

Barton Road Car Park, Ely, Cambridgeshire



Excavation Report



February 2018

**Client: Henry Riley LLP and Palace
Green Homes on behalf of
Palace Green Homes and
East Cambridgeshire District
Council**

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NGR: TL 5377 8001

Barton Road Car Park, Ely, Cambridgeshire

Archaeological Excavation


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Summary

Between the 5th and 16th June 2017 Oxford Archaeology East (OA East) carried out excavations at Barton Road Car Park, Ely, Cambridgeshire. Due to a number of factors, the investigation consisted of a further programme of evaluation trenching comprising a total of five additional trenches (Trenches 3-7). The locations of the additional trenches were based on the results of the previous phase of archaeological evaluation. This evaluation had revealed a possible Saxo-Norman ditch and remains spanning the medieval period including: an early to high medieval buried soil containing fragments of pottery, animal bone and charred wheat; and a late medieval boundary ditch. A later (undated) trench like ditch was also revealed cutting the buried soil. In addition, a relict topsoil and subsoil was revealed along part of the southern edge of the site.

The extent of these remains were further defined during the subsequent trenching excavation. Evidence for a long-lived boundary was represented by a set of three ditches in the northwestern part of the site, to the north and parallel to Barton Road. Faunal remains from two of the ditches produced radiocarbon dates of 856-989 cal AD and 1023-1159 cal AD. Continuations of these ditches were not uncovered in the eastern part of the site where they may have been truncated by later activity. The undated ditch feature found during the evaluation was found to be part of a network of trench like ditches, that probably represent wartime practice trenches, excavated by the British Army at this former military barracks site.

The lack of any further remains on the site supports cartographic evidence that demonstrates the site lay (until recently) within the agricultural setting of Barton Manor, beyond the southern limit of the city of Ely. The Late Saxon and early medieval ditches are of local significance when considering the early development of Ely. These provide further slight, but useful and securely dated, evidence for the evolving occupation of Ely between the Late Saxon and early medieval periods on the border of the Bishop's Barton Manor and the developing back-plots extending from Silver Street.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 Between the 5th and 16th June 2017 Oxford Archaeology East (OA East) carried out excavations at Barton Road Car Park, Ely, Cambridgeshire (NGR TL 5377 8001; Fig. 1). The site lies within the historic city of Ely and in an area with a number of known historical archaeological sites and remains.
- 1.1.2 This work was commissioned by Henry Riley LLP and Palace Green Homes on behalf of East Cambridgeshire District Council, in respect of a proposed residential development of 0.19 hectares on the southern part of the car park (Planning Application: 15/01417/F3M).
- 1.1.3 The excavation was undertaken in accordance with a Brief issued by Kasia Gdaniec of Cambridgeshire County Council Historic Environment Team (CCC HET), supplemented by a Written Scheme of Investigation (WSI) prepared by OA East (Phillips 2017).
- 1.1.4 An archaeological evaluation was conducted by OA East in 2016 (Event no. ECB4849; Clarke 2016; Figs 1 and 2). The evaluation revealed features and deposits attributed to the medieval period, with artefacts predominantly from the Saxo-Norman period (10th-11th centuries). The extent of these medieval remains was revealed further during the subsequent trenching excavation that also revealed a linear feature of probable Late Saxon date. In addition, further linear features were found to be of recent date and may possibly be associated with the site's previous use as an army parade ground and barracks.
- 1.1.5 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.
- 1.1.6 The site archive is currently held by OA East and will be deposited with Cambridgeshire County Council Stores in due course under the site code ECB5023 in due course.

1.2 Geology and topography

- 1.2.1 The site comprises the southern part of the current Barton Road Car Park, in the historic city of Ely, at a height of 20m above Ordnance Datum (OD) (Fig. 1).
- 1.2.2 The underlying geology of the proposed development site comprises Woburn Sands Formation - Sandstone Bedrock. Superficial deposits are described as Oadby Member Diamicton – Chalky Boulder Clay. (<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html> accessed 24th October 2016).

1.3 Archaeological and historical background

- 1.3.1 The site lies on the southern side of the historic core of Ely, in proximity to the scheduled monument of the castle motte on Cherry Hill, and to Ely Cathedral and its precincts located c.300m to the north-east (Fig. 2).
- 1.3.2 A full search of the Cambridgeshire Historic Environment Record (CHER) of a 1km radius centred on the site was commissioned from CCC HET. A Heritage Statement for the development was also produced by Carter Jonas in 2015. The following is a

summary based on this report and on the findings of the CHER search, with pertinent records shown on Fig. 2.

Prehistoric to Roman

- 1.3.3 There is plentiful evidence of prehistoric and Roman land use on the higher ground of the Isle, but pieces of fieldwork directly relevant to the site are few in number.
- 1.3.4 A large enclosure ditch dating to the Middle Bronze Age was revealed during an excavation at Cam Drive, Ely located approximately 1.5km to the north of the site (National Grid Reference: TL 5425 8155; ECB 4413; Phillips & Morgan 2015 (not illustrated)). The excavation also revealed many more features of the period including post-built structures, pits and a waterhole. An excavation at Bray's Yard, located approximately 750m to the north-east of the site, also revealed a Bronze Age ditch and plough marks (Hunter 1991).
- 1.3.5 Excavation at the former Red, White and Blue, Chiefs St (CHER ECB706; Fig. 2), 370m to the north-west, identified gullies and pits pre-dating the Roman period. A Roman phase included fence lines of post holes and other boundary features, probably relating to settlement adjacent to the Roman road (Akeman Street; Margary 1973, Route 23b) running across the summit of Ely Island. Nearby, at No. 36b St John's Road, an evaluation and watching brief revealed a series of ditches, pits, post holes and a possible roundhouse, some of which produced artefacts dating from the Late Iron Age, including an assemblage of Plain Ware pottery (CHER CB15549; Fig. 2). Subsequent monitoring recorded a ditch and two pits, the former containing pottery of Early Roman date.

Anglo-Saxon

- 1.3.6 There is little evidence for Early Saxon settlement in Ely. The closest findings to the current site include the remains of a cemetery found during an evaluation at Witchford Road, 350m to the south-west (CHER MCB16830; Fig. 2). The cemetery had clearly been badly affected by ploughing but findings of Early Saxon metalwork and disarticulated human remains proved its existence. Approximately 1.3km west of the site, 15 plough-damaged Anglo-Saxon inhumations were excavated that dated to the mid-seventh century AD (MCB17369), two of which were richly furnished female inhumations. Early Saxon pottery sherds were found at No. 2 West End, 250m to the north-west of the site (CHER CB15551; Fig. 2). Evidence relating to the original 7th century abbey of Etheldreda (Aethelthryth) remains elusive. It may have been located within the footprint of the current cathedral buildings. An alternative location is to the north-west of the site, close to the location of the Hospitals of St John Baptist and St Mary Magdalen (amalgamated in 1240 as Hospital of St John the Baptist), 400m west-north-west of the site on St John's Road (CHER's 08435 and 07342a-c; Fig. 2). Stone sculpture from one of the current St John's Farm buildings have been tentatively dated to the 8th century (Mortimer *et al.* 2005, 2).
- 1.3.7 The Middle Saxon settlement at Ely was referenced by Bede in the mid 8th century with Middle Saxon remains being found close to the centre at No. 2 West End (CHER CB15551; Fig. 2) and at Chiefs Street (CHER ECB706; Fig. 2), where pits, wells and an oven were in evidence. Close to the Lady Chapel of the Cathedral a large assemblage of Middle Saxon Ipswich Ware pottery was found in a pit along with imported French wares of the period (Mortimer *et al.* 2005, 2). A watching brief at St Mary's Lodge, north of St Mary's church, revealed a beamslot associated with Ipswich Ware pottery (CHER CB15552; Fig. 2). Pits with Late Saxon and medieval pottery and a quantity of animal bone were also found.

- 1.3.8 At The Paddock, to the east of the Cathedral and 500m north-east of the current site, excavations revealed evidence of ditches from the Late Saxon period, along with Saxon pottery, St Neots and Thetford ware (CHER 10170; Fig. 2). The features excavated lay under a depth of cultivated soil and it is possible that a part of the Late Saxon landscape may have survived within the Paddock. These ditches may represent the boundaries between urban properties (Mortimer *et al.* 2005, 2).
- 1.3.9 Extensive Middle to Late Saxon settlement remains were found extending along the northern side of Fieldside/West End Road (Mortimer *et al.* 2005; CHER CB15477; Fig. 2). In general, the plot of the known Middle to Late Saxon settlement remains in Ely appears to be confined to the north of the line delineated by Fieldside/West End Road in the western part and possibly along its projection eastwards through the city (and in close proximity to the northern edge of the site) to the line of Backhill/Station Road in the eastern part, eventually leading to the Stuntney causeway (Fig. 2). The western extremity may also be extrapolated leading to West Fen Road. This line would also appear to divide the secular settled land to its north and the ecclesiastical lands of the Bishop's Barton Manor and the Hospitals of St John and St Magdalen to the south. It may also be postulated that such a divide may also have once acted as an important east-west routeway through the city in the Mid-Late Saxon and Early medieval periods (Mortimer *et al.* 2005, 140).

Medieval

- 1.3.10 The castle motte on Cherry Hill is located 300m to the east of the site (CHER CB39; Fig. 2). The motte has long been considered to be of Norman origin but more recently has been interpreted as contemporary with the 12th century Anarchy period.
- 1.3.11 The site is also near to the Cathedral Church of the Holy Trinity (the historical Church of St Etheldreda and St Peter; 400m to the north-east; CHER 07322; MCB 16885; Fig. 2) and its precincts are bounded by The Gallery, the grounds and structures of the medieval Bishops' Palace to the south of Palace Green and the south-east of St Mary's Church.
- 1.3.12 The Bishop held the manor of Barton centred on the current Barton Farm, located 250m to the south-east of the site (Fig. 2). During the earlier medieval period the site is likely to have lain within the bounds of the manorial land that extended southwards from the city. This 'paramount manor' of the see of Ely is documented back to the 12th century. The manor is described as opening upon Back Hill to the east with its fields extending westwards towards the site (Atkinson *et al.* 2002, 47-50; Karn 2005, ciii). Evidence for the locality being a more ancient provincial centre is evidenced by ploughing services still being performed by the local 'men of the island' at the manor farm at the beginning of the 12th century. These ploughing services were abolished by Bishop Hervey (*r.*1109-1131). A manorial court was also held for the tenures of the island during this period (Miller 1970, 10). In 1138-9 Bishop Nigel awarded the tithe of Bishop's barton to the cathedral priory (Holton-Krayenbuhl 2011, 5). Later in the medieval period, a survey of the bishop's manors in 1356-8 records the manor comprising a hall, three barns, two oxhouses, a dovehouse, two windmills and a prison (Holton-Krayenbuhl 2011, 17). Records of the manor show that by 1436-7 the demesne was being rented out (Holton-Krayenbuhl 2011, 21).
- 1.3.13 An earthwork survey at The King's School located 175m to the south of the site, on the lands of Barton manor/farm, identified the remains of medieval ridge and furrow agriculture (CHER 11881; Fig. 2). The excavation of an adjacent evaluation trench

revealed a single medieval ditch, probably connected to agricultural activity (CB15312; Hatton 2002; Fig. 2).

- 1.3.14 The main building of Ketons manor-farm with origins in the 14th century also lay on Walpole Lane (Silver Street), 175m to the east of the site opposite the Ely Porta (<http://www.british-history.ac.uk/vch/cambs/vol4/pp47-50>, accessed 30th June 2017).
- 1.3.15 An evaluation at the Railway Mission on Silver Street located 100m to the north-east of the site revealed features suggestive that the area may have been part of a farmyard complex. The features included boundary ditches, pits and post holes, along with an oven or corn dryer for domestic or agricultural use (Kenney & Casa-Hatton 2000; CHER CB15550; Fig. 2). Based on artefactual evidence, they were dated to the 13th-14th centuries. Thick post-medieval make-up layers sealed the archaeological features.
- 1.3.16 The 1417 survey of Ely demonstrates that by the early part of the 15th century the urban development of the city had extended southwards to either side of Silver Street (then known as Walpole Lane) immediately to the north of the site. A row of tenements are described from west to east on the south side of Walpole Lane/Silver Street (Holton-Krayenbuhl 2011, 139). Tenements of the period were characteristically long and narrow strip-type plots set at right angles to a street. The narrow end fronted the street where the tenement house lay, with the rear part of the plot comprising open land for working and gardening. The rear of a series of tenements was sometimes defined by a ditch or service lane (Medieval English Towns-Glossary; <http://users.trytel.com/~tristan/towns/glossary.html>). The rear part of these plots would have extended towards the current site.
- 1.3.17 Urban medieval remains excavated in the vicinity of the site include medieval building foundations and a midden (probable kitchen waste) identified at Heywood Theatre located 200m to the north-east of the site (CB 15546; Fig. 2). Excavations at No. 16 Church Lane located 200m to the north of the site identified medieval and post-medieval remains including wells and undated skeletal human remains (MCB 16896; MCB 17889; Fig. 2). Numerous further archaeological interventions around the precincts of the religious houses in the area have revealed important evidence of early and high medieval cemeteries, building remains, and domestic properties.

Post-medieval and modern

- 1.3.18 Evidence of post-medieval land divisions and domestic activity was found during the nearby excavations at St Mary's Street, Silver Street and Church Lane described above.
- 1.3.19 The tenements that lay immediately to the north of the site and to the south of Walpole Lane/Silver Street (see Section 1.3.16) are further described in a survey of Ely dated to the 1520's. Notable features mentioned in the locality are the presence of the Bishop's pinfold, an orchard and tenement garden. Ketons Farm (see Section 1.3.14) is also mentioned along with its associated lands and tenements in the locality (Holton-Krayenbuhl 2011, 213-5).
- 1.3.20 Barton Manor remained in possession of the Bishop after the dissolution of the cathedral priory in 1539 and leased to tenant farmers. The lands of Barton farm extended to the parishes of the Holy Trinity and St Mary within the city (Lyson and Lyson 1808, 191). The 16th century appears to have witnessed a period of significant inclosure involving the demesne farms of Ely. A total of 329 acres are described as having been enclosed in Ely and Chettisham in the period between 1486-1548 (<http://www.british-history.ac.uk/vch/cambs/vol4/pp40-42>, accessed 20th June 2017). These inclosures are further described as for the conversion of arable land to pasture,

and more commonly for dairy-farming than for sheep. Two closes of the adjacent Keton manor-farm are also recorded as being converted to pasture in the early part of the 16th century (<http://www.british-history.ac.uk/vch/cambs/vol4/pp47-50>, accessed 30th June 2017). During the latter part of the 16th century Barton Farm was rented by the Steward (Styward) family. Records of dispute relating to the bounds of the farm dated to 1591 and 1599 name Thomas Steward, son of William and grandson of Nicholas Styward. Nicholas Styward is also described as having held the lease of the rents and tolls in Ely fair from Thomas Goodrick, Bishop of Ely (National Archives, Kew reference: E 134/33and34Eliz/Mich25 and E 134/41Eliz/Trin11).

- 1.3.21 John Speed's 1610 map of Ely (Fig. 3) indicates the site still lay on open land, beyond the southern urban reach of the city at this time. The row of tenements described on the 1417 survey of Ely are shown along the southern side of Silver Street/Walpole Lane immediately to the north of the site. The complex of Barton Manor/Farm is shown in close proximity to the south-east of the site. On the close of the Civil War in 1651 the farm, held on lease from the Bishop by Thomas Page Esquire, was sold to Richard Cromwell. A record held by Huntingdonshire Archives lists land on 'Barton farm and mills, Ely Cambridgeshire' as part of a bargain and sale by Oliver Cromwell and Richard his son to Francis Aleyne, John Desborough and John Thurloe in 1649 (Huntingdonshire Archives reference: 731/27).
- 1.3.22 Sale of land on Barton manor may have been in response to the encroachment of the expanding city of Ely on the arable land to the south. A plan of the city dated to c.1724 and described as a copy of a map of the 1670s shows the site still part of 'arable' land beyond the southern outskirts of the city (Fig. 4). However, by 1811 a minor road appears on historical maps of Ely, on the southern edge of the city, on the routeway of the present Barton Road (Fig. 5). The southward growth of the city in this period is shown in further detail by maps dated to 1829 (Fig. 6) and 1833 (Fig. 7) which also indicate buildings alongside the routeway. The first edition Ordnance Survey (OS) map gives the historical name of this routeway as 'Gaol Lane'. This lane was probably not paved during the first half of the 19th century as Gaol Lane was described in a record held by the National Archives, Kew as 'one continuous bed of mud, so bad that it is impossible to walk upon it' (National Archives, Kew reference: MH 13/68/63).
- 1.3.23 The extent of the bishop's estate in Ely including land belonging to Barton Manor is recorded on the 1846 tithe map for the parishes of Holy Trinity and St Mary, Ely (Cambridgeshire Archives reference: tithe map 4/29 Ely, Holy Trinity and St Mary Parish). The Bishop's lands are shown to extend southwards from the urban limits of the city (Fig. 8). The site itself was indicated to lie within a parcel of land described as a garden (Fig. 9). Many large gardens are described in Cambridgeshire towns such as Ely during this period for the growing of vegetables and fruits. This profitable enterprise supplied wider markets as well as the local populace. Numerous orchards are also described as being present along with the gardens, mostly for producing apples and cherries (Gooch 1811, 196).
- 1.3.24 A search of past OS maps of the site at <http://old-maps.co.uk> was carried out to determine the more recent use of the site. Barton Road along the southern edge of the site is named as Gaol Lane in the earliest map of 1885 (Fig. 10). The name of the lane may refer to the Ely Porta, to which this lane led at its eastern end that was sometimes used as a gaol. A prison was also listed as present at Barton manor in 1356-8 (see Section 1.3.11 above). A picture postcard dated to 1903 looking across the site from Gaol Lane towards Ely cathedral is given as Plate 1.

- 1.3.25 It was determined from the OS maps that the site was in use as a parade ground as part of a militia barracks from at least 1885 (Fig. 10). The barracks were developed in response to the Ely and Littleport riots in the early part of the 19th century. A photograph of the parade ground at the time of the coronation of George V in 1911 is also given as Plate 2 (Cambridgeshire Community Archives Network; http://ely.ccan.co.uk/content/catalogue_item/the-procession-formed-up-on-the-barrack-square-at-barton-road-ely-to-celebrate-the-coronation-of-george-v-in-1911). A record of the 'sale of militia barracks, Ely' in 1913-1914 is held by the National Archives, Kew (reference: HLG 1/3B/8).
- 1.3.26 The layout of the site remains the same until 1938 when a large Drill Hall appears immediately to the west of the current site. A photograph dated to 1945, and given as Plate 3, shows a nissen hut placed in the western part of the site (Cambridgeshire Community Archives Network; http://ely.ccan.co.uk/content/catalogue_item/part-of-the-former-barracks-field-in-barton-rd-ely-with-temporary-huts). Nissen huts can also be observed on the site from an aerial photograph of Ely dated to 1948 (www.britainfromabove.org.uk/image/EAW012876; Plate 4) and an OS map dated to 1958-9 (Fig. 11).
- 1.3.27 The site is described on Ordnance Survey maps as a car park on Militia Way, adjacent to Barton Road, from 1972.

Previous work on the site (Trenches 1 and 2)

- 1.3.28 The 2016 evaluation trenching encountered archaeological remains of early to late medieval date. A substantial boundary ditch was of Saxo-Norman date, the presence of which may prove to be a significant discovery within this part of Ely. The ditch was poorly dated but contained an assemblage of animal bone dominated by pig, with other identifiable fragments of sheep/goat, goose and fish. A fragment of sheep/goat bone was radiocarbon dated to 1023 – 1159 cal. AD (95% probability, SUERC 70944, 947±33). A buried soil contained small, abraded early-high medieval pottery sherds, animal bone fragments (predominantly of pig) and a moderate assemblage of charred wheat grains. This soil was cut by a minor boundary ditch dated to the late medieval period whose fill yielded a single piece of iron smithing slag. A further undated ditch, or trench, cutting the buried soil, was also recorded. A relict topsoil and subsoil revealed in the southern part of the site provides evidence that the site lay within agricultural land at the edge the historic core of Ely, possibly associated with Barton Manor/Farm (Clarke 2016).

1.4 Acknowledgements

- 1.4.1 The author would like to extend thanks to Henry Riley LLP and Palace Green Homes on behalf of East Cambridgeshire District Council for commissioning the archaeological works. The fieldwork was undertaken by Patrick Moan with the assistance of Ro Davis. The site survey was carried out by Patrick Moan. The project was managed by Tom Phillips, while Kasia Gdaniec monitored the work on behalf of CCC HET. The illustrations were produced by Emily Abrehart. Thanks are extended to the various specialists for their contributions.

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The original aims of the project were set out in the Brief (Gdaniec 2017) and Written Scheme of Investigation (Phillips 2017).

2.1.2 The main aims of this excavation were

- To mitigate the impact of the development on the surviving archaeological remains. The development would have severely impacted upon these remains and as a result a full excavation was required, targeting the areas of archaeological interest highlighted by the previous phase 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.

2.1.3 The aims and objectives of the excavation were developed with reference to the national, regional and local frameworks, in particular English Heritage (1997), Glazebrook (1997), Brown and Glazebrook (2000) and updated/revised by Medlycott (2011).

2.2 Site Specific Research Objectives

2.2.1 The evaluation identified a substantial Saxo-Norman boundary ditch and a medieval buried soil/ occupation layer, as well as two further ditches. Further to this, the following research aims were set out in the Brief:

- Definition of the rural/urban landscape: what can be understood of the boundary or enclosure ditches present in the area in relation to the priory or abbey land holdings as presented in A. Holton-Krayenbuhl's *The Topography of Medieval Ely* (2011 – Cambs Records Society, Vol 20) and other sources;
- Characterise evidence of craft and food production to further understanding of the local economy; and
- Pottery studies: Ely is a known centre for pottery production in the medieval period, what evidence is there for trade with other places as can be defined by the excavated assemblage?

2.3 Methodology

2.3.1 The methodology used followed that outlined in the Brief (Gdaniec 2017) and detailed in the Written Scheme of Investigation (Phillips 2017) which required that five additional trenches in total be machine stripped to the level of natural geology or the archaeological horizon. The dimensions of each additional trench (Trenches 3-7) is given in Table 1 below, along with the dimensions of the two earlier evaluation trenches (Trenches 1 & 2). Trench 5 was not excavated fully due to the presence of a live below-ground electricity cable.

Trench number	Trench dimensions (m)
1	14 x 2m
2	24 x 2m (L-shaped)
3	15m x 2m
4	15m x 2m
5	20m x 2m (L-shaped)

Trench number	Trench dimensions (m)
6	10m x 2m
7	8m x 8m (encompassing part of evaluation Trench 1)

Table 1: Excavation Trenches

- 2.3.2 Machine excavation was carried out by a tracked 360° type excavator using a 2m wide flat bladed ditching bucket under constant supervision of a suitably qualified and experienced archaeologist.
- 2.3.3 The site survey was carried out using a Leica GPS GS08 with SmartNET.
- 2.3.4 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.
- 2.3.5 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.
- 2.3.6 A total of seven bulk samples were taken from the excavated features during the additional trenching excavation for the analysis of plant micro/macro-fossils. A total of three bulk samples were also recovered during the evaluation trenching phase of the investigation. These each totalled between 10L and 40L and were processed by flotation at OA East's environmental processing facility at Bourn.
- 2.3.7 Site conditions were good with rain at times.

3 RESULTS

3.1 Introduction

- 3.1.1 The proposed development area was subject to a further five trenches (Trenches 3-7) in addition to the two trenches excavated during the evaluation phase (Trenches 1 & 2), totalling approximately 260m² (0.026ha). Trench 4 was extended to the north, to expose the northern edge of a boundary ditch.
- 3.1.2 The evaluation phase of the investigation revealed a possible Saxo-Norman ditch in Trench 2, with a medieval buried soil and ditch encountered along with later remains in Trench 2 (Appendix A.1). The findings of the evaluation trench investigations are presented along with the results of the excavation below are shown together on Figure 12. The further trenching works carried out during the excavation phase uncovered evidence for activity spanning the Late Saxon to modern periods. A series of three ditches spanning the Late Saxon to early medieval periods were encountered in the north-west of the site on an east-north-east to west-south-west alignment. In the western and eastern parts of the site a group of narrow trench like ditches were encountered dating to the modern period. These narrow features were found along with a possible hedge-line running along the frontage with Barton Road to the south.
- 3.1.3 Very little complex stratigraphy was present although some relict subsoils survived intermittently across the site. There was also heavy truncation observed of the natural land-surface and archaeological remains across the full extent of the site, associated with the site's previous use as a car park. The chronological phasing presented below is largely based on spatial associations, alignments and similarity of features where they appear to extend between trenches. Where possible this has been combined with dating evidence provided by stratified artefacts.
- 3.1.4 Descriptions of the features identified and artefacts recovered are given in this section supplemented by a context inventory presented in Appendix A.2. An excavation plan of the site with phasing is presented as Figure 12. Selected sections are included as Figure 13.
- 3.1.5 Four main periods of activity have been identified:
- Period 1: Late Saxon to Saxo-Norman (c.AD850-1066)
 - Period 2: Saxo-Norman (c.AD1066-1150)
 - Period 3: Medieval (c.AD1150-1500)
 - Period 3.1: early-high medieval (c.AD1150-1400)
 - Period 3.2: late medieval (c.AD1400-1500)
 - Period 4: Modern (c.1800 to present)

3.2 Natural deposits

- 3.2.1 The natural deposits of the Oadby Member Diamicton were encountered in all of the trenches excavated in both phases of the trenching investigation. The natural ground in the eastern part of the site (encompassing Trenches 1, 6 and 7; Plate 5) lay at a depth of 0.9m below ground level (19.32m OD) and in the western part of the site (encompassing Trenches 2, 3, 4 and 5) lay at a depth of 0.7m below ground level (19.37m OD). This deposit consisted of a mix of orange, reddish and greenish brown clayey silt with a little sand and gravel content.

3.3 Period 1: Late Saxon (c.AD850 – 1066)

Trenches 3 and 4 (Fig. 12)

Ditch 1

- 3.3.1 In the northwestern part of the site, Ditch 1 lay on a west-north-west to east-south-east alignment. A section was excavated as ditch cut **40** (Plate 6) in the central part of Trench 3, which measured a maximum 1.34m wide and 0.38m deep, with a U-shaped profile. The three fills (41, 42 and 43) similarly consisted of mid yellowish brown silty clay with varying gravel content.
- 3.3.2 This ditch continued on the same alignment to the central part of Trench 4, where it was excavated as ditch cut **48** (Section 14). The primary fill (49), 0.26m thick, consisted of dark yellowish brown silty clay with frequent gravel inclusions. This fill was overlain successively by fills 50 and 51, similarly consisting of dark and light yellowish brown silty clay with occasional gravel inclusions. Fill 50 produced a single cattle radius fragment. This bone was radiocarbon dated to 856-989 cal AD (82.9% SUERC-75140 GU45023). Fill 50 also yielded two charred degraded chaff fragments of the hulled prehistoric wheat spelt/emmer which are likely to be residual.

3.4 Period 2: Saxo-Norman (c.AD1066 – 1150)

Trenches 2 and 3 (Fig. 12)

Ditch 2

- 3.4.1 Ditch 2 (Section 4; Plate 7) lay immediately to the south of and parallel to Ditch 1. It was excavated as ditch cut **21** at the northern end of Trench 2 (Plate 8) during the evaluation phase of the investigation. It lay on a west-north-west to east-south-east alignment and measured 2.4m wide by 0.85m deep, with a U-shaped profile. A fill (22) up to 0.4m thick extended down the southern side of the cut and consisted of orange brown clayey sandy silt with occasional gravel inclusions. This was overlain by another fill (23) up to 0.85m thick that consisted of mid brown clayey silt with occasional gravel inclusions. Fill 23 contained one small fragment of quartz and flint tempered pottery, weighing less than 1g, and is not closely datable. In addition, 162g of animal bone was also recovered. The animal bone assemblage was dominated by pig with other identifiable fragments of sheep/goat, goose and fish. A sheep/goat metatarsus bone was radiocarbon dated to 1023-1159 cal AD (95.4% SUERC-70944 GU42662).
- 3.4.2 This ditch continued eastwards on the same alignment into the southern part of Trench 3 (Plate 9) where it was excavated as ditch cut **37** (Plate 10) as during the trenching excavation phase of work. The ditch cut was found to be less substantial, and measured 1.84m wide and 0.36m deep, with a U-shaped profile. The primary fill (38) up to 0.1m thick consisted of mid yellowish brown silty clay with frequent gravel inclusions. This was overlain by similar fill (39) up to 0.32m thick with only occasional gravel inclusions. Fills 38 and 39 combined yielded five fragments of cattle bone and fill 39 produced a single small fragment (6g) of Stamford Ware pottery; not closely datable. Fill 39 also yielded occasional charred cereal grains, a single legume and single seeds of cleaver and dock, and two nutlets of Great Fen Sedge
- 3.4.3 Ditch 2 must have terminated a short distance to the east of Trench 3 as it was not observed to continue eastwards on this alignment to Trench 4. The possibility remains this ditch may possibly have changed course to run northwards between Trenches 3 and 4.

3.5 Period 3.1: Early-High medieval (c.AD1150 – 1400)

Trenches 3 and 4 (Fig. 12)

Ditch 3

- 3.5.1 Along the northern edge of the development area, Ditch 3 lay on the same west-north-west to east-south-east alignment as Ditches 1 and 2. A section was excavated as ditch cut **44** at the northern end of Trench 3 (Plate 11). The ditch measured up to 2.5m wide and 0.44m deep, with a wide flat-based/U-shaped profile. The primary fill (45) up to 0.35m thick consisted of light to mid yellowish brown sandy clay with rare 'pea-gravel' inclusions and contained three cattle pelvis fragments. This fill was overlain by a similar mid to dark yellowish brown fill up to 0.11m thick. The fills produced occasional charred cereal grains.
- 3.5.2 The cattle pelvis displayed striations created by a saw, a method of butchery seen particularly in the medieval period (Appendix C.1.10).
- 3.5.3 This ditch continued on the same alignment to the northern part of Trench 4, where it was excavated as ditch cut **52** (Section 15). The primary fill (53) up to 0.3m thick consisted of light to mid yellowish brown silty clay with rare 'pea gravel' inclusions. This fill was overlain by fill 54 consisted of mid yellowish brown silty clay with moderate gravel inclusions, up to 0.24m thick. Fill 53 produced a single rim sherd (17g) of Roman Sandy Greyware pottery. This Roman sherd was abraded and is considered to be residual.

Trench 1 (Fig. 12)

Subsoil

- 3.5.4 A buried subsoil (5) (Section 2) was observed to overlie the natural ground in Trench 1 during the evaluation phase of the investigation. The soil consisted of mid yellowish brown silty clay with moderate gravel inclusions, 0.15m thick. It contained nine (25g) small, abraded sherds of medieval pottery broadly dating to the mid 12th to 15th centuries and a larger moderately abraded base sherd (88g) of a Late Saxon Thetford-type ware storage jar. Animal bone (23g) was present with identifiable fragments of pig, sheep/goat and dog. Charred plant remains of free-threshing wheat grains, pea/bean, clover and Great Fen sedge were also recovered. The soil was cut by Period 3.2 ditch **7** and Period 4 ditch **9** (see below), and truncated at a height of 19.48m OD by the modern (Period 4) car park construction formation level (**12**).
- 3.5.5 This buried subsoil may possibly be equated to subsoil 31 observed in the wider excavation area of Trench 7 as part of the additional trenching excavation. Subsoil 31 was found to be up to 0.3m thick and consisted of mid yellowish brown silty clay.

3.6 Period 3.2: Late medieval (c.AD1400 – 1500)

Trench 1 (Fig. 12)

Ditch 4

- 3.6.1 Ditch (**7**) at the southern end of Trench 1 lay on a north-east to south-west alignment. This ditch cut the buried soil (5) and measured 1m wide and 0.2m deep with a shallow U-shaped profile (Section 1). The fill (8) consisted of dark grey clayey silt with occasional gravel inclusions that produced three small fragments (1g) of shell tempered and sandy ware that are not closely datable. A single fragment (13g) of late medieval or early post-medieval roof tile and a small plano-convex hearth bottom (PCB) (15g)

indicative of iron working was also recovered. The ditch profile was truncated by the car park construction formation level (**12**) at a height of 19.48m OD.

3.7 Period 4: modern (c.AD1800 – present)

Trenches 4 and 5b (Fig. 12)

- 3.7.1 The corner of a ditch was revealed at the southern end of Trench 4. One arm of the ditch lay on a west-north-west to east-south-east alignment with a perpendicular arm extending south-south-west; excavated as cut **62**. The cut measured 0.64m wide and 0.72m deep with near vertical sides that merged sharply with a flat base (Section 17). The lower fill (63) tipped from the west and consisted of mid greyish brown silty clay with frequent gravel inclusions that produced a fragment (227g) of modern brick along with a fragment of animal bone. This was overlain by an upper fill (64) that consisted of mid yellowish brown silty clay with occasional gravel and bituminous coal inclusions. Fill 64 contained nine fragments of modern brick (136g), clinker (1g), irregular lumps of smithing slag (194g), Welsh roofing slate (10g) and two residual sherds (6g) of late medieval Ely ware pottery.
- 3.7.2 Ditch **60**, with similar morphology to ditch **62**, was excavated in Trench 5a. One arm of the ditch lay on a south-south-west to north-north-east alignment that joined a further arm on a west-north-west to east-south-east alignment in the central part of the trench. Ditch **60** measured 1.24m wide and 0.4m deep and contained a single fill (61) that consisted of dark yellowish brown silty clay with bricks and other modern material present.

Trenches 1, 6 and 7 (Fig. 12)

- 3.7.3 The excavation of Trenches 1, 6, and 7 in the eastern part of the site revealed similar linear ditches to those revealed in Trenches 4 and 5a.
- 3.7.4 During the excavation of Trench 1 during the initial evaluation phase a deep linear feature (**9**) was revealed to the north of ditch **7**. It lay on a west-north-west to east-south-east alignment and measured 1.1m wide and 1.35m deep (Section 2). It cut the medieval buried soil (5) and was in turn truncated by the modern car park construction (**12**). The sides of the cut were near vertical and merged sharply with a flat base. It contained two fills that did not yield any artefacts. The lower fill (10) consisted of dark greyish brown silty clay with moderate gravel inclusions. This was overlain by an upper fill (11) that consisted of mid yellowish brown silty clay with moderate gravel inclusions.
- 3.7.5 The extent of this ditch was further revealed in Trench 7, excavated during the additional excavation phase of works. Here, the feature was found to turn northwards on a perpendicular south-south-west to north-north-east alignment. A further section was excavated as cut **27** that measured 0.7m wide and 0.7m deep with a similar profile to cut **9**. The lower fill (34), which consisted of mid yellowish brown silty clay with occasional gravel inclusions, measured up to 0.32m thick. This was overlain by a dark grey brown sandy clay fill (28) up to 0.32m thick with occasional cornbrash gravel inclusions. Fill 28 yielded a sherd (3g) of late medieval Ely ware pottery and a sherd (8g) of green cylindrical bottle glass.
- 3.7.6 This feature continued northwards to Trench 6 where it was excavated as cut **25** (Plate 12) with a similar profile to cuts **9** and **27**. It turned westwards within Trench 6 to a perpendicular west-north-west to east-south-east alignment. Cut **25** was found to be 0.6m wide and 0.74m deep and contained a single fill (26) that consisted of dark greyish brown silty clay with occasional cornbrash and gravel inclusions. Fill 26 produced a range of finds that included: a sherd (5g) of (not closely datable) sandy

ware pottery; two fragments (15g) of clay tobacco-pipe stem and three fragments (81g) of ceramic roof tile.

- 3.7.7 A further linear feature (**32**) was revealed in the southeastern part of Trench 6 that lay on a north-east to south-west alignment. It measured 1.34m wide and 0.38m deep with near vertical sides that merged sharply with a flat base. The fill (33) consisted of dark greyish brown silty clay with moderate gravel inclusions. Fill 33 yielded two sherds (5g) of creamware pottery along with a fragment (2g) of clay tobacco-pipe stem, two fragments (19g) of brick and a large (776g) fragment of Portland cement kerb stone.
- 3.7.8 Perpendicular feature **35** with similar morphology to ditch **32** was excavated in Trench 7. The projected juncture of these two ditches within Trench 7 was obscured by a modern foul water drain. Ditch **35** measured 0.74m wide and 0.24m deep and contained a single fill (36) that consisted of mid greyish brown silty clay with occasional gravel and bituminous coal inclusions.

Trenches 5a and 5b (Fig. 12)

Hedge-line

- 3.7.9 To the south of ditch **60** in Trench 5b lay a probable hedge-line parallel to Barton Road. A section was excavated as cut **58** at the southern end of Trench 5b. This feature measured up to 1m wide and 0.16m deep, with an irregular profile. The fill (59) consisted of dark yellowish brown silty clay with moderate gravel inclusions.
- 3.7.10 This probable hedge-line continued on the same alignment westwards to terminate in the eastern part of Trench 5a, where it was excavated as cut **55** (Section 16). The cut measured 0.9m wide by 0.5m deep and contained two fills. The primary fill (56) up to 0.2m thick consisted of mid yellowish brown silty clay with rare gravel inclusions. This fill was overlain by fill 57 consisted of dark yellowish brown silty clay with moderate gravel inclusions, up to 0.28m thick. Fill 57 contained three abraded sherds (39g) of medieval Ely ware pottery and a fragment of sheep/goat bone.

Trench 2 (Fig. 12)

Relict topsoil and subsoil

- 3.7.11 Relict topsoil (18) and subsoil (19) layers were identified in a narrow zone up to 1m wide along the southern boundary of Trench 2 (Section 3), in the south-western corner of the site during the evaluation phase of the investigation. Both were observed to be 0.25m thick. The topsoil consisted of mid greyish brown sandy clayey silt with moderate gravel inclusions. The subsoil consisted of a similar orange brown deposit. These were overlain by the concrete hardcore base (17) for the tarmac surface (13) and completely truncated by the car park construction formation level cut (**16**) to the north.
- 3.7.12 A relict subsoil was also encountered in Trenches 3 and 4 overlying Period 2.1 Ditch 3. This layer, between 0.11m and 0.4m thick, consisted of dark brown sandy clay with moderate 'pea gravel' inclusions.
- 3.7.13 None of these layers yielded any artefacts.

Modern truncation

- 3.7.14 Modern truncation was encountered in all of the trenches representing the formation level for the construction of the car park (Section 3). The truncation in the eastern part of the site, (formation level **12**; across Trenches 1, 6 and 7) extended to a depth of 0.75m below ground level (19.48m OD). The truncation in the western part of the site (formation level **16**; across Trenches 2, 3, 4 and 5) extended to a depth of 0.7m below ground level (19.37m OD).

- 3.7.15 Formation level **12** in the eastern part of the site was overlain successively by a brick hardcore base (4) for a former tarmac surface (3) beneath concrete or sandstone hardcore (2 and 14 respectively) for the present car park tarmac surface (1). A 19th century worked antler steel handle (SF 1) was recovered from the sandstone hardcore of Trench 7.
- 3.7.16 A mixed layer, 0.1m thick, of greenish brown sandy clayey silt (15) was observed over formation level **16** in the western part of the site that probably represents a 'trample' layer. This was overlain by a layer of sandstone hardcore (14) for the present tarmac surface (13).
- 3.7.17 A modern foul water sewer was also revealed on a south-south-west to north-north-east alignment through Trenches 6 and 7, in the eastern part of the site.

3.8 Finds Summary

Overview

- 3.8.1 The finds recovered from the excavation consist of: worked bone; glass; pottery; ceramic building material; and a clay tobacco-pipe stem that span the Late Saxon, Saxo-Norman, medieval and modern periods. A few fragments of slag, brick, concrete and coal was also recovered from the modern ditches. Faunal remains and ecofacts from environmental samples were also recovered from features dating to the Late Saxon, Saxo-Norman and medieval periods.

Slag (Appendix B.1)

- 3.8.2 The excavations produced a small assemblage of slag and slag-like material. Period 3.2 Ditch 4 produced a small plano-convex hearth bottom (PCB), indicative of iron working (199g). However no hammer scale or microsphere slag was recovered suggesting the hearth bottom was discarded some distance from the area where metalworking may have been undertaken. Irregular lumps of smithing slag (231g) were also recovered from Period 4 ditches. Some of this material incorporates what appears to be fuel in the form of wood and coal.

Glass (Appendix B.2)

- 3.8.3 A single shard of glass bottle (8g) was recovered from a Period 4 ditch. The glass is most likely to be late 18th or 19th century.

Pottery (Appendix B.3)

- 3.8.4 The evaluation and excavation produced a small assemblage of pottery, comprising 25 (mostly abraded) sherds, weighing 0.196kg, including a small number of sherds that could not be closely dated and a single residual Roman sherd. The assemblage spans the mid 9th to the early 19th century, with the mid-12th century to mid-14th century being the main period of deposition or more likely manuring.
- 3.8.5 The two Late Saxon-early medieval sherds suggest, especially when considering the relatively large base sherd from a Thetford-type ware jar, along with the Late Saxon and Saxo-Norman radiocarbon dates from Ditches 1 and 2, that there was some level of Late Saxon-early medieval occupation in the vicinity of the site.

Clay tobacco-pipe stem (Appendix B.4)

- 3.8.6 During the excavation, three fragments of white ball clay tobacco-pipe stem weighing 0.017kg were recovered from Period 4 ditches.

Ceramic building material (Appendix B.5)

- 3.8.7 A total of 16 fragments (0.476kg) of moderately abraded ceramic building material (CBM) was recovered from Period 3.2 Ditch 4 and Period 4 ditches. The CBM recovered from Ditch 4 is late medieval or early post-medieval in date while the material from the modern ditches is mainly modern, with both 19th century brick and 20th century London brick being present.

Miscellaneous objects (Appendix B.6)

- 3.8.8 Two fragments (10g) of Welsh roofing slate and a single fragment (0.776kg) of Portland cement kerb, dating from World War II or later, were recovered from Period 4 ditches. Fragments of bituminous coal (41g) and clinker (1g) were also recovered from the modern ditches, likely to be from 19th or 20th century domestic hearths.

3.9 Environmental Summary

Faunal remains (Appendix C.1)

- 3.9.1 The material mainly dates to the Late Saxon (Period 1) and Saxo-Norman (Period 2) phases of the site with a small amount of bone from the modern (Period 4) phase. The number of recordable fragments is 32 and the species represented includes cattle, sheep/goat, pig, dog, crane, rabbit and fish from the codfish family. A cattle tibia from Period 1 Ditch 1 was extensively butchered. Period 2 Ditch 2 contained mostly cranial and foot elements of cattle, probably initial butchery waste, along with a pig humerus that also displays evidence of butchery. Furthermore, Period 3.1 Ditch 3 produced a sawn cattle pelvis.
- 3.9.2 It appears likely that cattle, pig and sheep/goat were all exploited for meat. This is supported by the clear signs of butchery in the assemblage that was for carcass reduction, food preparation and consumption. Cattle remains make up the largest amount of mammalian fragments and it is well known that cattle husbandry was a major part of the food economy during the medieval period. The presence of fish remains highlights the addition of fish to the inhabitant's diet.

Environmental remains (Appendix C.2)

- 3.9.3 A total of 10 bulk samples were taken during the excavations, most of which were taken from the Late Saxon, Saxo-Norman and medieval features identified in the trenches. The processed soil samples produced sparse quantities of cereals, legumes and weed seeds. The preserved remains are low in density and diversity and have limited archaeobotanical potential.

4 DISCUSSION AND CONCLUSIONS

4.1 Discussion

The site within the Late Saxon environment – church and town lands of Ely

- 4.1.1 This site has provided a small sample excavation into a plot of land within the southern reaches of the city of Ely. Documentary and mapped evidence (Section 1.3; Figs 2-11), supplemented by archaeological works in the vicinity of the site suggests a possible historical southern limit to the Mid-Late Saxon and early medieval urban settlement of Ely, abutting both the ecclesiastical lands of the Bishop's 'paramount manor' of Barton and the Hospitals of St John and St Magdalen to the south. There is documentary evidence to suggest Barton Manor was in existence during this period and may have served as an important administrative centre for the island of Ely. Furthermore, the path of this division may also have once acted as a routeway across the city during this early period (Fig. 2; Mortimer *et al.* 2005, 140). The site therefore probably lay within the agricultural setting of Barton Manor during these periods, and close to its northern limit with the settlement of Ely.
- 4.1.2 The excavation has uncovered a ditched boundary dating to the Late Saxon period, based on a cattle bone recovered from Ditch 1; dated to 856-989 cal AD. Ditch 1 was found to extend for 10m across the north-western part of the site on a west-northwest to east-southeast alignment, 15m to the north of, and parallel to, (later) Barton Road. This boundary would have presumably extended further across the land as a linear boundary that formed part of a field or paddock subdivision, or possibly part of the northern boundary to Barton Manor lands. The orientation of this early boundary may also reflect the wider orientation of local land division of the period that appears to have been respected by succeeding Ditches 2 and 3 and to the present day by the course of Barton Road (the historical Gaol Lane); a post-medieval development (see below).
- 4.1.3 Evidence for Late Saxon activity, however slight, is a significant discovery for the locality. Evidence for contemporary Late Saxon occupation in the near vicinity is limited to ditches indicative of urban plot boundaries at The Paddock and pitting activity excavated at St Mary's Lodge to the north-east and north of the site respectively (see Sections 1.3.7-8). In the wider vicinity extensive Mid-Late Saxon settlement remains were revealed at West Fen Road to the north-west of the site (see Section 1.3.9). Ditch 1 belongs to the period immediately prior to the refounding of Ely Abbey at the location of the current cathedral church in AD970. The location of the contemporary Abbey church and monastery of St Ethelreda is unknown with one candidate suggested to be St John's Farm to the west; the historical location of the Hospitals of St John and St Mary Magdalen (Fig. 2; Mortimer *et al.* 2005, 5).

The site within the evolving Saxo-Norman and early medieval environment

- 4.1.4 The boundary delineated by Ditch 1 appears to have been respected and probably reinstated by the more substantial cut of Ditch 2. The presence of a primary 'slumping' fill extending down the southern side of the cut is indicative of a bank that may have been present along the southern side of the feature. The ditch fill produced mostly cranial and foot elements of cattle indicative of the initial butchery of animals, along with butchered pig bone (Appendix C.1). The animal bone was radiocarbon dated to 1023-1159 cal AD. The lack of any pottery or other artefacts suggests the site still lay within the agricultural bounds of Barton Manor at this time.

- 4.1.5 A manorial court for the tenures of the island was held at this manor during this period and ploughing service dues to the manor were still being carried out by the 'men of Ely', demonstrating the manor's continued important status (Miller 1970, 10). During this period there was a major reorganisation of the land to the north of the site with the refounding in AD970 of the Church of St Etheldreda and St Peter (Ely Cathedral) - along with its Benedictine cathedral priory - at its current location, documented as being extensively rebuilt from 1083 onwards. The separate parish of St Mary, with its church located 200m to the north of the site, was also documented to be established by 1109 (Atkinson *et al.* 2002, 82-86).
- 4.1.6 Ditch 3 is only tentatively placed within the early medieval period. The only indicators of this proposed date are the presence of sawn cattle pelvis, more characteristic of the medieval period (Appendix C.1.10), and a possible increase in size with each reinstatement of this boundary. As with the earlier ditches, there was a lack of datable artefacts recovered from this feature, which only yielded butchered cattle remains suggesting the continued agricultural regime for the locality.
- 4.1.7 This view is reinforced with the presence of the remnant cultivated soil layer observed in Trench 1. The small, abraded sherds of medieval pottery recovered from this soil suggest manuring with midden material that has been reworked by ploughing activity (Appendix B.3.14). The moderate assemblage of charred plant remains within this soil also suggest the use of midden material as fertiliser (Appendix C.2.10).
- 4.1.8 These remains appear to conform to the general agricultural character of the archaeological remains found in the locality. Ridge and furrow earthworks were identified in the grounds of The King's School to the south of the site and Barton Road, where a medieval agricultural ditch was also identified through excavation (see Section 1.3.13).

The site within the later medieval and post-medieval environments

- 4.1.9 From the 14th centuries onwards documentary evidence suggests more intensive settlement activity in closer proximity to the north of the site (see Sections 1.3.14-21). The survey of 1417 describes rows of tenements to the north and south of Walpole Lane (the current Silver Street) along with the establishment of Ketons manor-farm. The rear gardens and working areas of these tenements would have extended southwards from the tenement houses towards the site (see Section 1.3.16). It is interesting to note that evidence for iron-smithing in the area was recovered from the only later medieval feature (Ditch 4) identified on the site. This development to the north of the site also occurred during a period of significant enclosure of demesne arable farm land in Ely for dairy-farming pasture between 1486-1548. Two closes forming part of Ketons Farm to the east are also documented to have been enclosed for pasture. The survey of the 1520s sheds further light on the urban environment of Ely between the site and Silver Street to the north, variously describing the Bishop's pinfold, an orchard, tenement gardens and Ketons Farm. The earlier ditches found on the site (Ditches 1-3) may have possibly formed part of the boundary between the back-plots of tenements and Barton Manor land at this time. With the dissolution of the cathedral priory in 1539, the lands of Barton Manor were retained by the Bishop who subsequently leased the manor to tenant farmers. Map evidence demonstrates the site remained as arable land beyond the southern urban reach of Ely throughout the 17th century (Figs 3 and 4).

The site's development in the modern period

- 4.1.10 Barton Road is first shown on historical maps from 1811 (Figs 5-7) with buildings also appearing along its route in the early part of the 19th century illustrating the recent

southward expansion of the urban environs of Ely to encompass the site. The tithe map of 1846 (Figs 8 and 9) indicates the site no longer lay within the now diminishing estate of Barton Manor, but within a parcel of land described as a garden (see Section 1.2.23). Market gardens were an important local enterprise in many of the larger Cambridgeshire towns during the 19th century (Gooch 1811, 196). A military barracks and parade ground was established on the site in response to the Ely and Littleport riots in the early part of the 19th century, and is shown on the 1885 OS map (Fig. 10). A Drill Hall (still present) was constructed immediately to the west of the site in the 1930s.

- 4.1.11 The multiple modern ditches excavated on the site had the appearance of narrow trench like features. Therefore, these features may possibly delineate part of a network of practice trenches, excavated on the parade ground of the former military barracks, of a type excavated by the British Army at the outset of the First World War (Graham 2016, 14). The narrowness of these trenches further suggest these features to possibly represent drainage sumps, excavated beneath the walkways of trenches, or narrow communication type trenches (www.shorehamfort.co.uk/about/the-great-war-training-trench). The upper profiles of these trenches were truncated by the construction of the present car park.
- 4.1.12 The construction of the present car park in the 1970s truncated the pre-existing land surface to a height of approximately 19.48m OD, which has limited the potential of survival of archaeological remains beneath the site.

4.2 Significance

- 4.2.1 The Late Saxon and early medieval ditches are of local significance when considering the early development of Ely. These provide further slight, but useful and securely dated, evidence for the evolving occupation of Ely between the Late Saxon and early medieval periods on the border of the Bishop's Barton Manor and the developing back-plots extending from Silver Street.

APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

A1 Evaluation Trenches (Clarke 2016)

Trench 1						
General description				Orientation		N-S
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. Beneath the truncation lay an early-high medieval buried soil cut by a late medieval ditch. A trench dating to the modern period was also observed cutting the buried soil.				Avg. depth (m)		0.9
				Width (m)		2
				Length (m)		14
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1	layer	-	0.2	Tarmac surface	-	modern
2	layer	-	0.1	Concrete hardcore	-	modern
3	layer	-	0.28	Old tarmac surface	-	modern
4	layer	-	0.2	Brick hardcore	-	modern
5	layer	-	0.16	Buried soil	-	early-high medieval
6	-	-	-	natural	-	-
7	cut	1	0.2	Ditch	-	late medieval
8	fill	-	0.2	Ditch	Tile and metal-working debris	late medieval
9	cut	1.1	1.35	Ditch	-	modern
10	fill	-	0.65	Ditch	-	modern
11	fill	-	0.7	Ditch	-	modern
12	cut	-	0.75	Truncation	-	modern
20	-	-	-	Natural	-	-

Trench 2						
General description				Orientation		N-S/E-W
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict topsoil and subsoil, observed to survive at the southern end of the trench. An E-W ditch of Saxo-Norman date lay at the northern end of the trench beneath the truncation.				Avg. depth (m)		0.7
				Width (m)		2
				Length (m)		17m/9m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.75	Truncation	-	modern
13	layer	-	0.1	Tarmac surface	-	modern
14	layer	-	0.5	Sandstone hardcore	-	modern

Trench 2						
General description				Orientation	N-S/E-W	
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict topsoil and subsoil, observed to survive at the southern end of the trench. An E-W ditch of Saxo-Norman date lay at the northern end of the trench beneath the truncation.				Avg. depth (m)	0.7	
				Width (m)	2	
				Length (m)	17m/9m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.75	Truncation	-	modern
15	layer	-	0.1	Trample layer	-	modern
16	cut	-	0.7	Truncation	-	modern
17	layer	-	0.1	Concrete hardcore	-	modern
18	layer	-	0.25	Relict topsoil	-	uncertain
19	layer	-	0.25	Relict subsoil	-	uncertain
20	-	-	-	Natural	-	-
21	cut	2.4	0.85	Ditch	-	Saxo-Norman
22	fill	-	-	Ditch	-	Saxo-Norman
23	fill	-	-	Ditch	Pottery and animal bone	Saxo-Norman

A2 Additional Trenching Excavation

Trench 3						
General description				Orientation	N-S	
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. An E-W ditch of Late Saxon date lay in the central part of the trench. To the south and north, a Saxo-Norman and an early-high medieval ditch were also revealed on the same alignment.				Avg. depth (m)	0.8	
				Width (m)	2	
				Length (m)	15.2	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.4	Truncation	-	modern
14	layer	-	0.4	Sandstone hardcore	-	modern
20	-	-	-	Natural	-	-
37	cut	1.84	0.36	Ditch	-	Saxo-Norman
38	fill	-	0.1	Ditch	Animal bone	Saxo-Norman
39	fill	-	0.32	Ditch	Pottery and Animal bone	Saxo-Norman

Trench 3						
General description					Orientation	N-S
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. An E-W ditch of Late Saxon date lay in the central part of the trench. To the south and north, a Saxo-Norman and an early-high medieval ditch were also revealed on the same alignment.					Avg. depth (m)	0.8
					Width (m)	2
					Length (m)	15.2
Contexts						
40	cut	1.34	0.38	Ditch	-	Late Saxon
41	fill	-	0.4	Ditch	-	Late Saxon
42	fill	-	0.14	Ditch	-	Late Saxon
43	fill	-	0.7	Ditch	-	Late Saxon
44	cut	2.5	0.44	Ditch	-	early-high medieval
45	fill	-	0.35	Ditch	Animal bone	early-high medieval
46	fill	-	0.11	Ditch	-	early-high medieval
47	Layer	-	0.4	Relict subsoil	-	uncertain

Trench 4						
General description					Orientation	N-S
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. The trench contained the eastward continuation of the two E-W aligned Late Saxon and Early-High medieval ditches revealed in Trench 3. A modern ditch also lay towards the southern end of the trench.					Avg. depth (m)	0.8
					Width (m)	2
					Length (m)	14
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.54	Truncation	-	modern
13	layer	-	0.1	Tarmac surface	-	modern
14	layer	-	0.54	Sandstone hardcore	-	modern
20	-	-	-	Natural	-	-
47	Layer	-	0.26	Relict subsoil	-	uncertain
48	cut	1.46	0.42	Ditch	-	Late Saxon
49	fill	-	0.26	Ditch	-	Late Saxon
50	fill	-	0.26	Ditch	Animal bone	Late Saxon
51	fill	-	0.12	Ditch	-	Late Saxon
52	cut	3.9	0.5	Ditch	-	early-high medieval
53	fill	-	0.3	Ditch	Pottery	early-high medieval
54	fill	-	0.24	Ditch	-	early-high medieval

Trench 4						
General description					Orientation	N-S
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. The trench contained the eastward continuation of the two E-W aligned Late Saxon and Early-High medieval ditches revealed in Trench 3. A modern ditch also lay towards the southern end of the trench.					Avg. depth (m)	0.8
					Width (m)	2
					Length (m)	14
Contexts						
62	cut	0.64	0.72	Ditch	-	modern
63	fill	-	0.72	Ditch	-	modern
64	fill	-	0.64	Ditch	CBM, coal, slag and animal bone	modern

Trench 5						
General description					Orientation	N-S/E-W
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. A modern ditch was revealed in the northern extension of the L-shaped trench. A probable hedge-line also extended along the southern side of the trench and the site.					Avg. depth (m)	0.52
					Width (m)	2
					Length (m)	10.1/7.5
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.32	Truncation	-	modern
14	layer	-	0.32	Sandstone hardcore	-	modern
20	-	-	-	Natural	-	-
47	Layer	-	0.2	Relict subsoil	-	uncertain
55	cut	0.9	0.5	Hedge-line	-	modern
56	fill	-	0.2	Hedge-line	-	modern
57	fill	-	0.28	Hedge-line	Pottery and animal bone	modern
58	cut	1	0.16	Hedge-line	-	modern
59	fill	-	0.16	Hedge-line	-	modern
60	cut	1.24	0.4	Ditch	-	modern
61	fill	-	0.4	Ditch	-	modern

Trench 6						
General description				Orientation	NW-SE	
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. The corner of a modern N-S/E-W aligned ditch lay towards the northwestern end of the trench. A similar modern SW-NE aligned ditch also lay towards the southeastern end.				Avg. depth (m)	0.9	
				Width (m)	2	
				Length (m)	7	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2	layer	-	0.6	Concrete hardcore	-	modern
12	cut	-	0.60	Truncation	-	modern
20	-	-	-	Natural	-	-
25	cut	0.6	0.74	Ditch	-	modern
26	fill	-	0.1	Ditch	Pottery, CBM, tobacco pipe stem and animal bone	modern
31	Layer	-	0.3	Relict subsoil	-	uncertain
32	cut	1.34	0.38	Ditch	-	modern
33	fill	-	0.4	Ditch	Pottery, CBM and tobacco pipe stem	modern

Trench 7						
General description				Orientation	N/A	
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. The late medieval ditch encountered within Trench 1 during the evaluation phase of the investigation was present within the footprint of Trench 7. Continuations of the modern ditches encountered in Trenches 1 and 6 were also revealed.				Avg. depth (m)	0.45	
				Width (m)	8	
				Length (m)	8	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12	cut	-	0.25	Truncation	-	modern
14	layer	-	0.25	Sandstone hardcore	-	modern
20	-	-	-	Natural	-	-
31	Layer	-	0.2	Relict subsoil	animal bone	uncertain
27	cut	0.7	0.7	Ditch	-	modern
28	fill	-	0.32	Ditch	Pottery and glass	modern

Trench 7						
General description				Orientation	N/A	
Consisted of tarmac surface overlying hardcore layers within truncation cut for car park construction. The truncation cut a relict subsoil. The late medieval ditch encountered within Trench 1 during the evaluation phase of the investigation was present within the footprint of Trench 7. Continuations of the modern ditches encountered in Trenches 1 and 6 were also revealed.				Avg. depth (m)	0.45	
				Width (m)	8	
				Length (m)	8	
Contexts						
34	fill	-	0.32	Ditch	-	modern
35	cut	0.74	0.24	Ditch	-	modern
36	fill	-	0.24	Ditch	Coal	modern

APPENDIX B. FINDS REPORTS

B.1 Slag

by Carole Fletcher with Graeme Clarke

- B.1.1 The evaluation and excavation produced a small assemblage of slag and slag-like material, the latter being mainly undiagnostic (Table 2).
- B.1.2 Period 3.2 ditch **7** produced a small plano-convex hearth bottom (PCB), indicative of iron working, however no hammer scale or microsphere slag was recovered from ditch **7**, suggesting the hearth bottom was discarded some distance from the area where metalworking may have been undertaken. Although in itself not closely datable, the PCB was found alongside undiagnostic pottery fragments recovered from sample 2 and a fragment of late medieval or early post-medieval roof tile.
- B.1.3 Irregular lumps of smithing slag (Simon Timberlake pers. comm.) were recovered from two fills of Period 4 ditch **62**, in Trench 4. Some of this material incorporates what appears to be fuel in the form of wood and coal.
- B.1.4 Although much of the slag is not closely datable, the dates of any pottery or ceramic building material (CBM) recovered alongside it are recorded, suggesting the PCB is late medieval or early post-medieval, while the slag from ditch **62** was recovered alongside 20th century brick.
- B.1.5 The PCB should be retained, however, the remaining material, due to its association with 19th century CBM, can be deselected prior to archive deposition.

Trench	Cxt.	Cut	Group	Per- iod	Form-description	Count	Weight (kg)	Date
1	8	7	Ditch 4	3.2	High temperature slag, PCB. Sub-rectangular with an irregular upper surface, as if some material has been lost above an asymmetrical convex base. Little extraneous material attached to the base, mainly dull grey with rust coloured patches over all surfaces. 78mm long, 65mm wide and 38mm deep	1	0.199	Not closely datable. CBM in context is late medieval or early post-medieval
4	63	62	Modern ditches	4	Smithing slag (Timberlake pers. comm.), slag and fuel mix. Dull grey irregular surfaces, some slightly lustrous smooth areas. Various sized bubbles and some runs suggest the slag was in part molten when ?raked out.	4	0.194	Not closely datable. CBM in context is 20th century
4	64	62	Modern ditches	4	Smithing slag (Timberlake pers. comm.). Dull grey irregular surfaces, some smooth areas, bubbles and some runs suggest the slag was in part molten when ?raked out.	3	0.037	Not closely datable. CBM in context is 20th century
	Tot- al					8	0.430	

Table 2: Slag catalogue

B.2 Glass

by Carole Fletcher

A single irregular shard from a dark olive, green cylindrical glass bottle (0.008kg), was recovered from Period 4 ditch **27**, in Trench 7. The shard has slightly clouded surfaces but is otherwise in good condition. The glass was recovered alongside a sherd of Late Medieval Ely ware (mid 14th-end 15th century), however the glass is most likely to be late 18th or 19th century. The fragmentary nature of the glass assemblage means it is of little significance and the glass may be deselected prior to archival deposition.

B.3 Pottery

by Carole Fletcher

Introduction

- B.3.1 The evaluation and excavation produced a small assemblage of pottery, comprising 25 sherds, weighing 0.196kg, including a small number of sherds that could not be closely dated and a single residual Roman sherd, recovered from features across seven trenches (Table 3). The assemblage spans the mid 9th to the early 19th century, with the mid 12th century-mid 14th century being the main period of deposition (or more likely, manuring). Overall the condition of the assemblage is abraded, with some moderately abraded sherds and the mean sherd weight is low at approximately 0.008kg.

Methodology

- B.3.2 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), The Medieval Pottery Research Group (MPRG), 2016 *A Standard for Pottery Studies in Archaeology* and the MPRG *A guide to the classification of medieval ceramic forms* (MPRG 1998) act as standards.
- B.3.3 Recording was carried out using OA East's in-house system based on that previously used at the Museum of London. Fabric classification has been carried out for all previously described Roman, medieval and post-medieval types, using the Cambridgeshire fabric codes (Spoerry 2016) where appropriate. All sherds have been counted, classified, weighed, and the Minimum Number of Vessels (MNV) determined. All the pottery has been recorded and dated on a context-by-context basis and the catalogue is recorded in Table 3. The pottery and archives are curated by Oxford Archaeology East until formal deposition.

Sampling Bias

- B.3.4 The excavation was carried out by hand and selection made through standard sampling strategies on a feature-by-feature basis. There are not expected to be any inherent biases.

Assemblage

- B.3.5 The average sherd weight from individual contexts is low at approximately 0.008kg and this weight would be even lower but for the presence of a large sherd from the base of a Thetford ware vessel, weighing 0.088kg. If this sherd is excluded, the average sherd weight is approximately 5g. The paucity of pottery suggests the site may have been cleared or was not an area of domestic occupation, perhaps back plots or agricultural land.

Trench 1

- B.3.6 Trench 1 produced pottery from Period 3.1 layer/buried soil, context 5, and Period 3.2 ditch **7** (Ditch 4). Context 5 produced 10 sherds, almost all of which are abraded, having been subject to reworking, the exception being a large moderately-abraded base sherd from a Thetford ware vessel, most likely a storage jar, dating from the mid 9th-end 12th century. The remaining sherds appear medieval, including sherds of Ely ware. From ditch **7**, three abraded sherds were recovered, all of which are highly abraded, each individually weighs less than 1g and cannot be closely dated.

Trench 2

- B.3.7 Trench 2 produced a single sherd of pottery from Period 2 ditch **21** (Ditch 2). The sherd, which weighs less than 1g, has fine quartz temper with some flint and is not closely datable.

Trench 3

- B.3.8 Period 2 ditch **37** (Ditch 2) produced a moderately abraded sherd from a Stamford ware jug. No other ceramic material was recovered and the sherd, weighing only 0.006kg, cannot be considered reliable dating.

Trench 4

- B.3.9 Two features in Trench 4 produced pottery. Excavation of Period 3.1 ditch **52** (Ditch 3) produced a single rim sherd from a Roman Sandy Greyware jar. The sherd dates from mid 1st-4th century and may be residual. Period 4 ditch **62** produced sherds of Late Medieval Ely ware, however the feature also produced 20th century brick and the sherd is likely to be residual.

Trench 5

- B.3.10 A single fill from Period 4 possible hedge line **55**, produced three moderately abraded sherds, including a decorated rim from a Medieval Ely ware bowl. No other datable ceramic material was recovered from the feature and it is likely that the medieval pottery was residual within the feature.

Trench 6

- B.3.11 Pottery was recovered from two features in this trench. From ditch **25**, an abraded body sherd in a buff sandy fabric which could be Roman or medieval was recovered; the ditch also produced a fragment of clay pipe stem (c.1580-1900). Neither find can be considered reliable dating for the feature. From ditch **32**, two sherds of mid 18th-early 19th century creamware were recovered, alongside a fragment of clay tobacco pipe stem and ?18th century or later brick. This would suggest that the material became incorporated into the ditch sometime after the mid 18th century, although the ditch itself may be earlier.

Trench 7

- B.3.12 A small fragment of Late Medieval Ely ware was the only ceramic find from Period 4 ditch **27** and, as with much of the pottery recovered from this site, the small size of the sherd makes it unreliable dating evidence.

Discussion

- B.3.13 The assemblage is likely to be domestic in nature, The earliest pottery is a single Roman sherd recovered from Period 3.1 ditch **52** (Ditch 3), representing a low background level of Roman material, however no Roman features were identified. There are two Late Saxon-early medieval sherds that suggest, especially the relatively

large base sherd from a Thetford-type ware jar, and the Late Saxon radiocarbon date of animal bone recovered from Ditch 2, that there was some level of Late Saxon-early medieval occupation in the vicinity of the site. However, the two sherds have been reworked and are most likely to be the result of manuring. The medieval assemblage is also not large and again most likely represents a manuring spread, some of which has been reworked and become incorporated into later features.

- B.3.14 The main period of deposition was from the 12th century-end 15th century, with only a small amount of later activity. The sherds that could not be closely dated most likely fall into this date range, although a few sherds may be earlier, however these, alongside the abraded nature of much of the material, indicate that the assemblage may have been spread across the site through manuring and later reworked or disturbed by ploughing or other activity. The paucity of pottery of all periods suggests the area was likely to have been open agricultural land until the 19th century.
- B.3.15 The following catalogue acts as a full record and the pottery may be deselected prior to archival deposition.

Trench	Cxt.	Cut	Group	Per-iod	Full Name	Basic Form-description	MNV	Count	Weight (kg)	Pottery Date Range
1	5	-	Buried soil	3.1	Medieval Coarseware	Body sherds, moderately abraded		2	0.006	Not closely datable
					Medieval Coarseware	Jar body sherds, externally sooted and moderately abraded		2	0.004	Not closely datable
					Early Medieval Essex Micaceous Sandy ware	Jar body sherd, slightly sooted and abraded	1	1	0.003	12th-end 14th
					Shelly ware	Body sherd, abraded	1	1	0.003	Mid-12th-end 15th
					Ely ware	Unglazed body sherd, moderately abraded		1	0.002	Mid-12th-mid 14th century
					Ely ware	Unglazed body sherd, heavily abraded		1	0.003	Mid-12th-mid 14th century
					Ely ware	Unglazed body sherd, moderately abraded	1	1	0.004	Mid-12th-mid 14th century
					Thetford-type ware	Jar base angle, moderately abraded	1	1	0.088	Mid 9th-end 12th century
1	8	7	Ditch 4	3.2	Shell tempered	Small leached and abraded shell tempered, sherds		2	0.001	Not closely datable
					Sandy ware	Small abraded body sherd buff surfaces and grey core		1	<0.001	Not closely datable
2	23	21	Ditch 2	2	Fine quartz temper with some flint.	Body sherd, abraded	1	1	0.001	Not closely datable
3	39	37			Stamford ware	Jug body sherd, external clear yellowish glaze, moderately abraded	1	1	0.006	875-1200
4	53	52	Ditch 3	3.1	Roman Sandy Greyware	Jar rim sherd, abraded	1	1	0.017	Mid 1st-4th century

Trench	Cxt.	Cut	Group	Period	Full Name	Basic Form-description	MNV	Count	Weight (kg)	Pottery Date Range
4	64	62	Mod. ditch	4	Late Medieval Ely ware	Body sherds, moderately abraded, possibly base angle but outer surface missing	1	2	0.006	1350-1500
5	57	55	Hedge	4	Medieval Ely ware	Bowl rim, externally thickened, flat topped with stabbed decoration on upper surface of the rim, too small to be sure of diameter. Body sherds, one with incised decoration, moderately abraded	1	3	0.039	1150-1350
6	26	25	Mod. ditch	4	Sandy ware	Abraded body sherd, buff surfaces and grey core	1	1	0.005	Not closely datable
7	28	27			Late Medieval Ely ware	Moderately abraded body sherd with two shallow horizontally incised lines	1	1	0.003	1350-1500
6	33	32	Mod. ditch	4	Creamware	Moderately abraded to abraded base sherds from a flatware vessel	1	2	0.005	1740-1830

Table 3: Pottery catalogue

B.4 Clay tobacco-pipe

by Carole Fletcher

- B.4.1 During the excavation, three fragments of white ball clay tobacco-pipe stem weighing 0.017kg were recovered from Period 4 ditches **25** and **32** in Trench 6 (Table 4). Terminology used in this report is taken from Oswald's simplified general typology (Oswald 1975, 37–41) and Crummy and Hind (Crummy 1988, 47-66). A quantification table for the clay pipes can be found at the end of this report, based on the recording methods recommended by the Society for Clay Pipe Research (<http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf>). Stem borehole diameter recording has not been undertaken on this assemblage due to its limited size.
- B.4.2 The clay tobacco pipe recovered represents what are most likely casually discarded pipe stems and do little other than to indicate the consumption of tobacco on or in the vicinity of the site, at some point after 1740, when considered in relation to the pottery also recovered from Period 4 ditch **32**. The plain and fragmentary nature of the assemblage means it is of little significance. The following catalogue acts as a full record and the clay tobacco pipe may be deselected prior to archival deposition.

Trench	Cxt.	Cut	Group	Period	Form	No of fragments	Description	Weight (kg)	Date
6	26	25	Mod.	4	Pipe	2	Two pipe stem fragments: 59mm long, 9-10mm in diameter,	0.015	Not closely

Trench	Cxt.	Cut	Group	Period	Form	No of fragments	Description	Weight (kg)	Date
			ditch		stem		circular in section with trimmed mould lines and 56mm long, 9-10mm in diameter, oval in section with trimmed mould lines.		datable
	33	32	Mod. ditch	4	Pipe stem	1	A single pipe stem fragment 26mm long, 8mm in diameter, circular in section with trimmed mould lines.	0.002	Not closely datable
Total:						3		0.017	

Table 4: Clay tobacco-pipe catalogue

B.5 Ceramic Building Material

by Carole Fletcher

- B.5.1 A total of 16 fragments of moderately abraded ceramic building material (CBM), weighing 0.476kg, were recovered from ditches from three trenches across the site (Table 5). Several fragments of late medieval or early post-medieval CBM were recovered from Trench 1, Period 3.2 ditch **7** (Ditch 4) and Trench 6, Period 4 ditch **25**, however the majority of the assemblage is post-medieval brick and tile. The CBM recovered from Period 4 ditch **62** in Trench 4 is mainly modern, with both 19th century brick and 20th century London brick present.
- B.5.1 The fragmentary nature of the CBM assemblage means few conclusions can be drawn apart from there having been brick built buildings present in the vicinity of, or on the, site in the 19th and 20th century. The earlier material, as with the pottery, is likely to be the result of manuring. The following catalogue acts as a full record and the CBM may be deselected prior to archival deposition.

Trench	Context	Cut	Group	Period	Form	Fabric	Description	Count	Weight (kg)	Date
1	8	7	Ditch 4	3.2	Roof tile	Smooth red fabric with coarse inclusions of grog and calcareous material. Thin pale grey core, occasional voids. Fabric 1	Small fragment of roof tile, sanded on base, slight lip formed on upper edge. 12mm thick	1	0.013	Late medieval or early post-medieval
6	26	25	Mod. ditch	4	Tile	Pale orange-pink smooth fabric, occasional voids. Fabric 2	Small fragment of tile, thickness unclear.	1	0.003	Post-medieval
					Roof tile	Pale orange-pink	Fragment of roof	1	0.038	Late

Trench	Context	Cut	Group	Period	Form	Fabric	Description	Count	Weight (kg)	Date
						relatively smooth fabric some calcareous inclusions. Pale grey core. Fabric 6	tile, unsanded base, slight lip formed on upper edge. 12mm thick			medieval or early post-medieval
					Roof tile-peg tile	Poorly mixed yellow and pink hard fabric; yellow surfaces and largely pink interior. Few inclusions, moderate tiny voids. Fabric 3, classic 'Burwell brick'-type fabric	Irregular fragment of roof tile. Possible round peg or nail hole, short length of edge survives. 12mm thick	1	0.040	Post-medieval, most likely 18th century or later
6	33	32	Mod. ditch	4	Brick	Poorly mixed and very varied fabric. Outer 3-10mm very mixed yellow and pink with occasional voids, interior almost black with large yellow grog inclusions. Fabric 4	Brick corner fragments, surfaces mostly smooth	2	0.019	Post-medieval, most likely 18th century or later
4	63	62	Mod. ditch	1	Brick	Well-mixed orange-red fabric with numerous yellow clay inclusions. Fabric 5	Fragment of mould-made frogged brick, full 70mm thickness survives. Depth of frog at least 25mm (likely a London brick like the fragment from context 64)	1	0.227	20th century
4	64	62	Mod. ditch	1	Brick	Fabric 5	Fragments of mould-made frogged brick, surfaces pale yellow in places. Partial single letter within the frog is possibly an L (from LONDON BRICK or LBC), founded at the beginning of the 20th century	2	0.037	20th century
					Brick	Fabric 2	Small fragment of brick	1	0.014	Post-medieval, most likely 19th century or later
					Brick	Hard fired dull	Small fragments of	6	0.085	20th

Trench	Context	Cut	Group	Period	Form	Fabric	Description	Count	Weight (kg)	Date
						orange fabric with moderate mica and rare quartz. Fabric 6	mould-made brick. Some surfaces are lightly textured			century
	Total							16	0.476	

Table 5: Ceramic building material catalogue

B.6 Miscellaneous objects

by Carole Fletcher

- B.6.1 Irregular fragments of roofing slate were recovered from Period 4 ditch **62** in Trench 4. Of the two fragments (0.010kg), one is dark blue-grey, the other slightly purple and both are Welsh in origin. The fragmentary nature of the assemblage means it is of little significance and the slate may be deselected prior to archival deposition.
- B.6.2 A single fragment weighing 0.776kg, 140mm long, 90mm wide, 60mm deep from an edge of a concrete sill or edging/kerb was recovered from Period 4 ditch **32**, context 33, in Trench 6. The fragment is off-white with two surviving well formed surfaces, one surface being slightly angled, and also has part of a rounded edge or corner. The matrix consists of sub-angular stones or pebbles up to 20mm and some larger fragments of flint.
- B.6.3 The concrete is likely to be World War II or later in date, when Portland cement kerb stones began to replace the use of granite setts. It was recovered alongside a small fragment of probable 20th century brick. This statement acts as a full record and the concrete may be deselected prior to archival deposition.
- B.6.4 Two contexts produced fragments of bituminous coal: 0.007kg from context 36 in Period 4 ditch **35** (Trench 7) and 0.034kg from context 64 in Period 4 ditch **62** (Trench 4). A small fragment of clinker (0.001kg) was also recovered from ditch **62**, context 64. While coal has been in use since at least Roman times, these fragments, alongside the clinker, are likely to be from 19th or 20th century domestic hearths. This statement acts as a full record and the coal and clinker may be deselected prior to archival deposition.

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal Remains

By Hayley Foster

Introduction

- C.1.1 This animal bone report details the analysis of the animal bone recovered from the site. The material mainly dates to the Late Saxon and Saxo-Norman periods with a small amount of bone from the modern phase. The assemblage is of a small size, recovered by hand-collection and from environmental samples. The number of recordable fragments totals 32 and the species represented includes cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), pig (*Sus sp.*), dog (*Canis familiaris*), crane (*Gruidae*), rabbit (*Oryctolagus cuniculus*) and fish from the Gadidae family. Fragments that could not be identified to a particular species were classified based on size.

Methodology

- C.1.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which was modified from Albarella and Davis (1996). As the assemblage is small, vertebrae were included with recordable elements and assigned based on large or medium mammal.
- C.1.3 Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) and Cohen & Serjeantson (1996) were used where needed for identification purposes. Attempts to distinguish between sheep and goat were carried out based on morphological characteristics and metric data following Boessneck (1969, 339-341) and Prummel and Frisch (1986, 569-570).
- C.1.4 Only one method of ageing could be implemented when analysing the mammalian bone remains from this site, which was assessing epiphyseal fusion. The state of epiphyseal fusion is determined by examining the metaphysis and diaphysis of a bone. Fusion was recorded according to Silver (1970) and Schmid (1972) for cattle, sheep and pig.
- C.1.5 Butchery marks were recorded in the database and described as chop, cut or saw marks.

Results and discussion

- C.1.6 The faunal material from the site is mainly Saxo-Norman and early-high medieval in date with only two fragments each from the Late Saxon and modern periods. From the data collected (Tables 6-8) the main domestic mammals, cattle, sheep/goat and pig, account for the majority of the identifiable bone in the assemblage.
- C.1.7 The ageing data is minimal for the assemblage, so it is difficult to estimate mortality profiles for the domestic species. All long bone elements assessed for fusion were identified as having fused epiphyses. There are no mandibles or mandibular third molars to assess for ageing.
- C.1.8 The hand-collected material includes a humerus from a crane, from context 23 (**21**; Trench 2) of Period 2 Ditch 2 with a breadth of distal measuring 25.66mm. The material from the environmental samples includes ten vertebral bodies from fish from the Gadidae family and a thoracic vertebra from a rabbit. Trench 3 context 38 (**37**) from Period 2 Ditch 2 contains mostly cranial and foot elements of cattle, probably initial butchery waste. In regard to visible taphonomic alterations, the bone is in good

condition and there is no evidence of gnawing or burning. There are three fragments with butchery evidence, one was from context 23 on a pig humerus in which a series of chop marks appear on the distal shaft near the articulation. This is evidence of separation of the lower limb by removing the muscle and ligaments.

- C.1.9 The cattle tibia from context 43 (**40**; Trench 3) of Period 1 Ditch 1 was extensively butchered. Scoop marks are seen all along the posterior shaft with chop marks on the distal shaft and fine cut marks on the distal epiphyses (to detach ligaments). Scoop marks are generally a result of a blade being utilised along the length of bone to remove small remnants of meat, or to detach muscles with tight attachments (Seetah 2006). The cut and chop marks would be from detaching the ligaments, and separation of the lower shank.
- C.1.10 A cattle pelvis from context 45 (**44**; Trench 3) of Period 3.1 Ditch 3 shows evidence of an abraded surface on the ischium section of the acetabulum. The marks appear to be striations created by a saw. Sawing bone would not have been the most efficient way of disarticulating a joint, however it is occasionally seen on fragments, particularly in the medieval period.

Context	Trench	Species	Element	Number of Fragments	Dates
5	1	Pig	Humerus	1	Early-High Med
5	1	Sheep/goat	Phalanx 3	1	Early-High Med
23	2	Large Mammal	Thoracic Vert	1	Saxon-Norman
23	2	Medium Mammal	Thoracic Vert	1	Saxon-Norman
23	2	Pig	Humerus	1	Saxon-Norman
23	2	Crane	Humerus	1	Saxon-Norman
23	2	Large-sized Mammal	Thoracic Vert	1	Saxon-Norman
23	2	Medium-sized Mammal	Pelvis	1	Saxon-Norman
38	3	Cattle	Loose Maxillary Tooth	1	Saxon-Norman
38	3	Cattle	Loose Maxillary Tooth	1	Saxon-Norman
38	3	Cattle	Loose Maxillary Tooth	1	Saxon-Norman
38	3	Cattle	Navicular Cuboid	1	Saxon-Norman
39	3	Cattle	Phalanx 1	1	Saxon-Norman
45	3	Cattle	Pelvis	3	Early-High Med
50	4	Large-sized	Radius	1	Late Saxon

Context	Trench	Species	Element	Number of Fragments	Dates
		Mammal			
57	5	Sheep/Goat	Humerus	1	Modern
63	4	Medium-sized Mammal	Pelvis	1	Modern

Table 6: Number of identifiable specimens (NISP) by element and species from hand collection

Context	Trench	Species	Element	Number of Fragments	Dates
5	1	Dog	Loose Mandibular Tooth	1	Early-High Med
23	2	Rabbit	Vertebrae	1	Saxo-Norman
38	3	Fish (Gadidae)	Vertebrae	10	Saxo-Norman
43	3	Cattle	Tibia	1	Late Saxon

Table 7: Number of identifiable specimens (NISP) by element and species from environmental samples

C.1.11 The limited amount of data restricts the interpretations that can be formed regarding husbandry practices and dietary preferences at Barton Road, Ely. It appears likely that cattle, pig and sheep/goat were all exploited for meat. This is supported by the clear signs of butchery in the assemblage that was for carcass reduction, food preparation and consumption. Cattle remains make up the largest amount of mammalian fragments and it is well known that cattle husbandry was a major part of the food economy during the medieval period.

Species	NISP	MNI
Cattle	9	2
Pig	2	2
Sheep/goat	2	2
Medium-sized Mammal	3	2
Large-sized Mammal	3	2
Crane	1	1
Rabbit	1	1
Fish (Gadidae)	10	1
Dog	1	1
Total:	32	14

Table 8: Species distribution NISP and MNI

C.1.12 Taxonomic composition suggests that the food economy was heavily domestic with little interaction with wild animals. There were no distinct variations between those fragments from the Early-High medieval and those from the Saxo-Norman contexts. The presence

of fish remains from the Gadidae family highlights the addition of fish to the inhabitant's diet. The single rabbit element is probably intrusive as this is a burrowing species. Dog is only represented by a single tooth.

- C.1.13 As all long bone epiphyses were fused, there is a lack of young animals from the assemblage. However, young animal bones are more porous and fragile and therefore may have not survived.
- C.1.14 The lack of long bone epiphyses restricted measurements from being taken, excluding the breadth of distal of the crane humerus. Therefore, comparisons of stature of the domestic species from similar sites in the area is not possible.

Conclusion

- C.1.15 The assemblage represents a small quantity of identifiable animal bone. The remains are in good condition overall, however this is a small group with limited research potential. The examples with butchery evidence are perhaps worthy of long-term preservation with the archive for display or future study.

C.2 Environmental remains

By Rachel Fosberry

Introduction

- C.2.1 A total of ten bulk samples were taken from features within the site.
- C.2.2 The purpose of the environmental analysis is to determine whether plant remains are present, their mode of preservation and whether they are of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.

Methodology

- C.2.3 The total volume (up to 36 litres) of each bulk 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 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 9. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* (Cappers *et al.* 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonised seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

- C.2.4 For the purpose of this assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories
- # = 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance

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

Results

C.2.5 Preservation of plant remains is by carbonisation (charring) and is generally poor with very few preserved specimens.

C.2.6 The results are discussed chronologically below:

Period 1: Late Saxon (c.AD850-1066)

Ditch 1

C.2.7 Fill 43 of ditch cut **40** in Trench 3 produced a small charred assemblage of occasional cereal grains, a small legume and a single seed of scentless mayweed (*Tripleurspermum inodorum*). Two samples were taken from ditch cut **48**; lower fill 50 contains two charred degraded chaff fragments of the hulled prehistoric wheat spelt/emmer (*Triticum spelta/dicoccum*) which are likely to be residual. Upper fill 51 contained a single indeterminate charred grain.

Period 2: Saxo-Norman (c.AD1066-1150)

Ditch 2

C.2.8 This feature was excavated as ditch cut **21** in Trench 2. Fill 23 did not contain any preserved plant remains other than sparse charcoal. The same ditch was excavated in Trench 3 as ditch cut **37** and the secondary fill 39 produced a small flot containing occasional charred cereal grains including free-threshing wheat (*Triticum aestivum s.l.*), a single legume (Fabaceae) and single seeds of cleaver (*Galium aparine*) and dock (*Rumex* sp.) in addition to two nutlets of Great Fen Sedge (*Cladium mariscus*).

Period 3.1: Early-High medieval (c.AD1150-1400)

Ditch 3

C.2.9 Also within Trench 3 was ditch cut **44** which produced occasional charred cereal grains.

Buried soil

C.2.10 This layer (5) contained a moderate assemblage of charred plant remains that is predominantly comprised of free-threshing wheat grains along with a fragment of charred pea/bean and single seeds of clover (*Trifolium* sp.) and Great Fen sedge. Charcoal volumes were small (<2ml). It is possible that these remains represent the use of midden material as fertiliser.

Period 3.2: Late medieval (c.AD1400 – 1500)

Ditch 4

C.2.11 This feature, excavated as ditch cut **7** in Trench 1, produced two charred cereal grains from fill 8. The remains are poorly preserved precluding identification to species.

Period 4: modern (c.AD1800 – present)

Ditches

C.2.12 This feature was excavated in Trench 6 as ditch **25**. Fill 26 contained occasional charred grain and legume fragments.

Hedge-line

C.2.13 Fill 57 of hedge-line **55** contained occasional wheat grains, a legume fragment and a small quantity of charcoal

Period	Sample No.	Cxt. No.	Cut No.	Group No.	Feat-ure No.	Feat-ure Type	Total No. buckets /bags	% context sampled	Area/ trench No.	Volume processed (L)	Flot Volume (ml)	Cereals	Chaff	Legumes	Weed Seeds	Charcoal	
1	3	23	21	Ditch 1	21	Ditch	2	2	2	16	15	0	0	0	0	0	+
1	4	39	37	Ditch 1	37	Ditch	4	<5%	3	30	15	##	0	#	#	#	+
2.1	5	43	40	Ditch 2	40	Ditch	4	<5%	3	39	2	#	0	#	#	#	+
2.1	7	50	48	Ditch 2	48	Ditch	2	<5%	4	17	1	0	#	0	0	#	0
2.1	8	51	48	Ditch 2	48	Ditch	2	<5%	4	18	1	#	0	0	0	0	+
2.1	6	45	44	Ditch 3	44	Ditch	2	5%	3	17	5	#	0	0	0	0	+
2.1	1	5	-	Buried soil	0	Layer	4	2	1	34	40	###	#	#	#	##	+
2.2	2	8	7	Ditch 4	7	Ditch	2	2	1	15	20	#	0	0	0	##	+
3	10	26	25	Mod. ditch	25	Trench	1	<5%	6	10	2	#	0	#	0	0	++
3	9	57	55	Hedge -line	55	Hedge	2	<5%	5	18	25	##	0	#	0	0	+++

Table 9: Environmental samples

Discussion

C.2.14 Residual material of degraded fragments of hulled wheat chaff suggest earlier occupation and it is likely that digging has led to disturbance of earlier remains which have become incorporated into later deposits. The preserved remains are low in density and diversity and have limited archaeobotanical potential.

C.3 Radiocarbon dating certificates

C.4



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



RADIOCARBON DATING CERTIFICATE

25 January 2017

Laboratory Code	SUERC-70944 (GU42662)
Submitter	Rachel Fosberry Oxford Archaeology East 15 Trafalgar Way Bar Hill Cams. CB23 8SQ
Site Reference	ELYBRD16
Context Reference	23
Material	Animal bone - left metatarsus : Sheep/goat
$\delta^{13}\text{C}$ relative to VPDB	-22.7 ‰
$\delta^{15}\text{N}$ relative to air	9.5 ‰
C/N ratio (Molar)	3.3
Radiocarbon Age BP	947 ± 33

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 :- *E. Dunbar*

Date :- 25/01/2017

Checked and signed off by :- *P. Nayant*

Date :- 25/01/2017

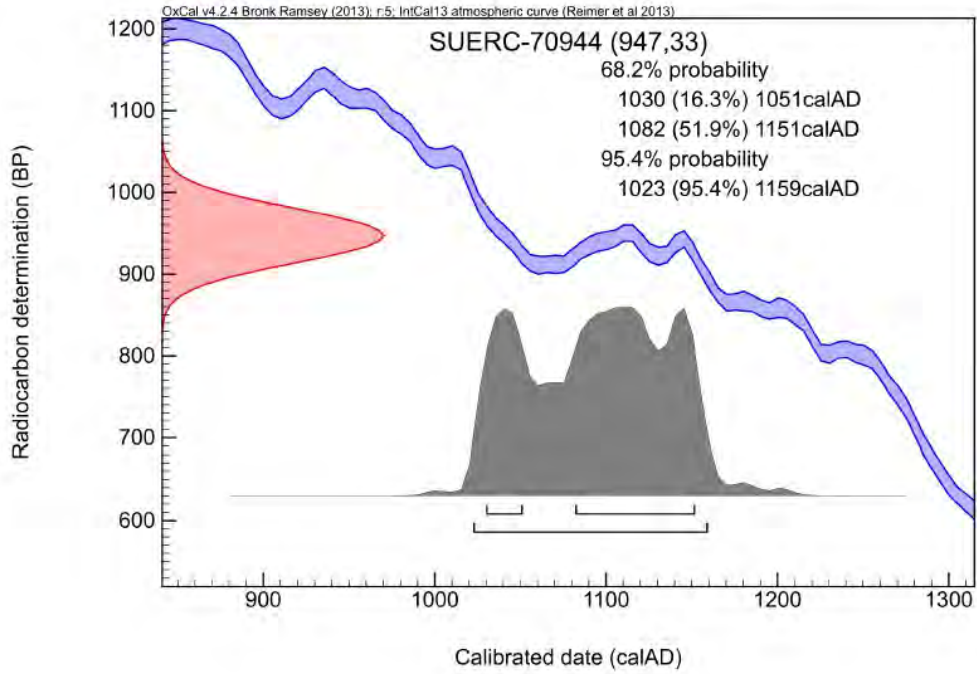


The University of Glasgow, charity number SC054601



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Calibration Plot





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



RADIOCARBON DATING CERTIFICATE

27 September 2017

Laboratory Code SUERC-75140 (GU45023)

Submitter Zoe Ui Choileain
Oxford Archaeology East
15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

Site Reference ELY BRD 17
Context Reference 50

Material Faunal: Radius : Cattle

$\delta^{13}\text{C}$ relative to VPDB -21.7 ‰

$\delta^{15}\text{N}$ relative to air 10.3 ‰

C/N ratio (Molar) 3.2

Radiocarbon Age BP 1131 \pm 33

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

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

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

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

Conventional age and calibration age ranges calculated by : E. Dunbar

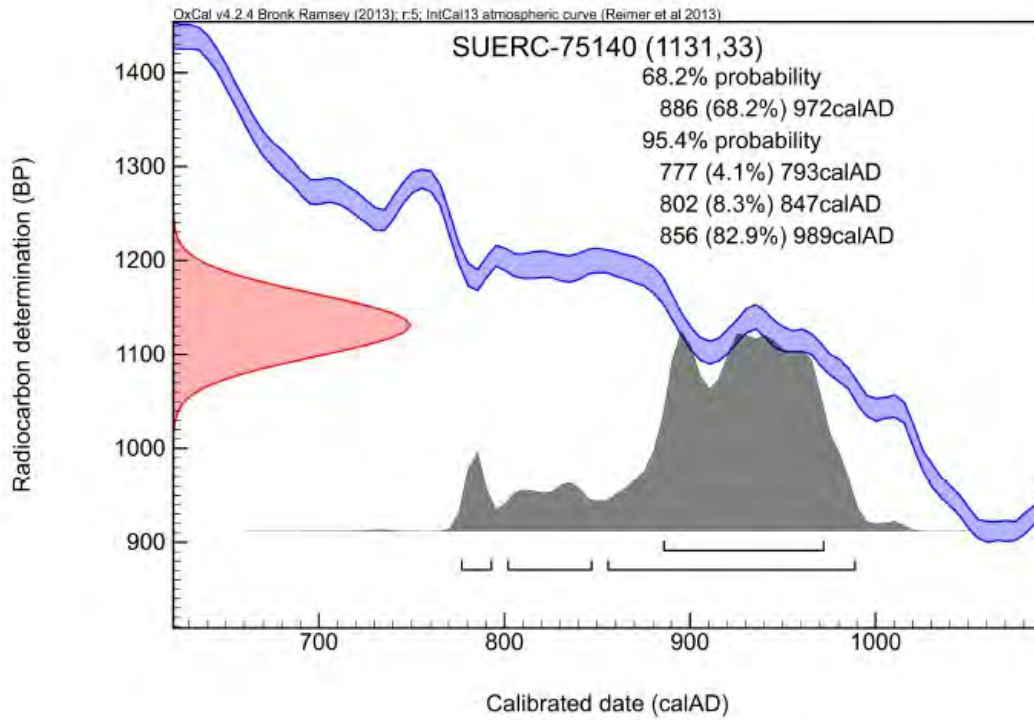
Checked and signed off by : B. Taylor



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

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

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

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

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

APPENDIX D. BIBLIOGRAPHY

- Albarella, U. and Davis, S.J. 1996 *Mammals and birds from Launceston Castle, Cornwall: decline in status and the rise of agriculture*. *Circaea* 12 (1), 1-156.
- Atkinson, T.D., Hampson, E.M, Long, E.T, Meekings, C.A.F, Miller, E, Wells, H.B and Woodgate, G.M.G 2002 'City of Ely: Introduction', in *A History of the County of Cambridge and the Isle of Ely: Volume 4, City of Ely; Ely, N. and S. Witchford and Wisbech Hundreds*, ed. R B Pugh. London
- Boessneck, J. 1969 Osteological differences between sheep (*Ovis aries* Linné) and goat (*Capra hircus* Linné), in D. Brothwell and E. Higgs (eds.), *Science in Archaeology*, 331-358. London: Thames and Hudson.
- Brown, N and Glazebrook, J (eds) 2000 *Research and Archaeology: A framework for the Eastern Counties 2: research agenda and strategy*. East Anglian Archaeology Monograph, Occasional Paper 8
- Cappers, R.T.J, Bekker, R.M., and Jans, J.E.A 2006 *Digital Seed Atlas of the Netherlands*. Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl
- Carter Jonas 2015 Heritage Statement. *Residential development for 11 dwellings, with minor alterations to the existing vehicular and pedestrian access. Land off Barton Road, Ely*. Carter Jonas LLP. Dated September 2015
- Clarke, G. 2016 *Barton Road Car Park, Ely, Cambridgeshire. Archaeological Evaluation*, ECB 4849. Oxford Archaeology East report no. 2010, dated 25th November 2016 (unpublished)
- Cohen, A and Serjeantson, D. 1996 *A manual for the identification of bird bones from archaeological sites*. London: Archetype Publications Ltd
- Crummy, N. and Hind, J. 1988 'Clay Tobacco Pipes' in Crummy, N. 1988 *The post-Roman small finds from excavations in Colchester, 1971-85*, p46-66. Colchester Archaeological Report No 6 Colchester Archaeological Trust
- Davis, S.J. 1992 *A rapid method for recording information about mammal bones from archaeological site* (AML report 19/92), London: English Heritage
- Driesch, A. 1976 *A guide to the measurement of animal bones from archaeological sites*.

- von den. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Harvard University
- Driesch, A. 1974 *'Kritische Anmerkungen zur Widerristhohenberechnung aus Langenmassen vor- und fruhgeschichtlicher Tierknochen'*, *Saugetierkundliche Mitteilungen* 22, 325-348.
- von den and Boessneck, J.
- English Heritage 2006 *Management of Research Projects, The MoRPHE Managers' Guide*
- English Heritage 2008 *Management of Research Projects, PPN3: Archaeological Excavation*
- Gdaniec, K. 2016 *Brief for Archaeological Evaluation at Barton Road Car Park, Ely. County Council Historic Environment Team. Dated 4th October 2016 (unpublished)*
- Gdaniec, K. 2017 *Brief for Archaeological Investigation at Barton Road Car Park, Ely Cambridgeshire. County Council Historic Environment Team, dated 23rd February 2017*
- Glazebrook, J (ed) 1997 *Research and Archaeology: A framework for the Eastern Counties 1: research agenda and strategy. East Anglian Archaeology Monograph, Occasional Paper 3*
- Gooch, Rev. W 1811 *General View of the Agriculture of the County of Cambridge. London*
- Graham, S. 2016 *Land Adjacent to No 37 St Johns Avenue, Woodditton, Newmarket, Cambridgeshire. Archaeological Evaluation, ECB 4711. Oxford Archaeology East report no. 1920, dated 6th May 2016 (unpublished)*
- Hatton, A. 2002 *Medieval Ditch at The King's School, Ely: an archaeological evaluation. Report No A210. Cambridgeshire Archaeology Reports [A series]*
- Hillson, S. 1992 *Mammal bones and teeth: An introductory guide to methods and identification. London Institute of Archaeology: University College London*
- Holton-Krayenbuhl, A.H. (ed) 2011 *The Topography of Medieval Ely. Cambridgeshire Records Society*
- Hunter, J. 1991 *Investigations at Bray's Lane, Ely. Cambridge Archaeological Unit unpublished report A110.*
- Jacomet, S 2006 *Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University.*
- Lyson, Daniel & Lyson, Samuel 1808 *Magna Britannia; being a concise topographical account of the several counties of Great Britain. Vol II, part 1 Cambridgeshire. Printed for T.Cadell and W.Davies, in the Strand, London*
- Karn, N. 2005 *English Episcopal Acta 31, Ely 1109-1197. Oxford University Press*

- Kenney, S. and Casa-Hatton, R. 2000 *A Medieval oven and ditches at the Railway Mission, Silver Street, Ely: an archaeological evaluation* (Unpublished CCC AFU report)
- Margary, I. 1973 *Roman Roads in Britain* Third Edition
- McCormick, F. and Murray E. 2007 *Knowth and the Zooarchaeology of Early Christian Ireland*. Dublin: Royal Irish Academy.
- Medieval Pottery Research Group 1998 *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper I
- Medlycott, M (ed) 2011 *Research and Archaeology Revisited: A revised Framework for the East of England*. East Anglian Archaeology Occasional Paper No.24
- Miller, E. 1970 *The Abbey and Bishopric of Ely: The Social History of an Ecclesiastical Estate from the Tenth Century to the Fourteenth Century*. Cambridge Studies in Medieval Life and Thought: New Series. Cambridge University Press.
- Mortimer R., Regan, R. and Lucy S. 2005 *The Saxon and Medieval Settlement at West Fen Road, Ely: The Ashwell Site*. Cambridge Archaeological Unit. East Anglian Archaeology 110
- Mortimer, R. 2016 *Written Scheme of Investigation for Archaeological Evaluation at Barton Road Car Park, Ely*. Oxford Archaeology East. Dated 24th October 2016 (unpublished)
- O'Connor, T. 2000 *The archaeology of animal bones*. Stroud: Sutton publishing
- Oswald, A. 1975 *Clay Pipes for the Archaeologist* British Archaeological Reports No. 14 British Archaeological Reports, Oxford.
- Owen, D.M. 1971 *Ely Records: A Handlist of the Records of the Bishop and Archdeacon of Ely*. Published by the Mare Fitch Fund
- Owen, J. & Bowen, E. 1720-64 *Britannia Depicta or Ogilby Improv'd*. London: T. Bowles
- Payne, S. 1973 *Kill off patterns in sheep and goats: the mandible from Asvan Kale*, Anatolian Studies 23, 281-303.
- PCRG SGRP MPRG 2016 *A Standard for Pottery Studies in Archaeology*.
- Phillips, T. and Morgan, S. 2015 *Bronze Age to Roman Remains at Cam Drive, Ely, Cambridgeshire*. OA East Report 1763 (unpublished)
- Phillips, T. 2017 *Written Scheme of Investigation for Additional Archaeological Evaluation at Barton Road Car Park, Ely, Cambridgeshire*. Oxford Archaeology East, dated 4th May 2017 (unpublished)

- Prummel, W. 1986 *A guide for the distinction of species, sex and body side in bones of sheep and goat*, Journal of Archaeological Science 13, 567-577
and Frisch, H.J.
- Schmid, E. 1972 *Atlas of animal bones for prehistorians, archaeologists and quaternary geologists*. Amsterdam-London-New York: Elsevier publishing company
- Seetah, K. 2006 The importance of cut placement and implement signatures to butchery interpretation. *In 10th Conference of the International Council for Archaeozoology, Essay Prize Submission, Mexico City, Mexico.*
- Silver, I.A. 1970 The ageing of domestic animals. In D.R. Brothwell and E.S Higgs (eds), *Science in archaeology: A survey of progress and research*, pp.283-302. New York: Prager publishing
- Stace, C. 1997 *New Flora of the British Isles. Second edition*. Cambridge University Press
- Zohary, D. 2000 Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley. 3rd edition. Oxford University Press
and Hopf, M.

APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

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

Project Reference Codes

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

Type of Project/Techniques Used

Prompt

Please select all techniques used:

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

Monument Types/Significant Finds & Their Periods

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

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

Project Location

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

Project Originators

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

Project Archives

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

Archive Contents/Media

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

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

Notes:

Project Originators

Organisation	OA EAST
Project Brief Originator	Kasia Gdaniec (CCC HET)
Project Design Originator	Tom Phillips (OA East)
Project Manager	Tom Phillips (OA East)
Supervisor	Patrick Moan (OA East)

Project Archives

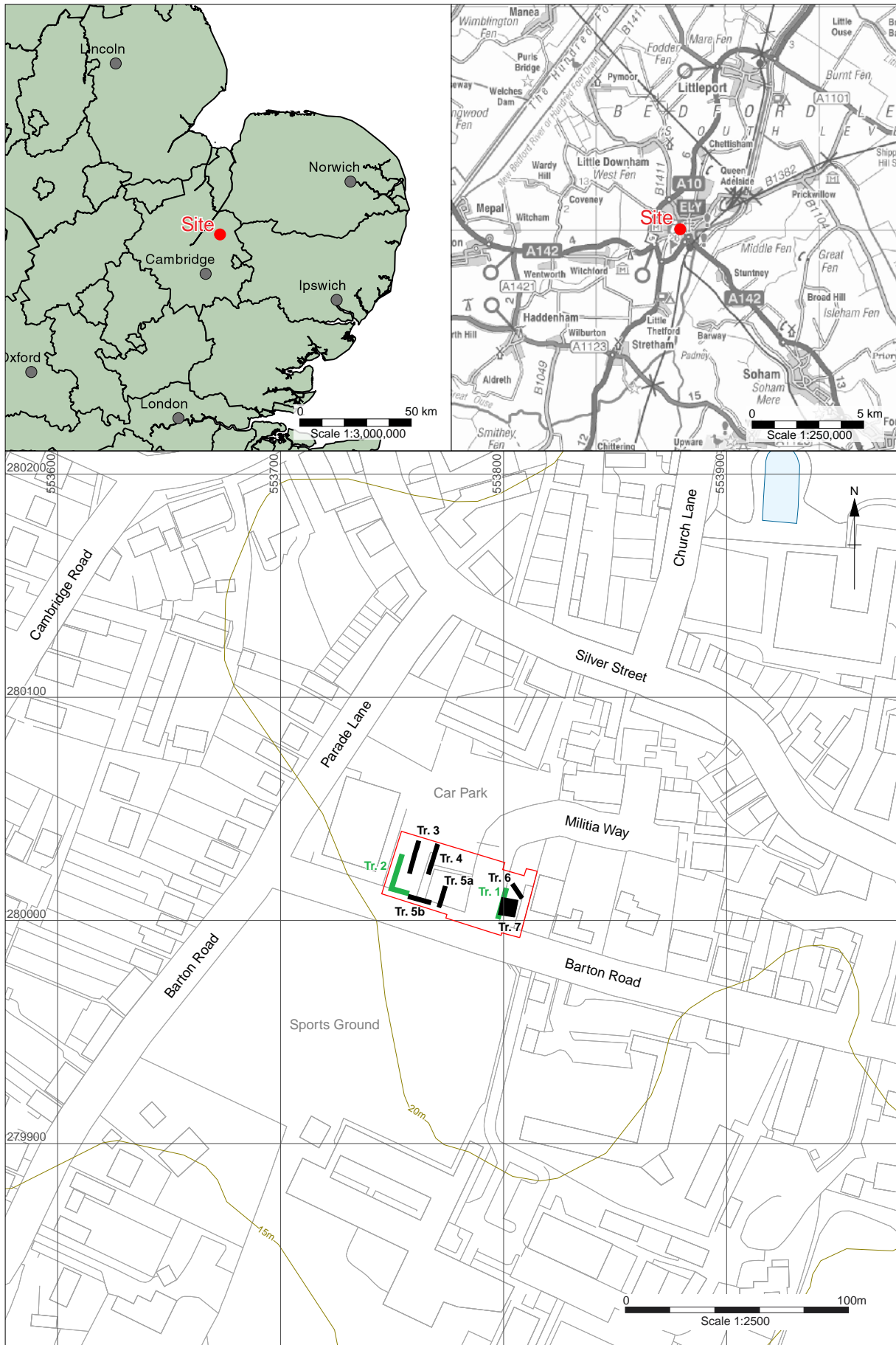
Physical Archive	Digital Archive	Paper Archive
Cambs. County Store	OA East	Cambs. County Store
ECB5023	ELYBRD17	ECB5023

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
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Ceramics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Worked Bone	<input checked="" 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Notes:



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Figure 1: Site location showing development area outlined (red), 2016 evaluation trenches (green) and 2017 evaluation trenches (black)

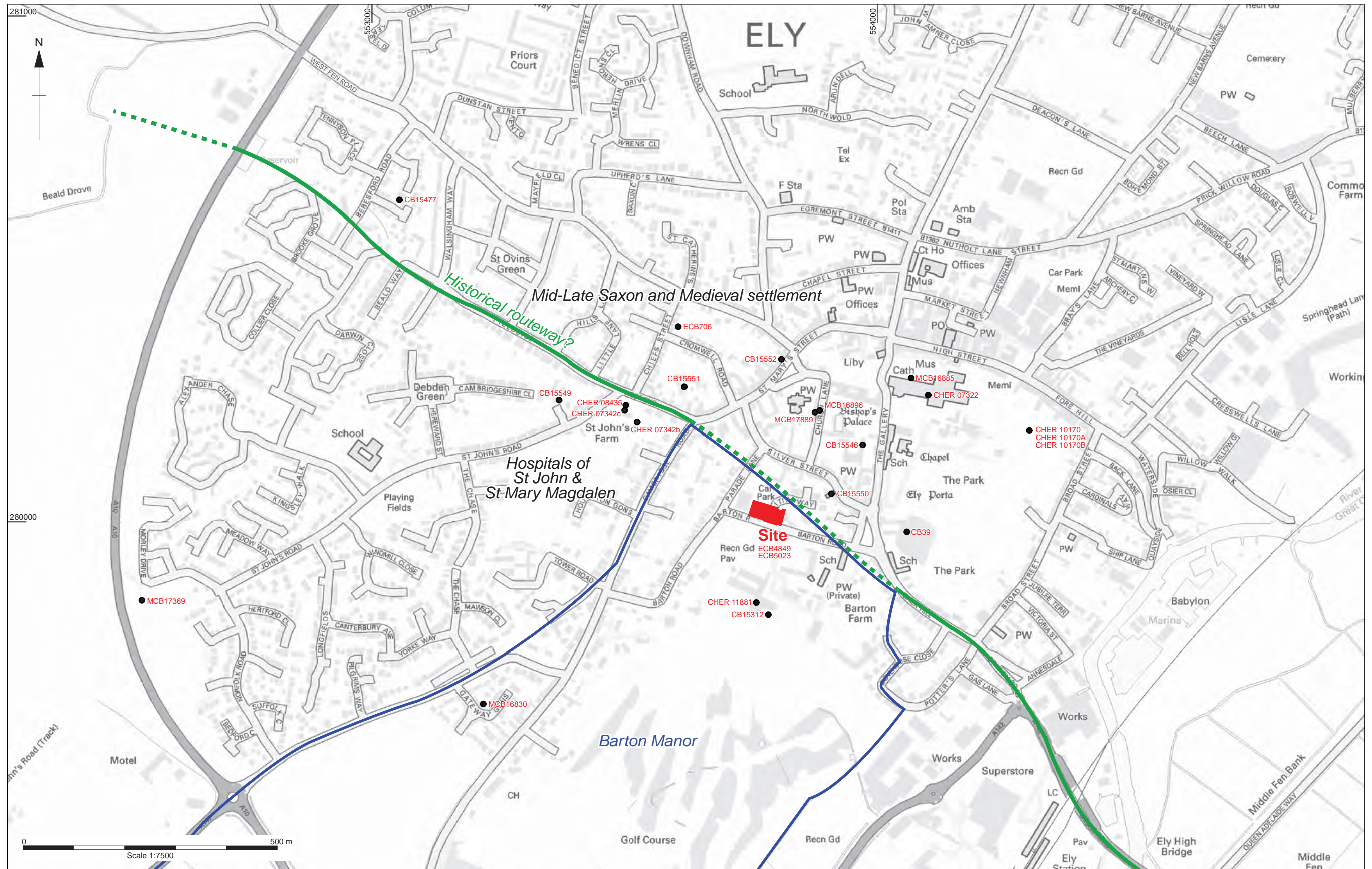


Figure 2: Map showing location of CHER events and monuments

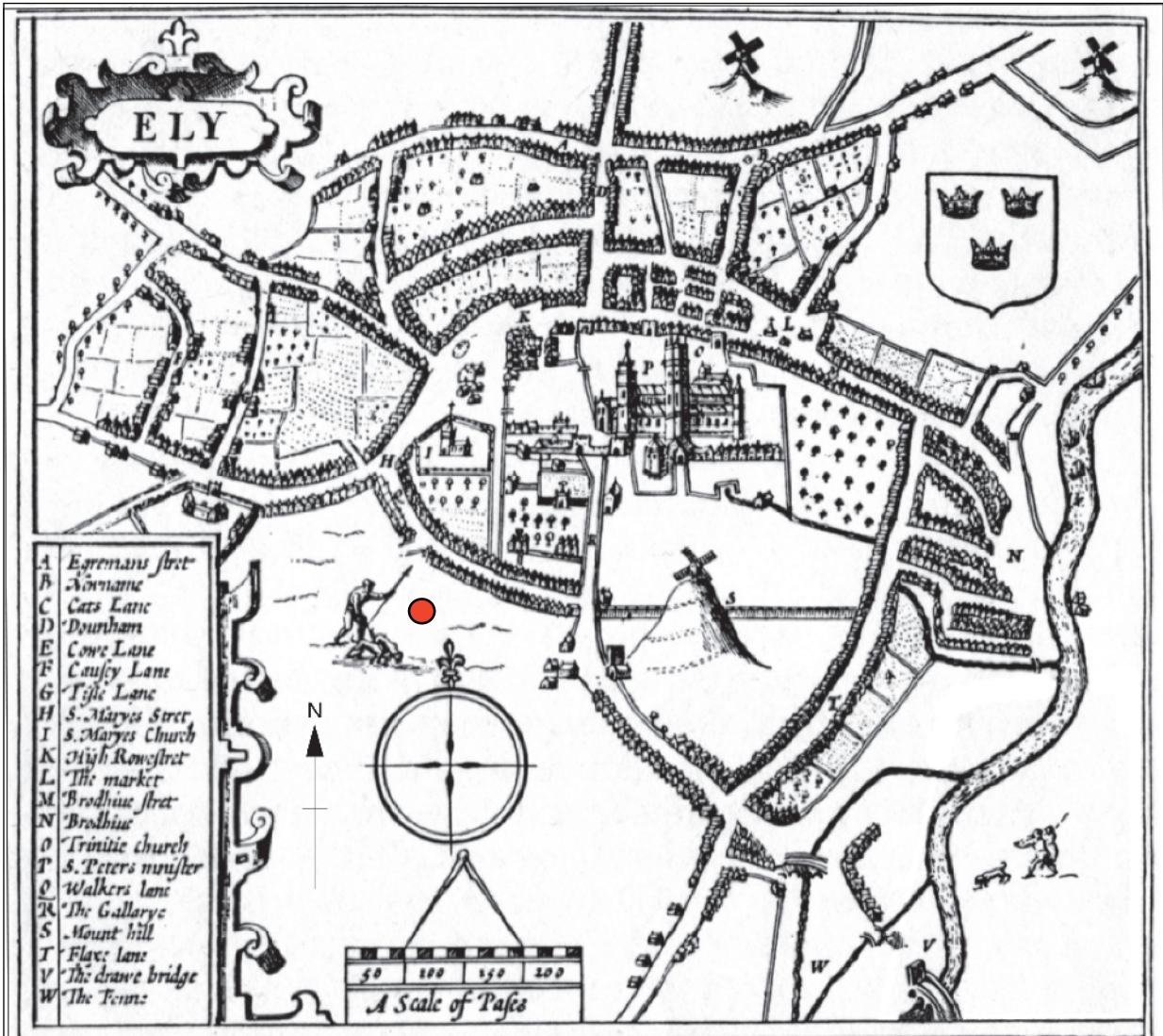


Figure 3: John Speed's map of Ely 1610. Approximate location of study area marked (red dot)

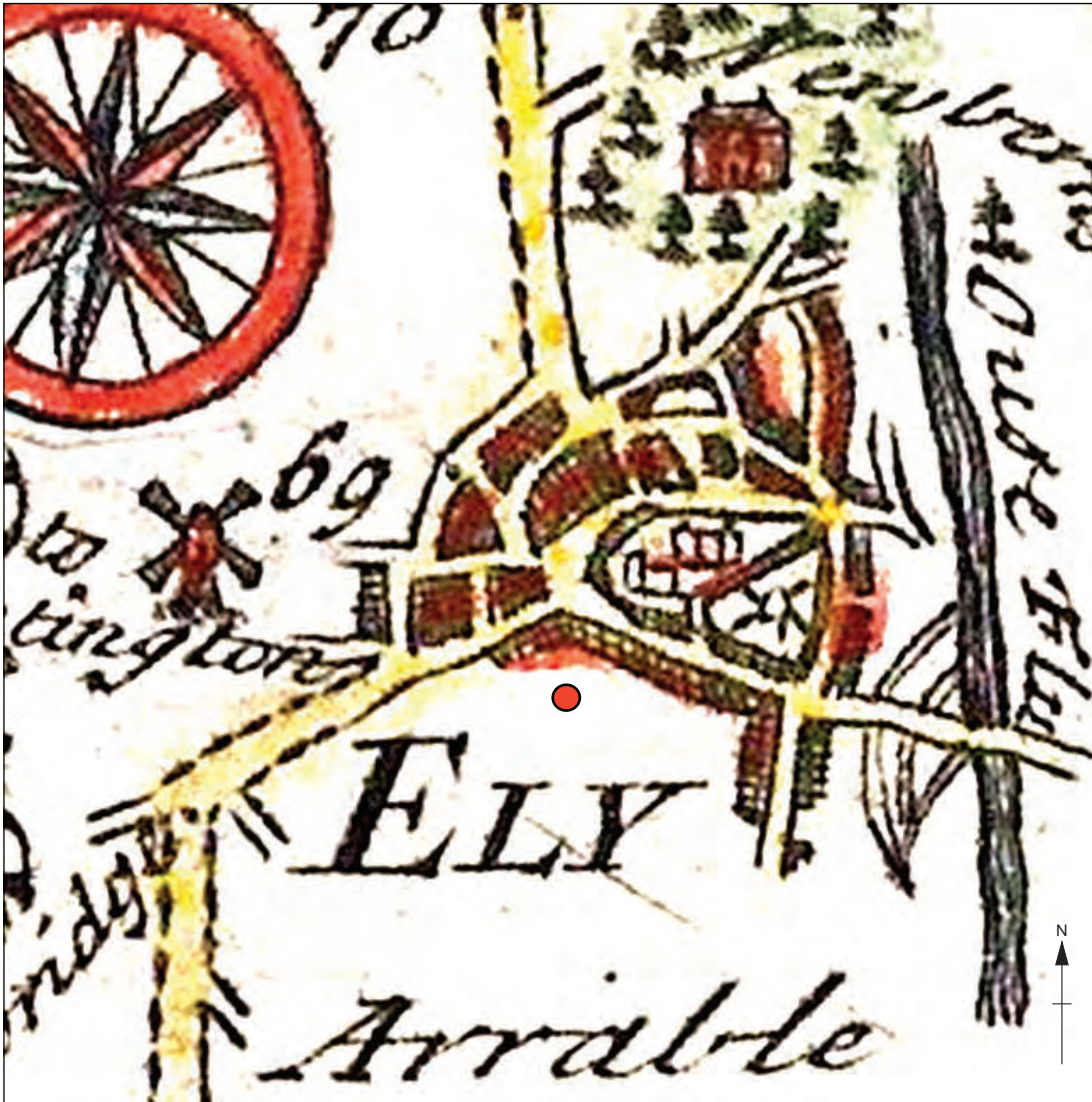


Figure 4: J. Owen and E. Bowen's map of Ely (extract) c. 1724 (copy of map of Ely by J. Ogilby c. 1670). Approximate location of study area marked (red dot)



Figure 5: William Hyett's Great Ouse Valley Map of 1811 (extract). Approximate location of study area marked (red dot).

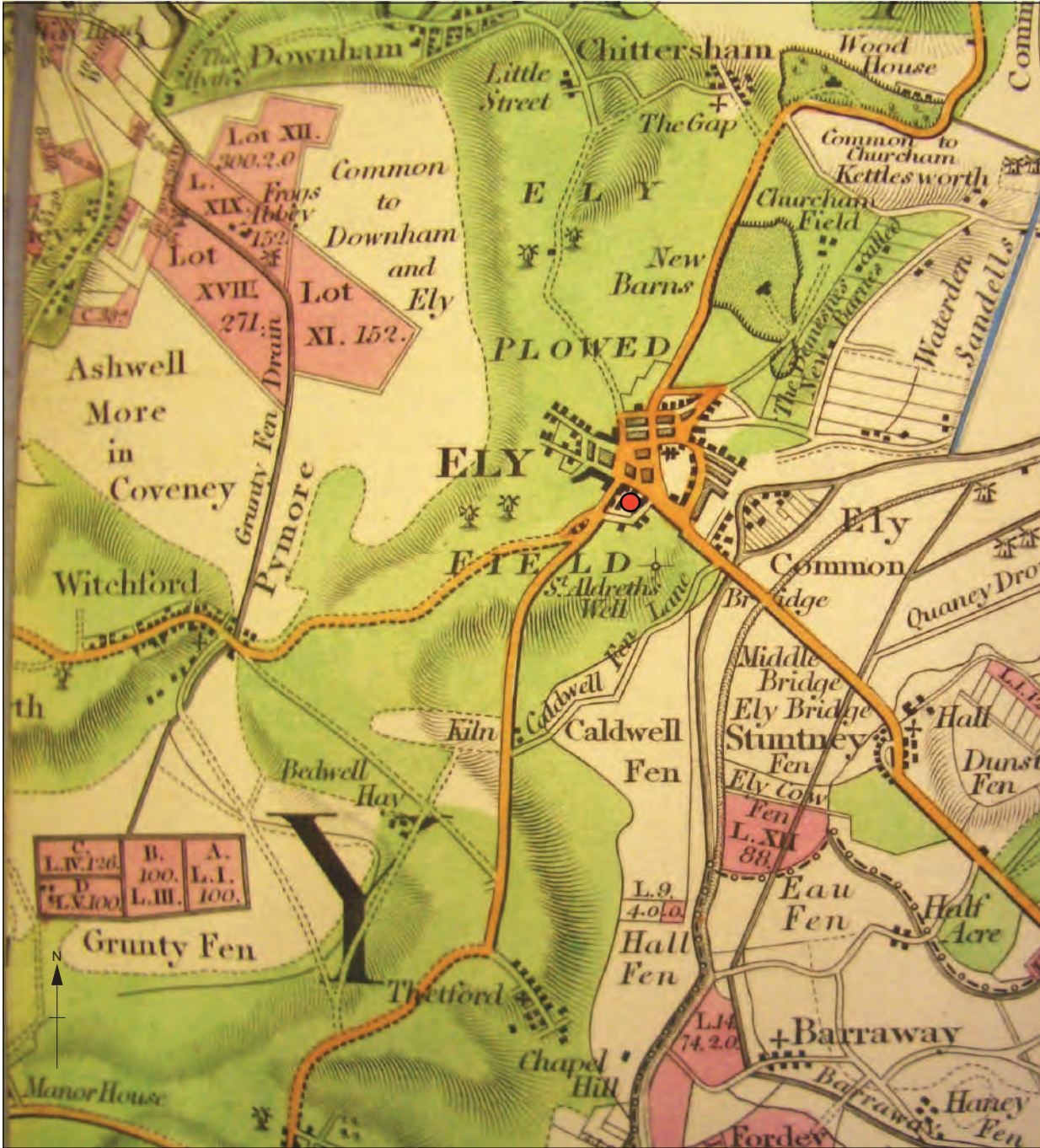


Figure 6: Samuel Walls' Bedford Level Map of 1829 (extract). Approximate location of study area marked (red dot)



Figure 7: Plan and Lands subject to the Eau Brink tax, 1833 (extract). Approximate location of study area marked (red dot)



Figure 8: Extent of Bishop's estate of Barton Manor (shaded red) on tithe map of 1846 (Cambridgeshire Archives reference: tithe map 4/29 Ely, Holy Mary Parish). Approximate location of study area marked (red)



Figure 9: Detail of the tithe map of 1846 showing extent of plots of land adjacent to Barton Road (Cambridgeshire Archives reference: Tithe map 4/29 Ely, Holy Mary Parish). Approximate location of study area marked (red) with Late Saxon to late medieval features (black)



Figure 10: First Edition Ordnance Survey, 1885. Approximate location of study area marked (red)

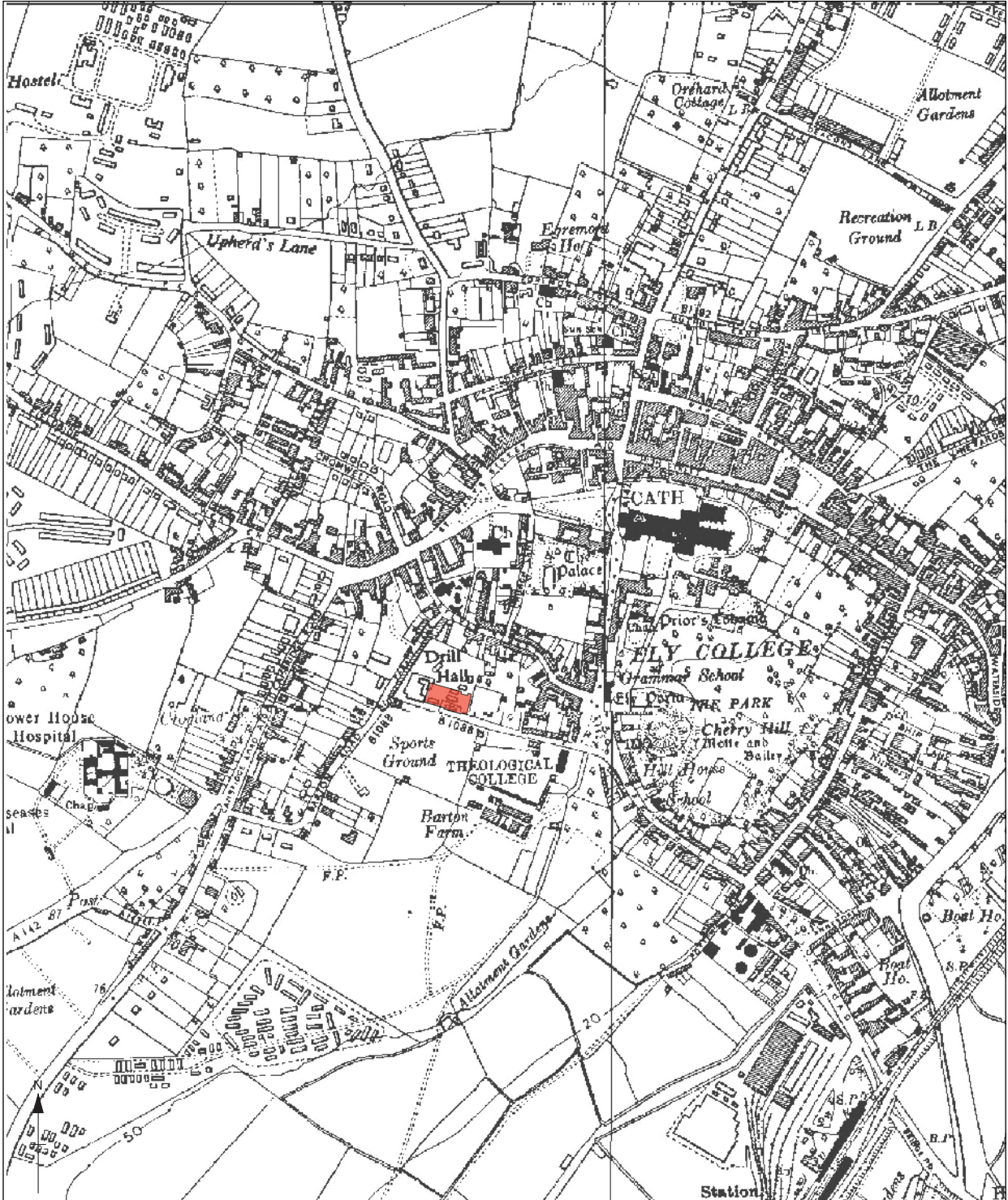


Figure 11: Ordnance Survey map of 1958-1959. Approximate location of study area marked (red)



Figure 12: Combined evaluation and excavation plan, with phasing

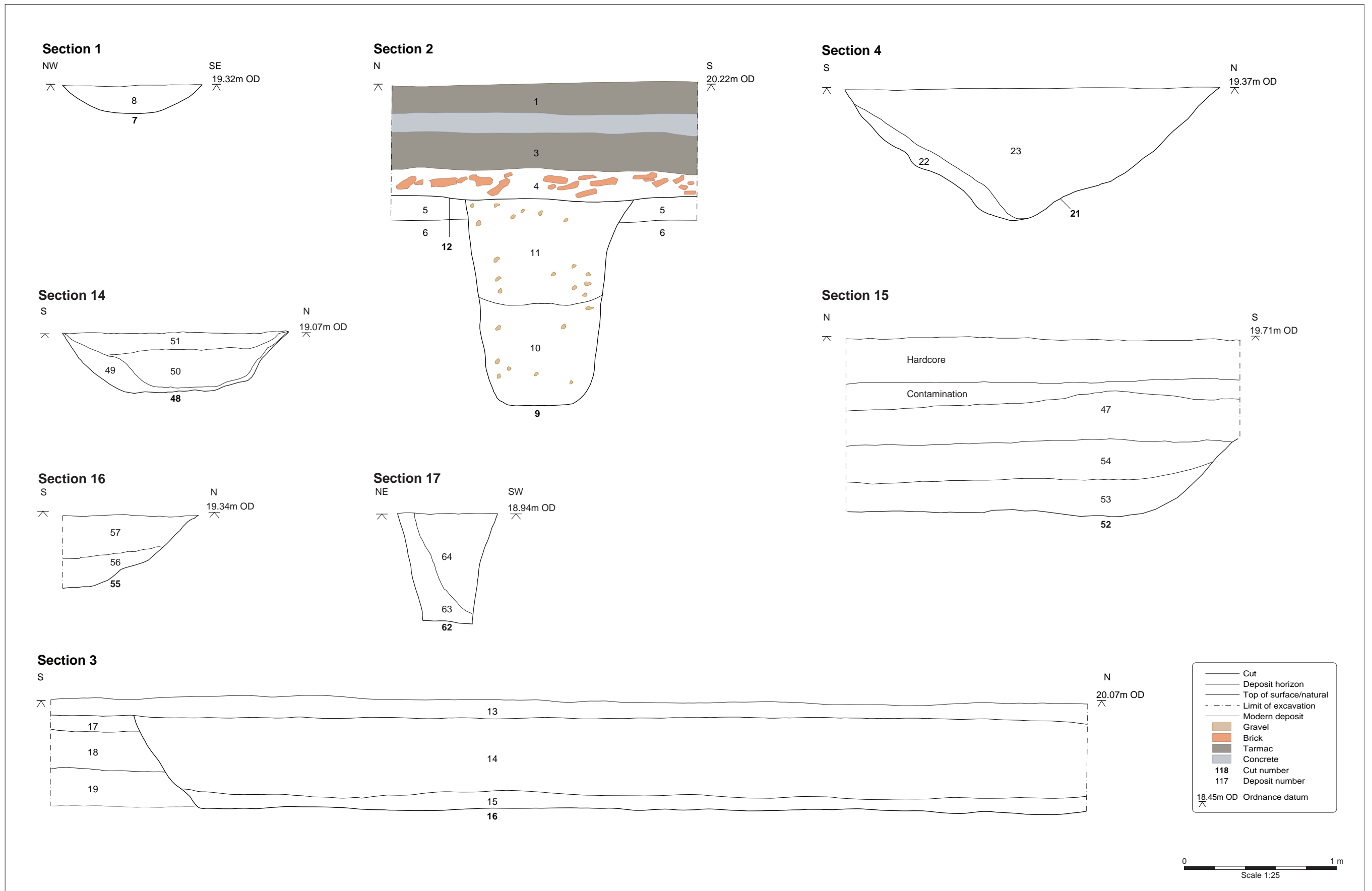


Figure 13: Selected sections

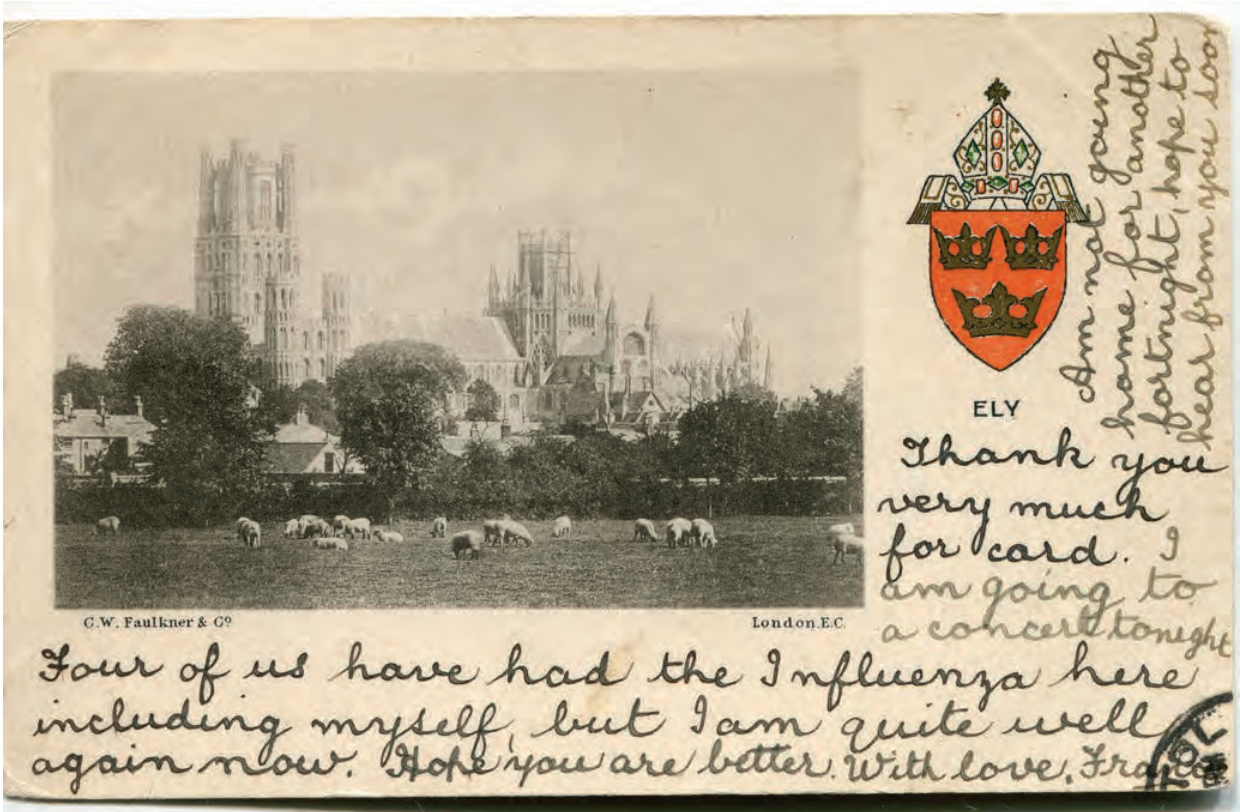


Plate 1: Postcard of Ely looking northwards across the site to the Cathedral, dated 1903



Plate 2: Photograph of parade ground of Militia Barracks, looking south-east, dated 1911 (Cambridgeshire Community Archives Network ref: 51170330279)



Plate 3: Photograph of Nissen hut in the western part of the site, looking south-east, dated 1945 (Cambridgeshire Community Archives Network ref: 51170330198)



Plate 4: Aerial photograph of Ely, dated 1948 (www.britainfromabove.org.uk/image/EAW012875)



Plate 5: Trench 7, looking north

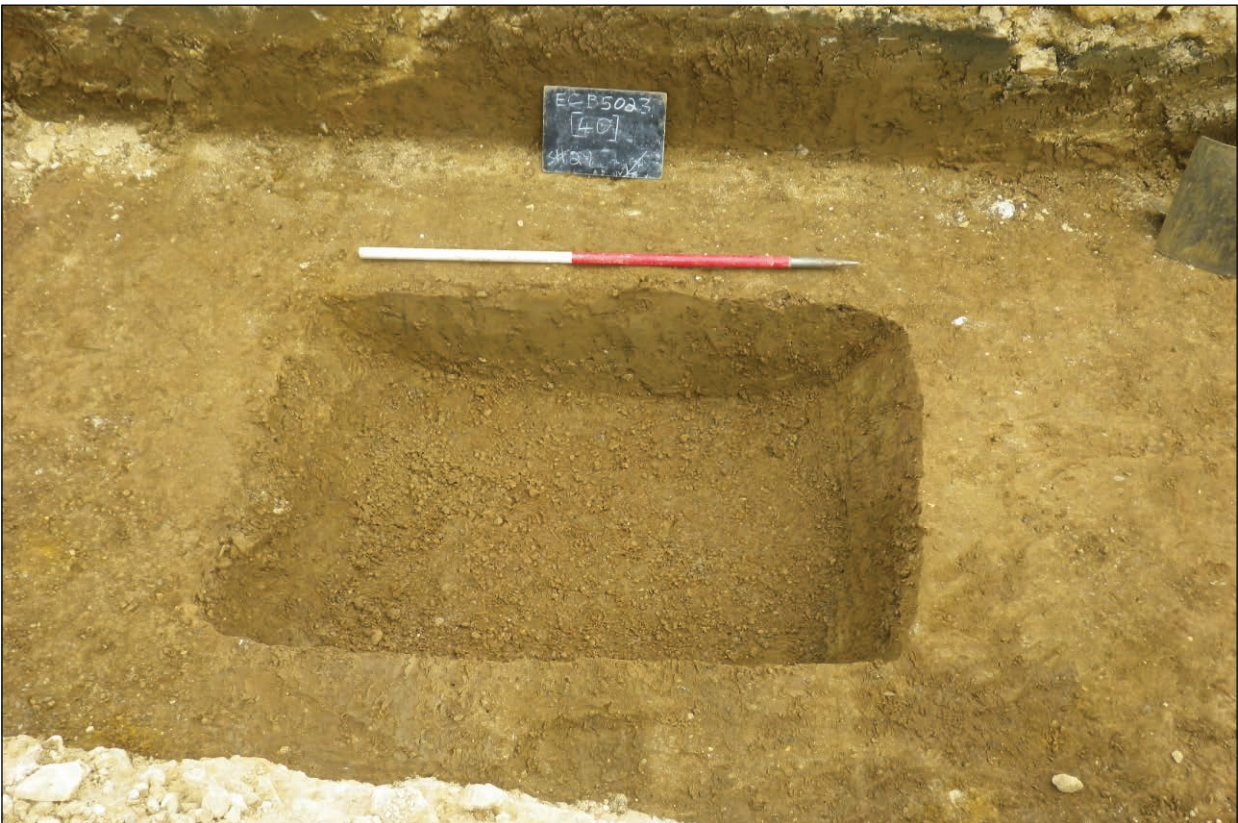


Plate 6: Ditch 40, looking east



Plate 7: Trench 2, looking north towards Ely Cathedral



Plate 8: Ditch 21, looking west



Plate 9: Trench 3, looking north



Plate 10: Ditch 37, looking east

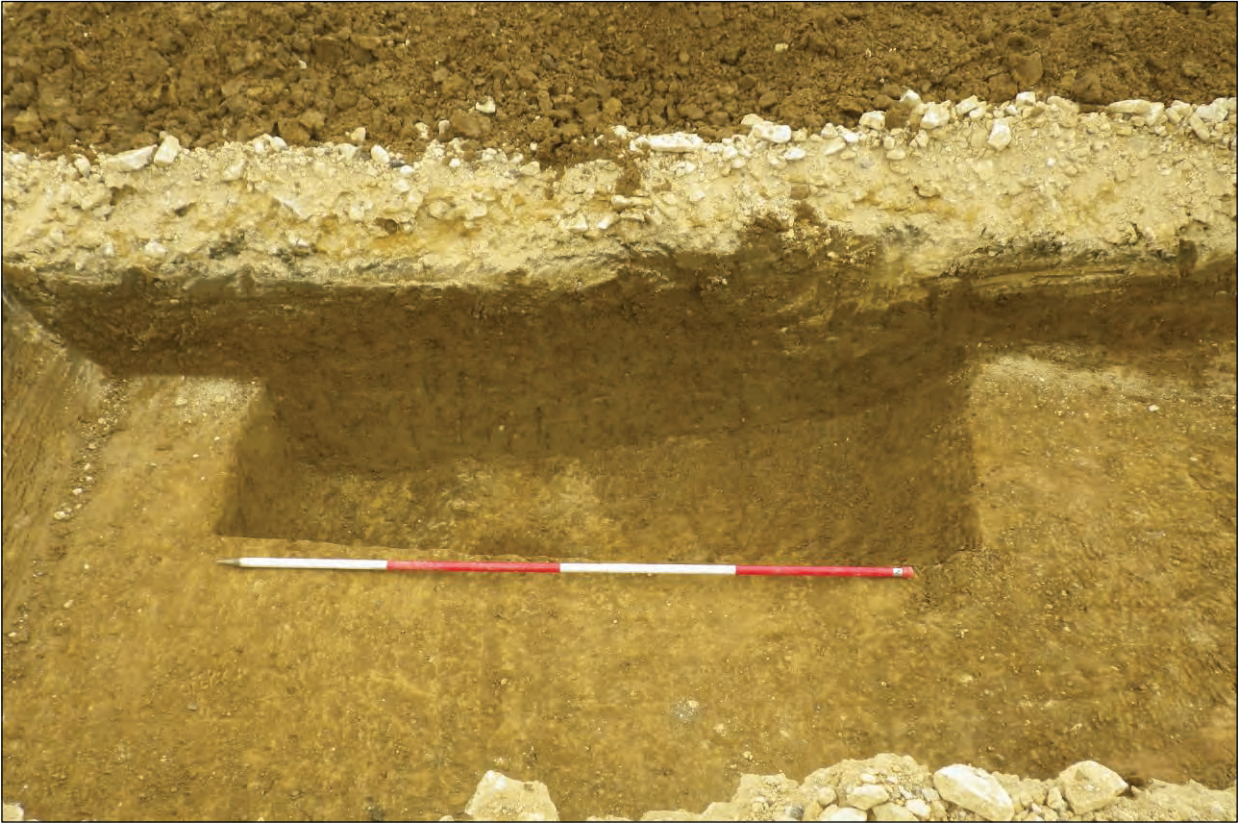


Plate 11: Ditch 44, looking east



Plate 12: Ditch 25, looking west



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