
ARCHAEOLOGICAL SOLUTIONS LTD

**MAINTENANCE BLOCK, JESUS COLLEGE, CAMBRIDGE,
CAMBRIDGESHIRE**

AN ARCHAEOLOGICAL EXCAVATION: RESEARCH ARCHIVE

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|-------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------|
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| District: Cambridge | | Site Code: ECB 4578 |
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OASIS SUMMARY

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| Project details | | | |
| Project name | Jesus College, Cambridge, Cambridgeshire. An Archaeological Excavation | | |
| <p>In February 2016, Archaeological Solutions Ltd (AS) carried out an archaeological excavation at the Maintenance Block, Jesus College, Jesus Lane, Cambridge (NGR TL 4510 5905). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of a small store building and a small extension to the existing building (Cambridge City Council Ref. 15/0852/FUL).</p> <p>An archaeological evaluation was undertaken prior to the excavation: The earliest find from the evaluation is a flake (4g) of struck flint, from undated Ditch F1009 (L1011 Segment A), which is tentatively dated as late Neolithic to early Bronze Age. The evaluation identified two ditches located in Trench 1 and these features are directly comparable with the archaeology recorded prior to the construction of the maintenance block. Ditch F1009 was aligned north/south, and was cut by Ditch F1012 which was aligned north-west/south-east. Ditch F1012 contained Roman pottery. A possible ditch, F1014, was identified in Trench 2 though much of the trench contained modern services.</p> <p>The features revealed during the excavation accord well with those previously recorded during excavation of the footprint of the existing Maintenance Block and the monitoring of nearby service trenches. The two mid-late Iron Age ditches are on the same alignment as the earlier ditches recorded during the Maintenance Block excavations, while the Roman ditch continued the line of a Roman ditch recorded during monitoring of a nearby service trench.</p> | | | |
| Project dates (fieldwork) | 19 th - 26 th February 2016 | | |
| Previous work (Y/N/?) | Y | Future work | N |
| P. number | 6446 | Site code | ECB 4578 |
| Type of project | Archaeological Excavation | | |
| Site status | - | | |
| Current land use | University college | | |
| Planned development | Extension to maintenance block and new store | | |
| Main features (+dates) | Ditches | | |
| Significant finds (+dates) | Mid – Late Iron Age and Roman (3 rd – 4 th C) assemblages | | |
| Project location | | | |
| County/ District/ Parish | Cambridgeshire | Cambridge | Cambridge |
| HER/ SMR for area | Cambridgeshire Historic Environment Record (CCC HER) | | |
| Post code (if known) | - | | |
| Area of site | c. 130m ² | | |
| NGR | TL 4510 5905 | | |
| Height AOD (max/ min) | c. 5.75-6m | | |
| Project creators | | | |
| Brief issued by | Cambridgeshire County Council Historic Environment Team | | |
| Project supervisor/s (PO) | Archaeological Solutions Ltd | | |
| Funded by | Jesus College | | |
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| Authors | Barlow, G. | | |
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MAINTENANCE BLOCK, JESUS COLLEGE, CAMBRIDGE, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EXCAVATION: RESEARCH ARCHIVE

SUMMARY

In February 2016, Archaeological Solutions Ltd (AS) carried out an archaeological excavation at the Maintenance Block, Jesus College, Jesus Lane, Cambridge (NGR TL 4510 5905). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of a small store building and a small extension to the existing building (Cambridge City Council Ref. 15/0852/FUL).

Jesus College was founded in 1496 on the site of the nunnery of St Radegund, adapting some of the nunnery buildings, developing with new buildings and alterations in the following centuries. A number of archaeological investigations have taken place in the immediate vicinity, such as recording of the gate Tower and West Range which showed that the buildings date to the earliest years of the college (HER ECB1656). Archaeological monitoring during works in the Master's Garden identified the site of the parishioner's cemetery (HER ECB1627).

An archaeological evaluation was undertaken prior to the excavation: The earliest find from the evaluation is a flake (4g) of struck flint, from undated Ditch F1009 (L1011 Segment A), which is tentatively dated as late Neolithic to early Bronze Age. The evaluation identified two ditches located in Trench 1 and these features are directly comparable with the archaeology recorded prior to the construction of the maintenance block. Ditch F1009 was aligned north/south, and was cut by Ditch F1012 which was aligned north-west/south-east. Ditch F1012 contained Roman pottery. A possible ditch, F1014, was identified in Trench 2 though much of the trench contained modern services.

The features revealed during the excavation accord well with those previously recorded during excavation of the footprint of the Maintenance Block and the monitoring of nearby service trenches. The two mid-late Iron Age ditches are on the same alignment as the earlier ditches recorded during the Maintenance Block excavations, while the Roman ditch continued the line of a Roman ditch recorded during monitoring of a nearby service trench.

1 INTRODUCTION

1.1 In February 2016, Archaeological Solutions Ltd (AS) carried out an archaeological excavation at the Maintenance Block, Jesus College, Jesus Lane, Cambridge (NGR TL 4510 5905; Figs. 1-2). The excavation was undertaken in compliance with a planning condition attached to planning permission for the construction of a small store building and a small extension to the existing building (Cambridge City Council Ref. 15/0852/FUL). The excavation was undertaken based on advice from Cambridgeshire County Council Historic Environment Team (CCC HET) requiring a programme of archaeological work.

1.2 The excavation was carried out in accordance with a brief issued by CCC HET (Andy Thomas; dated 10th February 2016) and a specification compiled by AS (11th February 2016) and approved by CCC HET. It followed the procedures outlined in the Chartered Institute for Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Excavation* (2014). It also adhered to relevant sections of Gurney's (2003) *Standards for Field Archaeology in the East of England*.

1.3 The primary objective of the excavation is to aim to record the location, extent, date and character of any surviving archaeological remains within the surviving areas of the site, and to preserve the archaeological evidence contained within the site by record and to attempt a reconstruction of the history and use of the site.

Planning Policy Context

1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to the impact of the proposal, particularly where a heritage asset is to be lost.

2 SITE DESCRIPTION

2.1 It is proposed to erect a small extension to the existing Maintenance Block and to erect a small store building adjacent to the west. The site lies within the north-western part of the Jesus College site, on the northern side of Jesus Lane within the historic core of Cambridge, south of the river Cam. The existing Maintenance Block dates to 2004 and is located in wooded grounds adjacent to a tennis court, south of Jesus Ditch which bounds the site from Jesus Green to the north.

Topography and Geology

2.2 The Maintenance Block site lies at c. 5.75-6m AOD on river terrace deposits of the Cam (British Geological Survey 1991).

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Amongst the earliest evidence for human activity in the vicinity of the site are Palaeolithic and later prehistoric flint artefacts recovered during an archaeological investigation in Jesus Close (HER MCB15990). Palaeochannels and alluvial deposits potentially of Mesolithic date have been recorded at 24 Thompson's Lane (HER MCB17876). A prehistoric cremation and pottery is known from Midsummer Common (HER 05020AandB) and Bronze Age vessels have also been recovered from this area (HER 04801). A pre-Roman/late Iron Age amphora has been recorded in Jesus College garden (HER 04660). Late Neolithic, Bronze Age and Iron Age features have previously been recorded at the Maintenance Block part of the site (HER CB15722). In addition an unspecified prehistoric 'stone object' has been recovered from the Cam in the vicinity of the site (HER 04759).

3.2 The Roman period is represented by pits recorded at Jordan's Yard (HER 04656), earthworks and other features identified as settlement remains at Magdalene College (HER 04664), the conjectured site of the former Roman bridge across the Cam, close to Magdalene Bridge (HER 09949), a Roman ditch at Park Street (HER CB15310), a Roman road and building remains at Chesterton Road (HER CB15492), and inhumations at Park Street (HER CB15113), thought to be part of the late Roman cemetery at Jesus Lane (HER CB15727). Roman features suggestive of a field system were recorded during the previous phase of archaeological investigation at the Maintenance Block (HER CB15722) and residual Roman pottery has been recorded during archaeological work elsewhere within Jesus College (HER MCB15990). Roman features have also been recorded at St John's College (HER MCB15975) and quarrying and settlement evidence has been identified at St John's Triangle (HER MCB18192). In addition, the Cambridgeshire Historic Environment Record records numerous findspots in the vicinity of the site indicating the recovery of Roman coins, pottery, glass and other objects.

3.3 Cambridge is recorded as a possible Anglo-Saxon hundred or wapentake meeting place (HER 11828). Waterfront structures of Anglo-Saxon date have been recorded at the site of the former George and Dragon/Spade and Becket public house (HER 04592). A probable inhumation of Saxon date was identified at Jesus Lane in 1895 along with brooches of the same date (HER 04608a). Cinerary urns, indicating the presence of a cremation cemetery, have been dredged from the Cam nearby (HER 04642). Saint Giles Church has known Saxon origins (HER 04755). Chesterton Lane is the site of a mid Saxon execution cemetery (HER CB15493) and late Saxon buildings (HER CB15494). A mixed Saxon cemetery has been recorded on Rose Crescent (HER 04889). Saxo-Norman and medieval features (HER MCB 17328) and structures (HER MCB18193) have been recorded at St John's Triangle. Saxon features have been recorded at the Old Divinity School site, adjacent to the medieval cemetery there (HER MCB20199). As with the Roman period, the

Cambridgeshire Historic Environment Record also records numerous findspots at which Anglo-Saxon period small finds and pottery have identified.

3.4 The medieval period is well represented within the vicinity of the site. Medieval pottery and earthworks (HER 04481) and building remains (HER 10358) have been recorded at St John's College and the current St John's College chapel is the site of the medieval hospital of St John the Evangelist (HER 04482). A medieval earthwork has been recorded in front of the chapel (HER 04526). All Saints Church, first recorded in the 11th century, stood opposite the hospital and was demolished in 1865 (HER 04756). The current All Saints Church is in Jesus Lane and has 13th century fabric (HER 04770). A medieval wooden structure was recorded along Bridge Street during drainage work in 1823 (HER 04523). In 1893, drainage works close to Trinity College revealed the remains of a medieval stone structure (HER 04527). Excavation at 28 Bridge Street has revealed the remains of a 13th century building (HER 04582). Midsummer Common is the site of a probable plague cemetery (HER 10174). A medieval bridge (HER 04606) is known to have existed at the point at which Jesus Lane crossed the King's Ditch, the medieval city boundary (HER 04999). Debris from a medieval building has been recorded along Jesus Lane (HER 04758). Sidney Sussex College stands on the site of a Franciscan Friary (HER 05004) and Jesus College itself is of medieval origin (see below) having originally been the site of a religious institution (HER 05275/05275c). Medieval human remains were found in the Master's Garden at Jesus College as a result of groundworks in the early 1990s (HER 11307). Medieval features have also been recorded at the Jesus College library site (HER 11890). Archaeological investigation at Jesus Close has produced evidence for medieval activity (HER MCB15990) and elsewhere in the college medieval quarries and ditches have been recorded (MCB 17480). The remains of King's Hall, a medieval building pre-dating Trinity College, were recorded during a watching brief in 1992 (HER 10528). In addition, numerous findspots of medieval date are recorded in the vicinity of the site.

3.5 The post-medieval period is also well-represented in the area surrounding Jesus College. At the college the north range of the college chapel is 17th century (HER 05275a) and post-medieval features were recorded during previous archaeological work at the Maintenance Block (HER CB15722). Early post-medieval remains have been found within the college grounds during archaeological investigation at Jesus Close (HER MCB15990). Elsewhere within the college, post-medieval quarrying activity has been identified (HER MCB17480). A Civil War fort was built on former woodland belonging to Jesus College in July 1643 (HER 09875) and Jesus Green is the site of a 17th century plague cemetery (HER 10175).

3.6 The Maintenance Block was subject to a trial trench evaluation followed by open area excavation in 2003/2004 prior to its construction (Evans and Williams 2004; HER ECB1470). Here some 50 features cut the terrace gravels, demonstrating evidence of sparse earlier prehistoric activity, relatively dense Iron Age occupation and then agricultural and paddock systems of the Romano-British period and field systems of medieval/post-medieval date.

3.7 The site was subject to an archaeological trial trench evaluation by Archaeological Solutions Ltd (Barlow and McClean 2016). In Summary:

'The earliest find from the evaluation was a flake (4g) of struck flint in an un-patinated, sharp condition from undated ditch F1009 (L1011 Segment A). The flake is tentatively dated as late Neolithic to early Bronze Age'.

'Two ditches were identified in Trench 1, and these are directly comparable with the archaeology recorded prior to the construction of the maintenance block. Ditch F1009 was aligned north-south and was cut by Ditch F1012 which was aligned northwest-southeast. Ditch F1012 contained Roman pottery and aligns well with a projected Roman ditch recorded during the adjacent monitoring'.

4 METHODOLOGY

4.1 The mechanical stripping was undertaken under close archaeological supervision using a small tracked mechanical 360° excavator fitted with a toothless ditching bucket. Thereafter, all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed. Excavated spoil was checked for finds. The open trench and excavated spoil were searched and scanned by metal detector to enhance the recovery of archaeological finds.

5 DESCRIPTION OF RESULTS

5.1 The excavation encountered four ditches: two of middle to late Iron Age date (F2005 and F2011); one of late Romano-British date (late 3rd to 4th century AD; F2011); and one undated ditch (F2003), the fill of which was cut by F2005 (Figure 1). The features accord well with previously recorded evidence from the site. Ditches F2008 and 2011 represented continuations of features identified by the forerunning evaluation (Barlow and McClean 2016), while all datable features reflected the alignments of previously excavated ditches at the site (Evans and Williams 2004; Figs. 3-4). The encountered features are described below by phase.

Phase 1 Middle to Late Iron Age

5.2 Ditch F2005 was linear (orientated north to south) and displayed moderately sloping sides and a narrow base (5.20+ x 1.98 x 0.74m). F2005 cut the fill of undated Ditch F2003 (L2004) and was cut in turn by Romano-British Ditch F2008. Its basal fill (L2007) comprised friable, mid orange brown sandy silt with occasional small and medium sub-angular and sub-rounded flint. It contained no finds. Uppermost Fill L2006 was friable, mid grey brown sandy silt with moderate small and medium sub-angular and sub-rounded flint. It yielded 12 sherds (210g) of middle to late Iron Age pottery, three quern fragments (346g), animal bone (256g) and oyster shell (9g).

5.3 Ditch F2011 was linear (orientated north-north-west to south-south-east) and displayed moderately sloping sides and a shallow, concave base (1.50+ x 1.35 x 0.55m). Its uppermost fill was cut by Romano-British Ditch F2008. The primary fill of F2011 (L2012) comprised friable, mid orange brown silty sand with moderate

medium sub-angular to rounded flint. It contained no finds. Uppermost Fill L2013 was firm, mid brown grey silty sand with moderate medium and large sub-angular to rounded flint. L2013 yielded two sherds (111g) of middle to late Iron Age pottery and animal bone (17g).

Phase 2 Romano-British (Late 3rd to 4th Century AD)

5.4 Ditch F2008 was linear in plan (orientated north-west to south-east) and had moderately sloping sides and a concave base (10.50+ x 2.85 x 0.85m). It cut the uppermost fills of Phase 1 Ditches F2005 and F2011. Its lower fill (L2010) comprised friable, dark grey/ orange brown silty sand with frequent medium and occasional large sub-angular to rounded flint. It contained a single sherd (3g) of Roman pottery, animal bone (20g) and oyster shell (38g). Its upper fill (L2009) was a firm, dark grey brown silty sand with frequent medium and occasional large sub-angular to rounded flint. L2009 yielded a significant finds assemblage including 49 sherds (707g) of late 3rd to 4th century AD pottery – dominated by locally-produced sand-tempered coarse wares – and 14 sherds (262g) of 4th century AD pottery (see *The Pottery*). Other finds from this context are a tiny fragment (1g) of copper alloy from a pair of tweezers (SF1), two iron carpentry nails (16g), a fragment of late Roman green vessel glass (<1g), animal bone (1450g) and oyster shell (365g). An illegible coin of 3rd or 4th century date was also present (see *The Small Finds*, below).

Undated

5.5 Shallow Ditch F2003 was linear in plan (orientated east to west), with moderately sloping sides and a flattish base (3.00+ x 0.80 x 0.14m). The southern edge of this feature had been disturbed by roots. The single fill of this feature (L2004) comprised mottled patches of firm, mid orange brown and mid brown orange sandy silt with moderate small and medium sub-angular and sub-rounded flint. L2004 lacked finds but was truncated by Phase 1 Ditch F2005, indicating a middle to late Iron Age date, or possibly earlier.

6 CONFIDENCE RATING

6.1 It is not felt that any factors inhibited the recognition of archaeological features or finds.

7 DEPOSIT MODEL

7.1 Topsoil L2000 was uppermost and comprised a 0.35m thick layer of firmish, very dark grey brown organic silty sand with occasional medium and large sub-angular and sub-rounded flint. L2000 sealed Subsoil L2001, comprising firm, mid grey brown silty sand, with occasional to moderate medium and large sub-angular and sub-rounded flint (0.38m thick). The natural geology (L2002) constituted friable, mid brown orange silty sand with frequent medium, and occasional large, sub-angular and sub-rounded flint, and was present at a depth of 0.73m below the current ground surface.

8 SPECIALIST REPORTS

The Pottery

Andrew Peachey MCIfA

The excavation recovered a total of 64 sherds (1031g) of pottery in a moderately to highly fragmented condition (Table 1); predominantly consisting of a single late Roman group from a ditch, with sparse body sherds of mid to late iron Age date contained in two further ditches. The Roman pottery included a range of locally-produced coarse wares, including Horningsea ware, as well as regionally-imported fine wares common in the 4th century AD, including fabrics from the Lower Nene Valley, Hadham and Oxfordshire; however diagnostic rim sherds were very limited in size and extent.

| Phase | Period | Sherd Count | Weight (g) |
|-------|-------------------------|-------------|------------|
| 1 | Middle to Late Iron Age | 14 | 321 |
| 2 | Roman | 50 | 710 |
| | <i>Total</i> | 64 | 1031 |

Table 1: Quantification of pottery by period

Methodology

The pottery was quantified by sherd count, weight (g) and R.EVE (including minimum number of vessels) with fabrics examined at x20 magnification. Rim type, profile and decoration were also recorded in separate fields and free-text comments in accordance with the guidelines developed by the Prehistoric Ceramics Research Group (PCRG 1995) and Study Group for Roman Pottery (Darling 1994). All fabrics will be described in the text or archive, with Roman fabrics cross-referenced, where possible to the National Roman Fabric Reference Collection (Tomber and Dore 1998) or appropriate regional kiln groups. To reduce the repetition of references to form types in type-site assemblages the following (*italicised*) abbreviations are used: *Horningsea* (Evans et al *forthcoming*; supplemented by Newton and Peachey 2012). All data has been entered into a Microsoft Excel spreadsheet that will form part of the site archive.

The Middle to Late Iron Age Pottery

A total of 14 sherds (321g) of prehistoric pottery were present in the assemblage, comprised of two fabrics (Table 2), which may be summarised as sand-tempered (Q1) and sand-and-organic tempered (QO1). The bulk of the prehistoric sherds: 12 sherds (210g) were contained in Ditch F2005 (L2006 Segments A and B), with the remainder contained in Ditch F2011 (L2013).

| Fabric Code | Fabric Description | Sherd Count | Weight (g) |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
| Q1 | Black to dark red-brown surfaces over a very dark grey core, with inclusions of common-abundant, moderately-sorted quartz (0.25-0.5mm) and sparse fine mica. | 7 | 187 |
| QO1 | As Q1 but with the addition of sparse common burnt out voids from organic temper, probably chopped grass (linear 3-10mm long) | 7 | 134 |
| <i>Total</i> | | 14 | 321 |

Table 2: Quantification of prehistoric fabric types

Both fabrics are represented by body and basal sherds that appear to belong to the handmade, slack-shouldered or ovoid tradition of jars that develops across East Anglian in the middle Iron Age, however this type of jar persists into the late Iron Age, as recorded at the Hutchinson site, Addenbrooke's (Webley with Anderson 2008, 65). These deposits do not include any conclusively late Iron Age pottery, but based on such limited quantities, the vessels recorded could span the middle to late Iron Age.

The Roman Pottery

The Roman pottery in the assemblage is entirely comprised of sherds contained within Ditch F2008 (L2009 Segments A and B, and L2010), which include nine different fabric groups (Table 3), whose association indicates a date in the 4th century AD. This chronology is based primarily on the presence of particular fabrics, notably OXF RS, HAD OX and ROB SH whose proportions increase significantly during this period, although they may appear from the 3rd century AD, and diagnostic rim or decorated sherds are of very limited extent, typically insufficient to allow more accurate dating.

| Fabric Code | Fabric Description | Sherd Count | Weight (g) |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------|
| LNV CC | Lower Nene Valley colour-coated ware (Tomber and Dore 1998, 118) | 7 | 123 |
| OXF RS | Oxfordshire red-slipped ware (Tomber and Dore 1998, 177) | 2 | 43 |
| HAD OX | Hadham oxidised ware (Tomber and Dore 1998, 151) | 3 | 67 |
| UNS WS1 | White-slipped ware 1. White-slipped (interior and exterior), orange surfaces and margins over a mid grey or orange-red core, with inclusions of common well-sorted quartz and sparse iron rich grains (both 0.25-0.5mm), with sparse fine mica. A Horningsea or local source for this fabric is possible (Evans <i>et al forthcoming</i>), although similar fabrics are also known at Godmanchester (Evans 2003, 207-9). | 1 | 3 |
| HOR RE | Horningsea reduced ware (Tomber and Dore 1998, 116; Evans 1991, 35). Mid to dark grey surfaces with a reduced mid-grey core and sometimes oxidised margins. Inclusions comprise common quartz (0.1-0.5mm) with sparse limestone and grog/ironstone (generally <2mm) and occasional flint (0.5-5mm) | 3 | 179 |
| HOR OX | Horningsea oxidised ware (Tomber and Dore 1998, 116; Evans 1991, 35). Mid-dark orange surfaces contrasting with a mid-orange or grey core. Inclusions comprise common quartz (0.1-0.5mm) with sparse limestone and grog/ironstone (generally <2mm) and occasional flint (0.5-5mm) | 4 | 29 |
| GRS1 | Sandy grey ware 1. Pale to mid grey core and interior with black external surfaces, possibly slipped. Inclusions comprise common quartz (0.1-0.25mm), sparse black iron rich grains and occasional calcitic grains (both 0.25-1mm). A hard slightly abrasive fabric with a smooth ?slipped exterior. Possible produced by the Jesus Lane kilns. | 4 | 46 |
| GRS2 | Sandy grey ware 2. Mid-dark grey surfaces over a lighter/pale grey core. Inclusions comprise common quartz (0.1-0.25mm), sparse fine mica and sparse black iron rich grains (0.25-1.5mm). A hard fabric with a slightly abrasive to smooth feel. | 22 | 182 |
| ROB SH | Romano-British shell-tempered ware (Tomber and Dore 1998, 212), wheel-made with common, moderately sorted shell (0.5-3mm) | 4 | 52 |
| <i>Total</i> | | <i>50</i> | <i>724</i> |

Table 3: Quantification of Roman fabric types

The fine wares in the group (LNV CC, OXF RS and HAD OX) comprise the most common regionally-traded types in East Anglia in the late Roman period. The LNV CC includes the flat base of a dish; the OXF RS the footring of a small bowl, and the HAD OX the everted bead rim of a wide-mouthed bowl and the hollow-footed base of a beaker or flagon, suggesting a fairly diverse range of regional imports consistent with the urban nature of Roman Cambridge. The bulk of the group is comprised of locally-produced sand-tempered coarse wares, notably those from Horningsea to the north-east (HOR RE/OX), and including sparse body sherds (GRS1) possibly produced in kilns on Jesus Lane (Hartley 1960, 26); but the bulk (GRS2) remain undifferentiated from assumed local kilns, though Hadham also remains a potential source. The HOR RE includes the rim of *Horningsea* SJ1.2 storage jar with a splayed bead rim and a *Horningsea* D3.1 dish with a single groove under the rim, although both have production ranges that span the late 1st to mid 4th centuries AD. Further jars with everted bead rims were present in GRS2, while a single ROB SH jar with a drooping triangular bead rim is a common component of late Roman assemblages in the region. The pattern of supply evident in this small group is consistent with that demonstrated by the very large assemblage recovered from excavation on Castle Hill Cambridge (Hull and Pullinger 1999, 141-2), but is of insufficient quantity to be conclusively identified with occupation in the immediate vicinity, and may represent the scattering of domestic rubbish in boundary ditches on the periphery of the settlement.

The Small Finds

Nicholas J. Cooper

Introduction

A small assemblage of four metal objects (two of iron and two of copper alloy), and two fragments of vessel glass, were recovered. All the objects are of Roman date and come from the fill of a late Roman ditch [2008] (2009). Additionally, three fragments of burnt stone were recovered from (2006), dated by pottery to the mid-late Iron Age.

Roman coin

1) [2008] (2009) A. Illegible coin. Ae 4. Diameter 9mm. Of later 3rd or 4th century date.

Objects Relating to Personal Grooming

Tweezers

2) SF1 [2008] (2009) A. Fill of late Roman ditch. One blade from a pair of copper alloy tweezers. Straight sided, undecorated, blade with part of spring loop preserved, and tip of blade is angled inwards. Length 45mm, width of blade 4mm. Tweezers are found throughout the Roman period and a pair of similar size came from Colchester (Crummy 1983, 59, fig. 63.1879).

Household Objects

Vessel glass

3) [2008] (2009) A. Two joining fragments of light green blown vessel glass. This colour is characteristic of the later Roman period and therefore contemporary with the other finds in the deposit.

Fastenings and Fittings

Iron nails

Two examples of Manning's (1985) Type 1b were recovered; one equivalent to the modern four inch nail and one to the two inch nail.

4) [2008] (2009) A. Damaged head and complete tapering shaft of Manning Type 1b Roman carpentry nail. Length 104mm.

5) [2008] (2009). Damaged head and upper shaft of Manning Type 1b Roman carpentry nail. Broken length 32mm.

Burnt Stone

6) (2006) Mid-late Iron Age ditch. Two, sooted, angular fragments from a granitic cobble or boulder, one of which has two angled flat surfaces. Granite is not native to the area and must have been imported, perhaps naturally, as a glacial erratic. Use as a rubbing stone is a possibility but rather too small (80mm) to be certain. Single burnt fragment from a red, fire-cracked sandstone cobble with rounded outer surfaces (65mm).

The Animal Bone

Dr Julia E.M. Cussans

A modest assemblage of animal bone was recovered from trial trench excavations at Jesus College. A total of 78 fragments derived from five contexts / segments, all of which were ditch fills (Table 4). The majority of the bones derived from Roman ditch fill L 2009. All of the contexts were rated as having ok or good preservation on a five point scale from very poor through to excellent. The majority of the assemblage could only be identified as large (cattle or horse sized) or medium (sheep or pig sized) mammal, however a number of identifiable elements were present. Identified mammal taxa in order of abundance were cattle, sheep/ goat and horse. Two bird bones were also present representing a chicken and a goose sized bird. Cattle were represented by bones of the head and feet and included several butchered elements, including knife cuts and large blade chops. At least one ageable mandible was present, which included a 4th deciduous premolar (dp4) indicating a fairly young animal. Cattle tarsals (foot bones) deriving from L2009 B were noted as being particularly large, possibly indicating the presence of a bull. Sheep/ goat were represented by head and limb bones, none of which were butchered. An ageable mandible included the dp4 and 1st molar (M1) with the M2 not yet erupted, indicating a young individual; further indication of the presence of young animals was given by the presence of unfused long bones. The sheep/ goat mandible was noted as having dental calculus deposits on some of the teeth. Horse was represented by a scapula

and a 1st phalanx, none of the bones were butchered and no pathologies were noted. Bones recorded a large mammal were a mix of ribs, vertebrae, skull and long bone fragments, while medium mammal bones were mostly long bone fragments. A larger assemblage would no doubt provide a useful and interesting insight into late Iron Age and Roman economy at the site.

| Feature | Context | Seg. | Description | Phase | Cattle | Sheep/ Goat | Horse | Large Mammal | Medium mammal | Bird | Total |
|---------|---------|------|-------------|--------------|--------|----------------|-------|-----------------|------------------|------|-------|
| 2005 | 2006 | | Ditch fill | 1 | 2 | 3 | | 1 | 12 | | 18 |
| 2008 | 2009 | A | Ditch fill | 2 | 4 | | | 30 | 2 | 1 | 37 |
| 2008 | 2009 | B | Ditch fill | 2 | 7 | 2 | 2 | 9 | | 1 | 21 |
| 2008 | 2010 | A | Ditch fill | 2 | | | | 1 | | | 1 |
| 2011 | 2013 | | Ditch fill | 1 | | | | | 1 | | 1 |
| | | | | <i>Total</i> | 13 | 5 | 2 | 41 | 15 | 2 | 78 |

Table 4: Quantification of animal bone

The Shell

Dr Julia E.M. Cussans

A small assemblage of marine shells was recovered from trial trench excavations at Jesus College. All of those recovered were native oyster shells (*Ostrea edulis*) and the majority came from the fill of Ditch F2008 (L2009; Table 5). Shell preservation was largely recorded as ok on a five point scale from very poor through to excellent; one context (L2010) was recorded as having good preservation. Lower and upper valves (umbone present) were roughly evenly represented and a number of shell fragments (no umbone) were also present. No signs of human modification were noted. Several of the shells showed signs of parasitic worm infestations, but nothing that was likely to cause serious harm to the living oysters. A small number of the shells were complete enough to be measured and one upper valve was noted as being particularly large with a shell length of c. 10cm. A larger collection of shells would likely inform regarding oyster collection, trade and consumption methods at or near to the site.

| Feature | Context | Seg. | Description | Phase | Lower valve | Upper valve | Fragment | NISP | MNI |
|---------|---------|------|---------------|--------------|-------------|-------------|----------|------|-----|
| F2005 | L2006 | B | Fill of Ditch | 1 | 1 | | | 1 | 1 |
| F2008 | L2009 | A | Fill of Ditch | 2 | 7 | 7 | 7 | 21 | 7 |
| F2008 | L2009 | B | Fill of Ditch | 2 | 7 | 6 | 7 | 20 | 7 |
| F2008 | L2010 | A | Fill of Ditch | 2 | 1 | 1 | | 2 | 1 |
| | | | | <i>Total</i> | 16 | 14 | 14 | 44 | 16 |

Table 5: Quantification of oyster shells

The Environmental Samples

Dr John R. Summers

Introduction

Two bulk soil samples for environmental archaeological assessment were taken and processed during trial excavations at Jesus College. One deposit (F2005 L2006) has been spot dated to the mid-late Iron Age and the second (F2008 L2009) to the late 3rd-4th century AD. This report summarises the findings from the assessment of the bulk sample light fractions, and discusses the significance and potential of any remains recovered.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006; Kerney and Cameron 1979; Kerney 1999) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 6. The sample from L2006 (Ditch F2005) contained a small number of carbonised wheat grains (*Triticum* sp.) and indeterminate cereal grains. These are likely to represent scattered carbonised debris on the site that became incorporated into the fill of the feature. It indicates the use of cereals in the vicinity of the excavated feature but little more can be said regarding diet and economy based on the small number of remains. The second sample from L2009 (Ditch F2008) contained no carbonised remains.

Conclusions

The remains from the present excavation add to results from previous trial excavations at the site (Summers 2016), which produced no carbonised remains. To date the evidence from Iron Age and Roman deposits indicate limited input of carbonised remains to the deposits, suggesting that they had little association with the deposition of debris from the processing or use of cereals. The excavated features may have been set away from centres of domestic occupation and agricultural processing activities, although the number of samples so far assessed is low and may not be representative of occupation of the site and surrounding areas.

9 DISCUSSION

9.1 The recorded features are tabulated below (Table 7):

| Phase | Date | Feature | Description |
|---------|---------------------------------------------------------------------|---------|-------------|
| 1 | Middle to late Iron Age | 2005 | Ditch |
| | | 2011 | Ditch |
| 2 | Romano-British (late 3 rd to 4 th century AD) | 2008 | Ditch |
| Undated | Iron Age or earlier | 2003 | Ditch |

Table 7: Phased feature list

9.2 The encountered evidence equates well with previous results from the site, with Ditches F2008 and F2011 representing continuations of features identified by the forerunning evaluation (F1012 and F1009 respectively; see Barlow and McClean (2016); Figure 3). The alignments of the dated ditches are directly comparable to archaeology recorded prior to the construction of the maintenance block (Evans and Williams 2004), while Phase 2 Ditch F2008 was aligned with a projected Roman ditch recorded during concurrent monitoring (Fig. 3).

9.3 Phase 1 Ditches F2005 and F2011 were both middle to late Iron Age in date; the uppermost fills of both were cut by Phase 2 Ditch F2008. Although F2005 and F2011 were approximately aligned, the base of F2005 rose up at its southern end, suggesting a terminus. Ditch F2011 did not re-immerge past F2008, indicating that it also terminated at this point. Whether the ditches formed an entranceway is unknown. The c. north to south alignment of the Phase 1 ditches was similar to ditches recorded during the earlier excavations at the Maintenance Block (Evans and Williams 2004), which strongly suggests they formed part of the same enclosure system. Recovered quern fragments and environmental remains suggest that this system may have been used for arable production/processing, although the current evidence is far from conclusive.

9.4 Phase 2 Ditch F2008 was a continuation of a Romano-British ditch recorded during the monitoring of nearby service trenches (Fig. 3), and also ran parallel to Iron Age ditches recorded during the Maintenance Block excavations (*ibid.*); it appears to have formed part of a previously interpreted field. The fact that F2008 was on a different alignment to Phase 1 Ditches F2005 and F2011 suggests a re-ordering of the local landscape at some point, possibly as early as the later Iron Age, although the closely datable finds from upper Fill L2009 are late Roman. Patterns of pottery consumption and discard in Phase 2 suggest that the field to which F2008 belonged was on the periphery of Roman Cambridge. The animal bone evidence from this feature points towards a mixed pastoral regime based on the rearing of cattle and sheep/goat – in order of abundance – with other ‘farmyard’ domesticates also present. However, the modest size of the assemblage prevents speculation regarding the overall importance of different species to the local pastoral economy. Environmental sampling of Phase 2 Fill L2009 yielded no carbonised remains.

9.5 The site is located close to the medieval nunnery of St Radegund which became Jesus College in 1496. Some of the nunnery buildings were adapted, with alterations and additions taking place in the following centuries. Despite this proximity, no medieval or post-medieval features or finds were encountered by the

excavation. This may suggest that the focus for activity of this date was towards Jesus Lane rather than towards the river.

10 CONCLUSIONS

10.1 The excavation evidence adds usefully to our knowledge of Iron Age and Romano-British activity in the area surrounding Jesus College. The encountered ditches reflected the alignments of previously recorded boundaries at this location, indicating that they probably formed parts of an Iron Age enclosure system and Romano-British field. Patterns of pottery consumption and discard in Phase 2 suggests that the field was on the periphery of the Roman town, while the animal bone evidence indicates associated pastoral agriculture. The forerunning Iron Age phase produced evidence for the production and/or processing of wheat, either at or near to the site, while animal bone was scarce by comparison.

DEPOSITION OF THE ARCHIVE

Archive records, with an inventory, will be deposited at the Cambridgeshire County Store. The archive will be quantified, ordered, indexed, cross referenced and checked for internal consistency.

ACKNOWLEDGEMENTS

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APPENDIX 1 CONCORDANCE OF FINDS

| Feature | Context | Seg. | Description | Spot Date (Pot Only) | Pot (Qty) | Pottery (g) | CBM (g) | Animal Bone (g) | Other Material | Other (Qty) | Other (g) |
|---------|---------|------|-------------|--------------------------------------------|-----------|-------------|---------|-----------------|--------------------------------------------------------------------------------------|----------------------------|--------------------------------|
| 2005 | 2006 | | Ditch fill | Mid-Late Iron Age | 11 | 201 | | 256 | Quern stone frags. | 3 | 346 |
| | | B | | Mid-Late Iron Age | 1 | 9 | | | Oyster shell | 1 | 9 |
| 2008 | 2009 | A | Ditch Fill | Late 3 rd -4 th C AD | 35 | 445 | | 581 | Fe frag. Oyster shell Fe nails coin SF1 (Cu alloy frag.) Glass | 2 2 1 1 1 1 | 4 278 16 1 1 <1 |
| | | B | | 4 th C AD | 14 | 262 | | 869 | Oyster shell | 2 | 87 |
| | 2010 | A | Ditch fill | Roman | 1 | 3 | | 20 | Oyster shell | 2 | 38 |
| 2011 | 2013 | | Ditch fill | Mid-Late Iron Age | 2 | 111 | | 17 | | | |

PHOTOGRAPHIC INDEX



1

Machine stripping excavation area.



2

View of site, post excavation, looking east.



3

Ditch F2003A, looking west.



4

Ditch F2008A, looking east.



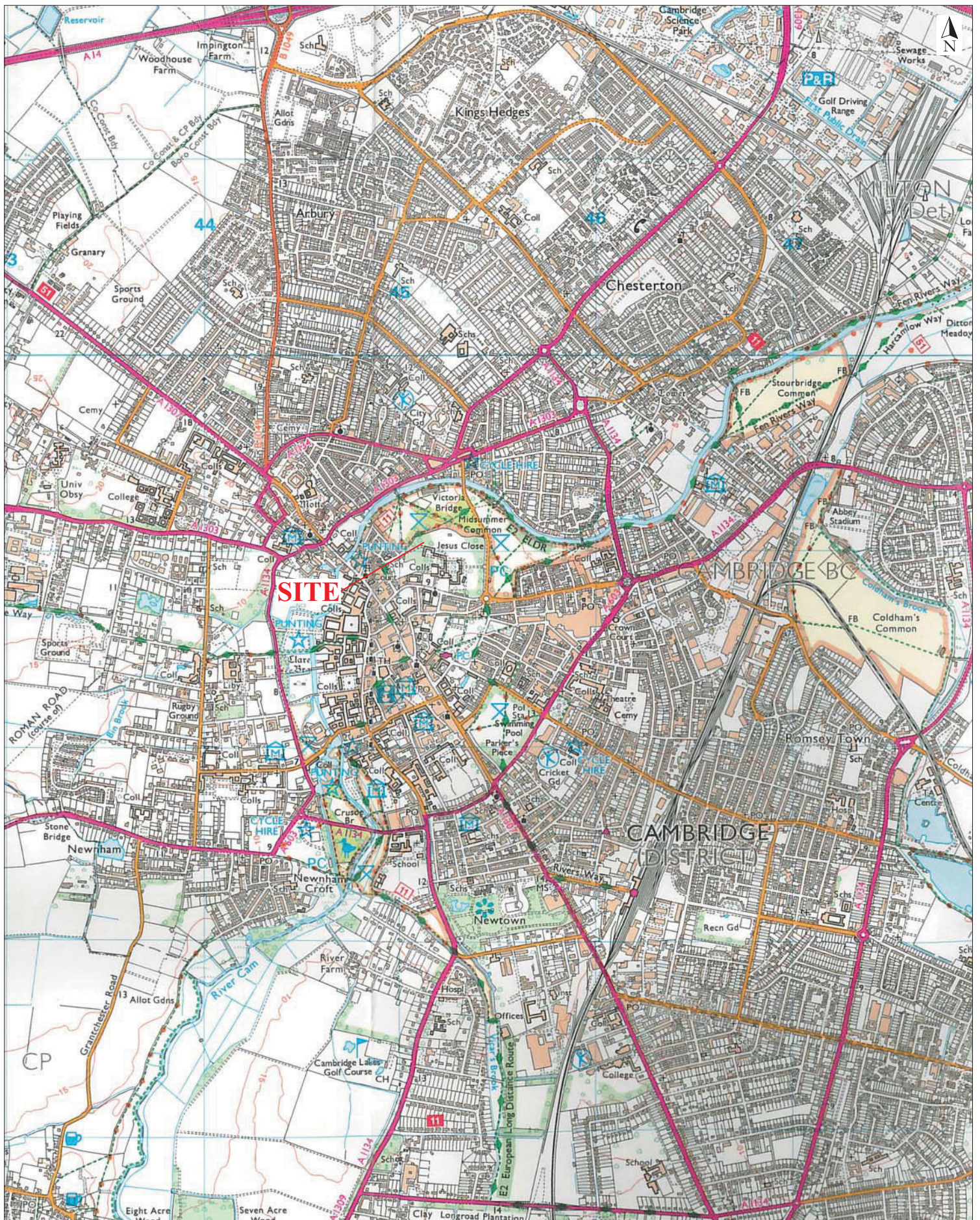
5

Ditches F2005B & F2008B, looking east.



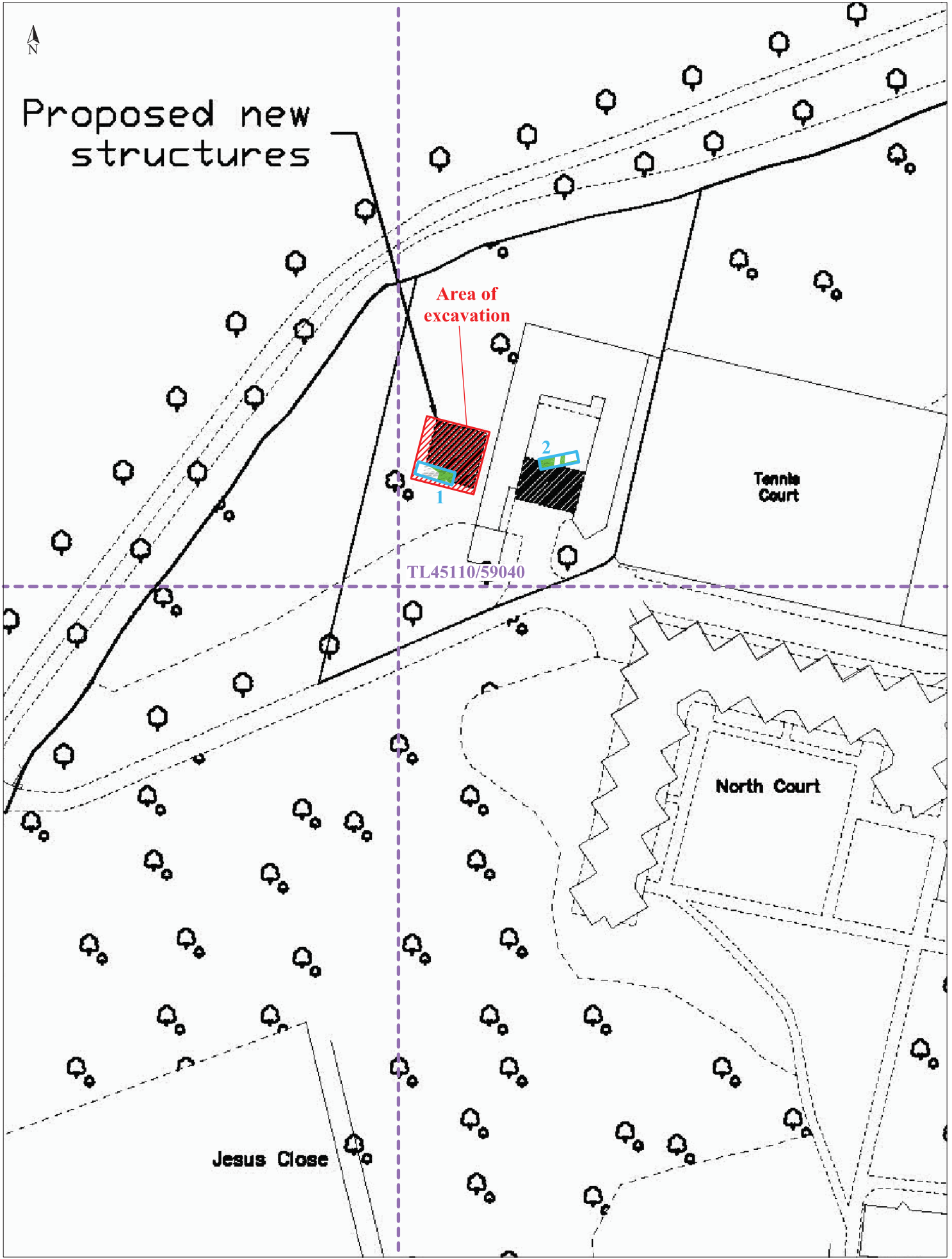
6

Ditch F2011, looking south.



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Fig. 1 Site location plan
 Scale 1:25,000 at A4
 Jesus College, Cambridge, Cambridgeshire (P6446)



0 50m

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Fig. 2 Detailed site location plan
 Scale 1:750 at A4
 Jesus College, Cambridge, Cambridgeshire (P6446)

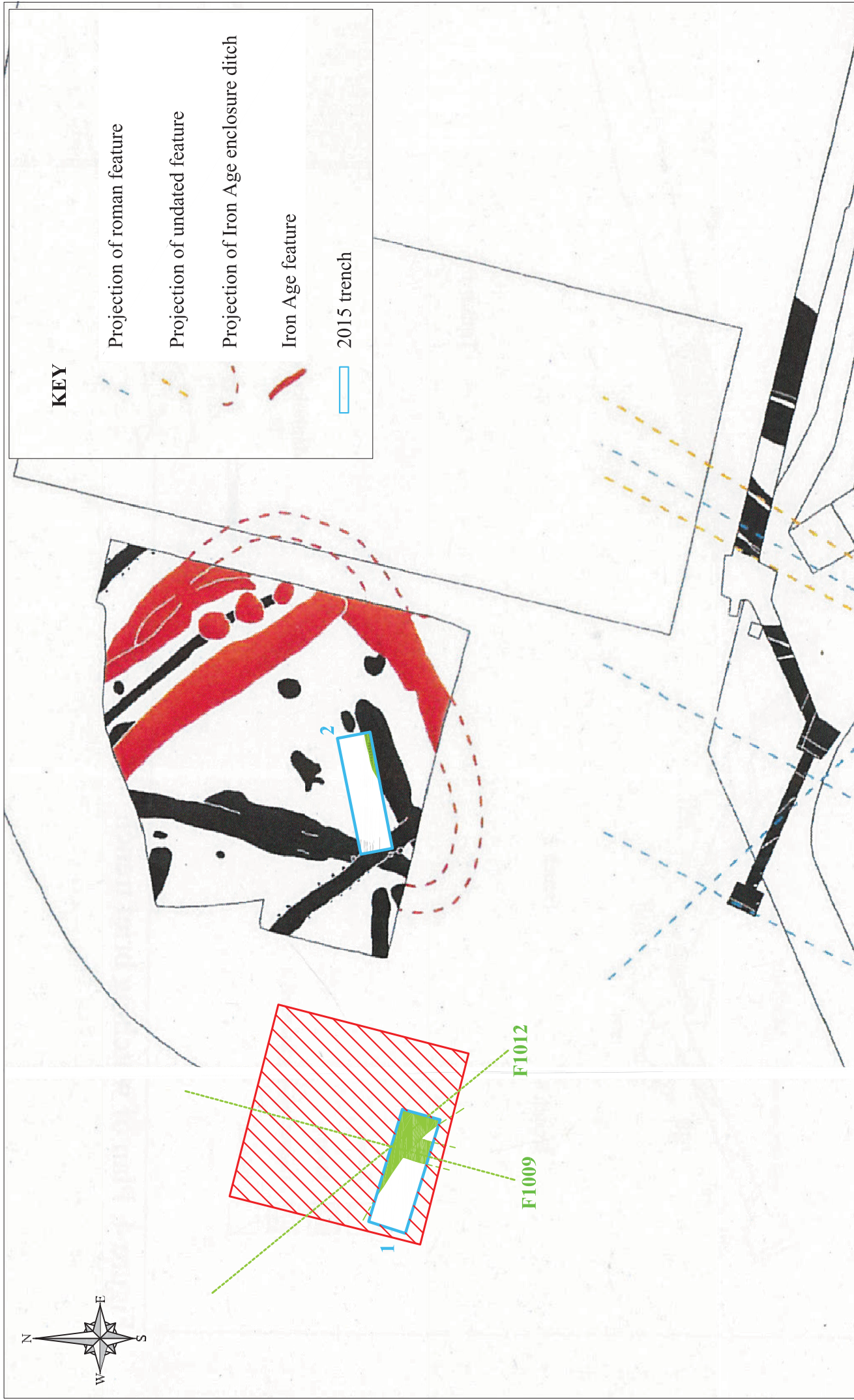
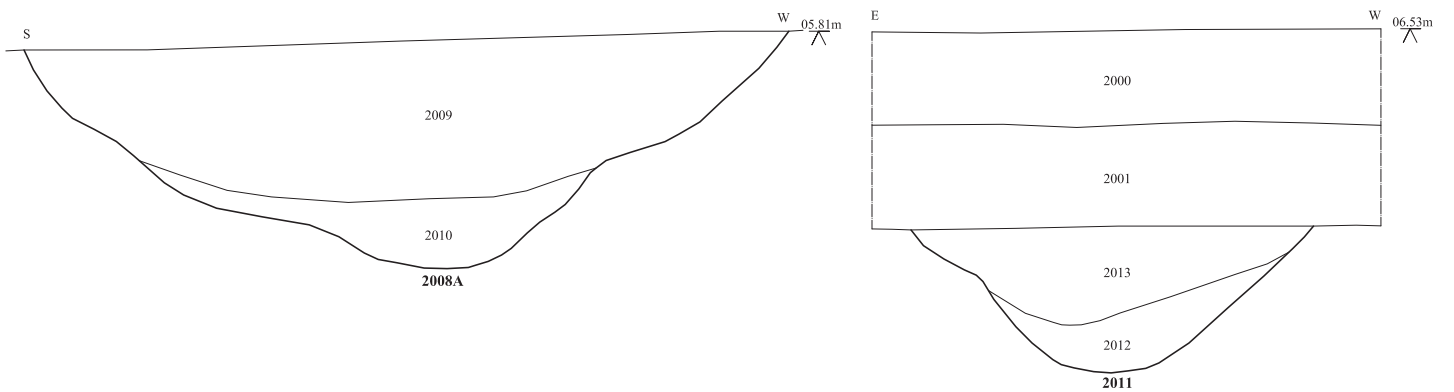
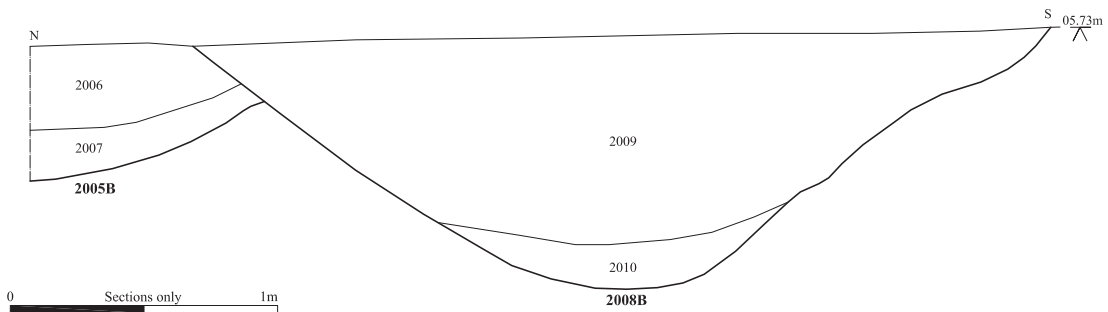
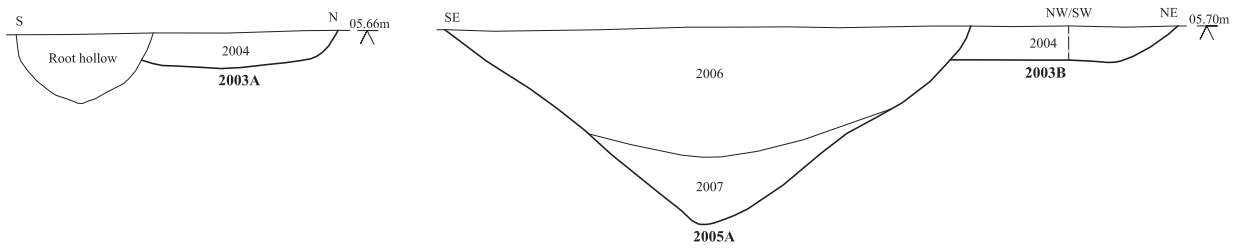
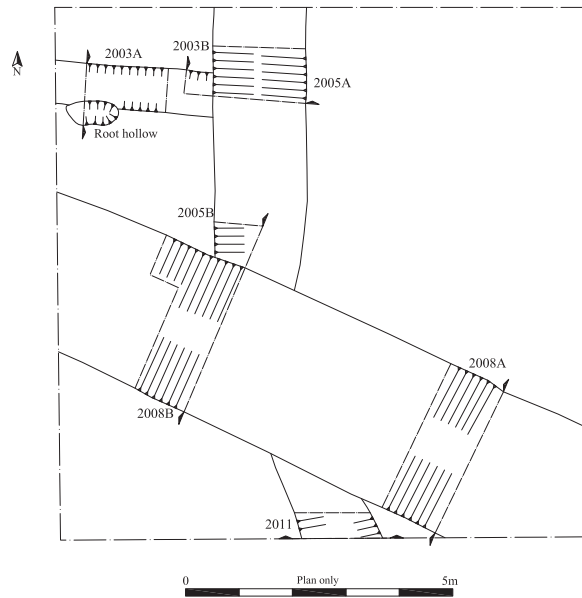


Fig. 3 Evaluation trenches and excavation area on 2004 excavation plan



| |
|--------------------------------------------------|
| <i>Archaeological Solutions Ltd</i> |
| Fig. 4 Plan and sections |
| Scale 1:100 and 1:20 at A3 |
| Jesus College, Cambridge, Cambridgeshire (P6446) |