. 68, no 383–85)

Wide mouthed jar

- 5 Miscellaneous wide-mouthed jars
- 5.3 Jar with a reverse 'S' profile and a cordon on the neck or shoulder, sometimes carinated (Thompson 1982, 139-142; Anderson with Brudenell 2010, fig 11, no 5; Farrar, Hull and Pullinger 1999, 124, nos 156-157)
- 5.4 Rounded jar, reverse 'S' profile, one or two girth grooves mid body.

Bowl

- 6 Miscellaneous open forms
- 6.15 Flanged rim bowl with curving sides, out-turned rim and foot-ring base (Rogerson 1977, 74; 76; 97)
- 6.18 Dish, straight-sided, flat-based, thickened everted 'triangular' rim (Perrin 1996, 417; 426; 449; 453; 455; Anderson with Brudenell 2010, fig 11, no 9)
- 6.19 Dish, straight sides which may be upright or angled, plain rim or may have external groove just below the rim (Perrin 1996, 402; 403; 415)
- 6.21 Open dish or dish internal angle, in curving rim, flat or foot ring base (Perrin 1996, 28, 29, 30; Hull 1999, 228, nos 173-176)

Amphora (Tyers 1996, 88-91)

- DR20 A large globular form (principally olive oil containers) with two handles and thickened, rounded or angular rim, concave internally

Mortaria (Tyers 1996, 116-135)

- 7 All miscellaneous bead and flange mortarium

Samian (Tyers 1996, 105-116)

- Dr24/25 A hemispherical cup with an external cordon

Dr35 A cup with curved walls and over hanging rim, trailed leaves are applied on rim.

Dr. 37 A deep bowl with slightly curved sides. The wall of the vessel is usually divided into two (approximately) equal zones, where the lower half is decorated.

Rittering 8. A hemispherical cup with external groove just below the rim and half-way down the wall

Pottery by Period and phase

B.1.22 Roman pottery was found in all four of the Roman phases, although deposition notably decreases after Period 1.2.

B.1.23 A small number of sherds were not assigned to phase as they originated from unstratified or evaluation deposits. Small amounts of residual Roman pottery were also found in post-Roman deposits (Period 2). This material is not discussed further within this report, although is fully catalogued in the archive for reference if required.

Period	Sherd Count	Weight (g)	EVE	Weight (%)
1.1	483	8551	5.68	31.20
1.2	730	11466	6.36	41.84
1.3	441	5274	3.30	19.25
1.4	98	563	0.37	2.05
2.1	5	14	0.11	0.05
2.2	6	44	0.06	0.16
2.3	2	16	0.09	0.06
0	86	1476	0.59	5.39
Total	1851	27404	16.56	100.00

Table 4: The pottery by period (shading = Roman contexts)

Period 1.1: Mid-1st century AD (AD30-60)

B.1.24 A total of 483 sherds, weighing 8551g (5.68 EVE) of Roman pottery fragments transitional between the latest Iron Age and Early Roman periods, were recovered from Period 1.1 deposits (31% by weight of the total assemblage). The majority of this pottery was found within ditches [particularly ditch **605/488**], although some material was found within postholes and layers (Tables 5 and 6). The pottery is fresh and in relatively good condition with an average sherd weight (ASW) of 17.7g.

Feature	Sherd Count	Weight (g)	EVE
Ditch	477	8490	5.68
Posthole	2	11	0.00
Layer	4	50	0.00
Total	483	8551	5.68

Table 5: The Period 1.1 pottery by feature

Feature	Sherd Count	Weight (g)	EVE
Ditch	477	8490	5.68
201	22	219	0.32
213	52	373	0.08
488	13	138	0.10
573	27	507	1.01
576	44	769	0.66
577	16	235	0.10
593	7	96	0.00
605	265	5936	3.36
610	3	20	0.00
612	28	197	0.05
Posthole	2	11	0.00
583	1	8	0.00
589	1	3	0.00
Unassigned	4	50	0.00
Total	483	8551	5.68

Table 6: The Period 1.1 pottery by feature

- B.1.25 The majority of pottery found within these period deposit is wheel made coarse sandy grey ware Romanizing wares (AD30-60). This fabric group is not standardised and includes a range of sandy fabrics tempered with fine flint and grog and fired to a range of colours and finishes. Cordoned – sometimes carinated - jars (type 5.3) are particularly well represented, also globular jars with girth grooves (type 5.4). Other diagnostic coarse wares include a small number of shell tempered jar/bowl pieces, also two small (possibly intrusive) Horningsea storage jar fragments.
- B.1.26 Of particular interest is a coarse sandy grey ware Romanising jar that was found located where ditch **488** intersected with the south running ditch **593** (SF38). The top part of this vessel has been lost but the body and base survive (13 sherds, weighing 197g) and it is decorated with a fine horizontal combed motif. It is possible that this vessel (and any contents no trace of which survive) was carefully placed at this ditch intersection as a votive deposit.
- B.1.27 No samian was found within these deposits which may also suggest that this phase is largely pre-Conquest in date.

Fabric	Sherd Count	Weight (g)	EVE
SGW(ROMANISING)	446	8129	5.49
SREDW	16	267	0.14
SOW	18	106	0.05
HORN	2	40	0.00
STW	1	9	0.00
Total	483	8551	5.68

Table 7: The Period 1.1 pottery fabrics, listed in descending order of weight (g)

Period 1.2: Early Roman (mid 1st to mid-2nd century AD)

4.8.6 A total of 730 sherds, weighing 11466g (6.36 EVE), were recovered from Period 1.2 deposits, which is the largest period group within the assemblage (42% by weight). The majority of this pottery was found within ditches, although some material was also found within a hearth, pits and postholes (Tables 8 and 9). The pottery is fairly fresh and in relatively good condition with an ASW of 17.7g.

Feature	Sherd Count	Weight (g)	EVE	Weight (%)
Ditch	461	8573	515	74.77
Pit	156	1778	102	15.51
Hearth	25	576	8	5.02
posthole	79	429	5	3.74
Pit/hollow	9	110	6	0.96
Total	730	11466	636	100.00

Table 8: The Period 1.2 pottery by feature type

Feature	Sherd Count	Weight (g)	EVE
Ditch	461	8573	5.15
0	61	628	0.28
304	23	883	0.83
312	3	30	0.00
344	1	12	0.00
395	6	41	0.00
422	7	21	0.00
443	7	99	0.08
504	7	151	0.13
552	4	52	0.00
555	3	39	0.10
562	1	1	0.00
565	79	1604	1.25
568	11	132	0.00
570	2	23	0.00
597	94	3420	1.37
602	7	91	0.00
614	139	1194	1.05
620	6	152	0.06
Hearth	25	576	0.08
618	25	576	0.08
Pit	156	1778	1.02
0	29	211	0.11
306	1	6	0.00
310	5	431	0.22
327	1	13	0.00
329	2	14	0.00

356	4	36	0.04
393	11	237	0.06
395	2	21	0.00
399	11	46	0.00
402	3	7	0.00
444	4	152	0.16
448	51	301	0.05
459	14	122	0.18
476	2	28	0.00
599	9	104	0.00
628	3	29	0.20
639	4	20	0.00
Pit/hollow	9	110	0.06
321	9	110	0.06
Posthole	79	429	0.05
332	1	27	0.00
338	3	3	0.00
341	1	1	0.00
354	2	7	0.05
408	1	8	0.00
436	1	1	0.00
450	1	1	0.00
451	2	29	0.00
465	1	11	0.00
473	1	6	0.00
591	65	335	0.00
Total	730	11466	6.36

Table 9: The Period 1.2 pottery by feature

B.1.28 This period group contains the largest quantity of pottery, also the most diverse range of fabrics and forms (Table 10).

Fabric	Sherd Count	Weight (g)	EVE
SGW	327	4008	2.38
SGW(ROMANISING)	267	3828	2.78
HORN	40	2360	0.96
SOW	59	988	0.07
SREDW	22	182	0.00
BAT AM	1	56	0.00
STW	4	20	0.12
NVCC	3	14	0.00
SAM SG	5	7	0.05
SAM CG	2	3	0.00
Total	730	11466	636

Table 10: The Period 1.2 pottery fabrics, listed in descending order of weight (g)

- B.1.29 Coarse sandy grey ware Romanizing wares are still present in a similar range of forms as Period 1.1. Indeed, of particular interest is a coarse sandy grey ware Romanising jar (SF36) that was found located at the point where ditch **488** intersected with ditch **312** (**565**). This wide mouthed cordoned jar was complete with a surviving diameter of 18cm (type 5.3; 29 sherds, weighing 1006g). It is possible that this vessel (and any contents, no trace of which survive) was carefully placed within the ditch as a votive deposit.
- B.1.30 Moreover, it may be following in a tradition of votive deposits as another almost complete vessel (SF38) was found within Period 1.1 deposits, also associated with ditch **488** (see above).
- B.1.31 It is the more standard Roman Sandy grey ware fabrics, however, that form the majority within the period group although present only in a limited range of forms. Well represented are globular jar fragments (type 4.5), also some platter and dish forms were found (types 6.21 & 6.18). These sandy grey wares are supplemented by a similar Sandy oxidised fabrics used to produce more specialist ceramic vessel including flagons and mortaria. Other diagnostic coarse wares include a small number of shell tempered jar/bowl pieces, also a significant number of Horningsea storage jar fragments (type 4.17).
- B.1.32 It is noteworthy that samian wares are found for the first time within deposits assigned to Period 1.2. The distinctive red table wares include a south Gaulish cup (Rittering 8), dish and bowl fragments, also central Gaulish bowl and cup (Dr35) pieces. Other fine wares include three Nene Valley colour coat beaker fragments, including a folded (type 3.3) and bag-shaped (type 3.6) examples. A single piece of Spanish olive oil amphora (DR20) was also found.

Period 1.3: Middle Roman (Mid 2nd century to early 3rd century)

- B.1.33 A total of 441 sherds, weighing 5274g (3.30 EVE), of pottery were recovered from Period 1.3 deposits, which is the only third largest period group within the assemblage (c. 19% by weight). It is clear, therefore, that pottery use and deposition was in decline within the excavated area after the mid-2nd century AD. The majority of this pottery was found within ditches (particularly ditch **579**), although material was found in pits, also a gully and postholes (Tables 11 and 12). The decrease in the deposition of fresh pottery (and increasing levels of residual material) is also reflected in the ASW which has fallen to only c. 12g.

Feature	Sherd Count	Weight (g)	EVE
Ditch	377	4390	2.55
Pit	57	709	0.36
Gully	4	135	0.39
posthole	3	40	0.00
Total	441	5274	3.30

Table 11: The Period 1.3 pottery by feature type

Feature	Sherd Count	Weight (g)	EVE
Ditch	377	4390	2.55
315	29	378	0.31
348	2	12	0.00
350	27	335	0.55
389	8	114	0.00
412	9	14	0.00
445	14	224	0.07
467	33	583	0.56
524	85	1128	0.44
529	4	20	0.00
579	158	1519	0.62
588	8	63	0.00
Gully	4	135	0.39
325	4	135	0.39
Pit	57	709	0.36
411	24	345	0.10
412	23	319	0.20
475	10	45	0.06
Posthole	3	40	0.00
532	3	40	0.00
Total	441	5274	3.30

Table 12: The Period 1.3 pottery by feature

- B.1.34 Coarse sandy grey ware Romanizing wares are still present in a similar range of forms as Period 1.1 and 1.2, although these are residual by the mid-2nd century AD.
- B.1.35 It is the fully Roman and standardised Sandy grey ware fabrics, however, that form the majority within the period group, although present only in a limited range of diagnostic forms. Well represented are globular jar fragments with 'S'-shaped rims (type 4.5). Also found are globular jars with everted rims (type 4.13) and straight-sided dishes with beaded rims (type 6.18), which are both vessel types found in the black burnished tradition that had become fashionable in this region by the mid-2nd century AD (Tyers 1996, BB2,186-188). These sandy grey wares are supplemented by a similar Sandy oxidised fabrics which are used to produce more specialist vessel types such as flagons and mortaria. Some more gritty oxidised sherds are consistent with Verulamium products and were perhaps traded from the St. Albans region. Other diagnostic coarse wares include a small number of shell tempered jar/bowl pieces, also a significant number of Horningsea storage jar fragments were found (type 4.17).
- B.1.36 Samian tablewares are still rare – but at their most numerous – within this period group. A small amount of south and central Gaulish material was found, both fabrics used to produce decorated deep hemispherical bowls (Dr37). Other fine wares include a single Nene Valley colour coat jar fragment (type 5.3). A single piece of Spanish olive oil amphora (DR20) was also found.
- B.1.37

Fabric	Sherd Count	Weight (g)	EVE
SGW	238	2522	1.67
SGW(ROMANISING)	92	1049	0.95
HORN	16	785	0.16
SOW	53	438	0.34
STW	17	194	0.00
SREDW	14	175	0.07
BAT AM	1	71	0.00
SAM CG	3	16	0.00
SAM SG	5	13	0.00
NVCC	2	11	0.11
Total	441	5274	330

Table 13: The Period 1.3 pottery fabrics, listed in descending order of weight (g)

Period 1.4: Late Roman (3rd to 4th centuries)

B.1.38 Only 98 sherds, weighing 563g (0.37 EVE) were recovered from Period 1.4 deposits, which is the smallest period group within the assemblage (2% by weight).

Feature	Sherd Count	Weight (g)	EVE
Grave	98	563	0.37
540	25	132	0.08
501	73	431	0.29
Total	98	563	0.37

Table 14: The Period 1.4 pottery

B.1.39 This pottery relates exclusively to the two inhumation burials that cut the Period 1.1 ditch system (Table 14) and mostly comprises the fragmentary remains of Romanising coarse grey ware jars and storage jars. Sandy grey ware jar fragments, also a very few oxidised fragments and also a single shell tempered fragment, were also found. It is worthy of note that none of this pottery was deliberately placed within the graves and it is extremely abraded with an average sherd weight of only 5.7g. It is consistent, therefore, with being residual material disturbed from the Period 1.1 enclosure ditch 593 that the graves were cut through.

Fabric	Sherd Count	Weight (g)	EVE
SGW(ROMANISING)	57	377	0.14
SGW	31	160	0.23
SOW	5	14	0.00
STW	1	6	0.00
SREDW	4	6	0.00
Total	98	563	37

Table 15: The Period 1.4 pottery fabrics, listed in descending order of weight (g)

Discussion

- B.1.40 This is a small to medium sized assemblage of latest Iron Age to Early/Mid-Roman pottery, recovered from a well-defined archaeologically sensitive area within central Cambridge, located only c.100m to the south-west of the walled area of the Roman town.
- B.1.41 The majority of the assemblage is locally produced wheel made utilitarian coarse ware vessels largely comprising jars and bowls, also handmade storage jars. Indeed, there appears to have been a seamless transition between the very latest Iron Age and Early Roman use of ceramics within the excavated settlement whereby the transition between Romanising grog tempered and Roman primarily sand tempered cordoned wide mouthed vessels is clearly recorded.
- B.1.42 The post-Conquest coarse wares are supplemented by a small amount of imported Gaulish fine tablewares consisting of samian from several factories.
- B.1.43 The majority of the ceramic assemblage is consistent with the buried fragmentary remains of domestic rubbish, possibly from an agricultural settlement outside the centre of the developing town. Two coarse Romanising sandy grey ware vessels, however, survived in better condition and it is probable that they (and their contents) were deliberately buried within ditches **488** and **312**, when complete, as votive deposits. Contemporary ritual deposition, albeit on a larger scale, has been recorded nearby in central Cambridge (Taylor 1999, 78-80).
- B.1.44 It is clear, however, that all ceramic deposition declined rapidly after the mid-2nd century as no material later than the early 3rd century is found with the assemblage. Indeed, it seems that most sites so far excavated close-by fit this pattern whereby significant ceramic deposition in the latest Iron Age to the Early/Mid Roman period is followed by reduced activity after AD200 when the area was cleared and redeveloped (Anderson with Brudenell 2010, 49; Browne 1977, 13; Taylor 1999, 77).
- B.1.45 Comparison with the published literature, therefore, demonstrates that this assemblage is very similar to other pottery excavated in the area and is consistent with the record of ceramic goods manufactured, used and deposited in this locality at this time (Farrar, Hull & Pullinger 1999; Anderson, with Brudenell 2010).
- B.1.46 It is worthy of note, however, that the excavated pottery does not reflect the number of high status vessels that have been collated in the Woolf Institute archives that are presumed to have been recovered from the site in antiquarian times and are described by Stephen Wadeson within this report (Appendix B.2). As a whole, therefore, this assemblage is relatively high status in character and similar to others found nearby but distinct from contemporary rural assemblages found in the wider region (Anderson & Brudenell 2010, 48-49). It appears likely that the location of the site near to the Roman fort and growing town aided the supply of pottery, both domestic and imported wares, until the area fell from use.
- B.1.1 Overall the pottery from the Westminster College excavations make a valuable contribution to the growing corpus of ceramic data from the vicinity and particularly informs on both the Iron Age/Roman transition in Cambridge and the apparent widespread change to the pattern of settlement in the hinterland of Cambridge in the Early Roman period.

B.2 Westminster College Pottery

By Stephen Wadson

Introduction

- B.2.1 A report from the Westminster College Committee in 1903 recorded the following: "Pottery. -- In the excavations for the foundation of the College there were found a number of pieces of pottery, including one good specimen of a Samian bowl: all of them are Roman with the exception of one urn, which is early Saxon. These specimens, as they were found, were carefully put aside by Professor MacAlister, and in November last were transferred by him to the Library." *Report of the College Committee, submitted to the 1903 Synod of the Presbyterian Church of England (pp 977 – 985).*

A List of Reconstructed Romano-British & Saxon Pottery located within the Library (Plate 6)

- B.2.2 Numeric vessel type codes, descriptions and published parallels

Samian (Tyers 1996, 105-116)

- B.2.3 Dr. 30: An approximately straight-sided cylindrical bowl, with designs occupying 66% of the vessel surface. The top of each design has an ovolo border. La Graufesenque, Southern Gaul, c. AD50-80. Vessel 1

Coarse Wares

2.0: Narrow-Mouthed jar, of miscellaneous or indeterminate form. Sandy grey ware, Burnished, Late 1st to 2nd Century AD Vessel 4

3.1: Beaker with a tall straight neck (funnel necked) and rounded body. Pentice-moulded beaker with rouletted decoration. Nene Valley Colour Coat. 4th Century AD (Perrin 1996, 395; Howe et al. 1980, 55) Vessel 5

3.1: Beaker with a tall straight neck (funnel necked) and rounded body. Pentice-moulded beaker with rouletted decoration. Nene Valley Colour Coat. 4th Century AD (Perrin 1996, 395; Howe et al. 1980, 56) Vessel 6

3.3.7: Indented Beaker, funnel neck, carinated base, plain rim, with multi bands of incised lines around the middle. Nene Valley Colour Coat. Mid-3rd Century AD (Perrin 1996, 395; Howe et al, 1980, 42) Vessel 7

3.3.2: Indented Beaker, funnel neck, five sided with oval indents and plain rim. Undecorated. Grey ware. Mid to late 3rd Century AD Vessel 8

3.13: Butt Beaker, Oxidized sandy coarse ware. Mid 1st to Early 2nd Century AD (Stead and Rigby 1986, 339) Vessel 2

4.5.2: Medium-mouthed jar, with short neck, squared rim and globular body. Combed Decoration. Sandy Grey ware. Mid/Late 1st to Early/Mid-2nd Century AD (Scole 1993) Vessel 10

5.8: Globular wide mouthed jar with a long flaring neck, high shoulder and rolled rim. Shell Tempered. Mid/Late 1st to Mid-2nd Century AD (Scole 142, 152) Vessel 3

5.8: Globular wide mouthed jar with a long flaring neck, high shoulder and rolled rim. Coarse sandy Grey ware. Mid/Late 1st to Mid-2nd Century AD (Scole 142, 152) Vessel 9

Saxon Pottery

0.0: Cremation Urn (partial Vessel). Linear chevron and dot design with stamped decoration. Each chevron is filled with a different design while the surviving stamps fill a single lower chevron. Handmade. c. 5th to 6th Century AD Vessel 11

A Brief Summary of the Additional Romano-British Pottery located within the Library

Samian

- B.2.4 In addition to *Vessel 1*, a further 169 sherds of samian were identified, with the majority of the assemblage consisting of plain wares (c.154 Sherds) these include two examples of potters stamps identified on the internal vessel base. (Stamps 1 & 2) Plain ware forms identified include Bowls: Dr. 38, 31 and 31R. Cups: Dr. 27, 27g, 33 & 35. Platters/Plates: Dr.15/17 & 18. Dishes: 18/31, 18/31R & 36.

- B.2.5 Initial identification has recorded sherds from at least fifteen mould decorated vessels, these include a single rouletted rim fragment from a South Gaulish Dr. 29 carinated bowl, five fragments from the cylindrical bowl Dr. 30 (not including *Vessel 1*) as well as at least six examples of the hemispherical bowl, Dr. 37. These include a single example of a vessel which has been repaired in antiquity and which contains several drilled repair holes in which a partial Pb (lead) rivet/pot mend remains in situ above the ovolo in the upper border/margin.
- B.2.6 The vast majority of sherds are unwashed and due to time constraints fabrics present have primarily been identified by vessel form present as well as both the stamped and decorated vessels. Both South Gaulish (La Graufesenque) and Central Gaulish (Lezoux) vessels were identified with certainty however without further analysis it is uncertain if vessels from either Les Martres (Central Gaul) or any of the Eastern Gaulish production centers were present in the assemblage.
- B.2.7 The samian present within the assemblage ranges in date from the mid to late 1st century onwards. The majority of the samian appears to be 2nd century Central Gaulish most likely from Lezoux. Availability of samian continues through to the end of the production period as indicated by the presence of Antonine forms within the assemblage however it is noticeable that the presence of forms typically associated with the second half of the second century are limited in numbers. Due to the present condition the assemblage it is not possible to make any specific comments on the nature of supply to the site or for statistical analysis.
- B.2.8 In addition, a single example of a Dr. 30 cylindrical bowl, (*Vessel 1*) was recovered during excavation of foundation trenches for the college as noted in the Report of the College Committee, submitted to the 1903 Synod of the Presbyterian Church of England (p.977 - p.985). (Ref. See Above). Approximately two thirds of the vessel were recovered and was reconstructed most likely not long after recovery. The vessel is a product of the kilns of South Gaul, most probably from La Graufesenque and is decorated in a repeated panel design typically associated with the Flavian period. While no exact parallels were identified during initial assessment of the bowls decorative style have identified specific aspects of the design which are similar to, and are consistent with designs used on vessels attributed to the work of the potters *Masculus* i c. AD 50-70 and *Sabinus* iii c. AD 50-80. Hopefully further work will allow us to identify the vessel with any certainty.

Catalogue of Samian Potters' Stamps

Two stamps were identified; each entry gives; potter; die; form; reading; pottery of origin; date.

S1: *Borillus* i, Die 4a. Drag.31 or 31R Bowl BORILLI.OFF, Lezoux. c. AD145-175. (NoTS Volume 2. 2008, 100-104)

S2: *Calvinus* ii, Die 1a. Drag.33 Cup CAL[VIN]o], Lezoux. c. AD130-165. (NoTS Volume 2. 2008, 177-178)

Coarse wares

- B.2.9 In addition to the samian recorded a further 54 sherds of Romano-British coarse wares were identified as part of the collection. Primarily consisting of locally produced, unsourced sandy coarse wares (sandy grey and reduced wares,) these include a number of rim sherds from a variety of medium mouth jars. The assemblage also includes several large storage jar rim sherds: most probably the product of the

Horningsea kilns, as well as a single large flat rim sherd with applied thumb decoration typical of the storage jars produced at Horningsea.

- B.2.10 Other forms identified include sherds from a single Early Roman carinated bowl/jar, a straight sided dish with a triangular rim (c. Mid 2nd century or later) and a single example of a vessel lid produced in a sandy grey fabric. Specialist wares are represented by two separate examples from wall sided mortaria dating from c. AD170+.
- B.2.11 Domestic fine wares identified with the collection, (not including Vessels 5, 6 and 7) consist of products from the kilns of the Nene Valley and include several fragments from a variety of beakers (c. Mid 2nd century or later); including several sherds of NVCC beakers including a single example with under-slip interlocking 'S'-shaped barbotine decoration (c. early 3rd century).

B.3 Medieval and Later Pottery

by Carole Fletcher

Introduction

- B.3.1 The excavation produced a small pottery assemblage of 56 sherds, weighing 0.798kg, recovered from 12 contexts from features and layers across the site. Some of this material was recovered from features, including a grave, that would otherwise appear to be Roman and the pottery must therefore be considered intrusive in these features. The condition of the overall assemblage is moderately abraded. The average sherd weight from individual contexts is small to moderate at 14g.

Methodology

- B.3.2 The Medieval Pottery Research Group (MPRG) documents *A guide to the classification of medieval ceramic forms* (MPRG 1998) and *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics* (MPRG 2001) act as a standard.
- B.3.3 Dating was carried out using OA East's in-house system based on that previously used at the Museum of London. Fabric classification has been carried out for all previously described medieval and post-medieval types. All sherds have been counted, classified and weighed. All the pottery has been recorded and dated on a context-by-context basis and the summary catalogue is recorded in Table 16. The archives are curated by Oxford Archaeology East until formal deposition.

Assemblage

- B.3.4 The majority of the pottery recovered is post-medieval (39 sherds weighing 0.618kg) and of these a large number of sherds are from horticultural ceramics, namely plant pots (16 sherds weighing 0.258kg) of which the largest number were recovered from layer 511. Also present in relatively large numbers were sherds of Post-medieval redware and post-medieval black-glazed ware (14 sherds weighing 0.240kg). A small number of medieval sherds were recovered, including several early medieval sherds, alongside medieval coarsewares and a small abraded sherd from a Hedingham fineware jug. Several of the medieval sherds were sooted, indicating their use in the processing of foodstuffs.
- B.3.5 A small, abraded sherd from a glazed Hedingham fineware jug was recovered as an intrusive element in Period 1.1 ditch **610**, while in Period 1.2, ditch **602** produced an intrusive, sooted sherd from a medieval coarseware jar.

- B.3.6 Phase 1.3 produced a further three intrusive sherds, from ditch **315** a small sherd from a plant pot of 19th century or later was recovered, and ditch **389** produced a single body sherd from an Early Medieval Essex Micaceous Sandy ware jar, alongside a sooted rim sherd from a Huntingdonshire early Medieval ware jar (c.1050-1200).
- B.3.7 Late Roman Phase 1.4 had slightly higher levels of intrusive material than in the previous phases and included sherds located within grave cut **501**. The majority of the pottery recovered from this grave is Roman, with varying levels of sherd abrasion. It seems likely that the later material recovered from this grave fill (seven sherds weighing 0.120kg), which includes an Early Medieval Essex Micaceous Sandy ware jar body sherd and a well formed Medieval Essex Micaceous Sandy Greyware jar rim alongside a base angle sherd from a Bourne D type ware vessel and a base sherd from a plant pot, is intrusive. The second grave, **540**, also produced a single intrusive fragment of plant pot. The broad date range (c.1050-1900) of the sherds present supports the likelihood that this material is intrusive and has become incorporated as layers above the graves have been reworked and therefore that this material does not date the features.
- B.3.8 Two features in Phase 2.2 produced post-Roman ceramics. If the dating for this phase is correct, then the majority of the pottery recovered from this phase would be intrusive, it seems likely therefore that the end date of this phase is somewhat later than stated by the excavator or that there has been a great deal of reworking of material.
- B.3.9 Pit **500** produced seven sherds of pottery, of these two are medieval, the first being a sherd of medieval coarseware, the second a sherd of late medieval East Anglian Redware. The remaining five sherds are all Post-medieval redwares, a mixture of bowl and jar sherds, dating the context to the mid 16th-end 18th century. Pit **547** produced two sherds of post-medieval pottery, body sherds from two separate jars, one Post-medieval redware, the second a post-medieval black-glazed ware, dating the context to the late 16th- end 17th century.
- B.3.10 Phase 2.3 produced the majority of sherds from this post-Roman assemblage, 29 sherds weighing 0.501kg, many of these being sherds of Post-medieval redware or fragments of plant pot. Two sherds were recovered from pit **550**, both are fragments from post-medieval black-glazed ware vessels, suggesting a date of late 16th-end 17th century for the fill of this feature. The remaining sherds were recovered from two layers, the first of which, 511, produced three sherds from Post-medieval redware bowls and 12 sherds from numerous flowerpots. Also present were a number of tableware sherds, including a fragment from a jug, or possibly a sauce boat, bearing the crest of one of the colleges, surviving letters indicate it is from St John's College, see Cessford (Appendix B. 4). Alongside this was recovered a rim sherd from a Bone China saucer (the edge decoration on which survives poorly), a base sherd from a creamware bowl or plate and a rim sherd from a pearlware jug. These sherds, alongside the plant pot fragments, suggest a 19th century date for this layer, with earlier material having become incorporated into it.
- B.3.11 Layer 513 produced a smaller assemblage of differing fabrics including a body sherd from a refined white earthenware bowl-plate a rim sherd from an English stoneware bottle and the base sherd from a plant pot, the fill of the feature dates to the 19th century.

Discussion

B.3.1 Domestic in origin, the early medieval and medieval sherds appear to represent background rubbish depositions that have been reworked in later periods, with some becoming incorporated into the upper fills of Roman features, indicating early medieval and medieval occupation in the vicinity of the site. The later material may also be domestic, although the Post-medieval redware bowl sherds can be used in dairying as well as food preparation and sometimes even for washing. The later creamware, pearlware, and refined white earthenware sherds come from tablewares, including fragments from St John's and unstratified material from Trinity College dinner services; the seven unstratified sherds discussed by Cessford (Appendix B.4) were not recorded in this assemblage, however a further sherd was recovered from layer 511, suggesting that material has been much reworked since deposition. The post-Roman pottery recovered from the site represents general rubbish disposal on the site, with only one cut feature, **308**, dated to the medieval period and only pits **500**, **547** and **550** identified a post-medieval feature, all other pottery coming from layers. The later pottery has little significance other than to help date the later features and it may be deselected prior to archive deposition.

Context	Cut	Phase	Fabric	Basic Form	Sherd Count	Sherd Weight (kg)	Pottery Date
318	315	1.3	Horticultural ceramic	Plant pot body sherd	1	0.002	19th-century+
392	389	1.3	Early Medieval Essex Micaceous Sandy ware	Jar body sherd	1	0.008	Mid 11th-early 13th century
			Huntingdonshire Early Medieval ware	Jar rim sherd, externally sooted	2	0.022	Mid 11th-end 12th century
502	501	1.4	Bourne D	Base angle sherd	1	0.03	Mid 15th- mid 17th century
			Early Medieval Essex Micaceous Sandy ware (transitional)	Jar base angle sherd externally sooted on vessel wall	1	0.033	12th-mid 13th century
			Horticultural ceramic	Plant pot base sherd	1	0.002	19th-century+
			Medieval coarseware	Body sherd	1	0.016	Mid 12th-end 14th century
			Medieval coarseware	Body sherd, slightly sooted internally	2	0.013	Mid 12th-end 14th century
			Medieval Essex micaceous Sandy Greyware	Jar rim sherd	1	0.026	Late 13th-end 14th century
507	500	2.2	Late medieval East Anglian redware	Base angle sherd	1	0.004	Mid 14th-end 15th century
			Medieval coarseware	Body sherd	1	0.009	Mid 12th-end 14th century
			Post-medieval redware	Bowl base sherd	1	0.008	Mid 16th-end of 18th century
			Post-medieval redware	Bowl body sherd	1	0.016	Mid 16th-end of 18th century
			Post-medieval redware	Jar/bowl body sherd	2	0.027	Mid 16th-end of 18th century
			Post-medieval redware	Jar/upright Bowl base angle sherd	1	0.049	Mid 16th-end of 18th century
511		2.3	Bone China	Bowl-saucer, rim sherd	1	0.007	Late 18th- end 19th century
			Creamware	Bowl-plate, base sherd	1	0.008	Mid 18th- early 19th century
			Horticultural ceramic	Plant pot base and body sherd	1	0.059	19th-century+
			Horticultural ceramic	Plant pot base sherd	1	0.007	19th-century+

Context	Cut	Phase	Fabric	Basic Form	Sherd Count	Sherd Weight (kg)	Pottery Date
			Horticultural ceramic	Plant pot body sherd	7	0.105	19th-century+
			Horticultural ceramic	Plant pot rim sherd	1	0.038	19th-century+
			Horticultural ceramic	Plant pot rim sherd	2	0.013	19th-century+
			Pearlware	Jug rim sherd	2	0.008	Late 18th-mid 19th century
			Post-medieval redware	Bowl base angle sherd	1	0.046	Mid 16th- end 18th century
			Post-medieval redware	Bowl rim sherd	3	0.031	Mid 16th- end 18th century
			Post-medieval redware	Flared bowl body sherd	1	0.046	Mid 16th-end 18th century
			Refined white earthenware	Body sherd	1	0.006	19th century
			Refined white earthenware with under glaze colour transfer printed decoration (Mulberry)	? Jug/sauce boat body sherd	1	0.016	Early-end 19th century
513		2.3	Refined white earthenware	Bowl-plate, body sherd	1	0.007	19th century
			English stoneware	Bottle rim sherd	1	0.018	18th-end 19th century
			Horticultural ceramic	Plant pot base sherd	1	0.029	19th-century+
			Nottinghamshire-Derbyshire stoneware	Jar rim sherd	1	0.05	18th century
541	540	1.4	Horticultural ceramic	Plant pot body sherd	1	0.003	19th-century+
546	547	2.2	Post-medieval black-glazed ware	Jar body sherd	1	0.004	Late 16th-end 17th century
			Post-medieval redware	Jar body sherd	1	0.006	Mid 16th-end of 18th century
548	550	2.3	Post-medieval black-glazed ware	Body sherd	1	0.004	Late 16th-end 17th century
549	550	2.3	Post-medieval black-glazed ware	Body sherd	1	0.003	Late 16th-end 17th century
604	602	1.2	Medieval coarseware	Jar body sherd, externally sooted	1	0.017	Mid 12th-end 14th century
611	610	1.1	Hedingham fineware	Jug body sherd	1	0.002	Mid 12th-mid 14th century

Table 16: Post-Roman Pottery Catalogue

B.4 Collegiate Ceramics from Westminster College

By Craig Cessford

Introduction

- B.4.1 A small quantity of 19th century pottery of collegiate origin was examined by the author, both items derive from unstratified contexts.
- B.4.2 Six sherds weighing 71g from a plate with a blue-transfer printed floral pattern that has a transfer printed mark on the rear a mark on the rear with the text ..IOH.., part of the name of St. John's College. This plate is the same pattern as three discovered at 132–36 Newmarket Road (site code CAMNMR14), one of which could be associated with the college cook Owen Jones (1846–73).

- B.4.3 The different rear mark in this case suggests that this particular vessel was manufactured after the college took direct control of its kitchens in 1877, how long this pattern continued in use for is unclear but it is unlikely to have extended significantly into the 20th century.
- B.4.4 A sherd from the outer portion of a plate weighing 36g with a transfer-printed pattern is associated with Trinity College, and has been found at several sites in Cambridge and is also known from surviving examples. Although this particular fragment does not possess any definitely collegiate attributes the rim pattern is not a common one on non-collegiate wares from Cambridge and it is likely to be from a Trinity College vessel. The earliest evidence for the use of this pattern at Trinity College dates to c. 1833–47 and it continued in use until at least the late 19th century, with some vessels probably manufactured after 1888.
- B.4.5 Whilst both vessels could be earlier a depositional association with the construction of Westminster College in 1897–99 is plausible and it is even possible that these vessels were used in the early years of Westminster College. They could have been late 19th/early 20th century gifts from St. John's and Trinity of vessels from services that were being phased out of use. A similar pattern has been observed at Ridley Hall, where vessels associated with King's College were recovered from unstratified contexts that probably date to the period of the foundation of that institution or soon after.
- B.4.6 The Westminster College sherd mulberry/purple was introduced in 1828; garter marks were popular from c.1840 onwards and were used on ceramics associated with several colleges.
- B.4.7 These include St John's College, where there are garter marks on vessels known to have been produced in 1882 with the text 'ST John's College' inside the garter. This garter mark is quite similar (but not identical) to the recovered example, it had a para-heraldic badge within the garter (the retrieved fragment was much smaller) and was brown not mulberry. Although apparently not particularly common mulberry was used on St. John's College ceramics, by the cook Charles Adolphus Desiré Bruvet (1873–77).
- B.4.8 There is no confirmed evidence that that the college itself used mulberry after it took control of the kitchens in 1877, although it is possible that they did. There is a piece of decoration with ribbon/intertwined bands pattern on the sherd. This has been noted on sherds from several vessels at the Grand Arcade site, these were in features backfilled c. 1879–82 and c. 1882–85. Although these sherds were not identifiably collegiate the vessels were incomplete and collegiate vessels were present in one of these assemblages, including one vessel from St. John's College. The most probable date for this sherd would be a mid/late 19th century date which broadly fits with the other material.

B.5 Small Finds

By Chris Howard-Davies

Introduction

- B.5.1 Only a small assemblage of metalwork and stone (65 fragments) was recovered from the site, the majority being ironwork (55 fragments, comprising c 86% of the metalwork), with nine items of copper alloy and one of stone (but see Appendix B.13). Most of the copper alloy objects are unstratified surface finds.

Copper alloy objects

- B.5.2 Five of the nine objects recovered were coins, all in relatively poor condition. All are of third or fourth-century date (Period 1.4). Thanks go to John Zant (OAN) for the identifications. All are from surface/unstratified contexts.

- 1 SF 14 Radiate copy (probably), c AD 270-90
- 2 SF 15 Copy (fragment), ? 4th century
- 3 SF 16 VALENS, 'SECURITAS REIPUBLICAE', Lyon mint, AD 364-78
- 4 SF 17 CARAUSIUS, 'PAX AUG', 'C' mint (?Colchester), AD 286-93
- 5 SF 53 House of Constantine 'GLORIA EXERCITUS', 2 standards, Trier mint (? copy), AD 330-5

- B.5.3 A rather poorly preserved Colchester brooch (**1**: SF35) came from ditch **605** (fill 606) phase 1.1). Mackreth (2011, 36) notes the strong tendency for Colchester brooches to survive in somewhat poor condition. This brooch type, which has continental origins, was already in use, and being made in Britain, before the arrival of Rome, and continued in popularity well into the middle years of the 1st century AD (Bayley and Butcher 2004, 149). More refined dating for these brooches relies on differences in the form and decoration of the catchplate (Mackreth 2011, 36), which, in this case, is now lost. The type is widely distributed in south-eastern Britain, but uncommon outside that zone.

- 1 Colchester brooch, plain curving bow, surface now extensively lost. Pin and catchplate missing. The spring is untypically wide, with five turns to each side. Although much of the surface is gone, there are at least two grooves visible across the spring cover. Mackreth's 'standard British type' (2011).
L: 40mm; W: 26.5mm; Ht: 14mm
CAMWCC15, 606, SF 35

The only other identifiable find (**2**; SF11, context 300) is of late medieval or early post-medieval date. Although now incomplete, probably lacking a small hook on its outer edge, where there appears to be a slight protrusion, it can be identified as a rather flimsy hooked clasp, used, in pairs and joined by a chain, to close loose garments. These objects are relatively common finds, popular from the late fifteenth to the early seventeenth century (Egan and Forsyth 1997, 230), and this example falls into Reads class E, type 3 (2008).

- 2 Small cast hooked clasp with rectangular suspension loop. Heart-shaped body with nicked edges and round central depression, perhaps divided into quadrants by low ridges, with a central dot.
L: 21.5; W: 17mm; Th: 1.75mm
CAMWCC15, 300, SF 11

- B.5.1 The two remaining items of copper alloy are not easily identifiable. SF10 (unstratified), a fragment of rod c 34mm long and 2.5mm in diameter and flattened at one end, seems to be a brooch or buckle pin, and SF12, from topsoil 300, is a plain cast ring, c 25mm in diameter, with a flattened oval cross section, is effectively undateable.
- B.5.2 The ironwork from the site was largely confined to hand-forged nails of Manning (1985) type 1b, deriving, for the most part from coffins associated with Skeleton 503 (grave 501) and Skeleton 542 (grave 541).
- B.5.3 Eight fragmentary nails (SFs 18, 19, 21, 22, 31, 42) were associated with the burial of Skeleton 503, coming from the fill (502) of grave 501. Only two (SF21 and SF42) appear to be largely complete, suggesting nails between 42mm and 55mm in length, with flat, approximately round heads c 14mm in diameter. None retains evidence that they have been clenched. A further three fragments (SF46) were recorded as coming from near the same grave (context 613).
- B.5.4 Grave 540 (Skeleton 542, fill 541) produced a similar number (10 fragments, SFs 23-30, 33), with the one potentially complete example (SF30) suggesting that they were of roughly the same size (c 47mm long, with a head diameter of 16mm). A single hobnail (SF34) came from the same grave. It can only provide extremely tenuous evidence that the deceased was shod, and is, presumably, as likely to have been lost from the sole of a grave-digger's shoe.
- B.5.5 Isolated nail fragments were recovered from a number of other contexts. Their distribution is shown in Table 17. Early Roman Pit **310** (fill 309) was unusual in producing a group of 17 fragments, presumably dumped in the pit as rubbish.

Context	Small Find no	Period	Quantity
307, fill of pit 308	40	2.2	1
309, fill of pit 310	52	1.2	17
333, fill of posthole 332	13	1.2	1
333, fill of posthole 332	45	1.2	1
425, upper fill of well 411	39	1.3	1
457, fill of posthole 456	41	1.2	1
471, fill of posthole 472	44	1.2	1
566, secondary fill of ditch 568	43	1.2	1

Table 17: Distribution of other nails from the site

- B.5.6 A single small but robust tapering spike (SF54) from ditch/slot **597** ((fill 596) phase1.2)) is most likely to be a headless nail, although it could be a small punch. Pit **500** (fill 507) produced a fragment of narrow (c 23mm wide) strip (SF51) and 5 fragmentary nails (SF 50), which are likely to be associated in some way, perhaps originally forming some kind of nailed binding strip. There is, however, the possibility, thrown up by x-ray, that at least one of the nails is a medieval horseshoe nail, suggesting that the group is somewhat mixed.
- B.5.7 A single horseshoe (SF47) was recovered from late made ground (511), the context strongly suggesting that its origins could lie elsewhere. Although complete, x-ray shows it to be somewhat worn, with the toe considerably narrowed. The shoe does not appear to have calkins, and has a broad web (c 29mm), with three rectangular nail holes on one branch, four on the other (likely to be the outside). It is c 108mm wide. It falls into Clark's type 3 shoes (1995), dating to the thirteenth-fourteenth century in both London and Winchester (*ibid*). The form of the surviving nails is not entirely clear from the x-ray, but they are probably of fiddle-key type.

Worked Stone

B.5.8 A single stone object (3; SF32) came from pit **543** ((544) phase 2.1) , where it was cutting into skeleton 542. Having a drilled perforation, it has been identified as a bead, but as it has no distinctive features to suggest a date, little more can be said. It is somewhat battered, and thus its original form cannot be ascertained with confidence, beyond suggesting that it was originally cylindrical, or possibly sub-conical, with a flattened base and ground or polished surfaces. Stone beads are difficult to date, but do not seem, other than those of amber or jet, to have been widely favoured during the Roman period. It also bears a superficial resemblance to a range of early medieval spindle whorls, but with a maximum diameter of only 16mm, and a perforation diameter of less than 6mm, it would seem rather small (see, for instance Walton Rogers 1997), although not impossible, see for example, those from Flixborough (Walton Rogers 2009). In this case, the small diameter perforation would suggest an early to middle Anglo-Saxon date (*ibid*).

- 3 Sub-cylindrical perforated stone object, possibly white limestone. Central hole appears drilled, and the original surface, where it survives, is lightly polished. Possibly white limestone.

Ht: 11mm; Ext diam: 16mm; Diam perf: 5.75mm
CAMWCC15, 541, SF 32

Small Find Number	Period	Context Number	Material	Object Name	Total No. of items	Other Comments	Part of:
10	-	0	Cua (copper alloy)	Artefact	1		
11	2.3	300	Cua (copper alloy)	Artefact	1	Topsoil Find: ?Harness Pendent	
12	2.3	300	Cua (copper alloy)	Ring	1	Topsoil Find:	
13	1.2	333	Fe (iron)	Nail	1		
14	-	0	Cua (copper alloy)	Coin	1		
15	-	0	Cua (copper alloy)	Coin	1	?Cua Coin	
16	-	0	Cua (copper alloy)	Coin	1		
17	-	0	Cua (copper alloy)	Coin	1		
18	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501	SK 503 501
19	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501	SK 503 501
20=42	1.4	502	Fe (iron)	Nail	1	Renumbered	SK 503 501
21	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501	SK 503 501
22	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501	SK 503 501
23	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
241.4	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
25	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
26	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
27	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
28	1.4	541	Fe (iron)	Nail	1	Fe (iron) ?Nail(s), ?More than one in Qty, ?Coffin	SK 542 540

Small Find Number	Period	Context Number	Material	Object Name	Total No. of items	Other Comments	Part of:
						Nail(s), SK 542 540	
29	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
30	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
31	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501	SK 503 501
32	1.4	544		Artefact	1	?Material, ?Natural, Worked, ?Bead fragment	543
33	1.4	541	Fe (iron)	Nail	1	?Coffin Nail, SK 542 540	SK 542 540
34	1.4	541	Fe (iron)	Nail (hobnail)	1	?Coffin Nail, SK 542 540	SK 542 540
35	1.1	606	Cua (copper alloy)	Brooch	1		
36	1.2	564	Ceramic	Vessel	1	Semi-Complete SRW Jar (c. 99%) - Holes in Base	
37	1.2	564	Stone	Artefact	1	?Worked, if so is it a ? Quern	
38	1.1	606	Ceramic	Vessel	1	Vessel Fragments (c. 65%> of vessel present).	
39	1.3	425	Fe (iron)	Nail	1		
40	2.2	307	Fe (iron)	Nail	1		
41	1.2	457	Fe (iron)	Nail	1		
42	1.4	502	Fe (iron)	Nail	1	?Coffin Nail, SK 503 501 This nail was originally meant to be numbered as SF 20 but was duplicated & labelled as SF 19. As such it was Re-Numbered as SF 42. ie Nail SF 20 is the same as Nail SF 42.	SK 503 501
43	1.2	566	Fe (iron)	Nail	1		
44	1.2	471	Fe (iron)	Nail	1		
45	1.2	333	Fe (iron)	Nail	1		
46	1.1	613	Fe (iron)	Nail	1	Found Near Grave 501 SK 503, ?Coffin Nail	
47	-	511	Fe (iron)	Horseshoe	1	Fe Horseshoe & Nails	
48	1.2	394	Stone	Quern	1	Quern/Mill Stone Fragment, Ridge & Furrow. ?Mill Stone Grit	
49	1.3	470	Lava	Quern	1	Quern/Mill Stone Fragment	
50	2..2	507	Fe (iron)	Nail	5	Found with Fe Artefact, SF 51	
51	2..2	507	Fe (iron)	Artefact	1	Found with Fe Nails, SF 50	
52	1.2	309	Fe (iron)	Nail	17	Fe (iron) Nail Fragments x17 (inc. ?x1Fe Hobnail)	
53	-	99999	Cua (copper alloy)	Coin	1	Unstrat:	
54	1.2	596	Fe (iron)	Artefact	1	?Nail	

Small Find Number	Period	Context Number	Material	Object Name	Total No. of items	Other Comments	Part of:
55	1.4	502	Fe (iron)	Nail	1	?Coffin Nail	SK 503 501
56	1.4	502	Fe (iron)	Nail	1	?Coffin Nails	SK 503 501
57	1.4	541	Fe (iron)	Artefact	1	? Nail frag, ?Coffin Nail	SK 542 540

Table 18: Small Finds

B.6 Lithics

By Steve Graham and Anthony Haskins

- B.6.1 A total of 0.035kg of worked, unworked and burnt flint was recovered from a variety of features spanning the Roman to post-medieval periods

Context	Material	Weight in kg	Cut	Feature Type	Period
305	Flint	0.000	306	pit	1.2
339	Flint	0.000	338	posthole	1.2
398	Flint	0.000	397	ditch	1.2
400	Flint	0.010	399	pit	1.2
489	Flint	0.020	488	ditch	1.1
546	Flint	0.000	547	pit	2.2
627	Flint	0.000	628	pit	1.2

Table 19: Lithics

- B.6.2 The flakes from contexts 339 and 398 are unworked. The flakes from 400 and 546 are burnt, the flint from 400 (pit **399**) could potentially have been either a pot boiler or crushed for use as a temper for pottery. Two flakes were recovered from context 627, these were small tertiary flakes (interior, noncortical, production flakes). The flake from 305 is a secondary flake with a hinge termination most probably struck by a hard hammer. The most notable of the flakes was from context 489. This was identified as a cortex from a secondary deposit (possibly glacial, most likely from a riverbed). Beyond the possibility of the flint from 489 being prehistoric, nothing else in terms of dating could be ascertained from the assemblage.

B.7 Glass

by Carole Fletcher

- B.7.1 Archaeological works produced a small assemblage of 11 shards of glass weighing 0.159kg, of which the majority is vessel glass.

Methodology

- B.7.2 The glass was scanned, recorded catalogued, the material was weighed as individual vessels where possible. The glass is catalogued in Table 20.

Assemblage

- B.7.3 Eight of the 11 shards recovered came from layer 511, described as a post-medieval made ground, with a partial neck and rim with an applied finish, from a 19th century bottle being recovered from this context. The bulk of the glass recovered from this and other contexts is not closely datable, however it is likely to be post-medieval, mostly 18th century or later. Only a single shard, recovered from posthole **589**, is tentatively identified as Roman, the remainder of the glass (recovered from ditch **397**) is post-Roman and appears to be intrusive within the feature.

Discussion

B.7.4 The glass, with the possible exception of the single shard recovered from posthole **589**, which is only tentatively identified as from a Roman vessel of indeterminate form, represents a background scatter of 18th and 19th century material as might be found on any urban site of the period. It is of little significance and may be deselected prior to archival deposition.

Cont-ext	Cut	Period	Form	Count	Weight (kg)	Description	Overall Date
398	397	1.2	?Window glass	1	0.001	Sub-rectangular shard of clear, slightly green tinted glass with some faults including several large bubbles and striations. Light iridescence on the surface of the glass. It is most likely a fragment of window glass, bears none of the hallmarks of Roman window glass and is likely to be intrusive into the context.	Not closely datable
			Vessel glass	1	0.001	Small sub-triangular shard of olive green vessel glass, most likely a bottle. The glass is in good condition and breaks appear to be modern.	Not closely datable, although likely to be 19th century or later
511		2.3	Window glass	1	0.015	Sub-triangular shard of near-colourless glass, one surface of which is moulded, resulting in a ridged surface such as that seen on security glass in some doors and windows, the moulded ridge lines obscuring the view through the glass. The other surface of the glass is relatively smooth, although lightly abraded and slightly pitted, suggesting it was the external surface.	Not closely datable, although likely to be 19th century or later
			Vessel-bottle	1	0.010	Partial cylindrical flaring neck and rim from a clear blue-green (aqua) glass bottle. Although no mould lines survive, this type of bottle was produced by mechanical means. The neck is tapered and the finish is a two-part with the actual lip having been lost. The surface of the glass is slightly iridescent with a more recent breaks indicating the glass is in good condition, with little degradation beyond the surface iridescence and patination.	19th-century or later
			Vessel-bottle	1	0.038	Shard from the base edge of a natural black glass bottle, the surface of the glass is covered with iridescent patination, some of which is flaking off. A more recent break indicates the glass to be in good condition below the patination. Part of the kick from the base of the bottle survives and	Not closely datable, however it may be 18th century or later

Context	Cut	Period	Form	Count	Weight (kg)	Description	Overall Date
						enough of the basal edge to indicate a basal diameter somewhere between 10 and 12 cm. The condition of the glass and the possible basal diameter suggest it might be an 18th-century bottle.	
			Vessel	1	0.012	Irregular fragment of vessel glass, most likely from a bottle, showing heavily patinated external surfaces and breaks; one more recent break indicates the glass is a dull olive green. The iridescent opaque surfaces of the glass suggest it has some age, however the recent break indicates the glass is in good condition, suggesting it is unlikely to be any earlier than 18th century.	Not closely datable, however it may be 18th century or later
			Vessel	1	0.009	Sub-rectangular shard of mid-green vessel glass, most likely a bottle. Some surface dulling, some small faults in the glass.	Not closely datable
			Vessel-bottle	1	0.029	Body shoulder shard from a dark olive-green bottle with numerous small bubbles within the glass. Smooth inner surface. Relatively smooth outer surface, though some stress lines can be felt in the division between the body and the slope of the shoulder is marked by the change in the surface feel of the glass. The striations indicating where the bottle was turned in the mould, being a part mould-blown bottle.	Not closely datable, but likely to be 19th century or later
			Vessel-bottle	1	0.030	Body shard and fragment of basal edge from a cylindrical dark olive green-natural black glass bottle. There are some faults within the glass and the outer surface is pitted from contact with the mould, indicating it is a mould-blown or part mould-blown vessel.	Not closely datable, but likely to be late 18th-19th-century
			Vessel-bottle	1	0.013	Shard of dark olive-green glass from the shoulder of a cylindrical bottle with a slight curve surviving where it has broken from the neck. The glass has some faults, including numerous small bubbles and the surface feels pitted, suggesting it was mould-blown or part mould-blown.	Not closely datable, but likely to be late 18th-19th-century
590	589	1.1		1	0.001	Small sub rectangular, slightly curved fragment of clear near-colourless glass. The glass has a degree of light iridescent patination on one surface and is more heavily patinated on the other surface which also feels rough	Not closely datable, however tentatively identified as Roman

Cont-ext	Cut	Period	Form	Count	Weight (kg)	Description	Overall Date
						as if it has been in contact with a mould. Roman mould-blown glass often has this surface texture. However, it is unclear if this fragment is Roman.	
Total				11	0.159		

Table 20: Glass

B.8 Clay Tobacco Pipe

by Carole Fletcher

Introduction and methodology

- B.8.1 During the excavation a total of seven fragments of clay tobacco pipe stem and one partial bowl, in white ball clay, in total weighing 0.024kg, were recovered from a single pit (**500**) and a layer (511). Terminology used in this assessment is taken from Oswald's simplified general typology (Oswald 1975, 37–41) and Crummy and Hind (Crummy 1988, 47-66).
- B.8.2 A full quantification table for the clay pipes, including separate counts for complete bowls, bowl fragments, heels and pipe stems and marked or decorated fragments, can be found in Table 21, based on the recording methods recommended by the Society for Clay Pipe Research (<http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf>). Stem bore hole diameter recording has not been undertaken on this assemblage due to its limited size, and the majority of the pipe fragments cannot be dated beyond the broadest date of c.1580-1910.

Assemblage

- B.8.3 A single bowl fragment recovered from pit **500**, which also produced post-medieval pottery, is the only datable fragment in the assemblage. The surviving fragment is from the back of a clay pipe bowl with clearly visible mould lines; the bowl has broken at the joint with the stem and the heel, leaving few datable features. The general curve of the surviving bowl back fragment suggests it is an Oswald type 7 or subsequent type and is therefore c.1660-80 or later. The majority of the stem fragments were recovered from layer 511, are unmarked and undecorated, and thus can themselves only be broadly dated, although the post-medieval material with which they were recovered suggests they may be 18th or 19th century.

Discussion

- B.8.4 The fragments of clay tobacco pipe recovered represent only fragments of what are most likely casually discarded pipes that have subsequently been reworked as the site was utilised and developed. The pipe fragments do little other than to indicate the consumption of tobacco on or in the vicinity of the site by one or more individuals some time after c.1660. The plain and fragmentary nature of the assemblage means it is of little significance and may be deselected prior to archival deposition.

Context	Cut	Phase	Form	Weight (kg)	No of bowl fragments	No of pipe stem fragments	Description	Date
507	500	2.2	Oswald type 7 or later	0.005	1		Part of back of bowl with clear mould lines. Broken at joint with stem and heel with no surviving heel angle.	Post-c.1660
				0.003		1	Fragment of slightly oval pipe stem, just beginning to flare to form the heel.	Not closely datable
511		2.3		0.001		1	Fragment of slightly oval pipe stem. Narrow fragment from relatively close to mouthpiece.	Not closely datable
		2.3		0.002		1	Fragment of slightly oval pipe stem.	Not closely datable
		2.3		0.002		1	Fragment of pipe stem.	Not closely datable
		2.3		0.002		1	Fragment of slightly oval pipe stem.	Not closely datable
		2.3		0.003		1	Fragment of pipe stem. Trimming of the mould seams on this stem appears to have left it somewhat flat on both the upper and lower surfaces.	Not closely datable
		2.3		0.006		1	Fragment of slightly oval pipe stem with slight flare at one end, suggesting it broke close to the edge of the heel. Mould seams on the upper and lower surfaces of the pipe can be clearly seen and felt.	Not closely datable
Total				0.024	1	7		

Table 21: Clay Tobacco Pipe

B.9 Ceramic Building Material

By Sarah Percival

- B.9.1 A total of 46 pieces of ceramic building material weighing 2.836kg were collected from twelve excavated contexts. The assemblage includes post-medieval to early modern brick and tile alongside a small quantity of Roman tile. One fragment is too small to be closely datable.

Period	Context	Feature	Feature type	CBM Date	Quantity	Weight (kg)
0	511	0	Layer	Modern	3	0.22
	546	0	Pit	Post Medieval	4	0.248
1.2	324	323	Gully	Post Medieval	1	0.027
	536	614	Ditch	Not closely datable	1	0.002
				Post Medieval	4	0.016
1.3	617	618	Hearth	Post Medieval	1	0.098
	425	411	Pit	Post Medieval	1	0.03
	470	467	Ditch	Roman	1	0.701
1.4	582	579	Ditch	Roman	2	0.117
	502	501	Grave fill	Post Medieval	1	0.006
2.2	540	540	Grave	Post Medieval	2	0.095
	307	308	Pit	Post Medieval	8	0.185
	507	500	Pit	Post Medieval	17	1.091
Total					46	2.836

Table 22: Quantity and weight of CBM by context

Methodology

- B.9.2 The CBM was counted and weighed by form and fabric and any complete dimensions measured. Abrasion, re-use and burning were also recorded following guidelines laid down by the Archaeological Ceramic Building Materials Group (ACBMG 2002). Terminology follows Brodrigg (1987).

Roman

- B.9.3 Three pieces of Roman CBM weighing 0.818kg were collected from three Period 1.3 contexts (Table 22). All are made of soft red silty fabric with common sub-rounded orange grog inclusions. A piece of bonding tile 40mm thick came from the fill of ditch **467**, an incomplete flue tile with combed arcs on the exterior surface was found in the fill of ditch **579**, which also contained an undiagnostic fragment in the same fabric.

Post-Roman

- B.9.4 The post-Roman assemblage comprises 39 pieces of late post-medieval to early modern roof, floor and walling material, plus three pieces of modern pan tile.
- B.9.5 Seven fabrics were identified (Table 23). Handmade bricks were found in three fabrics, all hard fired to a deep orange red. No complete or semi-complete measurements survived. One fragment from Period 2.2 pit **500** had mortar adhering to two surfaces.
- B.9.6 One fragment of floor tile in cream fabric with fine orange swirls came from Period 1.4 grave **540** and is likely to be intrusive.
- B.9.7 Roof tile formed the bulk of the assemblage. Roof tiles are found in four fabrics (Table 23). A fragment of peg tile with a single circular peg hole is made of creamy yellow fabric with orange swirls voids and sanded surfaces (Period 1.2 gully **323**). Twelve further roof tile fragments in the same fabric are probably also from the peg tiles. Three flat tile fragments were also recovered in two red orange sandy fragments.

Date	Type	Fabric	Context	Quantity	Weight (Kg)	
Post-Medieval	Brick	Red sandy with moderate chalk occasional quartz	507	10	0.99	
			307	1	0.106	
		Orange with cream swirls rare flint	617	1	0.098	
		Red sandy with moderate chalk occasional quartz	502	1	0.006	
			507	2	0.004	
			546	3	0.124	
	536		4	0.016		
	Floor tile	Cream and pale orange swirls	540	1	0.085	
	Flat roof tile	Orange sandy grey core	307	2	0.013	
			Orange sandy with voids and red grog	425	1	0.03
			Cream/ yellow with orange swirls, voids sanded surface	307	5	0.066
				507	5	0.097
				540	1	0.01
	546	1	0.124			
Peg tile	Cream yellow with orange swirls voids sanded surface	324	1	0.027		
Modern	Pan tile	Sandy red speckled, hard fired	511	3	0.22	
Total				42	2.016	

Table 23: Quantity of CBM by date type and fabric

Discussion

- B.9.8 The small and redeposited Roman CBM assemblage indicates that it unlikely substantial buildings were located at or near the site during this period.
- B.9.9 The post-Roman assemblage comprises one floor tile, brick fragments and roof tile consistent with late 18th to 19th century building activity. Much of this post-Roman assemblage has come from the upper fills of Roman features, however all of the features identified were all located next to the edge of the excavation baulk, and as such these finds can be interpreted as being intrusive and incorporated into the fills of the Roman features accidentally.

B.10 Baked Clay

By Sarah Percival

Introduction

- B.10.1 A total of 36 fragments of baked clay weighing 1.039kg were collected from eleven excavated contexts and from unstratified surface collection (Table 24).

Period	Feature Type	Cut	Context	Quantity	Weight (kg)	
0	Pit	448	453	1	0.003	
1.1	Ditch	605	606	1	0.011	
			607	4	0.021	
	Posthole	591	592	2	0.026	
1.2	Ditch	565	563	1	0.003	
			564	1	0.011	
			614	536	1	0.025
	Hearth	618	617	12	0.321	
	Pit	310	309	8	0.546	
				459	481	1
628				627	1	0.052
		639	477	2	0.014	
1.3	Pit	475	484	1	0.004	
Total				36	1.039	

Table 24: Quantity and weight of baked clay by feature

B.10.2 The complete assemblage was analysed and the baked clay recorded by context, grouped by form and fabric, and counted and weighed to the nearest whole gram. Diameter of wothy or round wood impressions was noted where available. Surface treatment and impressions were recorded along with the form and number of surviving surfaces. Fabrics were identified following examination using a x10 hand lens and are classified by major inclusion present. The archive is currently held by OA East before formal deposition.

Fabrics

B.10.3 Five fabrics were identified (Table 25). All are characterised by the use of fine, silty clay, some with added inclusions of flint, ferruginous pellets or chalk. The clay is soft and low fired to pale buff to orange colours.

Form	Fabric	Quantity	Weight (kg)
Daub	Fine silty clay with moderate small to medium flint iron oxide pellets	21	0.919
	Pale buff clay with common chalk pieces	1	0.011
Undiagnostic	Dense grey sandy fabric with orange surfaces	4	0.021
	Fine orange clay with cream swirls	5	0.044
	Fine orange clay with iron pellets	1	0.004
	Pale buff clay with common chalk pieces	4	0.04
Total		36	1.039

Table 25: Quantity and weight of baked clay by fabric

Forms

B.10.4 Twenty-one pieces in clay with occasional flint inclusions have smoothed exterior surfaces and opposing rough surfaces some with wattle impressions indicating that they are probably derived from a structure. Wattle impressions on the underside of the daub pieces have a width of 7mm. One further piece of daub was found in a second chalk tempered fabric. The remaining pieces are formless, having no preserved surfaces.

Deposition

B.10.5 Twelve pieces of daub were found within the fill of hearth **618** suggesting that they may have been from an oven dome. The remainder of the daub comes from ditch and pit fills not directly associated with structures.

Discussion

B.10.6 The assemblage represents a mix of structural pieces, some perhaps from an oven dome and undiagnostic material perhaps hearth lining or similar.

B.11 Mortar

by Steve Graham

B.11.1 A total of 0.115kg of mortar was recovered from two contexts. From the fill (307) of late medieval/post-medieval pit **308** 0.025kg was retrieved, the remainder came from the fill (507) of post medieval pit **500**. The mortar was composed of yellow lime mixed with sand, one piece of which (from 507) still has a small fragment of CBM still attached to it.

B.12 Metalworking Debris

By Sarah Percival

Introduction

B.12.1 A total of 220 pieces of metalworking debris (MWD) weighing 1.928kg were collected from ten excavated features (Table 26).

Feature	Type	Context	Description	Quantity	Weight (kg)
315	Ditch	317	Possible crucible? With highly vitrified material inside clay lining. Large lumps of chalk embedded in contents	1	0.207
321	Pit/hollow	322	Vesicular	1	0.004
467	Ditch	470	Vitrified	1	0.004
488	Ditch	489	Vitrified	1	0.002
524	Ditch	528	Vesicular, rusty	4	0.145
540	Grave	541	Vesicular white possible crucible	1	0.002
565	Ditch	563	Sandy clay with vitified surface	1	0.012
			Vesicular white vitrified chalk pieces	45	0.369
			Vesicular white vitrified chalk pieces	124	1.04
			Vesicular white vitrified chalk pieces	38	0.092
605	Ditch	606	Vesicular	1	0.04
614	Ditch	536	Vitrified	1	0.002
625	Ditch	625	Greenish prill	1	0.009
Total				220	1.928

Table 26: Quantity and weight of metalworking debris by feature

Methodology

B.12.2 The complete assemblage was recorded by type by context. The MWD was scanned with a magnet to establish the presence of iron and was counted and weighed to the nearest whole gram.

Nature of the Assemblage

B.12.3 The assemblage principally comprises non-magnetic composite lumps of white vesicular material with numerous voids and some chalk inclusions. Several pieces have vitrified clay lining adhering, perhaps from a hearth base or crude crucible. One piece, from ditch **625**, is a small green-coloured prill perhaps dross from copper alloy working.

Discussion

B.12.4 The metalworking debris assemblage suggests some copper working may have taken place at the site. The remainder of the assemblage is undiagnostic.

B.13 Stone

By Sarah Percival

Introduction and methodology

B.13.1 A total of three pieces of stone weighing 3.305kg were collected from three features (Table 27).

Object Name	Lithology	Cut	Feature Type	Context	Quantity	Weight (kg)
Quern	Lava	467	Ditch	470	1	0.203
	Gritstone	393	Pit	394	1	0.504
Uncertain	Fine limestone	565	Ditch	564	1	2.598
Total					3	3.305

Table 27: Quantity and weight of stone by feature

B.13.2 A full catalogue was prepared of the total assemblage. Each piece was examined using a hand lens (x20 magnification) and the basic lithology recorded. The pieces were counted and weighed to the nearest whole gram. Type and form were observed. For saddle querns grinding surface, wear angle, thickness, secondary re-use and tooling were recorded. For rotary shape, collar width, collar depth, hopper diameter, hopper shape, hopper depth, handle attachment, handle socket height above grinding surface, handle socket angle, spindle notch and diameter of feed were recorded. Spindle material, use wear, secondary re-use and tooling were also noted. The typological variables were selected to aid identification of the chronology and form of the quern, the petrological examination was undertaken to distinguish possible imports and locate the source of supply of stone to the site. OA East curate the assemblage and archive until formal deposition.

Nature of the Assemblage

B.13.3 A fragment of gritstone quern with chipped channels along the grinding surface came from fill 394 of pit **393**. A fragment of lava with one surface smoothed from wear came from fill 470 of ditch **471**. A fragment of fine limestone came from ditch **565**. The fragment shows no sign of wear or of being worked.

Discussion

B.13.4 The quern fragments provide evidence that crop-processing was being undertaken at the site, probably during the Roman period. Lava is found extensively on Roman to medieval sites throughout East Anglia, imported from sources in the Rhineland. The gritstone may be a variation of Millstone Grit sourced from the Pennines and again found widely on 2nd to 4th century sites in Cambridgeshire, for example Bobs Wood, Hinchbrook (Percival undated).

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Human Skeletal Remains

By Zoë Uí Choileáin

Introduction

- C.1.1 This report presents the results of the analysis on two skeletons (Sk 503 and Sk 542) recovered during the excavations. Both inhumations were extended and contained coffin nails but no grave good: both have been phased to the Late Roman period. The graves (**540** and **501**) were both shallow (between 0.18m to 0.20m deep) and have clearly suffered from post-Roman truncation.
- C.1.2 The radiocarbon dating results for both burials are discussed in appendix G.

Methodology

- C.1.3 The skeletons and disarticulated material were assessed in accordance with national guidelines set out by Mays *et al.* (2004) and with reference to standard protocols for examining human skeletal remains from archaeological sites (Brickley and McKinley 2004; Buikstra and Ubelaker 1994; Cox and Mays 2000).
- C.1.4 Completeness was recorded by noting the amount of the skeleton present as a percentage.
- C.1.5 Fragmentation was scored as either high (most bones fragmented and in pieces), moderate (approximately half of the skeleton has bones that are in fragments) or low (limited or few bones are fragmented).
- C.1.6 Surface condition was assessed using the scoring system devised by McKinley (2004) where the level of surface erosion on the bone was graded on a level between 0 and 5; grade 0 being no erosion and grade 5 being highly eroded.
- C.1.7 All remains were aged using the methods laid out by Buckberry and Chamberlain (2002) Lovejoy *et al.* (1985) and Scheur and Black (2000).
- C.1.8 Biological sex was estimated using the methods laid out by Buikstra and Uberlaker (1994).
- C.1.9 Any dental conditions, pathology or bony abnormalities were recorded. Particular attention was given to the presence of any unusual conditions that might require detailed specialist examination and/or the application of analytical techniques, such as radiography and histology.

Results

Skeleto	burial type/position	Orientation*	Compl- eteness %	Condition	Age	Sex	Pathologies
503	Extended, Supine	SE-NW	75-100	Grade 2	25-35	F?	Cribrā orbitalia on both orbits, healed periostitis on R tibia. Periodontitis on mandible. Caries and ante-mortem tooth loss on mandible.
542	Extended, Left side	NW-SE	25-50	Grade 2	24-32	M	Joint change in three R. Ribs between 5-9. Healed Fracture in 2 left Ribs between 5-9. Caries and ante-mortem tooth loss on mandible

Table 28: Inhumations (Skeletons 503 and 502)

Skeleton 503

- C.1.10 Skeleton 503 was the least truncated of the burials, being between 75-100% complete. Most bones were fragmented and extant wear and root activity meant that there was limited potential to observe certain conditions.
- C.1.11 Due to the rather fragmentary nature of the remains there is limited potential for recording the cranial or post-cranial measurements that are recorded in standard full analyses of archaeological human remains (Brickley and McKinley 2004). The length and width measurements of some long bones was possible (Buikstra and Uberlaker 1994). A stature estimate was taken from the right femur (Trotter 1970) which gave a height of 155cm.
- C.1.12 The individual was estimated to be probably female based primarily upon observations of the sciatic notch, cranial traits and a measurement of the width of the femoral head.
- C.1.13 The epiphyses on all bones had fused indicating that skeleton 503 was an adult. Few other traits were present with which to define age however the auricular surface suggests an age range of 25-29 years (Buckberry and Chamberlain 2002, Lovejoy et al 1985). The level of dental attrition was observed (Brothwell 1981; Miles 1963) and suggested an age of 25-35 years. As such the skeleton was estimated to be between 25-35 years at time of death.
- C.1.14 Little pathology was observed during the analysis however healing periostitis was present on the distal femur which is a sign of non-specific infection. As such this could be the result of numerous inflammatory conditions (Waldron 2009,116). Very mild cribrā orbitalia was observed as pitting on both orbits (Stuart-macadam). Walker (2009) argues that both a deficiency in Vitamin C and Vitamin B12 are likely causes of Cribrā Orbitalia. Few teeth remained to examine however the dental health of this individual appeared to be fairly poor with caries, periodontitis and ante-mortem tooth loss of the lower right molars.

Skeleton 542

- C.1.15 Skeleton 542 showed higher levels of truncation with the lower half of the body in particular being truncated by a later pit. Most bones present were fragmented and some conditions could be masked by the level of wear.
- C.1.16 The individual was estimated to be male based primarily on cranial traits.

- C.1.17 As with Sk503, the epiphyses on all bones present had fused indicating that this individual was an adult. The age range was narrowed using observations of the sternal rib ends (Iskan and Loth 1993) which suggested an age of 24-28 years old. Combined with the observations on dental attrition (Brothwell 1981 and Miles 1963) an age estimate of 24-32 years was reached.
- C.1.18 The condition of the bone combined with the high level of fragmentation made pathological conditions difficult to detect however two healed rib fractures were observed on the left hand side. As they were badly broken it was not possible to determine exactly which ribs the fragments came from but a general observation of size placed them between ribs 5-9. The fracture was healed although slightly misaligned and with extra bone having grown over the misaligned part. The joints of four ribs on the right hand side, again between ribs 5-9 were altered in shape possibly as a result of the same incident which caused the left ribs to become fractured. The most common incidents which result in fractured ribs are falls and brawls (Waldron 2009 151) Unfortunately the extensive fragmentation of the ribs mean it is not possible to determine whether any more trauma had occurred in this area. Dental health was again poor with a higher number of caries observed although less ante-mortem tooth loss than seen in skeleton 503.

Discussion

- C.1.19 Due to the fragmented nature of the remains, no further analysis is necessary. The presence of coffin nails suggests that it is likely that these burials may be more likely to belong to the Late Roman period when burial rites began to move away from cremation towards inhumation, which became fairly universal in the 4th century AD (Taylor 2001, 109). Burials during this time period became more standardised with the majority tending towards an extended supine position within a wooden coffin. The lack of grave goods is also common by the fourth century. (Taylor 2001 109). The roughly east to west orientation of skeleton 503, combined with the lack of grave goods does suggest a leaning towards Christian burial however this is by no means a definite indicator for the time period.
- C.1.20 The dental health of both individuals was fairly poor perhaps indicating a poor diet. The types of pathologies noted on the bones were all fairly standard and represent the type of general injuries that could be picked up by a working population. While there were no grave goods present to indicate a high class status nor are there any pathologies or funerary practices present which may indicate that these people were of a particularly lower class.

C.2 Faunal Remains

By Zoë Uí Choileáin

Introduction

- C.2.1 A total weight of 15.308kg of animal bone was recovered from the excavation. The preservation of the bone is on the whole good with moderate levels of fragmentation.
- C.2.2 The material was primarily recovered from Roman pits and ditches with a small proportion of fragments being retrieved from postholes.

C.2.3 The total number of assessable specimens came to 36, just under half of which (16 specimens or c.45%) were identified to species. The preservation of the material was moderate to quite good, with minimal surface erosion and weathering. The material came from three Romano-British ditches and was considered collectively as one assemblage. Ditches F100 and F103 from the evaluation produced a collective total of 29 specimens (c.80% of the assemblage). Cattle was identified based on loose teeth, and fragments of radius, ulna, tibia, phalanx and a vertebra. This was also the case with the other two domesticates, where meat-bearing joints were recorded alongside teeth. Gnawing was noted on four specimens, implying features were left open for some time and bones were within reach of scavengers. Two specimens were recorded as butchered: a cattle-sized shaft fragment displaying marks consistent with meat removal and a sheep/goat metatarsus showing two fine knife marks indicative of skinning (Rajkovic 2015, 9).

Methodology

C.2.4 All identifiable elements were recorded using a version of the criteria described by Davis (1992). Completeness was assessed in terms of percentage and zones present (Dobney and Reilly 1988). Identification of the assemblage was undertaken with the aid of Schmid (1972). No measurements were taken as no bones were complete. Taphonomic criteria including indications of butchery, pathology, gnawing activity and surface modifications as a result of weathering were also recorded where evident.

Results

The results are summarised in the table below

Cut	Phase	Context	Feature type	Unit	horse	cow	Sheep / goat	pig	bird	Large mammal	Medium mammal	Small mammal	frog	dog	No individuals represented	of	Butchery /pathology
304	1.2	303	ditch		2				1		2			1	3		
306	1.2	305	pit					2							1		
308	2.2	307	pit		3										3		Chop marks on humerii and femurs
310	1.2	309	pit	22			1				1			1	2		
312	1.2	311	ditch								1				1		
315	1.3	316	ditch					7			7	3			2		1 small mammal rib burnt
		318		35	3	2						8	5		4		
319	1.2	320	ditch				1								1		
321	1.2	322	pit								2				1		
325	1.3	326	gully			3			2						1		
327	1.2	328	pit			1									1		
332	1.2	333	posthole	24											1		
		339		8											1		1 frag calcined bone
348	1.3	349	ditch		10	1				10	5				3		
350	1.3	351	ditch			1	1				3				2		
		353			1	4				18	3				3		
389	1.3	392	ditch		12					24		1			2		
393	1.2	394	pit			1									1		
395	1.2	396	ditch			1									1		Rib with Chop mark

Cut	Phase	Cont-ext	Feature type	Unit	horse	cow	Sheep / goat	pig	bird	Large mammal	Medium mammal	Small mammal	frog	dog	No individuals represented	of	Butchery /pathology
		398		3		2				2					2		
399	1.2	400	pit						3						3		
408	1.2	409	posthole	1											1		
412	1.3	413	ditch	5						1					1		1 frag burnt bone
		414						1	2	10					2		
		415								1					1		
411	1.3	425	pit	15										1	1		1 frag calcined bone
		427				1	3		2	1					2		
		428								1					1		
		432				1	1		1	1					2		
436	1.2	437	posthole	4			1			1					1		Unid frags burnt
443	1.2	442	ditch			3									1		
445	1.3	446	ditch	3		1		1	4						3		
448		453	pit	5	2		4								2		1 frag unid burnt
444	1.2	455	pit		1				2						1		
465	1.2	466	posthole							42					1		
467	1.3	469	ditch	24		4			7						1		Cut marks on large mammal bone
		470				1			5	26	1				3		
473	1.2	474	posthole							1					1		
639	1.2	477	pit				2			1					1		
459	1.2	481	pit	8			2							1	1		1 frag calcined bone
475	1.3	484	pit							2					1		
	1.1	489				3	5								2		2 frags cow horn
501	1.4	502	grave	5			5	1	4	48				2	3		
504	1.2	505	ditch							3					1		
	2.2	507	pit	59	106	4	3		1	7					2		Poss infection in horse metacarpal. Cut marks on horse skull fragments
	-	511	layer			2		1		1					2		
	-	513	layer	1	2		1			13	1				2		Unid frag calcined bone
	1.2	515	pit				5		1	13					2		
	1.2	523		5		1	2		1						2		
524	1.3	527	ditch		1		1		3						2		
	1.3	528		31		1	5	1	10	3					1		Calcined bone
532	1.3	531	posthole							22					1		
614	1.2	536	ditch	5		2	17	3	7	39	4				4		1 frag burnt bone. Joint disease

459	1.2	481	pit	8			2							1	1	1 frag calcined bone
																on cow metapodial. Cut marks on medium mammal ribs and large mammal frags.
540	1.4	541	grave	7		1									1	1 frag burnt bone
	2.2	546	pit	3						3					1	
550	2.3	548	post hole						2	10					2	
	2.3	549						1							1	
552	1.2	551	ditch			1	1								2	
555	1.2	553	ditch			1									1	
562	1.2	560	ditch							1					1	
565	1.2	563	ditch			1	1			10				1	3	
	1.2	564		13			19								1	1 frag unid burnt. Juvenile sheep frags
568	1.2	566	ditch				2			10					1	
573	1.1	571	ditch	5					3						1	1 frag burnt bone
576	1.1	574	ditch					2		11					1	Cut mark on end of pig rib
576	1.1	574	ditch					2		11					1	Cut mark on end of pig rib
577	1.1	578	ditch						1		2				2	
579	1.3	580	ditch						6						1	
		581			2		2			9					2	Chop marks on metapodial
		582		26	7	5	2		1	16			1	5	5	Cut marks on horse tibia
588	1.3	585	ditch							2					1	
591	1.2	592	post hole	10			7		7		3				3	
593	1.1	594	ditch							1					1	
597	1.2	595	ditch		9		2								2	
		596					3		2	2	2				3	
599	1.2	598	pit							1					1	Cut marks. Unfused.
602	1.2	604	ditch	6		3			2					1	3	
605	1.1	606	ditch	19	1	16	9	2	2		7	7			5	Chop marks on cow mandible
		607								4				1	2	
612	1.1	613	ditch	37			1			3	1				2	
	1.2	625	ditch	2											1	
	-	99999		2			1		2	20					2	

Table 29: Faunal remains: Identifiable fragments and no. of individuals represented

C.2.5 Identifiable bone was sided where possible in order to calculate the number of individuals present in each context.

C.2.1 Almost all of the bone is well preserved with very little being masked by root activity taphonomy or gnawing. The low level of gnawing activity recorded may indicate that the material was buried fairly quickly after discard.

Occurrence of Species

C.2.2 The assemblage appears to contain a fairly even distribution of cattle, horse and sheep with a much lower quantity of pig, bird and dog. A large quantity of bone could only be identified to the medium mammal category therefore it is likely that pig is under-represented in this table.

C.2.3 Pits **308** and **579** both contained large dumps of horse bone. In the case of pit **308** this represented at least three separate individuals with multiple femurs and humerii being recovered from the same context.

C.2.4 Proportionately very little juvenile animal bone was recovered. Most notable was a collection of juvenile sheep bone from ditch **565**. As there were no repeated elements this is assumed to represent one individual.

Butchery and Pathology

Cut	Phase	Context	Feature	Butchery	Pathology	Burnt?
308	2.2	307	pit	Chop marks on horse humerii and femurs		
315	1.3	316	ditch			1 small mammal rib burnt
332	1.2	339	posthole			1 frag calcined bone
395	1.2	396	ditch	Rib with Chop mark		
412	1.3	413	ditch			1 frag burnt bone
411	1.3	425	pit			1 frag burnt bone
436	1.2	437	posthole			Unid frags burnt
448	1.2	453	pit			1 frag unid burnt
467	1.3	469	ditch	Cut marks on large mammal bone		
459	1.2	481	pit			1 frag calcined bone
500	2.2	507	pit	Cut marks on horse skull fragments	Poss infection in horse metacarpal.	
-	-	513	layer			Unid frag calcined bone
524	1.3	528	ditch			Calcined bone
614	1.2	536	ditch	Cut marks on medium mammal ribs and large mammal frags.	Joint disease on cow metapodial.	1 frag burnt bone.
540	1.4	541	grave			1 frag burnt bone
565	1.2	564	ditch			1 frag unid burnt. Juvenile sheep frags
573	1.1	571	ditch			1 frag burnt bone

576	1.1	574	ditch	Cut mark on end of pig rib		
579	1.3	581	ditch	Chop marks on metapodial		
		582		Cut marks on horse tibia		
599	1.2	598	pit	Cut marks. Unfused medium mammal bone.		
605	1.1	606	ditch	Chop marks on cow mandible		

Table 30: Butchery, pathology and calcined bone

- C.2.5 A large amount of butchery marks were noted on the horse bones from pit **308** and ditch **579**. These were primarily chop marks across the saggital plane. The most likely explanation for this is marrow extraction where the bones are split open in order to retrieve the marrow inside. This is a form of butchery that is often seen on Roman sites in relation to cattle (Seetah 2006). Fragments of horse skull were recovered from context 507 which is the fill of a pit. Possible cut marks were observed upon some fragments which are consistent with meat removal.
- C.2.6 The second highest proportion of chop marks were recorded on cattle and large mammal bone. These represented a mixture of chop marks and finer cut marks consistent with meat removal.
- C.2.7 Very little pathology was noted on any of the bone however some possible periostitis was noted upon a cow metapodial from ditch 614 and a horse metapodial from context 507 which is the fill of a pit. Periostitis is a non-specific bone infection which can happen as a result of inflamed tissue above and is frequently observed upon archaeological assemblages (Baker and Brothwell 1984).

Discussion and conclusion

- C.2.8 The assemblage primarily represents an even spread of horse, cattle and sheep/goat. In general this assemblage would seem to represent domestic waste. The dominance of butchered cattle bone is likely to represent the preference for cattle introduced from the continent as the legions populated Britain (King 1999).
- C.2.9 The most interesting contexts in this assemblage are contexts 307 (pit **308**) and 507 (pit **500**). The presence of multiple horse remains in the same pit indicates possible industrial use: perhaps the marrow was being extracted for tallow- or glue-making. The activities of specialist horse knackers is not well documented in the medieval period (Baxter 1996, 77) and therefore this assemblage, while small, has moderate potential for adding to the record. The butchered horse remains from context 507 also show the only signs of pathology with signs of infection on a metapodial.

C.3 Environmental Samples

By Rachel Fosberry

Introduction

- C.3.1 Fourteen bulk samples were taken from features within the excavated areas in order to assess the quality of preservation of plant remains and their potential to provide useful data on the diet and economy of the settlement. Features sampled include ditches, pits and postholes largely dating to the Early Roman period.

- C.3.2 An additional twelve samples were taken from two Late Roman graves (**501** and **540**) and from a potential cremation (**605**) in order to maximise the recovery of human skeletal remains.
- C.3.3 This was in addition to three bulk samples taken during the evaluation from ditches F:100 (**211**), F:103 (**207**) and pit F:101 (**204**). These samples were all dry, with carbonised remains. None of the three contained much charcoal, and only F.103 had plant macro-remains other than charcoal: two spelt glume bases (*Triticum spelta*) and two wild grass seeds. There was a low presence of terrestrial and brackish water snails. Fragmented artefacts in the heavy residues attested to an active area where various human activities had left traces including a small lump of lead. Although archaeo-botanical remains were uncommon, the small, delicate specimens were well preserved. (de Vareilles 2015,10)

Methodology

- C.3.4 The total volume (up to 20 litres) of each sample was 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 0.25mm 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 Tables 31 and 32. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* 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).

Quantification

- C.3.5 For the purpose of this initial assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories

= 1-10, ## = 11-50, ### = 51+ specimens #### = 100+ specimens

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

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

Results

- C.3.6 The samples taken from the potential cremation **605** (Samples 32 and 33, fill 606) did not produce any plant remains other than sparse charcoal. This suggests that any cremation deposit would have consisted of bone that had been picked out of a cremation pyre without the inclusion of any of the fuel used.

C.3.7 The samples taken from the fills of graves **501** and **540** are mainly devoid of preserved plant remains as would be expected for such a feature. The presence of single charred grains and cereal chaff fragments is likely to be the result of these burnt remains on the ground surface becoming accidentally incorporated into the grave when it was backfilled, or they may represent later intrusions

Sample No.		21	22	23	24	25	26	27	28	29	30	32	33
Context No.		541	541	541	541	502	502	502	502	502	502	606	606
Phase		1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.1	1.1
Cut No.		540	540	540	540	501	501	501	501	501	501	605	605
Feature Type		grave	grave	grave	grave	grave	grave	grave	grave	grave	grave	ditch	ditch
Volume processed (L)		6	4	2	2	9	16	9	24	8	1	8	9
Flot Volume (ml)		1	1	1	1	1	1	1	1	1	1	1	1
CHARRED CEREAL GRAIN													
<i>Triticum cf. spelta</i> L. caryopsis	Spelt Wheat grain			1									
cereal indet. caryopsis	Indeterminate grain									1			
CHARRED CEREAL CHAFF													
<i>Triticum dicoccum</i> Schübl./ <i>spelta</i> L. rachis internode	Emmer or Spelt Wheat chaff		1	1		1							
CHARRED WEED SEEDS													
medium trigonous <i>Carex</i> spp. 2-3mm] nut	medium triangular -seeded Sedges									1			
CHARCOAL		+	+	+	+	+	+	+	+	+	0	+	++

Table 31: Environmental samples from graves 501 and 540 and vessel (SF38) found in ditch **605**.

C.3.8 The bulk samples were largely unproductive with only occasional specimens of charred grains and legumes present. The exception is pit/well **411** which had eleven fills, two of which were sampled. Basal fill 425 (Sample 14) contains occasional plant remains, mainly cereal grains, that have been preserved by carbonisation. There is no evidence of any waterlogged preservation indicating that feature, if it was a well, had dried out prior to being backfilled. Fill 432 (Sample 15) is higher in the fill sequence and consists of a large assemblage of charred cereal processing waste.

C.3.9 Chaff remains are most abundant and these consist of the glume bases and spikelet forks that can be identified as spelt (*Triticum spelta*) wheat with occasional emmer (*T. dicoccum*) wheat. Charred grains of wheat are also included in the assemblage with a ratio of glume:grain of 8:1. Both spelt and emmer wheat are hulled wheat varieties in which the grain is tightly enclosed in the outer chaff.

C.3.10 Two hulled grains comprise a spikelet and the ratio of glume: grain is usually 2:1 which, if found in an archaeobotanical assemblage, could indicate the burning of complete ears of wheat (after Hillman 1981, Wilkinson and Stevens 2003, Nesbitt 1996). The lack of straw can be explained by the differential preservation of cereal remains when subjected to burning in which the cereal stems are less likely to be preserved by carbonisation than the tougher glume bases and cereal grains (Boardman and Jones 1990, 10.)

Hulled wheats require parching and/or pounding in order to release the grain resulting in a waste product of fine chaff. This chaff is particularly useful as tinder and is commonly found in large quantities on Iron Age and Roman sites as, once burnt, it survives well in archaeological deposits.

Sample No.		10	11	12	13	14	15	17	18	19	20	31	34	35	36
Context No.		309	328	333	339	425	432	464	466	481	407	596	639	638	606
Phase		1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1
Cut No.		310	315	332	338	411	411	463	465	459	406	597	565	605	
Feature Type		Pit	Ditch	post hole	post hole	Pit	Pit	Pit	Pit	Pit	post hole	Ditch			
Volume processed (L)		23	8	6	6	17	16	6	8	17	16	10	2	8	
Flot Volume (ml)		10	1	1	1	10	125	1	1	1	1	1	0	0	0
CHARRED CEREAL GRAIN															
<i>Triticum sp. caryopsis</i>	Wheat grain						14					1			
<i>Triticum cf. spelta L. caryopsis</i>	Spelt Wheat grain					9	82			1					
<i>Triticum spelta L. germinated caryopsis</i>	Emmer/ Spelt Wheat grain						6					2			
cereal indet. caryopsis	Indeterminate grain	1				3	7								
cereal indet. germinated embryo	sprout					4	18					1			
CHARRED CEREAL CHAFF															
<i>Hordeum vulgare L. rachis internode</i>	domesticated Barley chaff						1								
<i>Hordeum vulgare L. six-row rachis internode</i>	six-row barley chaff						1								
<i>Triticum dicoccum</i> Schübl. glume base	Emmer Wheat chaff						4								
<i>Triticum spelta L. spikelet fork</i>	Spelt Wheat chaff						12								
<i>Triticum spelta L. glume base</i>	Spelt Wheat chaff						622								

Sample No.		10	11	12	13	14	15	17	18	19	20	31	34	35	36
cf. <i>Triticum spelta</i> L. lower rachis fragments	Spelt Wheat chaff						8								
<i>Triticum dicoccum</i> Schübl./ <i>spelta</i> L. spikelet fork	Emmer or Spelt Wheat chaff						10								
<i>Triticum dicoccum</i> Schübl./ <i>spelta</i> L. glume base	Emmer or Spelt Wheat chaff						212								
<i>Triticum dicoccum</i> Schübl./ <i>spelta</i> L. rachis internode	Emmer or Spelt Wheat chaff						123								
CHARRED LEGUME															
Legume <2mm	vestches, small peas						1f								
Legume 2-4mm	Peas/sm all beans			1											
CHARRED WEED SEEDS															
<i>Galium aparine</i> L. nutlet	Cleavers								1						
<i>Poaceae spp.</i> Medium-size	Medium size grass seeds						6								
<i>Rumex sp.</i> Achene	small-seeded Docks						2								
Charcoal		++	+	+	+	+	+++	+	+	+	+	+	0	+	+
Large animal bones		###	##	###	##	##	#	#	#	##	#	#	##	0	#
Pottery		##	#	0	#	#	#	0	0	### #	0	##	## #	0	#
Slag		0	0	0	0	0	0	0	0	0	0	0	## ##	0	0
Magnetic residues		#	0	0	0	#	0	#	0	##	#	0	0	0	0

Table 32: Environmental bulk samples

Discussion

- C.3.11 In general, the samples were poor in terms of identifiable material with the exception of pit/well **411**. This feature was located on the western edge of the excavation and is likely to be part of the Early to Mid Roman settlement thought to be mainly located beyond the limits of this excavation. The identification of both emmer and spelt wheat is significant as emmer wheat is less common in the Roman period when it was replaced by spelt as the favoured variety for large-scale cultivation. Its presence at Westminster College is fitting with the early Roman date of the settlement.
- C.3.12 The samples from Westminster College has limited potential due to only one feature producing significant preserved remains. This assemblage has been fully quantified and no further work is required.

C.4 Shell

By Steve Graham

- C.4.1 A very small amount of shell (0.12kg) was recovered, virtually all of which is oyster, seemingly represented throughout the period of Roman occupation. The one exception is a small fragment of mussel recovered from ditch **593** (594).

Context	Weight in kg	Cut	Feature Type	Period
318	0.02		315ditch	1.3
432	0.04		411pit	1.3
477	0.01		639pit	1.2
502	0.01		501grave fill	1.4
527	0.04		524ditch	1.3
594	0.00		593ditch	1.1

Table 33: Shell

APPENDIX D. ASSOCIATED ROMAN SITE AND FINDS GAZETTEER

Below is a list of Roman sites and finds within a 500m radius of the site as referred to in the text (see Figure 1 for location).

CHER Number: **04598**

Grid Reference: TL 443 591

Roman remains at Castle Knott, Lady Margaret Road, found c.1893 during building work, including Roman coins and a (possible) skeleton.

CHER Number: **04690**

Grid Reference: TL 443 591

The T-shaped road known as Lady Margaret Road cuts through what was formerly an unbroken meadow, but is now divided up into building sites. . A large number of roofing tiles were found in building "Barrmore". Some small fragments of iron, resembling door-fastenings and other domestic fixtures were also found. Of pottery innumerable fragments have been found throughout the field. Fully 1000 sherds were taken from the ground at the Barrmore excavations. The condition and character of the pottery shows that the field was used as a rubbish heap by the inhabitants of Camboritum. A silver denarius of Trajan (?) was found : a third brass of Constantine and another of Claudius Gothicus at Castle Knott. A few defaced second and third brass were found at Barrmore and at Torrisdale. Traces of charcoal were found scattered through the soil. A large number of bones were found. Human bones were discovered at Castle Knott: they consisted of the remains of two men, a woman and a child. With these exceptions, all the bones were those of animals, obviously mainly kitchen refuse. Oyster shells were found in profusion. The workmen struck a small hollow and in it found a stone with marks offering, and a small cup, in fragments, but complete: the walls of the opening were blackened with wood ash. Apparently the remains of some cooking operation. In the Barrmore excavation an ancient ditch or water course was struck, and also at Torrisdale. The ground seems to have been very marshy and at one spot a kind of terrace was formed of rather large stones. One of these stones appeared at sometime to have been used as a whetstone. About 5ft below the surface, a half quern-stone (upper stone) was discovered of conglomerate.

CHER Number: **04927A**

Grid Reference: TL 442 594

Skeleton disturbed by gas-pipe, outside No 18 Huntingdon Rd. It lay at right angles to the road, approx 4ft deep, apparently just above natural. The layers above were much disturbed. No grave was noticed by the workmen. Only the legs were recovered, and these had apparently been articulated. They were large bones, probably belonging to a tall adult male. This site is on the Roman road to Godmanchester, just outside the gate

CHER Number: **04928**

Grid Reference: TL 4397 5886

Roman inhumation and pottery from 69 Grange Road found during work in 1908.

CHER Number: **04930**

Grid Reference: TL 4446 5896

Human skeletal remains of complete burial and disarticulated remains from 10 individuals from 3rd/4th century found. Inhumation was of a female aged between 36 and 50 was found on its right side, slightly flexed legs with east to west orientation

CHER Number: **05111**

Grid Reference: TL 4420 594

Building work at 71 Grange Road uncovered Roman inhumation, pottery and various objects in 1911.

CHER Number: **05123**

Grid Reference: TL 4420 5900

Roman road discovered in sewerage trench in Madingley Road.

CHER Number: **05124**

Grid Reference: TL 442 593

Well / pit, pottery and skeletons found at St Edmund's House 1936. Skeletons in Roman rubbish pits.

CHER Number: **05125**

Grid Reference: TL 4430 5900

Roman and Anglo-Saxon pottery found c1900 part of which interpreted as 'interments'.

CHER Number: **05240**

Grid Reference: TL 443 592

Roman remains at Mount Pleasant. Excavated by Alexander 1964, 1967. Roman pit / well, pottery, dwelling (not of stone), oven / hearth, wooden structure, earthwork, stone structure, road.

CHER Number: **08497**

Grid Reference: TL 4440 5904

Westminster College and boundary with Pound Hill. Roman pot sherds found in undisturbed layers number 4 Pound Hill in 1982.

CHER Number: **08770**

Grid Reference: TL 444 591

The site of the old Unigate dairy, Pound Hill, was excavated in autumn 1983. The purpose was to locate the defences of the Roman settlement. A small area 5m x 5m was excavated halfway down the site next to the Honey Hill footpath. A school had been built in the N corner of the site in 1810 - 1811. Between the path round the playground and the playground wall footings was the base of the original buttress to the wall. The buttress base was set in the top of the remaining 75cm of gault clay which caps the Roman rampart bank. The gault clay contained a very few sherds of the C3- C4, together with tile fragments. The rest of the rampart bank (1,20cm) consisted of dark brown compacted loam with many mussel shells, sherds of the late Roman period, limestone fragments and a few small bones (mainly of frog and rodent). Two gullies 40cm deep were under the rampart bank. These gullies cut a smaller shallower gully obliquely and all three were cut into cut redeposited sand. Under the sand the domed base of an iron furnace was found covered by a layer of charcoal and with a thick layer of slag round the perimeter.

Burnt clay and ash were found to one side of the furnace which had been constructed on the natural gault. A second small trench was excavated in the E corner of the developers' hole'. The earliest feature here was the bottom of a bowl furnace with a thick layer of iron slag in the outlet. Overlying and partly cutting the furnace was a ditch with its butt end on the N side of the furnace. The ditch fill consisted of a sand / clay / loam mix with C1 Romano-British sherds and one complete grey cooking pot. To the S of the furnace the ditch (U-shaped) was cut into natural sand. Another U-shaped ditch ran in a roughly E-W direction cutting across the upper fill of the butt end of the previous ditch. Its fill of light brown clayey loam with a little sand mixed in contained sherds of late C1 date. A pit, 90cm by 70cm and 40cm deep, cut into the top of both ditches. Two large pieces of opus signinum with a finished surface and a smaller fragment, a large tile fragment, 16 bones (mainly sheep) and c 50 C1 -C2 sherds were found in the fill of brown clay / loam.

CHER Number: **11521**

Grid Reference: TL 445 590

A recording brief was undertaken during the lowering of the access ramp / stairway at Kettle's Yard Gallery during March and April 1994. The discovery of a rammed building footing necessitated an excavation to examine this feature more fully. It is thought that this must be the remnant of a Roman building. A number of features were discovered beneath the footing, including a water storage well/pit, a processing tank and feeder channel, possibly for the processing of flax. Both were dated to c C3 by finds of pottery, this being much abraded.

CHER Number: **CB15489**

Grid Reference: TL 444 591

An evaluation found 1st century Roman pits and cess pits, and a series of late medieval quarry pits containing waste from iron smithing. The majority of the archaeological deposits however have been truncated by the quarrying activity.

An archaeological evaluation on the site of the former Cow and Calf public house identified three phases of activity on the site. The site lies within the 4th century walled town of Cambridge and lies close to the Via Devana. Three Romano-British pits and cess pits were excavated, dated to the 1st century AD. Four late Medieval pits, and a series of 16th century quarry pits were found, the latter containing iron smithing waste. In the 17th-18th century the site was levelled by the dumping of material. A large Romano-British finds assemblage was recovered from in situ features and as residual material in the quarry pits. A watching brief was carried out during construction works on the site in 2003. No further archaeological features were recorded, but residual Roman and Medieval pottery was recovered from the quarry backfills. The watching brief confirmed the results of the evaluation, that any Roman or Medieval archaeology on the site had been almost completely destroyed by later gravel quarrying.

CHER Number: **CB15716**

Grid Reference: TL 445 590

A small scale evaluation was undertaken in late May 2002, in advance of the redevelopment and extension of the folk museum. The evaluation revealed evidence of successive backyard deposits, and at a greater depth, stone and mortar structures of probable Roman date. Excavation has revealed a sequence of intense activity, interspersed with periods when the area was given over to gardening or horticulture. The earliest evidence is remains of a mid 1st-mid 2nd century Roman timber building fronting the road, with a neonatal burial interred in the rear of the structure. This may mark the earliest post-Conquest route into Cambridge. Little Late Roman or Early-Mid Saxon evidence was recovered apart from a single sherd of Mid Saxon Maxey type pottery.

CHER Number: **MCB15881**

Grid Reference: TL 441 592

An evaluation was carried out to assess the potential of the area within the college grounds. A poorly preserved child inhumation, tentatively dated to the Roman period, and only a few Roman pottery sherds were also recovered, indicating that the area probably lies outside the area of Roman occupation. Open area excavation revealed a further truncated inhumation, and a shallow ditched enclosure, suggested to be a small ploughed-out cemetery (MCB16299).

CHER Number: **MCB 17905**

Grid Reference: TL 4454 5904

Excavations at Northampton street in 1949 exposed sections of Roman ditch and walling. Ditch was aligned east to west with 2nd to 3rd century pottery at base.

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APPENDIX F. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-242978		
Project Name	Excavation at the Woolf Institute, Westminster College, Cambridge		
Project Dates (fieldwork)	Start	16-06-2015	Finish
			15-07-2015
Previous Work (by OA East)		Future Work	

Project Reference Codes

Site Code	CAM WCC 15	Planning App. No.	14/0922/FUL
HER No.	ECB 4487	Related HER/OASIS No.	

Type of Project/Techniques Used

Prompt: Direction from Local Planning Authority - Direction 4

Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input checked="" type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input checked="" 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 checked="" 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
ditch	Roman 43 to 410	HSR	Roman 43 to 410
pit	Roman 43 to 410		Select period...
post hole	Roman 43 to 410		Select period...

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)
District	Cambridge	Woolf Institute Westminster College Madingley Road Cambridge
Parish	Cambs City	
HER	CCC HET	
Study Area	790m2	National Grid Reference
		TL 4433 5904

Project Originators

Organisation	OA EAST
Project Brief Originator	Kasia Gdaniec
Project Design Originator	Robert Atkins
Project Manager	Robert Atkins
Supervisor	Steven Graham

Project Archives

Physical Archive	Digital Archive	Paper Archive
.CCC Stores	O A East	.CCC Stores
CAMWCC15	CAMWCC15	CAMWCC15

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Environmental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Human Bones	<input checked="" 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Survey		<input checked="" type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/> Database	<input checked="" type="checkbox"/> Aerial Photos
<input checked="" type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input checked="" type="checkbox"/> Geophysics	<input checked="" type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input checked="" type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input checked="" type="checkbox"/> Manuscript
<input type="checkbox"/> Spreadsheets	<input checked="" type="checkbox"/> Map
<input checked="" type="checkbox"/> Survey	<input checked="" type="checkbox"/> Matrices
<input checked="" 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 checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input type="checkbox"/> Survey

Notes:

APPENDIX G. RADIOCARBON DATING CERTIFICATES



RADIOCARBON DATING CERTIFICATE

05 October 2016

Laboratory Code SUERC-69254 (GU41841)

Submitter Rachel Fosberry
Oxford Archaeology East
15 Trafalgar Way
Bar Hill
Cambs. CB23 8SQ

Site Reference CAMWCC15
Context Reference 503

Material Femur – left : Human

$\delta^{13}\text{C}$ relative to VPDB -19.6 ‰

$\delta^{15}\text{N}$ relative to air 10.4 ‰

C/N ratio (Molar) 3.3

Radiocarbon Age BP 1769 ± 34

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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email Gordon.Cook@glasgow.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-

Date :- 05/10/2016

Checked and signed off by :-

Date :- 05/10/2016

Calibration Plot

OxCal v4.2.4 Bronk Ramsey (2013); r:5; Mixed (IntCal13,LocalMarine,16,10)

SUERC-69254 (1769,34)

68.2% probability

250 (68.2%) 390AD

95.4% probability

210 (95.4%) 430AD

Probability density

0.006
0.004
0.002
0

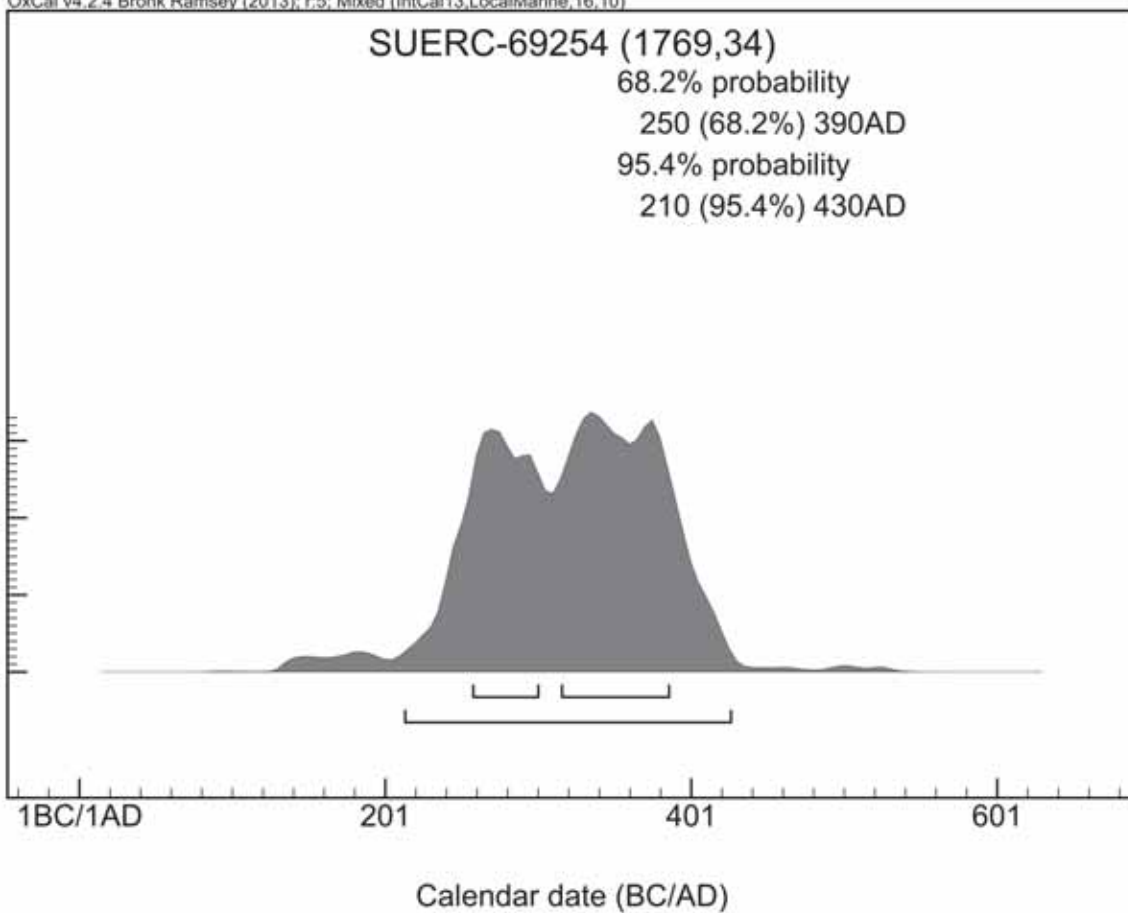
1BC/1AD

201

401

601

Calendar date (BC/AD)





RADIOCARBON DATING CERTIFICATE

05 October 2016

Laboratory Code SUERC-69255 (GU41842)

Submitter Rachel Fosberry
Oxford Archaeology East
15 Trafalgar Way
Bar Hill
Cambs. CB23 8SQ

Site Reference CAMWCC15
Context Reference 542

Material Femur – left : Human

$\delta^{13}\text{C}$ relative to VPDB -19.6 ‰

$\delta^{15}\text{N}$ relative to air 11.1 ‰

C/N ratio (Molar) 3.2

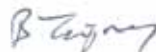
Radiocarbon Age BP 1796 ± 34

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

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email Gordon.Cook@glasgow.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-



Date :- 05/10/2016

Checked and signed off by :-



Date :- 05/10/2016

Calibration Plot

OxCal v4.2.4 Bronk Ramsey (2013); r:5; Mixed (IntCal13,LocalMarine,16,10)

SUERC-69255 (1796,34)

68.2% probability

230 (65.4%) 350AD

370 (2.8%) 380AD

95.4% probability

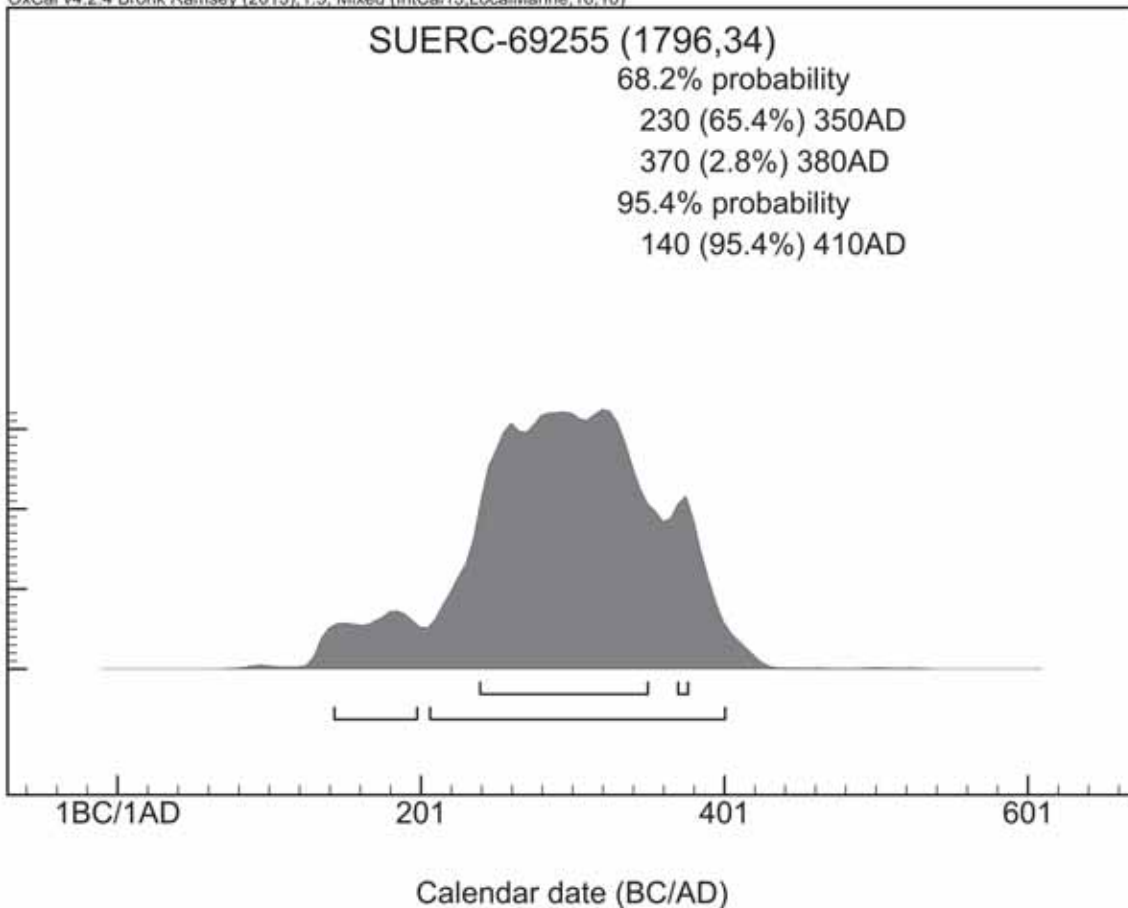
140 (95.4%) 410AD

Probability density

0.006
0.004
0.002
0

1BC/1AD 201 401 601

Calendar date (BC/AD)





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Figure 1: Site location (including nearby Roman features and finds - see appendix F)

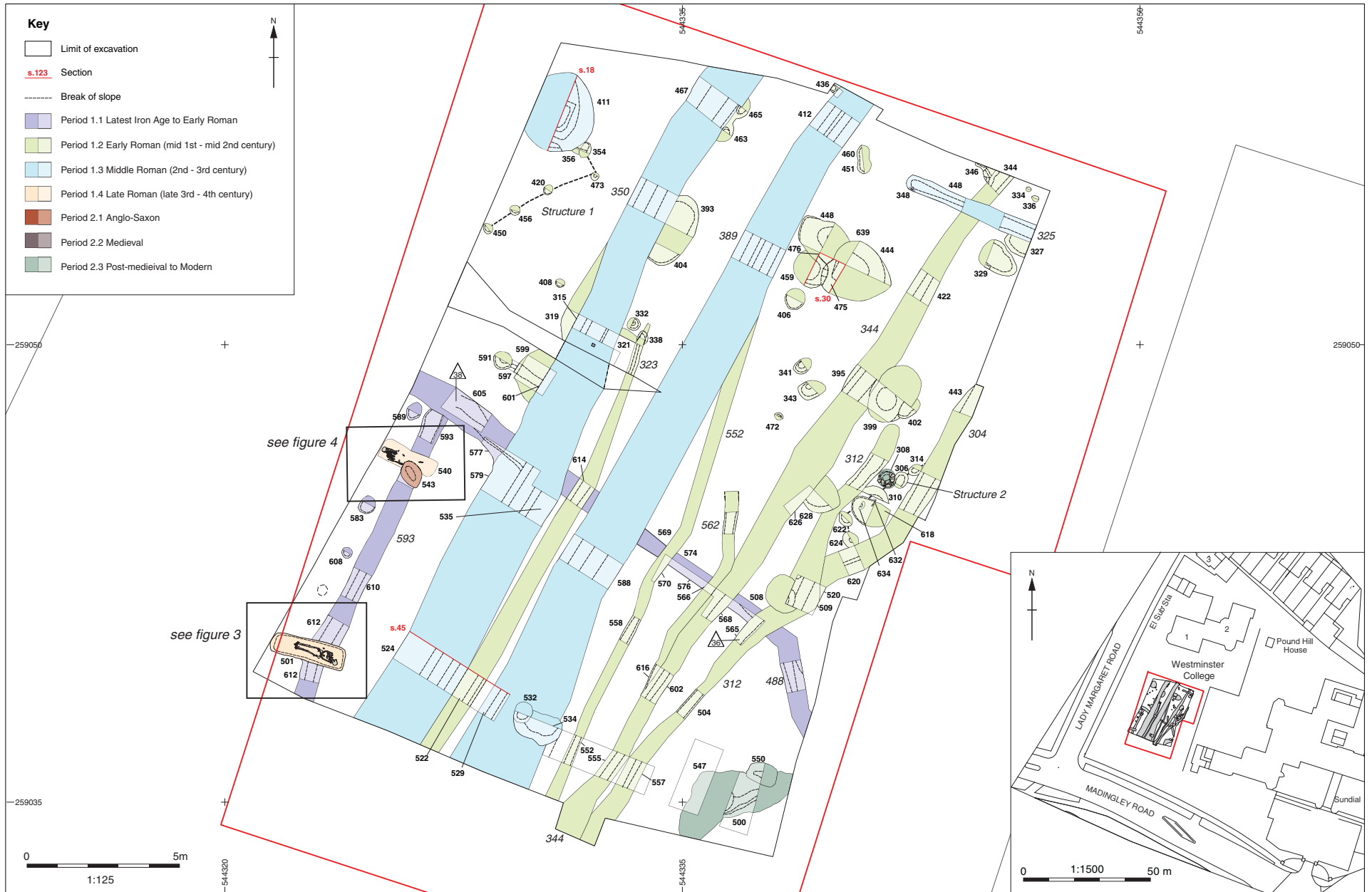
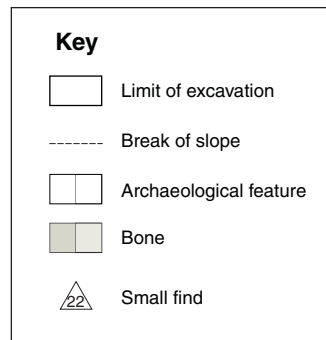
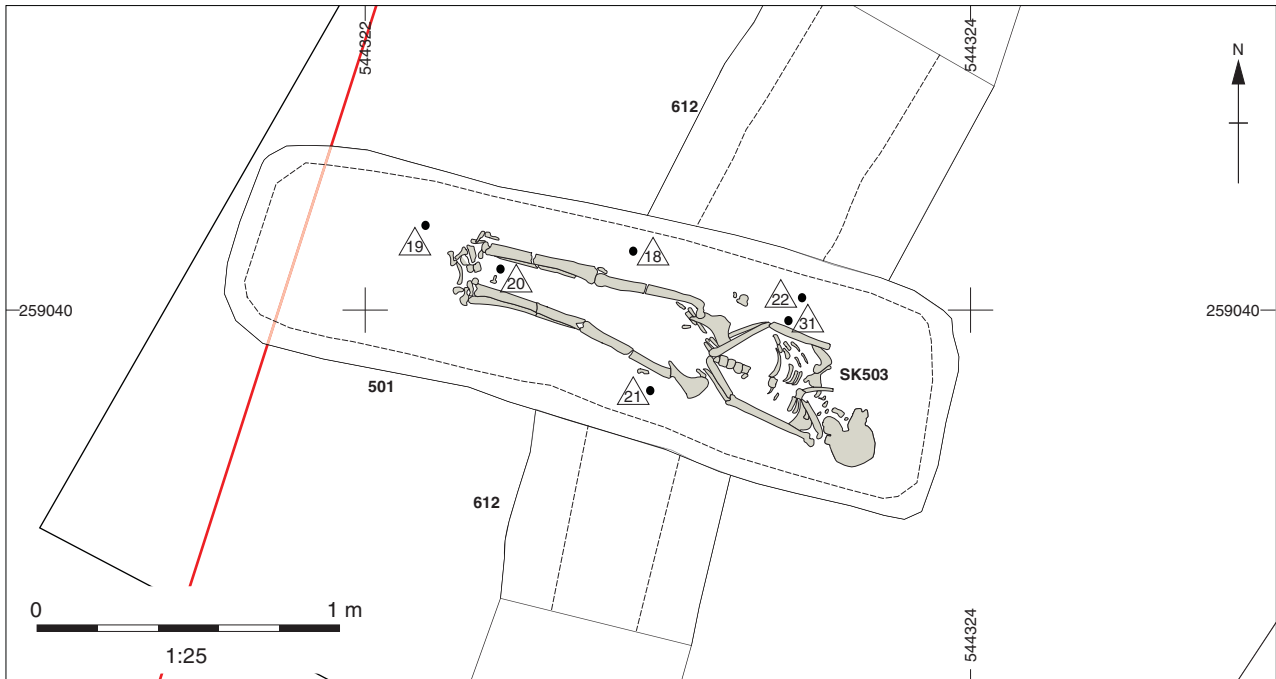


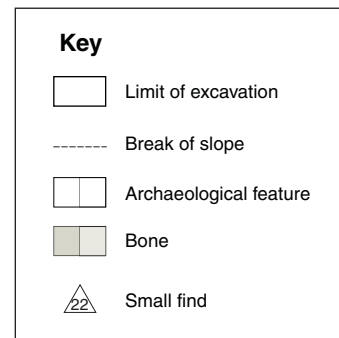
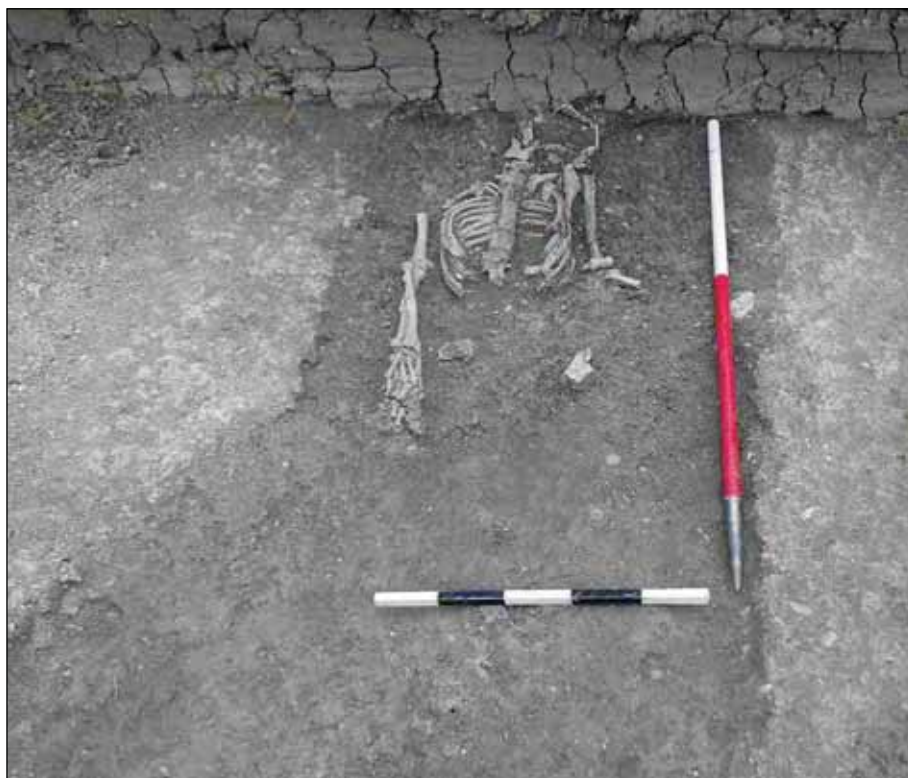
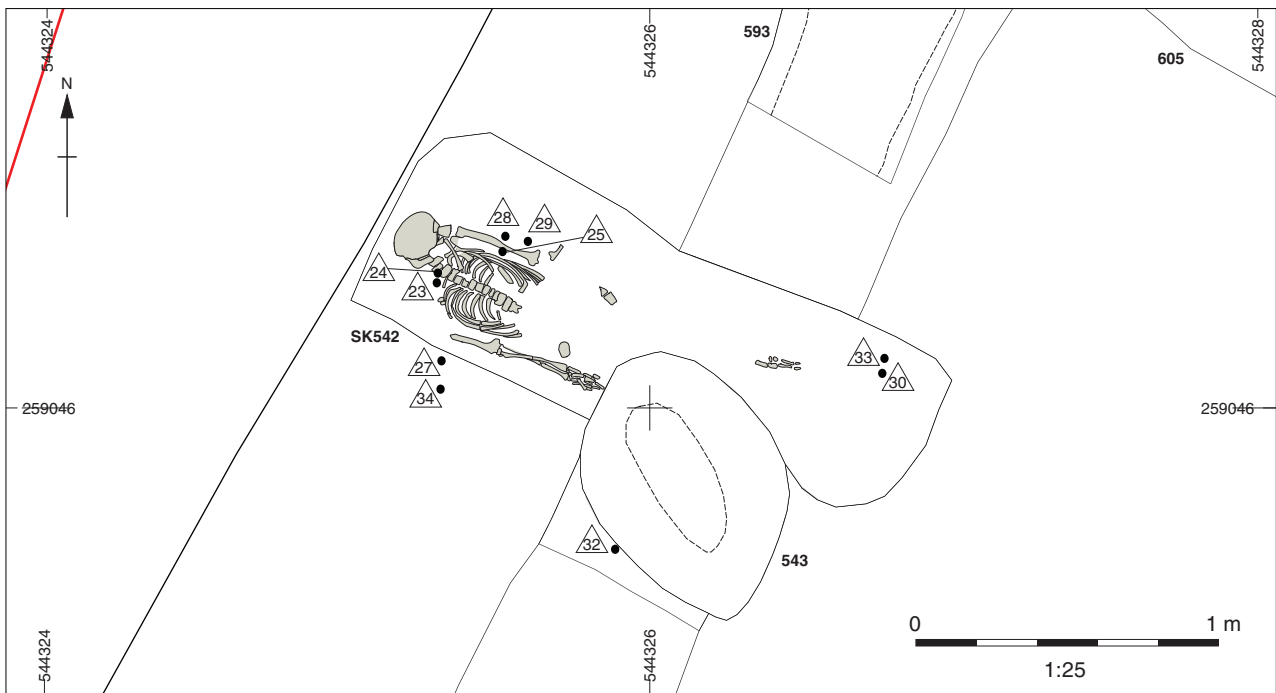
Figure 2: Plan of the excavation, showing all phases

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Skeleton 503, from the west

Figure 3: Plan and photograph of skeleton 503



Skeleton 542, from the east

Figure 4: Plan and photograph of Skeleton 542

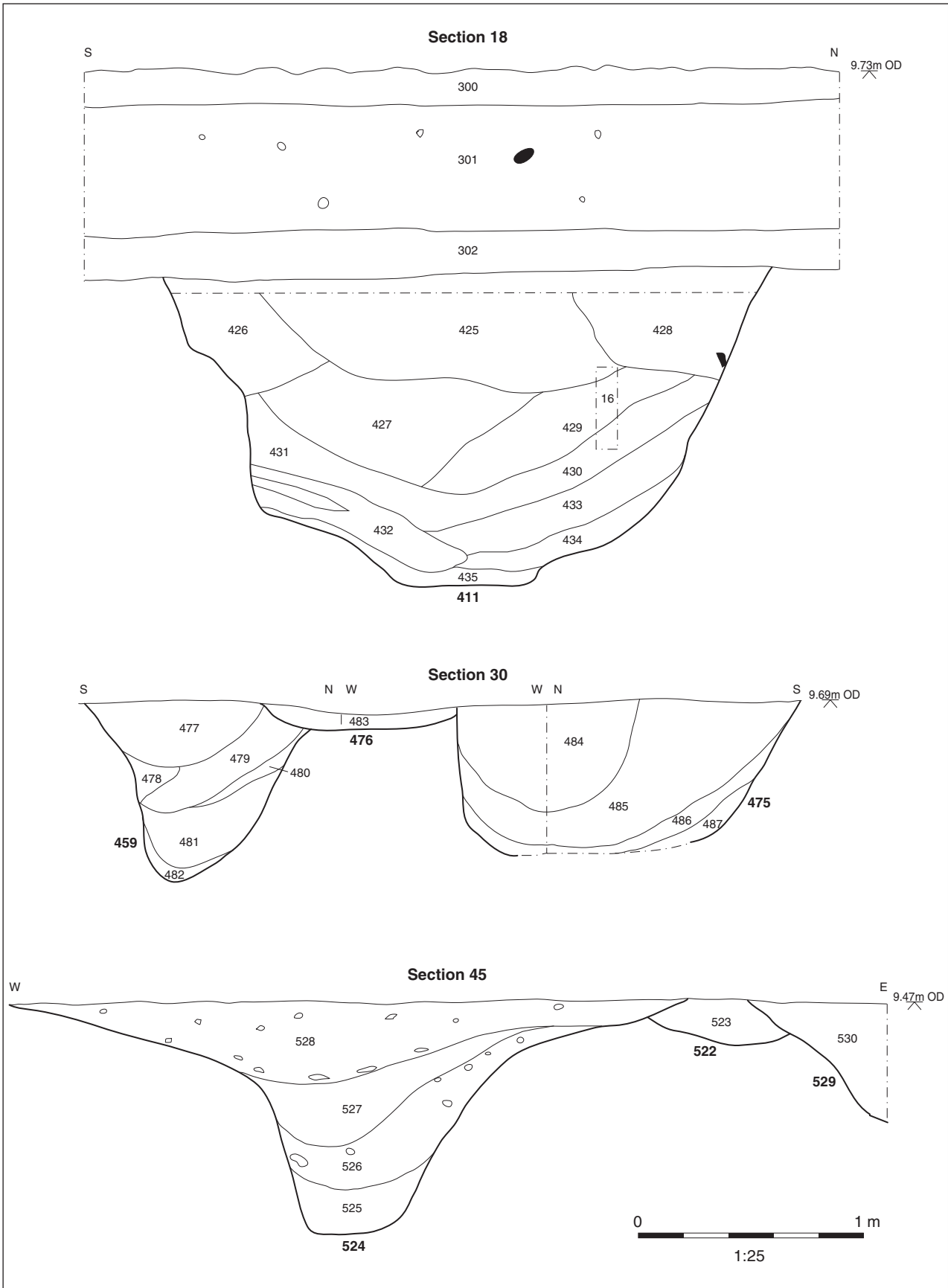


Figure 5: Selected sections



Plate 1: Photogrammetry plan of site



Plate 2: Intercutting pits **444**, **448**, **459**, **476**, from the south



Plate 3: South facing section through ditch **350**



Plate 4: Well 411, from the east



Plate 5: Pit 308, from the north



Plate 6: Selection of vessels from Westminster College library including Anglo-Saxon cremation urn recovered during construction of the college in 1897-99



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