Land off Rampton Road, Cottenham



Archaeological Evaluation Report



November 2015

Client: CgMs

OA East Report No: 1864 OASIS No: Oxfordar3-229856

NGR: TL 4407 6729



Land off Rampton Road, Cottenham

Archaeological Evaluation

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Report Number: 1864

Site Name: Land off Rampton Road, Cottenham

HER Event No: CHER ECB 4588

Date of Works: October-November 2015

Client Name: CgMs

Client Ref: 18679

Planning Ref: S/1818/15/OL

Grid Ref: TL 4407 6729

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Summary

Between 26th October and 4th November 2015 Oxford Archaeology East (OA East) conducted an archaeological evaluation at land off Rampton Road, Cottenham (TL 4407 6729; Fig. 1) on 14.16ha of land. This work was undertaken in advance of the determination of a planning application (S/1818/15/OL) and followed on from a desk-based assessment by CgMs (Gailey 2015) and a geophysical survey by GSB (Tanner 2015). Thirty-eight evaluation trenches were excavated across the site with seven targeted over possible anomalies located by the survey.

In eight trenches (Trenches 1-8) features dating to the Late Iron Age to Early/Middle Saxon were found. The features were located in the south-west corner of the site on a slight south-east facing slope next to the top of a short rise between 13.26m OD and 12.1m OD. A total of 48 features were revealed in this area, 28 of which were excavated in the evaluation. The features comprised a network of enclosure ditches, pits, watering holes and gullies. These belonged to an area of ditch defined Late Iron Age and Roman settlement, characterised by a complex of interconnected rectilinear enclosures broadly arranged on a north-west south-east aligned axis. Possible structural remains were identified in the evaluation, including Late Iron Age period ring gullies and Roman period beam slot structures or gullies.

The large ditched enclosures, watering holes and the relatively large quantities of animal bone recovered suggest that pastoral farming was a notable function of the Late Iron Age and Roman economy at that site. Charred cereals were also recovered indicating an arable component, with good preservation of seeds through carbonisation and waterlogging. Moderate quantities of Late Iron Age pottery and Roman pottery were also found suggesting long-lived settlement from the mid first century BC to the 4th century AD.

Three Early/Middle Saxon features comprising a possible SFB, a ditch and a pit were uncovered in three trenches (Trenches 2, 7 and 8), suggesting the presence of Saxon occupation. Furrows were recorded over most of the evaluation area on a north-west to south-east and north-east to south-west axis. Those examined yielded finds from at least the 17th century.





1 Introduction

1.1 Location and scope of work

- 1.1.1 An archaeological evaluation was conducted on 14.16ha of land off Rampton Road, Cottenham, in advance of the determination of planning application S/1818/15/OL.
- 1.1.2 This archaeological evaluation was undertaken in accordance with a Brief issued by Gemma Stewart of Cambridgeshire County Council (Stewart 2015; CCC; Planning Application S/1818/15/OL), supplemented by a Written Scheme of Investigation prepared by OA East (Brudenell 2015).
- 1.1.3 The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government March 2012). The results will enable decisions to be made by CCC, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.
- 1.1.4 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and topography

- 1.2.1 The British Geological Survey of England and Wales (BGS 1974) records the Solid geology as Kimmeridge Clay within the north-western half of the site. These clays were composed of dark grey clays and mudstones. In the remainder of the site Lower Greensand comprised the natural. These 'Woburn Sands' occupied the upper portion and were seen to consist of generally unconsolidated coarse orange brown pebbly sands. This soft natural was affected by heavy rain causing archaeological features to be covered with sandy silts, which meant that large parts of the trenches had to be cleaned by hoes.
- 1.2.2 The middle of the site was at the top of a slight slope (Trench 14 at 13.7m OD) with the ground falling to the north-west and south-east. The lowest areas were around the northern extent of the site (Trench 36 at 9.47m OD and Trench 38 at 7.25m OD). The ground continued to fall to the north-west beyond the evaluation where a stream flows north-east to south-west.

1.3 Archaeological and historical background

- 1.3.1 Whilst the surrounding landscape provides evidence of some earlier prehistoric activity, largely in the form of Mesolithic worked flints from the excavations at Lordship Lane, approximately 800m north-east (CHER CB15521; Mortimer 2000), the archaeological significance of the area falls largely within the later Iron Age and Romano-British periods. Aerial photography has revealed several extensive cropmark complexes surrounding the site. In the field immediately west, a series of ditched rectilinear enclosures and linear boundaries characteristic of Iron Age and Romano-British settlements have been recorded from cropmarks (CHER 09547; 05190). This complex extends into the south-west corner of the site, with linear features registering in the geophysical survey (Tanner 2015). The anomalies identified suggest the presence of boundary ditches and enclosures, with an outlying ring-ditch located *c*.80m north-east of the main complex.
- 1.3.2 A minor Roman trackway/road probably heads through the settlement just to the south of the site (Lees 2015, 8). This routeway is aligned north-east to south-west and led to



the large Roman settlement/small town at Bullocks Haste on the Car Dyke some 3km to the north-east. The south-eastern extent of this settlement has recently been evaluated and found to date to the Iron Age and Roman periods (Lees 2015; CHER ECB 4470 and PCA *pers. comm.*). The investigation found Early Roman field boundaries aligned east to west and north-west to south-east. An undated pond or old watercourse which contained a single Early Roman pottery sherd may have been partially filled in and visible in the Early Roman period (Lees 2015, 25).

1.3.3 To the north-west of the site (*c*.250m from the northern site boundary) there is an extensive Romano-British cropmark complex comprising a double banked enclosure and a series of internal enclosures, a trackway and outer field system with scattered compounds (CHER 07800; 01787; 04215; 11053; 01679). Finds of Roman material have been made at this site, with others from the wider area including a Roman gold coin (05199) and Roman pottery sherds in test pits excavated at Harlestone Road (MCB19739).

Anglo-Saxon and medieval

- 1.3.4 Early/Middle Saxon settlement has only been found in one area within Cottenham some 600m to 1km to the north-east of the site (Heawood 1997; CHER CB 15526; Mortimer 2000; CHERs CB 15522 and 15523). An evaluation to the south of Denmark Road found residual Early/Mid Saxon pottery, and occupation from the Late Saxon period (Heawood 1997). An extensive excavation at Lordship Lane found no Roman remains but an extensive ditch system from the Early Saxon or Middle Saxon period (c.7th century) with principal remains dating to the Middle and Late Saxon period (Mortimer 2000). It is in these areas that the nucleus of the Cottenham village is located.
- 1.3.5 Cottenham was in Chesterton Hundred and was first recorded in AD 948 and derives from 'Cotta's ham' (Reaney 1943, 149). It was one of the largest villages in Cambridgeshire in the 11th century with 60 tenants recorded in 1086 (Lewis 1989, 51). Evidence for Saxo-Norman and medieval activity has been primarily found to the east of the site within the residential and historic core of Cottenham more than 500m to the north-east of the site (e.g. Mortimer 2000).

Post-medieval

1.3.6 The 1811 OS plan shows the site located at equal distance between Cottenham and Rampton (Fig. 3). The site therefore lay outside the medieval settlement core within the surrounding fields. The site comprised part of an open field known as Two Mill Field on the edge of North Fen (CHER 05200, 05201; MCB16560). The geophysical survey revealed a series of linear anomalies likely to be furrows, and potentially associated with the open field system (Tanner 2015). The 1847 Enclosure map shows the site divided into a series of four plots with boundaries running perpendicular to Rampton Road. The OS historic map series shows that these boundaries were gradually removed during the 20th century.

1.4 Magnetometer survey

1.4.1 A magnetometer survey using a Bartington Grad 601-2 was carried out across the site with a traverse interval of 1m and a sample interval of 0.25m (Figs. 4 to 6; Tanner 2015). This survey recorded a complex of ditches in the south of the site. Some anomalies within the complex were highlighted as being of potential archaeological origin, such as pits or other features associated with the settlement. A circular anomaly approximately 10m in diameter was recorded directly 80m to the north-east of the settlement. Elsewhere the survey uncovered agricultural related activity from the medieval to modern periods, including furrows, field boundaries, trackways and drains.



1.5 Geotechnic pits

1.5.1 On 24th September 2015, Oxford Archaeology East (OA East) monitored the excavation of three geo-technical test pits located along the edge of the northern and southern field boundaries, roughly 250m to 290m away from known cropmarks of a Roman settlement (Moan 2015). No features of archaeological significance were found.

1.6 Acknowledgements

1.6.1 The author would like to thank CgMs for commissioning the work especially to Suzanne Gailey and to the landowner, Norman Gautrey, for funding the work. Gemma Stewart monitored the work on behalf of Cambridgeshire County Council. Dr Matt Brudenell of OA East managed the project. David Brown surveyed the site and Séverine Bézie produced the illustrations. Steve Critchley kindly metal detected the trenches and gave details on the geology of the site. Specialists reports were written by Katie Anderson, Matt Brudenell, Rachel Fosberry, Antony Haskins, László Lichtenstein, Adrian Popescu and Paul Spoerry. The fieldwork was carried out by Rob Atkins, Zoe Clarke, Andrew Greef, Malgorzata Kwiatkowska, Kathryn Nicholls, Ashley Pooley and Chris Swain.



2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area. More specific project aims were identified as follows:
 - 'Ground truth' the geophysical survey results by testing a range of anomalies of likely archaeological origin, and areas where no anomalies registered.
 - Provide sufficient coverage and exposure to enable excavation to establish the approximate form, date and purpose of any archaeological deposits, together with extent, localised depth and quality of preservation.
 - Provide sufficient coverage and exposure to evaluate the likely impact of past land uses, and the possible presence of masking deposits.
 - Provide sufficient coverage and exposure to provide information to construct an appropriate archaeological conservation/mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and order of cost.
 - Set results in the local, regional, and national archaeological context.

2.2 Methodology

- 2.2.1 Thirty-eight trenches were excavated at the site, totaling 1530m of linear trenching: 34 40m long trenches, three 50m long trenches, and one 20m long trench, all at 1.8m wide (Brudenell 2015). These were located in positions indicated on a plan prepared by CgMs. Some of the trenches located south-western part of the site were targeted over geophysical anomalies (Figs. 4 and 5).
- 2.2.2 Machine excavation was carried out under constant archaeological supervision with a tracked 360°-type excavator using a 2m wide toothless ditching bucket.
- 2.2.3 The site survey was carried out by David Brown using a Leica GS08 system with Smartnet. All trenches were located to Ordnance Survey.
- 2.2.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metaldetected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.2.5 Most of the trenches had to be cleaned by hoe as heavy rain silted areas of the trenches and thereby hiding previously exposed features.
- 2.2.6 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.
- 2.2.7 Bucket sampling (90L) of the topsoil from each of the trenches was carried out.
- 2.2.8 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.
- 2.2.9 Six bulk samples (all 20L) were taken from features within the settlement site.



2.2.10	evaluation cast or wet)	place	during	mixed	weather	conditions	(ranging	from	sunny,
	,								



3 Results

3.1 Introduction

- 3.1.1 Thirty-eight evaluation trenches were excavated across the proposed development area. The trial trench evaluation confirmed that the results of the geophysical survey were fairly accurate (except that the settlement extended slightly further to the north than was thought). Late Iron Age to Early/Middle Saxon features were found in eight trenches all in the south-western extent of the site. Elsewhere furrows shown on the survey proved accurate.
- 3.1.2 The topsoil (1) across the site was between 0.25m and 0.35m thick, and largely consisted of a mid to dark brown silty sand with a little clay (clay was more prominent in areas where the natural subsoil comprised Kimmeridge Clay). A subsoil was encountered in trenches within the south-western side of the site as well as five trenches elsewhere (Table 1), and was up to 0.3m thick (mostly between 0.1m and 0.2m thick). This subsoil sealed features dating to the Late Iron Age to Early/Middle Saxon periods.
- 3.1.3 The eight trenches which contained pre-medieval archaeological remains are described in detail in Section 3.2. A sample of the features in these eight trenches were hand excavated. Excavation was sufficient to characterise the nature and date of the activity within this settlement zone with the agreement of Gemma Stewart of the Cambridgeshire County Council Historic Environment Team.
- 3.1.4 The other 30 trenches only contained plough-truncated remnant furrows, post-medieval and modern drains; these are recorded within tabular form in Table 1. A full context list appears in Appendix A (Table 2).

3.2 Late Iron Age to Early/Middle Saxon remains within Trenches 1-8 Trench 1

- 3.2.1 Trench 1 lay in the middle of the eastern part of the site. It had been positioned to investigate a circular geophysical anomaly (Figs. 4-6; Tanner 2015). The trench was 20m long and aligned east to west across the centre of the anomaly. The trench topsoil was between 0.24-0.25m thick, and the subsoil was between 0.08-0.11m thick.
- 3.2.2 The excavation uncovered a circular ring-ditch with an external diameter of *c*.12m. The ditch (49 and 53) was up to 1.45m wide and 0.3m deep with gentle to moderate sides and a slight concave base (Plate 1; Fig. 7, Sections 11 and 13). It was filled with a single deposit consisting of a mid greyish brown silty sand which was largely sterile, though 49 yielded four fragments Late Iron Age pottery (8g). Ditch 53 produced a residual Early Bronze Age sherd (5g) and one cattle bone. A soil sample (3) from 49 did not contain any preserved plant remains (See Fosberry, Section C.2, Table 14).
- 3.2.3 A single undated post hole (**51**) lay towards the centre of the ring-ditch. It was 0.6m in diameter and 0.16m deep with moderate sides and a concave base (Fig. 7, Section 12). Its fill was a mid greyish brown silty sand with occasional charcoal flecks.

Trench 2

3.2.4 Trench 2 was located to the south-west of Trench 1 (Fig. 6; Plate 2). It was 50m long aligned north-east to south-west across large linear and discrete anomalies recorded in the geophysical survey (Fig. 5). The topsoil in the trench was between 0.28-0.30m thick, and the subsoil was was between 0.02-0.12m thick.



- 3.2.5 At the northern end of the trench were three Late Iron Age ditches (**10-14**). The earliest of these was **14** which comprised a short *c*.2m long, truncated section of shallow curving gully terminating in the trench. The gully was 0.45m wide and 0.12m deep with gentle sides and a concave base. It was filled with mid brownish grey clayey silt within which was a large pottery assemblage of 171 sherds (1981g) and four animal bones (all cattle). The pottery belonged to a single combed and cordoned vessel (see Brudenell, Appendix B.2), and may have been a placed deposit.
- 3.2.6 Cutting gully **14** was ditch **12** aligned north-west to south-east. The ditch corresponded with a linear geophysical anomaly approximately a 50m long (Fig. 5). Ditch **12** was 1.7m wide and 0.35m deep with moderate sides and a flattish base (Fig. 7, S.3). It was filled with a mid reddish brown clayey sandy silt which contained 14 sherds of pottery (253g). Immediately to the north of ditch **12** was a parallel aligned ditch (**10**). This was 1.8m wide and 0.2m deep. It was filled with a mid reddish brown clayey sandy silt and contained ten sherds (56g) of pottery.
- 3.2.7 At center of the trench was a feature extending over 15m, which correspond with a large pit-like anomaly recorded by the geophysical survey (Figs. 5 and 6). Two slots were excavated at either end of the feature to assess it. At the northern end a pit-like feature was defined. Feature 16 had a moderate south-western side, was 0.54m deep with a flat base (Fig. 7, S.5). It contained a single fill (17) which comprised a mid brownish grey clayey silt with frequent ironstone inclusions. Within this deposit were four sherds (154g) of Early/Middle Saxon pottery from three different vessels. Given the profile of the feature and the presence of Saxon pottery, this may be sunken featured building.
- 3.2.8 At the southern end, a second feature was defined. Feature **97** had near vertical sides with the base identified by hand augering at a depth *c*.1.75m (Fig. 7, S.22). The upper two deposits (98 and 99) were hand excavated. Fill 99 comprised a sterile mid orange brown silty clay which was overlaid by a mid brown grey clayey silt (98). This this contained 14 sherds (120g) of Roman pottery dating from at least the mid 2nd century and two animal bones (both cattle).
- 3.2.9 A unexcavated and unnumbered ditch aligned south-east to north-west lay directly to the south of feature **97** and was *c*.1.8m wide.
- 3.2.10 To the south of the unnumbered ditch was another pit (**79**) more than 7m in length that corresponded with a geophysical anomaly (Figs. 5 and 6). The base was identified by hand augering at a depth of 1.28m, cut into natural blue Kimmeridge Clay. The lowest hand dug fill (80) comprised a light to mid orangey grey clayey silt with frequent ironstone inclusions, rare charcoal flecks, five sheep bones (including a tool made from a right hand tibia) and two horse bones (see Lichtenstein Appendix C.1). It was sealed by a mid to dark brown grey clayey silt (79) within which were three Late Iron Age pottery sherds (22g) and a notable collection of animal bone. This comprised a cattle tooth, 18 cattle bones (one with cut marks denoting skinning and a tibia broken to extract marrow), a sheep bone and two horse bones (including a sawn metatarsus). An environmental sample (6) from this deposit contained occasional charred plant remains (See Fosberry, Section C.2, Table 14).

Trench 3

3.2.11 Trench 3 was 50m long and aligned north-east to south-west directly to the east of Trench 2 (Fig. 5). The topsoil in the trench was 0.30m thick, and the subsoil was between 0.05-0.10m thick.



3.2.12 Two ditches (43 and 45) some 10m apart, both aligned north-west to south-east were encountered at the far southern extent of the trench (Fig. 6; Plate 3). Ditch 43 was 1.8m wide and 0.95m deep with very steep to near vertical sides and a slightly irregular base (Fig. 7, S.9; Plate 6). It was filled with a mid to dark grey clayey silt (44) which contained six Roman pottery sherds (94g), 49 cattle bone fragments and a single sheep bone. Ditch 45 was undated, it was 1.35m wide and 0.17m deep.

Trench 4

- 3.2.13 Trench 4 was 50m long and aligned north-west to south-east directly to the south of Trench 3 (Fig. 6). Fifteen features and a layer were found within the trench (Fig. 6; Plate 4). Sealing all the features was a 0.2m thick subsoil layer which was overlaid by a 0.3m thick topsoil. Three Roman early/mid to late 4th century coins were found through metal detecting the topsoil spoil with these ranging from AD 330-334 and 375-8 (SFs 1-3).
- 3.2.14 Ditch **30** was north-west to south-east aligned, and curved slightly to the east. It was 2.95m wide and 0.7m deep with a steep southern side and a concave base (Fig. 7, S.14). The primary fill (29) consisted of a sterile light yellowish brown silty sand overlaid by a mid greenish grey sandy silt (28) which contained eight Roman pottery sherds (96g) and one sheep/goat bone. The upper deposit was a mid brownish grey sandy silt (27) which had a moderate collection of Roman pottery dating into the 4th century (22 sherds weighing 360g and eight animal bone fragments which consisted of three cattle teeth, two cattle bones, one sheep's tooth and two sheep bones). A thin deposit of trample (22) appeared to overlie the ditch. It was more than 2.1m long, 1.35m wide and 0.1m thick (Fig. 7, S.14). It comprised a dark brownish grey sandy silt with moderate sandstone pebbles. The deposit yielded eight Roman pottery sherds (103g), five cattle bones (including one mandible with butchery marks), a sheep tooth and three sheep bones.
- 3.2.15 Ditch **30** was cut by ditch **26** on its north-western side. It ran parallel to **30**, and was 1.45m wide and 0.75m deep, with very steep sloping sides and a slightly irregular concave base. The primary fill (25) comprised a thin sterile light brownish grey silty sand. This deposit was overlaid by a mid brownish grey sandy silt (24), up to 0.45m thick, which contained Roman pottery dating into the 4th century (12 sherds weighing 213g), a piece of probable daub with ?straw impressions (9g), a cattle and two sheep/goat bones. An environmental sample (4) from this fill contained occasional charred grains of barley and spelt wheat (See Fosberry, Section C.2, Table 14). The upper deposit (23) was a very dark brownish grey sandy silt within which were 21 Roman pottery sherds (201g), a clay fragment (6g), seven cattle bones, a sheep's tooth and two sheep/goat bones.
- 3.2.16 Cutting ditch **26** on its south-eastern side was a possible large pit/pits or watering hole (**58**) partly within the southern baulk of the trench. This feature was 6.35m long northwest to south-east and was up to 1.05m wide within the trench. Three Late Iron Age pottery sherds (92g), two Roman pottery sherds (27g) and two sheep/goat bones were collected from the top (57) after cleaning, but the feature was not excavated. A smaller pit (**60**) lay partly with the northern baulk opposite feature **58**. Pit **60** was 1.4m in diameter and was also not excavated.
- 3.2.17 Toward the centre of the trench were four gullies (**70, 72, 74** and **76**), pit **78** and modern field boundary **68**. The gullies are possibly structure-related beam slots.
- 3.2.18 Gully **76** was stratigraphically the earliest feature. It was aligned north-east to southwest and was 0.3m wide (unexcavated). The gully was cut by a pair of parallel slots or



- gullies (72 and 74) directly to the north. These were 0.25m and 0.35m wide and 0.15m and 0.2m deep respectively. They had gentle sides and slight concave bases, both filled with a mid brownish grey sandy silt. Gully 76 yielded six sherds (45g) of Roman pottery, whilst 74 contained two cattle bones.
- 3.2.19 Gullies **72** and **74** were cut by gully **70**, aligned north-west to south-east. The gully was 11m long, 0.4m wide and 0.1m deep, with gentle sides and a slight concave base. A Roman sherd (26g) was found during the cleaning of the feature.
- 3.2.20 Gully **70** was cut by gully **68** which was orientated north to south, was 0.3m wide and contained a single post-medieval brick fragment.
- 3.2.21 Pit **78** lay partly within the northern baulk of the trench opposite gully **70**. The pit (unexacavted) was 1.8m in diameter. Seven sherds of Roman pottery (132g), part of a millstone grit quern stone (SF 4) and a cattle bone were recovered from the top of the feature during cleaning.
- 3.2.22 Four metres to the south-east of the pit **78** were two ditches (**62** and unnumbered). Unexcavated ditch **62** was aligned north-east to south-west, and was 0.9m wide. The fill contained modern glass and two *c*.19th century drain fragments. Its location roughly corresponds with a field boundary recorded on both the 1847 Enclosure map and Ordnance Survey maps from 1887 to 1950 (Gailey 2015, figs. 3-6). Directly to the south-west of the field boundary was an unnumbered and unexcavated ditch measuring up to 5m wide.
- 3.2.23 Pit or waterhole **9** was located toward the southern end of trench. The feature was 4.4m in diameter and was hand augered to a depth of 1.7m (Fig. 7, S.9). It had steep to very steep sides. The basal deposit (56) was a water-lain mid greyish blue organic clay. This was sealed by a sterile mixed light yellowish brown and mid greyish brown silty sand (55), overlain by a dark greyish green sandy silt (8) which contained 36 Roman pottery sherds (589g), a Roman tile fragment (604g) and 25 animal bone fragments (15 cattle bones, two sheep teeth, eight sheep bones and one horse bone). An environmental sample (5) from this deposit found an abundant assemblage of waterlogged plant remains as well as some charred chaff grains (See Fosberry, Section C.2, Table 14). The diverse assemblage of plant remains suggests that the feature had contained water and had been used by animals.
- 3.2.24 Overlaying fill 8 was a dark brownish green sandy silt (7) which contained 11 Roman pottery sherds, two cattle bones and one sheep bone. This in turn was sealed by a dark brownish grey sandy silt (6) from which 39 Roman pottery sherds (596g), two cattle teeth, nine cattle bones (including some with cut marks) and a single horse bone were recovered. The top fill of the feature was a dark greyish brown sandy silt (5) which yielded 73 late Roman pottery sherds (1163g), a Roman tile fragment (235g), five cattle bones and three teeth, and 19 sheep bones and five teeth. Cut marks were found on several sheep and cattle bones
- 3.2.25 Two unexcavated features (**64** and **66**) lay directly to the south-east of pit/watering hole **9**. Undated pit **64** was partly within the northern trench baulk and was 2m in diameter. Ditch **66** was aligned north to south, and appears to align with a geophysical anomaly to the north (Fig. 6). The ditch was a 3.1m wide, and surface cleaning of the feature two Late Iron Age pottery sherds (20g).

Trench 5

3.2.26 Trench 5 was 38.5m long and aligned north-west to south-east directly to the west of Trench 2 (Fig. 5). It was targeted over linear geophysical anomalies suggestive of a



- sub-square enclosure (Fig. 5). Thirteen features were uncovered within the trench, four of which were excavated. The trench topsoil was 0.26-0.34m thick, and the subsoil was between 0.10- 00.2m thick.
- 3.2.27 At the north-western end of the trench there were four unexcavated and unnumbered features. These consisted of a north to south aligned ditch, 2.7m wide and three probable pits up to 2.7m in diameter.
- 3.2.28 Directly to the south-east of these four features was a large ditch (34). The ditch was aligned north-east to south-west and corresponded to a large linear anomaly recorded in the geophysical survey (Fig. 5). The ditch was 4.65m wide with moderate to steep sides. The depth of the features was determined by hand augering, and was 2.5m deep (Fig. 7, S.6). The basal fill comprised a waterlogged mid greyish to blue clay silt (not numbered). Overlying this was fill 33, which was mostly recorded in the auger but also at the base of the hand dug slot. The fill was an organic mid grey to black clay silt with charcoal. It yielded a single Late Iron Age pottery sherd (56g) and large quantities of animal bone (nine cattle bones and a tooth, five sheep bones and two teeth, a pig bone and three dog bones). An environmental sample (1) contained occasional seeds of henbane and goosfoots which may provide evidence of waterlogging in the feature (See Fosberry, Section C.2 including Table 14). Sealing deposit 33 was a light greyish brown silty sand (32) which contained two Late Iron Age pottery sherds (9g) and undiagnostic bone. The upper fill (31) was a mid reddish brown silty sand from which six Late Iron Age pottery sherds (29g), two fired clay/daub fragments (24g), a cattle bone and seven sheep bones were recovered.
- 3.2.29 To the south-east of ditch **34** were two unexcavated ditches aligned north-east to southwest which were 2m and 1.3m wide respectively. The north-western most ditch cut an unnumbered pit or ditch terminate, which was *c*.1.9m in diameter.
- 3.2.30 In the south-eastern half of the trench there were five features, and three of these were excavated.
- 3.2.31 The earliest dated feature was ditch **36**, which was aligned north to south. It was more than 0.66m wide and 0.52m deep with a steep western side and a flattish base (Fig. 7, S.7). A single backfill deposit (35) comprised a mid reddish brown silty sand which contained a single Late Iron Age pottery sherd (11g) and two cattle teeth.
- 3.2.32 Ditch **38/42** was also aligned north to south and cut ditch **36** on its eastern side. It was 1.68m wide and 0.58m deep with steep to very steep sides and a slightly irregular concave base (Fig. 7, S.7). It was filled with a mid greyish brown silty sand which contained five Late Iron Age pottery sherds (47g), 27 early Roman pottery sherds (1130g), a cattle tooth, nine cattle bones, a sheep tooth, six sheep bones and two flint flakes.
- 3.2.33 Ditch **38/42** was cut by ditch **40** which was aligned north-east to south-west. Ditch **40** was 1.56m wide and 0.7m deep with steep sides and a concave base (Fig. 7, S.8). The ditch was backfilled with a single deposit (39) which comprised a mid brownish grey silty sand within which were three Late Iron Age pottery sherds (26g), eight cattle and six sheep bones. An environmental sample (2) of this fill contained occasional charred barley and wheat grains as well as two cattle teeth and two cattle bones (See Fosberry, Section C.2, Table 14).
- 3.2.34 Two unnumbered pits were also excavated with one having an uncertain stratigraphic relationship with ditch **36.** The other measured 2.4m in diameter and was located more than 3m to the south-east of ditch **40**.



Trench 6

- 3.2.35 Trench 6 was 38.5m long and aligned north to south directly to the west of Trench 5. Five featured comprising four linear ditches and a pit were revealed. Two ditches were excavated (82 and 84). The trench topsoil was between 0.26-0.28m thick, and the subsoil was between 0.04-0.1m thick.
- 3.2.36 At the northern end of the trench there was a north-west to south-east aligned ditch (84), which was probably the same features as ditch 93, Trench 7 (Fig. 6). the ditch was 1.42m wide and 0.36m deep with gentle to moderate sides and a slightly rounded base (Fig. 7, S.18). Its single backfill comprised a mid brownish grey silty sand within which was a large unabraded Late Iron Age pottery sherd (106g).
- 3.2.37 Twelve metres to the south was a north-west to south-east aligned furrow 2.9m wide. In the top of the fill was a post-medieval brick fragment.
- 3.2.38 Ditch **82** lay directly to the south of the furrow and was orientated north-west to south-east. It was 2.02m wide and 0.4m deep with moderate sides and a flat base. Ditch **82** contained five sherds of Late Iron Age pottery (96g), four cattle bones and a single sheep bone.
- 3.2.39 Directly to the south of ditch **82** was an unexcavated pit, 3.1m in diameter. At the far southern end of the trench was a probable ditch seemingly aligned north-west to southeast. The alignment and spacing of the feature is similar to that of Late Iron Age ditches **82** and **84**.

Trench 7

- 3.2.40 Trench 7 was 40m long and aligned north-east to south-west and was located directly to the north of Trench 6. Within the trench was ditch **93**, a large probable quarry pit (**85**) and two furrows (**95** and unnumbered). The trench topsoil was 0.25-0.30m thick, and the subsoil was between 0.08m-0.20m thick.
- 3.2.41 A 1.6m wide furrow aligned north-west to south-east (unnumbered) was located at the northern end of the trench. To the south-west was a large sub-rounded Early/Middle Saxon quarry pit (85). Two different sections were excavated through the pit as originally it had been thought these were different features. The pit was 7.27m in diameter and was 1.3m deep with moderate sides (Fig. 7, S. 19 and 20). Hand augering found the natural subsoil which comprised orange sands and gravels. The primary fill (86=89) consisted of a light brownish grey sandy silt which contained nine Roman pottery sherds (168g) and a flint flake. This layer was sealed by a mid greyish brown silty sand (90) within which was a spout from an Early/Middle Saxon vessel (51g) and a flint flake. Overlying layer 90 was a mid brownish grey sandy silt (87=91) which contained 18 residual Roman pottery sherds (164g) and a sheep's tooth. The upper deposit (88=92) was a sterile mid greyish brown sandy silt with four tiny residual Late Iron Age sherds (4g) and a fired clay fragment (2g).
- 3.2.42 Ditch **93** was to the south-west of quarry pit **85**, and is thought to be a continuation of ditch **84** in Trench 6 (see above). The ditch was *c*.1.4m wide and was unexacavted. To the south-east was furrow **95**, aligned north-west to south-east. The furrow measured 1.75m wide and 0.1m deep.

Trench 8

3.2.43 Trench 8 was 39m long and aligned north to south. It was located to the north of Trench 2 and west of Trench 1 in an area few obvious geophysical anomalies registered



- (Tanner 2015). Four features were uncovered (4, 19, 21 and one unnumbered). The trench topsoil was between 0.32-0.36m thick, and the subsoil was up to 0.10m thick.
- 3.2.44 Ditch **4** was aligned north-west to south-east. The ditch was 2m wide and 0.44m deep with gentle to moderate sides and a slightly irregular base (Fig. 7, S.1). Its primary fill (3) was a sterile light browny orange silty sand. The top fill (2) was a light to mid orange browny grey silty sand which contained four Late Iron Age pottery sherds (17g), a fired clay fragment (2g), three cattle teeth, 28 cattle bones, one sheep tooth and two sheep bones.
- 3.2.45 Directly to the south of ditch **4** was an unexcavated probable pit, which was partly located within the western trench baulk. It was 2.1m wide and the top of its fill contained fragments of burnt clay.
- 3.2.46 Two metres to the south of the unnumbered pit were two intercutting features (**19** and **21**). Pit **21** was 1.8m long, 0.12m deep and was filled with a sterile light brown silt which contained no artefacts. It was cut by ditch or pit **19**, which was 3m wide and 0.28m deep. The feature was filled by a light orange brown sandy silt which contained a single Roman pottery sherd (119g) and four Early/Middle Anglo-Saxon pottery sherds (71g) derived from one or two vessels. The fill also yielded a fired clay fragment (8g), four cattle teeth, nine cattle bones, a pig tooth, a pig bone and six horse teeth.

3.3 Trenches containing only furrows or no evidence of archaeological features

3.3.1 The remaining 30 trenches contained little archaeological evidence other than the ploughed out remains of 'ridge and furrow' (Table 1). The furrows were recorded across the site by the geophysical survey and were revealed in several of the trenches, they were on a north-west to south-east alignment in the eastern and western thirds of the proposed development area and a north-east to south-west alignment in the middle third (Fig. 4). No subsoil was found in the majority of the trenches – where it was encountered it is included in Table 1.

Tr No.	Alignment of trench	Depth of topsoil	Furrows and any possible features/tree throws		
9	East to west	0.31m-0.32m	No archaeological remains		
10	North to south	0.3m-0.35m	No archaeological remains		
11	North to south	0.3m-0.32m	No archaeological remains		
12	East to west	0.3m-0.31m	No archaeological remains		
13	North to south	0.32m	One furrow (48) aligned north-west to south-east. It was 3.7m wide and 0.21m deep.		
14	North to south	0.29m -0.3m	Two furrows aligned north-east to south-west		
15	North to south	0.3m (subsoil was 0.1m-0.15m thick)	Two furrows aligned north-east to south-west		
16	North to south	0.28m-0.29m (subsoil was 0.14m-0.18m thick)	One furrow aligned north-east to south-west		
17	North-west to South-east	0.25m-0.28m	Four furrows aligned north-east to south-west. One furrow contained a red to yellow mixed brick fragment which dates from at least the late 17th century		
18	North-west to South-east	0.32m-0.35m	Five furrows aligned north-east to south-west. One furrow contained a post-medieval brick fragment		



Tr No.	Alignment of trench	Depth of topsoil	Furrows and any possible features/tree throws
19	North to south	0.26m	Three furrows aligned north-east to south-west. One furrow contained a post-medieval roof tile fragment
20	North-west to South-east	0.28m-0.31m	Two furrows aligned north-east to south-west
21	North to south	0.28m	Four furrows aligned north-east to south-west. One furrow contained a red to yellow mixed brick fragment which dates from at least the late 17th century
22	North-west to South-east	0.27m-0.28m	Four furrows aligned north-east to south-west. The furrows were between 1.3m and 2.3m wide. One furrow was excavated and was 0.12m deep
23	North to south	0.28m-0.3m (subsoil was 0.1m- 0.2m thick)	Three furrows aligned north-east to south-west
24	East to west	0.3m-0.31m (subsoil was 0.05m-0.1m thick)	Three furrows aligned north-east to south-west
25	East to west	0.28m-0.3m	Two furrows aligned north-east to south-west
26	East to west	0.25m-0.3m	One furrow aligned north-west to south-east. It contained a clay pipe fragment
27	North to south	0.28m-0.3m	No archaeological remains
28	North to south	0.27m-0.28m	No archaeological remains
29	North to south	0.28m-0.3m	One furrow aligned north-west to south-east. It contained a post-medieval red brick fragment
30	North-east to south-west	0.26m-0.28m	One furrow aligned north-west to south-east
31	North-east to south-west	0.29m-0.3m	Three furrows aligned north-west to south-east. One furrow contained a post-medieval fully oxidised roof tile fragment
32	North-east to south-west	0.26m-0.28m	One furrow aligned north-west to south-east
33	North to south	0.27m-0.31m	No archaeological remains
34	North-east to south-west	0.25m-0.3m	One furrow aligned north-west to south-east. It contained one post-medieval brick fragment
35	North to south	0.26m-0.3m	Two furrows aligned north-west to south-east
36	North to south	0.28m-0.3m	Three furrows aligned north-west to south-east. One furrow contained four sherds of post-medieval red ware pottery (from same vessel. Another furrow had a post-medieval brick fragment
37	North to south	0.28m-0.31m	One furrow aligned north-west to south-east
38	North to south	0.28m-0.3m (subsoil was between 0.05m and 0.1m thick)	One furrow aligned north-west to south-east. It contained a post-medieval completely oxidised roof tile fragment

Table 1: Remaining trenches

3.4 Finds Summary

3.4.1 Four residual worked flints were recovered from a Roman and an Early/Middle Saxon feature (see Haskins, Appendix B.1). A moderate assemblage of 241 Late Iron Age pottery sherds (2838g) were recovered from 19 contexts in seven trenches. The pottery



dated from *c*.50BC to AD 50 and comprised both wheel-made and handmade examples (see Brudenell, Appendix B.2). A collection of 321 Roman pottery sherds (5629g) were found in 21 contexts from six trenches. The pottery included Early Roman examples, but most dated between AD 200-400 (see Anderson, Appendix B.3). Nine sherds (276g) of Early/Middle Saxon pottery derived from three features in three different trenches and comprised parts of five or six vessels (see Brudenell and Spoerry, Appendix B.4). A small collection of other artefacts were recovered comprising two fragments of a millstone grit quernstone (1.112kg), two Roman flat tile fragments from two Roman contexts (839g), two modern drain fragments (282g), seven fired clay/daub fragments (51g) from seven contexts (Late Iron Age to Early/Middle Saxon) and two probable brick fragments (14g) from a furrow. Three early/middle to late 4th century coins came from the topsoil of Trench 4 (see Atkins and Popescu, Appendix B.5).

3.5 Environmental Summary

3.5.1 A total of 550 animal bone elements and fragments were collected by hand excavation and from the environmental samples. The assemblage contained primarily domestic stock in contexts dated to the Late Iron Age and Roman periods. In a Late Iron Age context there was a tool made from an animal bone (see Lichtenstein, Appendix C.1). Six bulk environmental samples were taken from a Late Iron Age ditch, four Roman ditches and a probable watering hole. The latter contained an abundant quantity of waterlogged plant remains, whereas the others had none to occasional charred grains (see Fosberry, Appendix C.2).

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4 DISCUSSION AND CONCLUSIONS

4.1 Introduction

4.1.1 Thirty-eight trenches were excavated across the site with seven of the trenches targeting possible features identified by an earlier geophysical survey (Tanner 2015). The trial trench evaluation found pre-medieval remains in eight trenches with the remaining 30 trenches only containing furrows or no archaeological remains. The evaluation has confirmed that the results of the geophysical survey were fairly accurate

4.2 Neolithic and Bronze Age

4.2.1 Four residual Neolithic flint flakes and a single Early Bronze Age pottery sherd were found in features belonging to the later settlement (see below). The finds are indicative of early prehistoric activity in the area, but do no suggest sustained occupation.

4.3 Late Iron Age and Roman

- 4.3.1 Features dating from the Late Iron Age and Roman periods extended across the area evaluated by Trenches 1-8 in the south-west corner of the site. The archaeological remains were all located on the Woburn Sands geology, with the focus centred on a slight south-east-facing slope, with the north-western limit at 13.26m OD (Trench 7) falling to 12.1m OD at the south-eastern corner of the site (Trench 4).
- 4.3.2 A total of 48 features were revealed in this area, 28 of which were excavated in the evaluation; sufficient to characterise the nature and date of the activity within this zone. The features comprised a network of deep enclosure ditches, pits, watering holes and gullies. Combined, the geophysical survey, air photographic evidence and the results from the trial trenched evaluation serve to identify an area of ditch defined Late Iron Age and Roman settlement characterised by a complex of interconnected rectilinear enclosures and associated occupation features broadly arranged on a north-west south-east aligned axis. The evaluated area is part of a larger settlement complex (CHER no. 09547) extending to the south-west, with around two-thirds of the complex lying beyond the site/evaluated area.

Late Iron Age features

- 4.3.3 Late Iron Age features dating from c.50BC were found in Trenches 1, 2, 4, 5, 6 and 8. Possible structural remains were found in two trenches (Trenches 1 and 2), more than 50m apart, and were located near/at the north-eastern extent of the settlement complex. Some Iron Age features may relate to a phase of open settlement at the site, as the possible ring-ditch in Trench 2 was cut by a Late Iron Age ditch. A single vessel was recovered from the terminal of this ring-ditch, and may represented a placed deposit. The ring-ditch in Trench 1 was also located in an unenclosed area of the settlement complex. This displayed an external diameter of c.12m with a single internal post hole found. The geophysical survey suggests this ring-ditch had an entranceway on its southern side (Fig. 6).
- 4.3.4 The ten other features containing Late Iron Age pottery were all ditches. All were between 1.4m and 4.65m wide, with particularly large ditches excavated in Trenches 2 and 5; the latter forming part of a sub-square enclosure recorded in the geophysical survey. The largest, ditch **34** in Trench 5, was 4.65m wide and 2.5m deep, with the lowest hand augered deposit being waterlogged. The Late Iron Age bone assemblage was dominated by cattle (70.3%) and sheep/goat (24.6%) with very small quantities of dog, horse and pig. A bone tool was also found.



4.3.5 The Iron Age pottery dates from the *c*. mid 1st century BC, with examples of handmade and part wheel-thrown pottery recovered. The continuation of settlement throughout the Late Iron Age to Early Roman transition is suggested by the mixed pottery assemblages recovered from at least one feature (ditch 38/42).

Roman features

- 4.3.6 Roman features dating from the 1st-4th centuries AD were found in Trenches 2, 3, 4, 5, and 7. Features included possible structural remains in Trench 4 where several narrow linear gullies or beam slots were found, some of which were intercutting. A series of pits were also found in Trenches 2 and 4, including a well or watering hole 4.4m in diameter, 1.7m deep, and containing abundant waterlogged plant remains. These trenches (3, 4 and 5) also revealed a network of ditches containing Roman pottery. Some of these ditches appear to form part of the system of interconnected rectilinear enclosures identified by the geophysical survey. Evidence from the trenching suggests that this system, which had Late Iron Age origins (see above), was extended in the Roman period along the same dominant north-west to south-east axis, implying continuity in development/occupation.
- 4.3.7 Evidence for continuity is also suggested by the faunal record, with the Roman animal bone assemblage dominated by cattle (66.8%) and sheep (32.1%). Indeed, the combination of large ditched enclosures, watering holes and the relatively large quantities of animal bone recovered suggest that pastoral farming was a notable function of both the Late Iron Age and Roman economy of the site. The site was close to local markets and was in a good transport area. A routeway from the Via Devana runs north-east through Oakington to the large Roman settlement/small town at Bullocks Haste on the Car Dyke some 3km to the north-east (Mortimer pers. comm.). The line of this routeway passed just to the south of the current site (Lees 2015, 8).
- 4.3.8 The Roman pottery included early and late Roman wares, and 4th century AD types (including Oxford wares, Hadham wares, and Nene Valley wares). Three early/mid to late 4th century AD coins were also recovered from the topsoil from Trench 4. In light of the presence of Early/Middle Saxon features in the same location, these Late Roman finds hint at the possibility of settlement continuity into the Saxon period. This is still fairly unusual, but the number sites demonstrating such a sequence has been increasing in recent years with examples found at Boxworth (Connor 2008, 116) and the site between Stow Longa and Tilbrook (Atkins 2010, 85).

4.4 Saxon

- 4.4.1 Three Early/Middle Saxon features were found in Trenches 2, 7 and 8 located at the far western extent of the site. Topographically, this location next to the highest point on the site is similar to other Early/Middle Saxon settlements, such as a site between Stow Longa and Tilbrook, Cambridgeshire, located at the edge of a high ridge (Atkins 2010, 85).
- 4.4.2 The three features dated to the Early/Middle Saxon period comprised two possible pit/ditches and a quarry pit. Although only nine pottery sherds (276g) were recovered from these features, they derived from five or six different vessels and were relatively unabraded, with carbonised food residues surviving in two of the six pots. The size and condition of the sherds, coupled with the survival of carbonised food crusts, suggest they are likely to derive from occupation activities in the immediate vicinity, hinting at the presence of settlement. Indeed, it is possible that at one of the Saxon ditches/pits (16) could be a sunken featured building.



4.4.3 Within the wider landscape, a single area of known Saxon settlement is located some 600m to 1km to the north-east of the site, where the core of Cottenham village originated (Heawood 1997; Mortimer 2000). An excavation at Lordship Lane found an extensive ditch system dating from the Early Saxon or Middle Saxon period (c.7th century) with the principal remains dating to the Middle and Late Saxon period (Mortimer 2000). An evaluation location to the south of Denmark Road found residual Early/Mid Saxon pottery and occupation from the Late Saxon period (Heawood 1997)

4.5 Medieval and post-medieval

4.5.1 Furrows were recorded in many of the trenches and throughout the site in the geophysical survey. These were aligned north-west to south-east in the northern and southern parts of the site, and north-east to south-west in the central part of the site. The extent and alignment of the furrows was accurately plotted by the geophysical survey. The excavated examples were between 1.3-3.7m wide and 0.12-0.21m deep, and yielded post-medieval finds dating as early as the late 17th century.



APPENDIX A. CONTEXT INVENTORY

Ctxt	Cut	Tr	Category	Feature Type	Function	Length	Breadth	Depth	Pottery dates
1		ALL	layer	Topsoil				,	•
2	4	8	fill	ditch			2	0.34	Late Iron Age
3	4	8	fill	ditch			1.3	0.14	
4	4	8	cut	ditch			2	0.44	
5	9	4	fill	well/watering hole		3.95	2.1	0.3	Roman
6	9	4	fill	well/watering hole		3.05	1	0.25	Roman
7	9	4	fill	well/watering hole		2.85	1	0.3	Roman
8	9	4	fill	well/watering hole		2.8	1	0.4	
9	9	4	cut	well/watering hole		4.4		1.7	
10	10	2	cut	ditch			1.85	0.2	
11	10	2	fill	ditch			1.85	0.2	Late Iron Age
12	12	2	cut	ditch			1.7	0.35	Iron Age
13	12	2	fill	ditch			1.7	0.35	Late Iron Age
14	14	2	cut	?ring ditch	?house		0.45	0.12	
15	14	2	fill	?ring ditch	?house		0.45	0.12	Late Iron Age
16	16	2	cut	?SFB			2.3	0.54	
17	16	2	fill	?SFB			2.3	0.54	Early/Middle Saxon
18	19	8	fill	?ditch or pit		3	2	0.28	Early/Middle Saxon
19	19	8	cut	?ditch or pit		3	2	0.28	
20	21	8	fill	?pit		1.8	1	0.12	
21	21	8	cut	?pit		1.8	1	0.12	
22		4	layer			2.1	1.35	0.1	Roman
23	26	4	fill	ditch	?boundary	2.1	1.2	0.35	Roman
24	26		fill	ditch	?boundary	2.1	1.45	0.45	Roman
25	26		fill	ditch	?boundary	1	1.45	0.5	
26	26		cut	ditch	?boundary		1.45	0.75	
27	30		fill	ditch	?enclosure		0.85	0.35	Roman
28	30		fill	ditch	?enclosure		1.2	0.3	Roman
29	30		fill	ditch	?enclosure		0.5	0.5	
30	30		cut	ditch	?enclosure		2.05	0.7	
31	34		fill	ditch			4.65	0.56	Late Iron Age
32	34		fill	ditch				0.4	Late Iron Age
33			fill	ditch					Late Iron Age
34	34		cut	ditch			4.65	2.5	
35			fill	ditch			0.66	0.52	Late Iron Age
36			cut	ditch			0.66	0.52	
37	38		fill	ditch			1.68	0.58	Roman
38	38		cut	ditch			1.68	0.58	
39	40		fill	ditch			1.56	0.7	Late Iron Age
40	40		cut	ditch			1.56	0.7	
41	42		fill	ditch					Roman
42	42		cut	ditch			4.0	0.05	
43	43		cut	ditch			1.8	0.95	5
44			fill	ditch			1.8	0.95	Roman
45			cut	ditch			1.35	0.17	
46	45	3	fill	ditch			1.35	0.17	



Ctxt	Cut	Tr	Category	Feature Type	Function	Length	Breadth	Depth	Pottery dates
47	48	13	fill	furrow	agricultural		3.7	0.21	
48	48	13	cut	furrow	agricultural		3.7	0.21	
49	49	1	cut	ring ditch	house		1.35	0.3	
50	49	1	fill	ring ditch	house		1.35	0.3	Late Iron Age
51	51	1	cut	post hole or pit	?house	0.6		0.16	
52	51	1	fill	post hole or pit	?house	0.6		0.16	
53	53	1	cut	ring ditch	house		1.45	0.27	
54	53	1	fill	ring ditch	house		1.45	0.27	Late Iron Age
55	9	4	fill	well/watering hole			1.54	0.5	
56	9	4	fill	well/watering holr				0.65	
57	58	4	fill	pit or watering hole		6.35			Roman
58	58	4	cut	pit or watering holr		6.35			
59	60	4	fill	pit		1.4			
60	60	4	cut	pit		1.4			
61	62	4	fill	ditch	field boundary		0.9		Modern
62	62	4	cut	ditch	field boundary		0.9		Modern
63	64	4	fill	pit		2			
64	64	4	cut	pit		2			
65	66	4	fill	ditch			3.1		Late Iron Age
66	66	4	cut	ditch			3.1		-
67	68	4	fill	gully	field boundary		0.3		Modern
68	68	4	cut	gully	field boundary		0.3		Modern
69	70	4	fill	gully or slot		11	0.4	0.1	Roman?
70	70	4	cut	gully or slot		11	0.4	0.1	
71	72	4	fill	gully or slot			0.25	0.15	
72	72	4	cut	gully or slot			0.25	0.15	
73	74	4	fill	gully or slot			0.35	0.2	Roman
74	74	4	cut	gully or slot			0.35	0.2	
75	76	4	fill	gully or slot			0.3		
76	76	4	cut	gully or slot			0.3		
77	78	4	fill	pit			1.8		Roman
78	78	4	cut	pit			1.8		
79		2	fill	?ditch				0.53	Late Iron Age
80		2	fill	?ditch				0.35	
81	82	6	fill	ditch			2.02	0.4	Late Iron Age
82	82	6	cut	ditch			2.02	0.4	
83	84	6	fill	ditch			1.42	0.36	Late Iron Age
84	84	6	cut	ditch			1.42	0.36	
85	85	7	cut	pit	quarry	7.27		1.3	
86	85	7	fill	pit	quarry			0.22	Roman
87			fill	pit	quarry			0.24	Roman
88			fill	pit	quarry			0.36	
89			fill	pit	quarry			0.18	
90			fill	pit	quarry			0.25	Early-Middle Saxon
91			fill	pit	quarry				-



Ctxt	Cut	Tr	Category	Feature Type	Function	Length	Breadth	Depth	Pottery dates
92	85	7	fill	pit	quarry				
93	93	7	cut	ditch					
94	93	93 7 cut ditch							
95	95	7	cut	furrow	agricultural		1.75	0.1	
96	95	7	cut	furrow	agricultural		1.75	0.1	
97	97	2	cut	pit				1.5	
98	97	2	fill	pit				0.52	Roman
99	97	2	fill	pit				0.85	

Table 2: Context list



APPENDIX B. FINDS REPORTS

B.1 Struck flint

By Anthony Haskins

Introduction

B.1.1 Four residual struck flints were recovered from the evaluation.

Methodology

B.1.2 For the purposes of this report individual artefacts were scanned and then assigned to a category within a simple lithic classification system (Table 3). The results of this report are therefore based on a rapid assessment of the assemblage and could change if further work is undertaken.

Quantification

Context	Cut	Trench	Primary Flake	Secondary Flake	Tertiary Flake
37	38	5	1	1	
86	85	7		1	
90	85	7			1

Table 3: Flint quantification

Results

- B.1.3 The majority of the recovered flint was a good quality dark reddish-brown semi-translucent flint with occasional darker inclusions and a pale yellowish-grey chalky cortex with little sign of surface erosion. The flint recovered from 90 was a good quality pale brownish-grey flint with white inclusions.
- B.1.4 The narrow flakes from quarry pit fills (86) and (90) have Neolithic characteristics whilst the primary and secondary flake from ditch fill (37) are less diagnostic. All flints are soft hammer struck supporting a Neolithic date.

Discussion

B.1.5 The residual flakes recovered are likely to be Neolithic in date which suggests that some Neolithic activity may be present in the area.

B.2 Prehistoric pottery

By Matt Brudenell

Introduction

B.2.1 An assemblage comprising 241 sherds (2838g) of prehistoric pottery was recovered from the evaluation, displaying a mean sherd weight (MSW) of 11.8g. The pottery derived from 19 contexts relating to ditches and pits across 7 trenches (Trenches 1-2 and 4-8). With the exception of one possible sherd of decorated Early Bronze Age pottery from ring-ditch 53 in Trench 1, all the material dates to the Late Iron Age, c. 50



BC – AD 50. This assemblage included both wheel-made and handmade wares allied to the Late Iron Age 'Belgic' potting tradition and contemporary handmade native wares of Middle Iron Age-type. The pottery was in a stable condition, with sherds varying from fresh to abraded. This report provided a quantified summary of the assemblage.

Ctxt	Cut	Feature type	Tr	No./Wt. (g) sherds	Fabrics (no./wt(g) sherds)	Date & comment
2	4	Ditch	8	4/17	Q1 (4/17)	Late Iron Age.
11	10	Ditch	2	10/56	G1 (6/20), GQ1 (1/18), Q1 (3/18)	Late Iron Age. Includes vessel rim and cordoned sherd.
12	12	Ditch	2	2/43	Q1 (2/43)	Late Iron Age. Includes base sherd.
13	12	Ditch	2	12/210	G1 (3/4), GQ1 (6/33), Q1 (3/173)	Late Iron Age. Includes vessel rim and combed sherds.
15	14	Ring ditch?	2	171/1981	G1 (1/3), GQ1 (170/1978)	Late Iron Age. With the exception of 1 sherd, all belong to the same combed and cordoned vessel.
31	34	Ditch	5	6/29	GQ1 (6/29)	Late Iron Age. Includes grooved sherd.
32	34	Ditch	5	2/9	Q1 (2/9)	Late Iron Age
33	34	Ditch	5	1/56	GQ1 (1/56)	Late Iron Age. Combed sherd.
35	36	Ditch	5	1/11	Q1 (1/11)	Late Iron Age rim sherd.
37	38	Ditch	5	5/47	Q1 (4/39), QCH1 (1/8)	Late Iron Age. Includes a scored and combed sherd.
39	40	Ditch	5	3/26	Q1 (3/26)	Late Iron Age. Includes cordoned sherd.
50	49	Ring ditch	1	4/8	G1 (4/8)	Late Iron Age.
54	53	Ring ditch	1	1/5	GQ (1/5)	Early Bronze Age. Fingernail decorated sherd
57	58	Pit or waterhole	4	3/92	G1 (1/21), GQ1 (1/65), Q1 (1//6)	Late Iron Age. Includes vessel rim and cordoned sherds.
65	66	Ditch	4	2/20	Q1 (2/20)	Late Iron Age.
79	-	Ditch?	2	3/22	Q1 (3/22)	Late Iron Age. Includes two vessel rims.
81	82	Ditch	6	5/96	Q1 (5/96)	Late Iron Age. Includes fingertip and combed partial vessel profile.
83	84	Ditch	6	2/106	G1 (1/104), Q1 (1/2)	Late Iron Age. Includes cordoned bowl/tazza.
88	85	Pit	7	4/4	GQ1 (4/4)	Late Iron Age (residual)
TOT	-	-	-	241/2838	-	

Table 4: Iron Age pottery quantification by context

Fabric Type	Fabric Group	No./Wt. (g) sherds	% fabric (by wt.)	No./Wt. (g) of sherd wheel- made	% fabric wheel-made (by wt.)	MNV
G1	Grog	17/165	5.8	7/143	88.7	2
GQ1	Grog and sand	189/2183	76.9	3/80	3.7	3
Q1	Sand	34/482	17	13/164	34.0	7
QCH1	Sand and chalk	1/8	0.3	-/-	0.0	-
TOTAL	-	241/2838	100.0	23/387	13.6	12

Table 5: Iron Age pottery quantification by fabric. MNV= minimum number of vessels calculated as the total number of different rims and bases identified (10 rims, 2 bases)



Pottery fabrics:

B.2.2 Grog:

G1: Moderate fine to coarse grog (1-3mm in size).

B.2.3 Grog and sand

GQ1: Moderate fine to coarse grog (1-3mm in size) in a dense quartz sand matrix.

B.2.4 Quartz sand

Q1: Moderate to common guartz sand.

B.2.5 Quartz sand and chalk

QCH1: Moderate to common quartz sand and moderte medium to coarse chalk (mainly 1-2mm in size)

Methodology

B.2.6 All the pottery has been fully recorded following the recommendations laid out by the Prehistoric Ceramic Research Group (2009). After a full inspection of the assemblage, fabric groups were devised on the basis of dominant inclusion types, their density and modal size. Sherds from all contexts were counted, weighed (to the nearest whole gram) and assigned to a fabric group (sherds broken in excavation were refitted and counted as single entities). Sherd type was recorded, along with technology (wheelmade or handmade), evidence for surface treatment, decoration, and the presence of soot and/or residue. Rim and base forms were described using a codified system recorded in the catalogue, and were assigned vessel numbers. Where possible, rim and base diameters were measured, and surviving percentages noted. In cases where a sherd or groups of refitting sherds retained portions of the rim and shoulder, the vessel was also categorised by form. The Late Iron Age wheel-made 'Belgic' vessels were classified using Isobel Thompson's (1982) catalogue, and her alphanumeric codes, prefixed with TH-. All pottery was subject to sherd size analysis. Sherds less than 4cm in diameter were classified as 'small' (149 sherds); sherds measuring 4-8cm were classified as 'medium' (87 sherds), and sherds over 8cm in diameter will be classified as 'large' (5 sherds).

Assemblage characteristics

- B.2.7 With the exception of a single fingernail decorated grog tempered sherd (5g, fabric G1) from context 54, ring-ditch 53, Trench 1(likely to be Early Bronze Age), all the pottery is assigned to the Late Iron Age and may be considered together. This group of material was essentially characterised by sherds with either grog or sand as the principle inclusion (Table 5). Combined, grog and grog-and-sand tempered fabrics (G1 and GQ1) accounted for 83% of the pottery by weight, whilst sandy wares (including fabric Q1 and QCH1) constituted 17%. Both these wares were used to make handmade and wheelmade ceramics, though the majority of grog tempered sherds derived from wheel-made pots or combed decorated handmade jars. The sandy fabrics, by contrast, were more often than not associated with plain Middle Iron Age-type vessels.
- B.2.8 A distinction between handmade and wheel-made pots was not always clear, particularly with smaller sherds, combed sherds, or vessels in soft grog tempered fabrics. Furthermore, in some instances vessels appear to have been hand built, and then wheel-finished, whilst at other times, handmade vessel were made to imitate forms normally wheel-turned. These problems may have skewed the figures, though the totals given in this report include all material recorded as definitely and probably wheel-made.



- Overall, this amounted to 23 sherds (387g). This represents between c. 10-14% of the assemblage, depending on preferred methods of calculation 9.5%1by sherd count or 13.6% by weight and is fairly typical of sites in this area of Cambridgeshire.
- B.2.9 The forms of only three vessels could be established in the assemblage, which combined included 178 sherds weighing 2135g. The first comprised the partial profile of a grog-tempered carinated wheel-made bowl with cordoned neck from context 83, ditch 84, Trench 6 (1 sherds, 104g). The vessel had an everted beaded rim, with diameter of 19cm (12% intact). The vessel may be a tazza and is most similar to Thompson's form TH-E2-1 or TH-F3-4. The second partial vessel profile derived from context 81, ditch 82, Trench 6 (3 sherds, 49g). This comprised fragments of a combed handmade sandy ware jar with fingertip impression on the shoulder, similar to Thomson's from TH-C8-1 (mouth diameter 17cm, 10% intact). Finally, the third partial vessel derived from context 15, ring-ditch/gully 14, Trench 2. The vessel comprised 174 sherds weighing 1982g. These belonged to large handmade jar, with a cordoned off-set neck, a restricted mouth with everted rim, combed on the shoulder and body (similar to Thompson's form TH-C6-1). The jar had a mouth diameter of 18cm (12% intact).
- B.2.10 In terms of surface treatment, a total of 26 sherds (446g) were burnished or carefully smoothed, representing 11% of the assemblage by sherd count or 16% by weight-figures fairly typical of later Iron Age assemblages. A variety of fabrics were burnished, though this treatment was more common on the sandy wares. Most of the burnished pottery was wheel-made. Decoration was identified on 120 sherds (1795g, from a maximum of 12 vessels) and consisted of combing to the shoulder and body of vessels; grooving, scoring and the moulding of cordons/corrugations on the shoulder and neck decorative forms typical of 'Belgic' tradition.
- B.2.11 Direct evidence of vessel use was scare in the assemblage although 4 sherds (118g) had carbonized residues adhering to their surfaces. These were identified on handmade sherds only.

Discussion

B.2.12 The earliest pottery from the site is a small fingernail decorated grog-tempered sherd from ring-ditch 53, trench 1, likely to be Early Bronze Age in origin. The rest of the assemblage can be confidently assigned to the Late Iron Age and displays a typical mix of grog-tempered sherds in the 'Belgic' tradition – some of which were combed, cordoned and wheel-made – and handmade sherds in the Middle Iron Age-type tradition. These assemblages date between c. 50 BC – AD 50, with handmade pottery continuing to be manufactured up to and immediately beyond the Roman conquest. In the wider Cambridgeshire landscape, this group has affinities with Late Iron Age assemblage recently excavated in Clay Farm (Brudenell 2013) and the Addenbrookes's Hutchinson Site (Webley and Anderson 2008), Trumpington Park & Ride (Brudenell forthcoming a and b), Wardy Hill (Hill and Horne 2003) and Hurst Lane (Percival 2007).

B.3 Roman pottery

By Katie Anderson

Introduction

B.3.1 A sizable assemblage of Roman pottery totalling 321 sherds, weighing 5629g and representing 6.33 EVEs (estimated vessel equivalent) was recovered from the



evaluation. All of the pottery was analysed and recorded in accordance with the Study Group for Roman Pottery guidelines (Perrin 2011).

Assemblage Composition

- B.3.2 The material was derived from 21 different contexts, the majority of which were later Roman in date (AD200-400), including some material dating to the 4th century AD, with a smaller number of earlier Roman contexts (mid-1st-2nd century AD), suggesting that activity may have been continuous during the Roman period. Much of the assemblage could only be broadly dated as Romano-British (AD50/100-400), including non-diagnostic sherds and/or unsourced wares. The pottery suggests activity at the site peaked between AD200-400.
- B.3.3 The pottery varied in condition with the sherds ranging in size from small to large, with a number of sherds noted as being abraded. That said, the overall mean weight for the assemblage was fairly high at 17.5g. This figure is somewhat influenced by the presence of several large storage jar body sherds.
- B.3.4 A range of vessel fabrics were identified (Table 6), although the assemblage was dominated by Romano-British coarsewares which represented 82% of the total assemblage, comprising both sourced and unsourced wares. Within this group, sandy greywares dominated (28% of the total assemblage), including micaceous, coarseware and fineware variants, most of which are likely to have been made in the local area. This included 28 Horningsea greyware sherds weighing 1106g, which can be considered as a local product given the sites close proximity to the Horningsea kilns, some 6km south-east of the site. Shell-tempered wares were also well represented, totalling 15.3% of the assemblage. Aside form the Horningsea greywares, other sourced Romano-British coarsewares included four Horningsea black-burnished wares, and single examples of a Nene Valley whiteware and an Oxfordshire whiteware, both of which were from mortaria
- B.3.5 Romano-British finewares accounted for a further 17.4% of the assemblage, which included Nene Valley colour-coated wares and red-slipped wares from both Hadham, Herts and the Oxfordshire kilns. The presence of a relatively high number of Nene Valley colour-coated products (44% of the Romano-British finewares and 7.8% of the entire assemblage) is perhaps unsurprising given that it could be considered as a considered 'local' product, that there was at least one more local manufacturer of colour-coated wares. That said, the site clearly had access to wares from outside of the local area, including 11 sherds of Oxfordshire red-slipped ware and ten Hadham red-slipped wares. The remaining 0.6% of the assemblage comprised imported wares, consisting of one Central Gaulish sherd (91) and one unsourced, yet imported colour-coated sherd (5). The low number of imported wares is a reflection of the date at which the site appears to have peaked (in the Late Roman period), rather than having any implications for the status/wealth etc. of the site, as by this period the level of imported wares had fallen significantly.

Fabric Code	Fabric	No.	Wt(g)
BLKSL	Black-slipped ware (unsourced)	7	64
BUFF	Buff sandy ware (unsourced)	3	67
CC	Colour-coat (unsourced)	7	87
CC import	Colour-coat (Imported but unsourced)	1	3
CSGW	Coarse sandy greyware (unsourced)	16	185
CSMBLK	Coarse sandy micaceous black-slipped ware (unsourced)	9	123
CSMGW	Coarse sandy micaceous grey ware (unsourced)	43	468



CSMOX	Coarse sandy micaceous oxidised ware (unsourced)	17	257
CSMRDU	Coarse sandy micaceous reduced ware (unsourced)	40	1312
CSOX	Coarse sandy oxidised ware (unsourced)	8	81
CSRDU	Coarse sandy reduced ware (unsourced)	6	60
FSMGW	Fine sandy micaceous greyware (unsourced)	3	17
FSMOX	Fine sandy micaceous oxidised ware (unsourced)	2	31
FSOX	Fine sandy oxidised ware (unsourced)	1	11
HADRS	Hadham red-slipped ware	10	116
HORNBB	Horningsea black-burnished ware	4	141
HORNGW	Horningsea greyware	28	1106
IMITBB	Imitation black-burnished ware	27	288
NVCC	Nene Valley colour-coated ware	25	519
NVWW	Nene Valley whiteware	1	9
OXFRS	Oxfordshire red-slipped ware	11	96
OXFWW	Oxfordshire whiteware	1	61
SAMCG	Samian - Central Gaulish	1	3
SHELL	Shell-tempered ware	49	521
WW	Whiteware (unsourced)	1	3

Table 6: All Roman pottery by fabric

- A range of vessel forms were identified (Table 7), of which jars were the most commonly B.3.6 occurring representing 48% of all vessels by minimum number of vessels (MNV), totalling 21 vessels derived from 80 sherds, weighing 2926g and representing 4.57 Within this category there were a range of different sized jars, with rim diameters ranging in size from 8cm to 40cm, indicating a variety of different uses; the largest being storage jars, with Horningsea wares, with the interior and exterior combing well represented. Bowls and dishes were moderately well represented, each with a minimum of nine and eight different vessels recorded respectively. This comprised both coarseware and fineware varieties, including four beaded-flanged bowls, two of which were in coarseware fabrics and two which were finewares including a Nene Valley colour-coat and all of which date c.AD250-400. A Hadham red-slipped sieve was also identified, which had several small, pre-firing perforations in the base (23). Dishes were dominated by straight-sided plain rim dishes (dog dishes) of which there were eight examples. There was also part of an Oxfordshire red-slipped imitation Dr36 dish with white painted decoration (5), dating to the 4th century AD.
- B.3.7 Other vessel forms identified within the assemblage comprised a minimum of three beakers, in colour-coated varieties, although there were also body sherds from greyware beakers present. Finally a minimum of three mortaria were recorded, deriving from the Oxfordshire and Nene Valley kilns.
- B.3.8 One Nene Valley colour-coated jar sherd was noted as being modified (23), with evidence at attempted post-firing perforation in the side of the vessel, possibly for use hanging over a fire. Three jars were recorded as having exterior sooting under the rim of the vessels indicative of use over a fire.
- B.3.9 The forms present in the assemblage as well as the usewear evidence are indicative of domestic consumption, with a range of vessels used for the storage, preparation and serving of food and drink.

Form	No.	Wt(g)	MNV	EVE
Beaker	10	77	3	0.3
Bowl	12	256	8	0.54
Closed	142	1576	0	0.25



Dish	10	217	8	0.26
Jar	80	2926	21	4.57
Mortaria	6	109	3	0.16
Open	6	114	0	0.25
Unknown	55	354	1	0

Table 7: Roman pottery quantification by vessel form

Contextual Analysis

- B.3.10 Roman pottery was recovered from 21 contexts, representing 14 different features from six trenches in varying quantities (Table 8). 11 contexts contained small assemblages of pottery totalling fewer than ten sherds, while seven contexts contained between 11-30 sherds). The remaining three contexts contained between 36-73 sherds. The bulk of the assemblage, was recovered from Trench 4, totalling 246 sherds, weighing 3834g from eight different features, thus representing 76.6% of the total Roman assemblage by sherd count.
- B.3.11 There is limited evidence for chronological, spatial distribution, although the earlier Roman features were located exclusively in Trenches 5 and 7, while most of the latest dating contexts (3rd-4th+ century AD) were recovered from Trench 4, suggesting a slight shift in the focus of the site between the early and late Roman period. 50% of the total assemblage was recovered from well (9) (see below), with a further 30% derived from ditches and 16% from pits. The remaining 4% came from gullies and layers.
- B.3.12 The largest single assemblage derived from a well (9) in Trench 4, which contained a total of 159 sherds, weighing 2631g, from four contexts, which represented 50% of the total pottery assemblage. The majority of the pottery was from upper fill (5) totalling 73 sherds (1163g), dating AD300-400, thus making this the latest dating context on the site. The mean weight of the pottery from this context was 16g, and included four shelltempered jars, two Nene Valley colour-coated jars and five sherds from at least one large Horningsea greyware storage jar. Three dishes and two bowls were also identified along with a large number of non-diagnostic body sherds. Fill (6) immediately below contained a further 39 sherds (596g), dating AD240-400, which included a minimum of four jars, three bowls and a beaker, as well as three mortaria sherds. Below that, a total of 11 sherds weighing 283g were collected from fill (7), with a date range of AD240-400. The high mean weight of 25.7g from this context is largely due to the presence of two Horningsea greyware storage jar sherds. In addition to these were two Oxfordshire redslipped wares and a Nene Valley colour-coated beaker. Finally fill (8) contained 36 sherds of pottery, weighing 589g, which dated AD150-300, comprising several different Horningsea vessel sherds; both greywares and black-burnished wares, as well as one sherd from a Nene Valley colour-coated vessel.
- B.3.13 The pottery from well **9** therefore suggests that it was dug in the early-mid Roman period, but had gone out of use as a well by the later 2nd/early 3rd century AD, when it started to be backfilled. The ceramic evidence suggests it was filled over a relatively long period of time, with the upper fill containing material dating to the 4th century AD. That said, the pottery was fairly fragmented, with few refitting sherds, which suggests that sherds deposited within this feature may have come from elsewhere, rather than these fills representing primary refuse.

Context	Cut	Trench	No.	Wt(g)	Context spotdate
5	9	4	73	1163	AD300-400



6	9	4	39	596	AD240-400		
7	9	4	11	283	AD240-300		
8	9	4	36	589	AD150-300		
18	19	8	1	119	AD100-400		
22	22	4	8	103	AD150-400		
23	26	4	21	201	AD240-400		
24	26	4	12	213	AD300-400		
27	30	4	22	360	AD300-400		
28	30	4	8	96	AD100-200		
37	38	5	26	1099	AD40-100		
41	42	5	1	31	AD50-400		
44	43	3	6	94	AD100-300		
57	58	4	2	27	AD150-300		
69	70	4	1	26	AD100-400		
73	74	4	6	45	AD150-300		
77	78	4	7	132	AD100-400		
86	85	7	9	168	AD50-400		
87	85	7	3	22	AD50-200		
91	85	7	15	142	AD100-200		
98	97	2	14	120	AD150-400		

Table 8: Roman pottery quantification by context

B.3.14 Also within Trench 4 were ditches **26** and **30** which contained moderate assemblages of pottery. Ditch **26** contained 33 sherds, weighing 414g from two fills, which dated to the 3rd-4th centuries AD. This included four Nene Valley colour-coated sherds as well as an Oxfordshire red-slipped vessel. Ditch **30** was cut by Ditch **29** and the pottery evidence supports this as it suggests an earlier date, with fill (28) containing pottery dating between AD100-200, while the fill above, (27) contained pottery with a date range of AD 300-400. It is of note that two sherds (although not refitting) from the same colour-coated beaker with barbotine scale decoration were recovered from fill (23) ditch **26** and fill (27) ditch **30**.

Trench	No.	Wt(g)
2	14	120
3	6	94
4	246	3834
5	27	1130
7	27	332
8	1	119

Table 9: Roman pottery quantification by Trench

Discussion

B.3.15 Overall, the Roman pottery demonstrates that there was activity from the earlier to the later Roman period, although earlier activity was limited, with an apparent peak in activity in the later period, c. AD200-400. The quantity of pottery is indicative of fairly intensive activity in the late Roman period, certainly around Trench 4, and the forms identified within this assemblage suggest this is likely to have been domestic in nature. The range of fabrics identified is of interest, and suggests that the site had access to

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trade networks from outside of the immediate local area, certainly towards the latter stages of occupation.

B.4 Saxon Pottery

By Dr Matt Brudenell with identification by Dr Paul Spoerry

Introduction

B.4.1 Nine sherds (276g) of handmade Saxon pottery were recovered from the evaluation. The pottery derived from three contexts relating to cut features in Trenches 2, 7 and 8. The sherds were in a stable condition and were relatively unabraded, with some retaining carbonised residues on the interior. The pottery is of Early-Middle Saxon date and is described below in context order.

Context 17

B.4.2 Four sherds (154g) of pottery were recovered from context 117, ditch/pit **16**, Trench 2. The sherds derived from three individual pots in different fabrics. The largest sherd (116g) belonged to the base of a large vessel with a diameter c. 14cm. The sherd fabric contained moderate to common large rounded quartz grains and leached out calcareous inclusions. The second vessel was represented by a neck sherd (29g) in a dense quartz sand fabric with flecks of mica. The final vessel comprised two small organic tempered body sherds (10g). The pottery is dated Early-Middle Saxon.

Context 18

B.4.3 Four sherds (71g) of pottery were recovered from context 18, ditch/pit 19, Trench 8. The sherds derived from one or two vessels, with two sherds being refitting base fragments (46g). The sherds were tempered with a mix of apparently crushed igneous rock including Biotite fragments, that might derive from glacial erratics including Mountsorrel Dolerite or other Biotite granites. Pottery of this type of fabric is known from many early to middle Saxon assemblages in this region and seems to represent preferential selection of glacial clays, and/or igneous erratics within these deposits for use as temper. All the sherds had carbonised food crusts on the interior surfaces. A single abraded sherd of Roman pottery was also recovered from the context. The pottery is dated Early Saxon.

Context 90

B.4.4 Context 90 of pit 85, Trench 7 yielded a fragment of a quartz sand tempered vessel rim (51g) with a pierced lug or suspension loop below the rim-top. The clay around the pierced hole had been pulled out on the vessel exterior to create a dished lug, akin to a spout. The sherd is either Early-Middle Saxon, or a proto-Thetford ware. Pierced lug vessels of Early Saxon period have been recovered from excavations in Willingham (D. Hall, notes on unpublished assemblage from Willingham High Street).

B.5 Other artefacts

By Rob Atkins and Dr Adrian Popescu

Introduction

B.5.1 A small collection of other artefacts were recovered comprising two fragments of a millstone grit quernstone (1.112kg), two Roman flat tile fragments from two Roman



contexts (839g), two modern drain fragments (282g), seven fired clay/daub fragments (51g) from seven contexts (Late Iron Age to Early/Middle Saxon) and two probable brick fragments (14g) from a furrow.

Results

Coins

- B.5.2 Three early/mid to late 4th century coins came from the topsoil of Trench 4 (SFs 1-3):
- B.5.3 Small Find 1(SF 1)

Gratian (367-383)

Obv. [D N] GRATIA – N[VS P F AVG], pearl-diademed, draped and cuirassed bust to right.

Rev. GLORIA [RO – MAN]ORUM, exergue TCON. Emperor advancing to right, dragging captive and holding *labarum*. RIC IX, p. 66, no 18b.XVc, Arelate, 375-378.

Diameter is 15.44mm, thickness is 1.46mm and weight is 2.30g.

B.5.4 SF 2

Valentinian I (364-375)

Obv. [D N VAL]EN[T]INI – ANVS P F AVG, pearl-diademed, draped and cuirassed bust to right.

Rev. [GLOR]IA RO – [MANORUM], in field O-F-II, exergue illegible. Emperor advancing to right, dragging captive and holding *labarum*.

This form of mintmark was used at the mint of Lugdunum (Lyons) between 364 and 375.

Diameter is 16.42mm, thickness is 1.72mm and weight is 2.21g.

B.5.5 SF 3

Constantinopolis

Obv. [CONST]AN – [TINOPOLIS], Bust of Constantinoplis wearing laureate helmet, imperial cloak and holding reversed spear.

Rev. Victory standing towards left on prow, holding shield and spear, exergue T[R]S Struck at Treveri (Trier) between 330 and 334.

Diameter is 10.09mm, thickness is 1.02mm and weight is 1.0g.

Quernstone

B.5.6 Two fragments from a lower stone of a millstone grit rotary quern (sf 4), presumably from Derbyshire. Found in fill 77 (Roman pit **78**; Trench 4) weighing 1.112kg.

Roman tile

- B.5.7 Roman tile (235g) from fill 5 of Roman waterhole **9** (Tr. 4). Hard orange sandy fabric with grey core. It is 23-25mm thick.
- B.5.8 Roman tile (604g) from fill 8 of Roman waterhole **9** (Tr. 4). Fully oxidised hard bright orange sandy fabric. It is 38mm thick.

Drain

B.5.9 Two fragments (282g) of c.19th century drain from field boundary ditch fill 61 (62) (Tr.



4). Yellow fully oxidised fabric.

Fired clay/daub

- B.5.10 One fragment (2g) from fill 2 of Roman ditch 4 (Tr. 8). Undiagnostic.
- B.5.11 One fragment (8g) from fill 18 of Early/Middle Saxon pit/ditch 19 (Tr. 8). Orange clay.
- B.5.12 One fragment (9g) from fill 24 of Roman ditch **26** (Tr. 4). ?Daub. Orange clay burnt on one side. Been smoothed on this Side. Interior there are ?straw impressions.
- B.5.13 One fragment (6g) from fill 23 of Roman ditch 26 (Tr. 4). Yellow clay.
- B.5.14 Two fragments (24g) from fill 31 of Late Iron Age ditch **34** (Tr. 5). One fragment has a smoothed side and is in a hard orange sandy fabric (internal) with dark grey surface. The other fragment is in a hard orange sandy fabric with small stone inclusions.
- B.5.15 One fragment (2g) from fill 88 of Early/Middle Saxon quarry pit **85** (Tr. 7). Hard orange sandy fabric.

?Brick

B.5.16 Two fragments (14g) of probable brick from fill 47 of furrow **48** (Tr. 13). One in a hard orange/red sandy fabric the other in a yellow/oange mixed fabric.



APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Zooarchaeological Remains

By László Lichtenstein

Introduction

C.1.1 The zooarchaeological remains from the Cottenham project were evaluated to establish the nature of the assemblage, the presence of ecofacts and the level of preservation conditions.

Method

- C.1.2 The animal remains from each context were recorded and assessed to provide primary data information using standard zooarchaeological methods following guidelines set out by English Heritage (2014) along with further guidelines from Sisson & Grossman (1953), Schmid (1972), Driesch (1979), Fehér (1990) and Hillson (1992) and with use of comparative material from the author's vertebrate reference collection. Due to anatomical similarities between sheep and goat, the criteria set out by J. Boessneck (1969) was used to separate the two species where possible. They were otherwise classified as sheep/goat.
- C.1.3 Ageing data such as epiphyseal fusion and tooth wear evidence were noted according to Bull and Payne (1982), Grant (1982), Hillson (2005) Schmid (1972) and Silver (1969), with the identification of juvenilis after Schmid (1972) and Amorosi (1989). The identification of foetal skeletal elements was made following Prummel (1987).
- C.1.4 The remaining elements could only be categorised according to the relative size of the animal represented (large terrestrial mammal: cow, horse, large deer; medium terrestrial mammal: sheep/goat, pig, small deer; small terrestrial mammal: dog, fox, hare; very small terrestrial mammal: mouse, vole). Bones that could not be identified to species were, where possible, grouped following the code system of NABONE zooarchaeological database.
- C.1.5 The presence of large and medium vertebrae and ribs were recorded for each context, although, aside from the first two cervical vertebra, these were not identified to species. To characterise the assemblage some measurements were taken according to von den Driesh (1976), using digital calipers with an accuracy of 0.01 mm.
- C.1.6 The minimum number of individuals (MNI) was calculated based on the most frequently occurring bone for each species, taking into account left and right sides, as well as epiphyseal fusion. For the calculation of the number of identified species present (NISP), all identifiable fragments of animal bone were counted.
- C.1.7 A catalogue of the animal bone assemblage was recorded directly into an Excel database, which comprises of the preservation, taphonomical description, identification of species, quantification of ageable, measurable elements as well as noting any butchery or animal teeth marks, pathological signs or sexual dimorphism. Such information was organised in context order with quantification and assessment for the archive.

Results

C.1.8 A total of 550 animal bone elements and fragments were collected from a range of features and occupation layers during the evaluation (Table 13). Some 92.6% of the



- specimens have been hand-collected during the evaluation and the remaining 7.4% (41) were recovered from the processed environmental samples.
- C.1.9 The animal bone assemblage from site is comprised of 536 (97.5%) fragments, from phased contexts, with only 14 (2.5%) fragments of animal bone from undated contexts. The phasing of this assemblage can be divided into four chronological phases: Late Iron Age; Roman; Early/Middle Saxon and Saxon. In terms of the dates for the bone, the largest quantities were recovered with finds of a Late Iron Age and Roman date (Table 10).
- C.1.10 Most of the animal bone assemblage came from ditches, pits and a well, with the remainder of the assemblage being recovered from gullies, layers and quarry pits. There is little to distinguish between individual features or between feature types. Slight differences are noted in the distribution of partially articulated remains of animals. Animal Bone Groups (partially articulated bones of individual animal skeletons) mostly occured in ditch fills.

Species/Taxa	Late Iron Age	Roman	Early/Middle Saxon	Undated	Total					
•	NISP									
Bos Taurus L.	83	123	13	-	218					
Ovicaprid	29	59	1	5	94					
Sus scrofa	1	-	2	-	3					
domesticus B.										
Equus caballus L.	2	2	20	2	26					
Canis familiaris	3	-	-	-	3					
Sub-total	118	184	36	7	344					
LTM	54	63	17	5	139					
MTM	19	16	5	1	41					
STM	1	1	2	-	4					
VSTM	-	4	-	-	4					
Herpetofauna	1	-	-	-	1					
Uni	6	3	7	1	17					
Total	199	270	67	14	550					

Table 10: Species present in the animal bone assemblage by period

Preservation and fragmentation

C.1.11 The state of preservation of the bones from site is very good, with fragmentation being moderate within individual contexts. Some measureable bones are available from the assemblage for retrieval of ageing and biometric data. The level of surface abrasion is low with only a few poorly preserved fragments observed. Certainly the low degree of surface erosion exhibited by these bones suggests that they may have not been exposed for long time before burial. A few fragments show some evidence of burning, probably representing cooking and fire debris. Canid gnawing is noted in a relatively low frequency, only being observed on bones of domestic animals. No pathological conditions were observed.

Species present and general observation

- C.1.12 The total number of individual species elements (NISP) is 344 (62.5%). The species identified include the three main livestock animals: cattle, sheep/goat, pig, as well as horse and dog. The assemblage has also produced a few rodents and frog remains (Table 10).
- C.1.13 The relative importance of these livestock species is similar to each phase of the site. The majority of the assemblage consists of the main food mammals: cattle, sheep/goat and domestic pig. Ages of the main food mammals vary considerably with both adults



and juveniles present, with some mature specimens and one neonatal individual being identified from the main food species. Whilst there are anatomical similarities between sheep and goat, in this assemblage the ovicaprid remains almost certainly came from sheep.

C.1.14 A moderate amount of age information is obtainable from this assemblage (Table 11), which should enable the reconstruction of mortality profiles and clarify the nature of the husbandry strategy. The presence of bones from neonate and immature animals indicates that the livestock were bred, reared and slaughtered locally, but further, more detailed work is neccessary to confirm these preliminary results within the different phases.

Information type	Late Iron Age	Roman	Early/Middle Saxon
Age – Teeth	-	3	1
Age – Bones	1	2	-
Biometric	3	4	1
Butchery	6	7	2
Total	10	16	6

Table 11: Information type and quantity available from the Late Iron Age, Roman and Saxon animal bone assemblage

- C.1.15 Horse bone recovered from the contexts are those of adult individuals. None of the horse bones have any evidence of butchery and it seems all of the horses were working animals that reached maturity in all phases.
- C.1.16 In a Late Iron Age ditch (fill 33) a dog skull indicates an adult individual of a large size. Cut marks were absent from these bones, it is therefore unlikely that the dog had been skinned, dismembered or in any way utilised for any purpose. Dog may have been used for different purposes, such as for herding, guarding or even as a pet. Animals such as dogs have been kept as pets and companions for a significant proportion of human history.
- C.1.17 Material recovered from environmental samples has the potential to provide information for the economy of the site and additional environmental evidence of the surrounding environment. A small number of rodent and amphibian (frog) bones were recovered, but have not been identified to species at this stage. These species would have been living on and around the site. Their elements within the assemblage acts as an indicator of the general environmental background of the site.
- C.1.18 One bone tool is included in the faunal assemblage and this was considered separately.

Observations by period

Species/taxa	Late Iron Age		MNI	Roman		MNI
	NISP	%NISP		NISP	%NISP	
Cattle	83	70.3%	2	123	66.8%	4
Sheep/goat	29	24.6%	2	59	32.1%	3
Pig	1	0.8%	1	-	-	-
Horse	2	1.6%	1	2	1.1%	1
Dog	3	2.6%	1	-	-	-
Total	118	100%	-	184	100%	-

Table 12: Number of Identified Species and Minimum Number of Individuals from Late Iron Age and Roman contexts



Late Iron Age period

- C.1.19 A total of 199 animal bone elements and fragments were assessed from features dating to the Late Iron Age period. Employing standard zooarchaeological methodological procedures, 118 specimens were identified to taxa representing livestock species: cattle; sheep or goat; pig; horse; dog and an amphibian (frog) species (Table 12).
- C.1.20 Predominating the assemblage are cattle and sheep/goat: these were the most numerous taxon at the site from this period, followed by lower numbers of horse and pig.
- C.1.21 Knife marks were noted on cattle and sheep/goat lower leg bones. There is also some evidence for marrow extraction (fill 79). A cattle humerus and tibia and diaphysis fragments of long bones signify evidence of being consistently chopped transversely and split longitudinally to extract marrow. Cut marks around the cattle lower limb bones, often regarded as evidence of skinning, were also present in this context.
- C.1.22 Evidence of bone working was seen on the diaphysis of a horse metatarsus, lower leg bone (fill 79). This fragment was sawn to collect diaphysis fragments for deliberate bone working or craft activity.

Roman

- C.1.23 A total of 270 animal bone elements and fragments were assessed from features dating to the Roman period. Employing standard zooarchaeological methodological procedures, 184 specimens were identified to taxa representing only livestock species: cattle; sheep or goat; and horse species (Table 12).
- C.1.24 The assemblage is predominated by cattle and sheep/goat: these were the most numerous taxon at the site from this period, followed by lower numbers of horse.
- C.1.25 The large range of body parts suggests that all three livestock species were slaughtered and butchered on site for local consumption during this phase. The deposition of bone is fairly mixed and includes elements from different stages in the carcass reduction sequence from features with secondary and tertiary deposition. 'Chopping' marks are evident on cattle and sheep/goat bones. Heavy 'chopping', associated with dismemberment, was noted on a cattle mandible (fill 2). Parallel knife cuts, most probably filleting marks, were observed on a cattle mandible fragment (fill 22) and sheep/goat pelvis (fill 5).
- C.1.26 Tooth wear evidence of cattle (fill 6) indicates a 2-3 year old and a 3.5 year old animal. A small porous non-fused cattle tibia (fill 27) indicates an unborn, foetal individual.
- C.1.27 The Roman assemblage contained measurable animal bones. Biometrical data was taken from a small selection of measurable bones, from a cattle metacarpus (fill 8). Using Nobis' index (GL:182.0mm, Bp:58.9mm, Bp/GL*100:32.36mm), this individual was identified to be a bull, with estimated shoulder heights *c.* 1152.06 cm. This bull was a small/small-medium size beast.

Early/Middle Saxon, undated contexts

- C.1.28 The recovered 67 bones from Early/Middle Saxon and Saxon contexts belong exclusively to domestic animals, with cattle and horse bones predominating. Sheep/goat was also present, however in lower numbers, making the amount of bone recovered negligible.
- C.1.29 The bone assemblage is the result of the disposal of primary butchery and kitchen waste and the secondary deposition of domestic rubbish.



Bone artefact

C.1.30 A bone tool was noted made from the diaphysis of a sheep tibia (fill 80) of a Late Iron Age feature. This fragment has a shiny surface and smooth edge, probably used as a temporary tool to remove animal skins and prepare hides. The shaft had been cut diagonally showing deliberate wear on point and modest on cut edges. Joint surface and the shaft unworked it had not been intended for use as a permanent tool. Broken into five pieces.

Conclusions

- C.1.31 The main assemblage contains primarily domestic stock with a limited insight into aspects of meat preparation and consumption, though ageing can provide information on the uses, health and husbandry of the domestic animals kept here.
- C.1.32 Abbreviations used in text

Bp – Greatest breadth of the proximal end

Bd – Greatest breadth of the distal end

GB - Greatest breadth

GI – Greatest length

GL1 – Greatest length of the lateral part

L – Length

Ld – Length of the dorsal surface

NISP – Number of Identified Specimen

			Ca	attle	Sheep	o/Goat	F	Pig	Но	orse	Dog	LTM	MTM	STM	VSTM	UNI
Ctxt	Cut	Ph	Teeth	Bones	Teeth	Bones	Teeth	Bones	Teeth	Bones	Bones	All	All	All	All	All
2	4	LIA	3	28	1	2						7				
5	9	Rom	3	5	5	19						19	3			
6	9	Rom	2	9						1		3	2			
7	9	Rom		2		1						1				
8	9	Rom		15	2	8				1		4	6		2	
15	14	LIA		4												
18	19	Sax	4	9			1	1	6	14		15	3	2		5
22	-	Rom		5	1	3						1	2			
23	26	Rom		7	1	3						4	1			
24	26	Rom		1		3						1			2	2
27	30	Rom	3	2	1	2						1	1			
28	30	Rom				1						2				
31	34	LIA	1	5	1	4						2				
32	34	LIA		1		7						10	3			2
33	34	LIA	1	9	2	5		1			3	8	4	1		2
35	36	LIA	2													
37	38	Rom	1	9	1	6						10				
39	40	LIA	2	10		4						3	3	1		1
41	42	Rom										1				
44		Rom	2	47		1						12				
50	49	LIA											1			1
54	53	LIA		1												
57	58	Rom				2						1	1			
67	68	-										2				



69	70	-								1			
73	74	Rom		2									
77	78	Rom		1						3			
79	-	LIA	1	18		1			2	22	5		2
80	-	-				5			2	2			
81	82	LIA		4		1				2	4		
87	85	Sax			1					2	2		2
98	97	Rom		2				·	·				

Table 13: Animal bone by context

C.2 Environmental samples

By Rachel Fosberry

Introduction

C.2.1 Six bulk samples were taken during the evaluation. The purpose of this assessment is to determine whether plant remains are present, their mode of preservation and whether they are of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.

Methodology

C.2.2 The total volume (between 13 litres and 19 litres) of each of the samples was processed by tank flotation using modified Siraff-type equipment. The floating component (flot) of the samples was collected in a 0.25mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. 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 14. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands and the authors' own reference collection. Nomenclature is according to Stace (1997). Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.2.3 For the purpose of this initial assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories

= 1-5, ## = 6-10, ### = 11-50, #### = 51+ specimens ##### = 100+ specimens

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

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

Results

C.2.4 Several of the samples contain plant remains that are untransformed (as in they have not been carbonised) and are most likely to have been preserved by waterlogging.



Cladoceran ephippia (egg-cases of e.g. water fleas) are present within these samples and are indicative of standing water.

Trench 1

C.2.5 Sample 3, fill 35 of ring ditch **49** did not contain any preserved plant remains which is not uncommon for such features.

Trench 2

C.2.6 Sample 6 was taken from spread 79 and contains occasional charred plant remains in the form of a single items of an indeterminate grain fragment, a spelt wheat (*Triticum spelta*) glume base, an awn fragment and seeds of dock (*Rumex sp.*) and lesser stitchwort (*Stellaria graminea*). Such sparse remains cannot be indicative of deliberate deposition and are most likely to have accumulated in the deposit as wind-blown items. Several untransformed seeds are present and represent plants that are commonly found growing on wasteland such as thistles (*Carduus/Cirsium sp.*), docks, nettles (*Urtica dioica* and *U. urens*), goosefoots (*Chenopodium spp.*), oraches (*Atriplex sp.*) and brambles (*Rubus sp.*).

Trench 4

C.2.7 Two features, thought to be Roman in date, were sampled in Trench 4; upper fill 24 of ditch **26** (Sample 4) contains occasional charred grains of barley (*Hordeum vulgare*) and spelt wheat with a single degraded glume base and a pea-sized legume (Fabaceae). Sample 5 was taken from one of the lower fills (8) within pit/waterhole 9 and contains a large assemblage of organic material that has been preserved by waterlogging in addition to a smaller component of charred cereal remains that are all chaff elements (spelt glume bases and rachis fragments). Seeds of nettles and goosefoots predominate (both plant species are large seed-producers) along with seeds of thistles, knotgrass (Polygonum aviculare), sainfoin (Onobrychis vicifolia), deadnettles (Lamium sp.), henbane (Hyoscamus niger), hemlock (Conium maculatum) and chickweed (Stellaria media). Aquatic plants are represented by seeds of water-crowfoot (Ranunculus subgenus batracium) and duckweed (Lemna sp.). This diverse species list suggests that the feature contained water and was probably used by animals as a water-source as indicated by the nitrogen-loving plants; nettles and henbane that thrive in dung-enriched soils. Additionally, the remains of burnt cereal processing waste have accumulated within this deposit.

Trench 5

C.2.8 Samples were taken from two of the several ditches that were exposed within trench 5. Sample 1, fill 33 of large ditch 34 contains untransformed seeds of henbane and goosfoots that are also found in Sample 2, fill 39 of ditch 40. The seeds have most likely been preserved by waterlogging due to the depth of the feature and the height of the water-table. The sparseness of the remains may suggest that the water level has altered over the years resulting in differential preservation. Sample 2 also contains two charred grains of both barley and spelt.

Sample No.	Ctxt No.		Featur e Type	Tr	Volume proces sed (L)	Flot Vol (ml)	Cerea Is	Cha ff	Legu mes	Untran sforme d Seeds	Small Bone s	Charco al <2mm	Flot comments
3	50	49	Ditch	1	16	5	0	0	0	#	0	++	Occasional untransformed seeds. Some animal bones and pottery

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6	78	-	Ditch	2	15	1	#f	#	0	##	0	0	Occasional untransformed seeds, occasional charred spelt chaff. Large quantities of animal bones
5	8	9	Pit/well	4	19	100	0	##	0	###	#	0	Abundant assemblage of waterlogged plant remains with several spelt glume bases and rachis fragments. A few animal bones and pottery
4	24	26	Ditch	4	16	60	##	#	#	0	0	0	Charred barley ad wheat grains, degraded glume base, single legume. Some animal bone and pottery
2	39	40	Ditch	5	15	5	#	0	0	#	0	0	Occasional untransformed seeds, charred barley and wheat grains. Some animal bone and a few pottery sherds
1	33	34	Ditch	5	13	1	0	0	0	#	0	+	Occasional untransformed seeds. A few animal bone fragments

Table 14: Environmental samples

Discussion

C.2.9 The environmental samples taken during the evaluation of the Land off Rampton Road, Cottenham indicate that there is excellent potential for the recovery of plant remains preserved by both carbonisation and waterlogging. Waterlogged plant remains are of particular value for providing information on the surrounding environment of a site whereas carbonised plant remains relate more to agriculture and domestic, culinary activities. The remains are dated to the Roman period and the finding of spelt wheat in several of the samples is corroborative, as it was the favoured cereal of this period.

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APPENDIX D. BIBLIOGRAPHY

Amorosi, T., 1989 A Postcranial Guide to Domestic Neo-Natal and Juvenile Mammals, The identification and Aging of Old World Species. BAR International Series 533

Atkins, R., 2010 Roman, Anglo-Saxon and medieval settlement at Stow Longa and Tilbrook *Proc Cambridge Antiq. Soc.* 99, 75-88

Boessneck, J., 1969 'Osteological Differences between Sheep (Ovis aries Linne) and Goat' (Capra hircus Linne) in Brothwell, D.R., and Higgs, E.S., (eds), *Science in Archaeology* (2nd ed.), 331-58

British Geological Survey (BGS)., 1974 England and Wales 1:50 000 series Cambridge Sheet 188 Solid and Drift Edition Institute of Geological Sciences

Brudenell, M., 2015 Land off Rampton Road, Cottenham, Cambridge Written Scheme of Investigation for archaeological evaluation OA East report (unpublished)

Brudenell, M., Forthcoming a 'The Later Prehistoric Pottery', in Hinman, M., Cambridge Park & Ride. East Anglian Archaeology Report

Brudenell, M., Forthcoming b 'Late Prehistoric Pottery', in Patten, R., Excavation at Trumpington Meadows, Cambridge. Cambridge: Cambridge Archaeological Unit Monograph

Bull, G. and Payne, S., 1982 'Tooth eruption and epiphysial fusion in pigs and wild boar'. In Wilson, B., Grigson, C., and Payne, S., (eds), Ageing and Sexing Animal Bones from Archaeological Sites. Oxford, British Archaeological Reports British Series 109, 55-71

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

Connor, A., 2008 Community excavations at Spring Close, Boxworth, TL 350 645, Cambridgeshire *Proc Cambridge Antiq. Soc.* 97, 111-119

Fehér, G.,1976 Háziállatok funkcionális anatómiája (Budapest), 25-108

Gailey, S., 2015 Land off Rampton Road, Cottenham Archaeological desk-based assessment CgMs report (unpublished)

Grant, A., 1982 'The use of tooth wear as a guide to the age of domestic ungulates' in Wilson, B., Grigson, C., And Payne, S., (eds), *Ageing and Sexing Animal Bones from Archaeological Sites*, Brit. Ser. Brit. Archeol. Rep. 109, 91-108

Grigson, C., and Clutton-Brock, J., 1984 'Husbandry in Europe' in *Animals and Archaeology*. Btit. Arahaeol. Rep. International Ser. 227

Heawood, R., 1997 *Medieval, post-medieval, and undated features south of Denmark Road, Cottenham: an archaeological evaluation* Cambridgeshire County Council report 140 (unpublished)

Hill, J.D., and Horne, L. 2003 Iron Age and Early Roman pottery. In C. Evans, Power and Island Communities: Excavations at the Wardy Hill Ringwork, Coveney, Ely E. Anglian Archaeol. Rep. 103, 145-84 (CAU: Cambridge)

Hillson, S.,1992 *Mammal Bones and Teeth. An introductory guide to Methods of Identification*. Institute of Archaeology (University College, London)

Hillson, S., 2005, Teeth. Cambridge manuals in archaeology (Cambridge) Second edition



Jacomet, S., 2006 *Identification of cereal remains from archaeological sites* IPNA, Universität Basel (IPAS: Basel University) Second edition

Jones, R. and Page, M., 2006. *Medieval villages in an English landscape: beginnings and ends (Macclesfield: Windgather Press)*

Lees, M., 2015 Land at Oakington Road, Cottenham, Cambridgeshire Pre-Construct Archaeology report 12117 (unpublished)

Lewis, C.P., 1989 'Cottenham', in Wright, A.P.M. and Lewis C.P. (eds.), *The Victoria History of the Counties of England A history of the county of Cambridge and Isle of Ely* vol IX (Oxford University Press), 48-70

Medlycott, M. (ed.), 2011 Research and archaeology revisited: a revised framework for the East of England E Anglian Archaeol. occ. pap. 24 (ALGAO East of England)

Moan, P., 2015 Land off Rampton Road, Cottenham, Cambridgeshire Archaeological Monitoring and Recording OA East report 1839 (unpublished)

Mortimer, R., 2000 village development and ceramic sequence: the Middle to Late Saxon village at Lordship Lane, Cottenham *Proc. Cambridge Antiq. Soc.* 89, 5-33

NABONE., 2008 Recording System Codes, North Atlantic Biocultural Organization Zooarchaeology Working Group Nineth Edition

Nobis, G., 1954 'Zue Kenntnis der ur- und frühgeschichtlichen Rinder Nord- or Mitteldeutschlands', in Zeitshrift für Tierzüchtung un Züchtungsbiologie 63, 155-194

O'Connor, T., 2000 *The Archaeology of Animal Bones* (Texas: A&M University Press), 68-79, 80-97 and 111-112

PCRG., 2009 The Study of Later Prehistoric Pottery: General Policies and Guidelines for Analysis and Publication (Oxford: Prehistoric Ceramics Research Group occ. Pap. 1 and 2) Third edition

Percival, S., 2007 'Iron Age Pottery', in Evans, C., Knight, M. and Webley, L., Iron Age settlement and Romanisation on the Isle of Ely: the Hurst Lane Reservoir site *Proc. Cambridge Antiq. Soc.* 96, 52-56

Perrin, R., 2011 Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery

Prummel, W., 1987a Atlas for identification of foetal skeletal elements of Cattle, Horse, Sheep and Pig, Part 1. *Archaeozoologia Vol. I.1* (Biologisch-Archaeologisch-Instituut, Groningen, Netherlands), 23-30

Prummel, W., 1987b Atlas for identification of foetal skeletal elements of Cattle, Horse, Sheep and Pig, Part 2. *Archaeozoologia Vol. I.2* (Biologisch-Archaeologisch-Instituut, Groningen, Netherlands), 11-42

Prummel, W., 1988 Atlas for identification of foetal skeletal elements of Cattle, Horse, Sheep and Pig, Part 3. *Archaeozoologia Vol. II.1.2* (Biologisch-Archaeologisch-Instituut, Groningen, Netherlands), 13-26

Prummel, W., 1989, Appendix to Atlas for identification of foetal skeletal elements of Cattle, Horse, Sheep and Pig. *Archaeozoologia Vol. III.1.2* (Biologisch-Archaeologisch-Instituut, Groningen, Netherlands), 71-78

Reaney, P. H., 1943 The placenames of Cambridgeshire and the Isle of Ely Cambridge University Press



Schmid, E.,1972 Atlas of animal bones for prehistorians, Archaeologist and Quaternary Geologists (Amsterdam-London New York: Elsevier publishing company)

Sisson, S. and Grossman, J. D., 1953 *The Anatomy of the domestic animals* (Philadelphia and London) Fourth edition, revised

Silver, I., 1969 'The ageing of domestic mammals', in Brothwell, D., and Higgs, E., (eds.), Science in Archaeology, a Survey of Progress and Research (London), 282–303 Revised Edition

Stace, C., 1997 New Flora of the British Isles. Second edition (Cambridge University Press)

Stewart, G., 2015 Land off Rampton Road, Cottenham, Cambridge Brief for archaeological evaluation Cambridgeshire Historic Environment Team report dated 15 October 2015 (unpublished)

Tanner, J., 2015 Land off Rampton Road, Cottenham, Cambridgeshire GSB Prospection report G15120 (unpublished)

Thompson, I.M. 1982. Grog-tempered 'Belgic' Pottery of South-eastern England. Oxford: British Archaeology Reports, British Series 108

Von Den Driesch, A., 1976 A guide to the measurements of animal bones from archaeological sites Peabody Museum Bulletin 1 (Cambridge Mass, Harvard University)

Webley, L. and Anderson, K., 2008 'Late Iron Age and Roman Pottery', in Evans, C., with Mackay, D. and Webley, L., *Borderlands. The Archaeology of the Addenbrooke's Environs, South Cambridge* (Cambridge: Cambridge Archaeological Unit), 63-75.

Zohary, D. and Hopf, M., 2000 Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley. 3rd edition (Oxford University Press)



APPENDIX E. OASIS REPORT FORM

Project De	etails										
OASIS Num	ber c	0xfordar3-22985	6								
Project Nam	ne L	and off Ramptor	n Road, Cottenl	nam							
Project Date	es (fieldw	ork) Start	26-10-2015			Finish	04-	11-201	5		
Previous Wo	ork (by C	A East)	Yes			Future	Wor	k Unl	known		
Project Refe	erence C	odes	<u> </u>								
Site Code	ECB 458	8		Plannir	ng App.	No.		S/181	8/15/OL		
HER No.	ECB 458	8	Related HER/OASIS No					No			
Type of Proi	iect/Tech	nniques Use	d								
Prompt		·	n Local Plannin	g Authority	/ - PPS 5						
Developmen	t Type	Housing Esta	te								
Please sele	ect all t	echniques	used:								
Aerial Photo	ography - ir	mpling				Remo	te Operated Vehicle Survey				
Aerial Photo	ography - n	ew	Gravity-0	Core				Sample Trenches			
Annotated S	Sketch		Laser So	anning				Survey/Recording Of Fabric/Structure			
× Augering			☐ Measure	d Survey			×	Targe	ted Trenches		
☐ Dendrochro	nological S	Survey	× Metal De	etectors				Test F	Pits		
☐ Documentar	ry Search		Phospha	ite Survey				Topog	graphic Survey		
Environmen	ıtal Sampliı	ng	☐ Photogra	☐ Photogrammetric Survey ☐ Vibro-core							
Fieldwalking	9		☐ Photogra	aphic Surv	ey			☐ Visual Inspection (Initial Site Visit)			
Geophysica	l Survey		Rectified	l Photogra	phy						
Monument	Types/S	ignificant Fi	nds & Their	Period	s						
List feature type	es using th	e NMR Mon	ument Type	e Thesa	I Urus an	nd significar	nt find	ls usin	g the MDA Object type		
Thesaurus	together w	ith their respect	ve periods. If n	o features	finds wer	e found, pl	ease	state "	none".		
Monument		Period			Object			ı	Period		
Settlement		Iron Ag	e -800 to 43		Potter	y,animal b	one		Iron Age -800 to 43		
Settlement		Roman	43 to 410		Coins,	pottery, a	anim		Roman 43 to 410		
Settlement		Early M	edieval 410 to	1066	Potter	y, animal	bone	;	Early Medieval 410 to 1066		
Project Lo	ocation										
County	Cambrid		Site Ad	dress (in	clud	ing po	ostcode if possible)				
District South Cambridgeshire					Land off Rampton Road,						
Parish Cottenham					Cottenham Cambridgehire						
HER	Cambrid	geshire									
Study Area	14.16ha			Nationa	al Grid Re	efere	ence	TI 4407 6729			



Project Originators

Project Archives	
Supervisor	Rob Atkins, OA East
Project Manager	Matt Brudenell, OA East
Project Design Originator	Matt Brudenell, OA East
Project Brief Originator	Gemma Stewart, Cambridgeshire County Council
Organisation	OA EAST

Project Archives

Physical Archive	Digital Archive	Paper Archive
ECB4588	ECB4588	ECB4588
CCC Stores	OA East	CCC Stores

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	×	X	X
Ceramics	×	X	×
Environmental	×	X	×
Glass			
Human Bones			
Industrial			
Leather			
Metal	×	×	×
Stratigraphic			
Survey			
Textiles			
Wood			
Worked Bone	×	×	×
Worked Stone/Lithic	×	×	×
None			
Other			

Digital Media	Paper Media
■ Database	Aerial Photos
GIS	Context Sheet
Geophysics	▼ Correspondence
▼ Images	Diary
▼ Illustrations	▼ Drawing
☐ Moving Image	Manuscript
Spreadsheets	▼ Map
■ Survey	Matrices
▼ Text	Microfilm
☐ Virtual Reality	☐ Misc.
	▼ Research/Notes
	➤ Photos
	▼ Plans
	▼ Report
	▼ Sections
	▼ Survey

Notes:

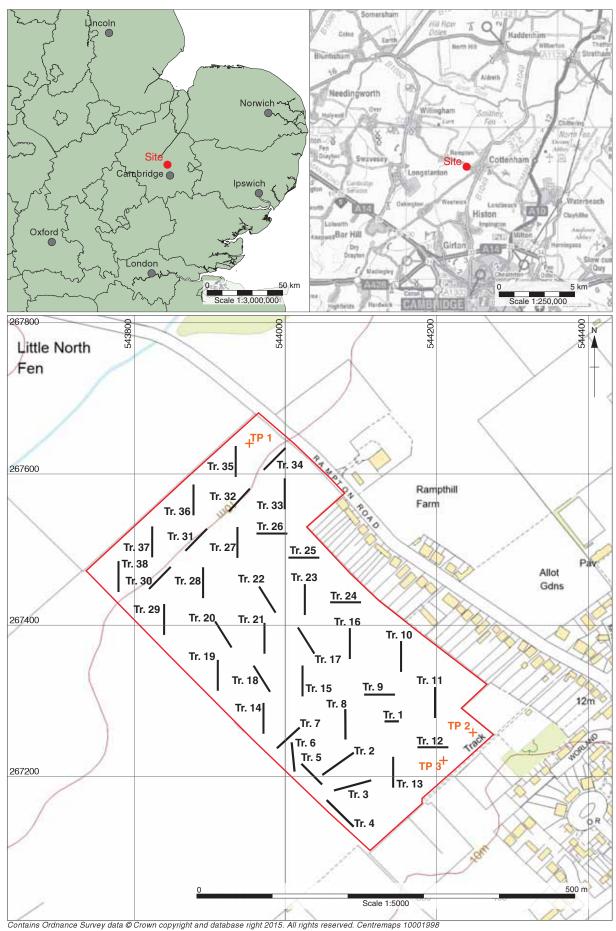


Figure 1: Site location showing trenches (black) and test pits (orange) in development area (red)



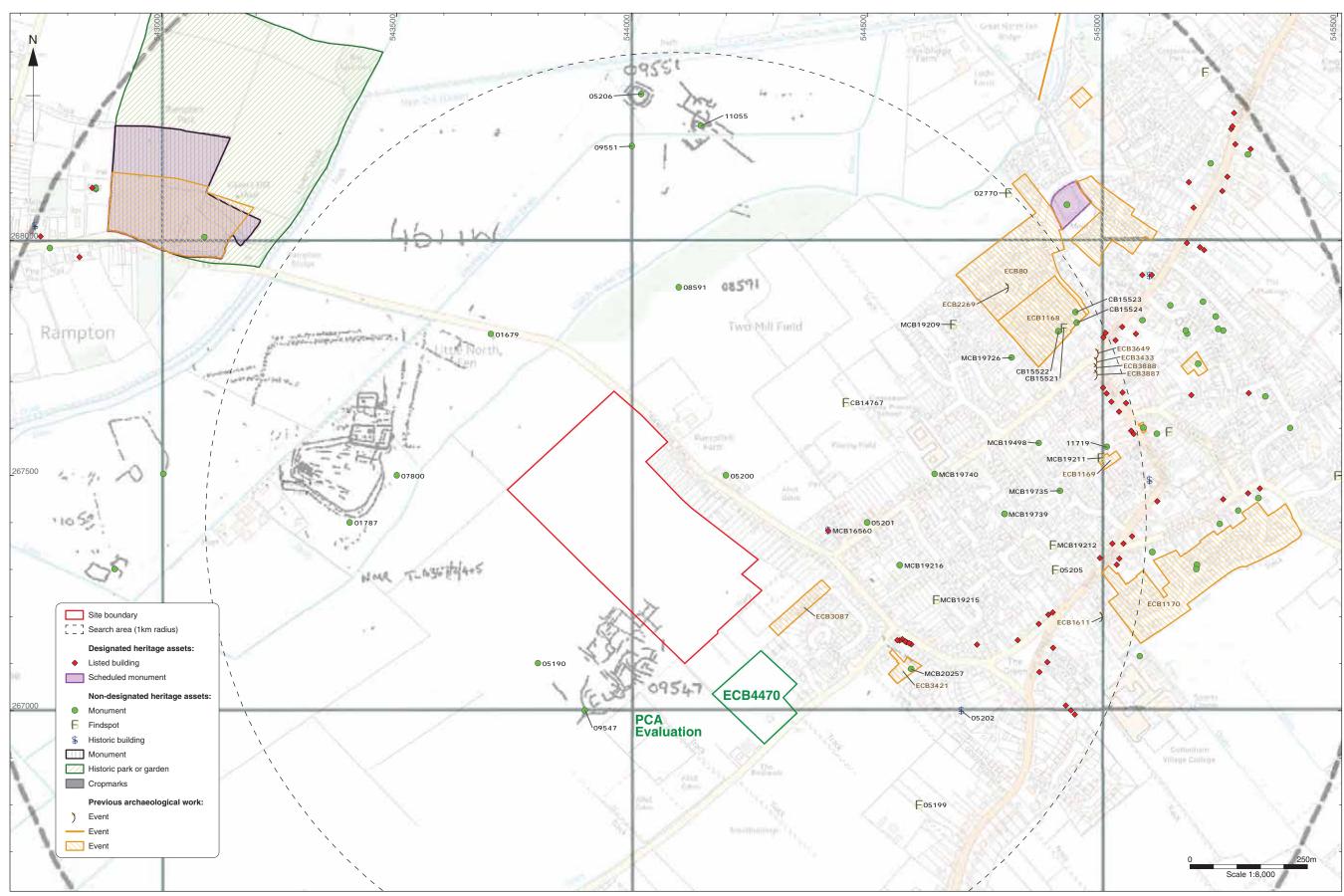


Figure 2: HER location plan taken from DBA (Gailey 2015)



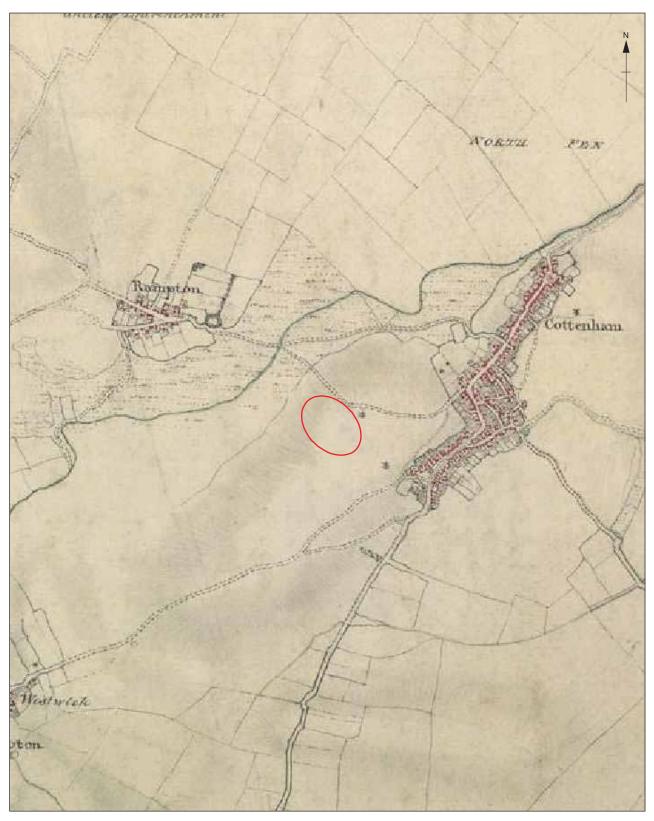


Figure 3: 1811 Ordnance Survey map

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Figure 4: Trench and Test Pit layout overlaying geophysical survey



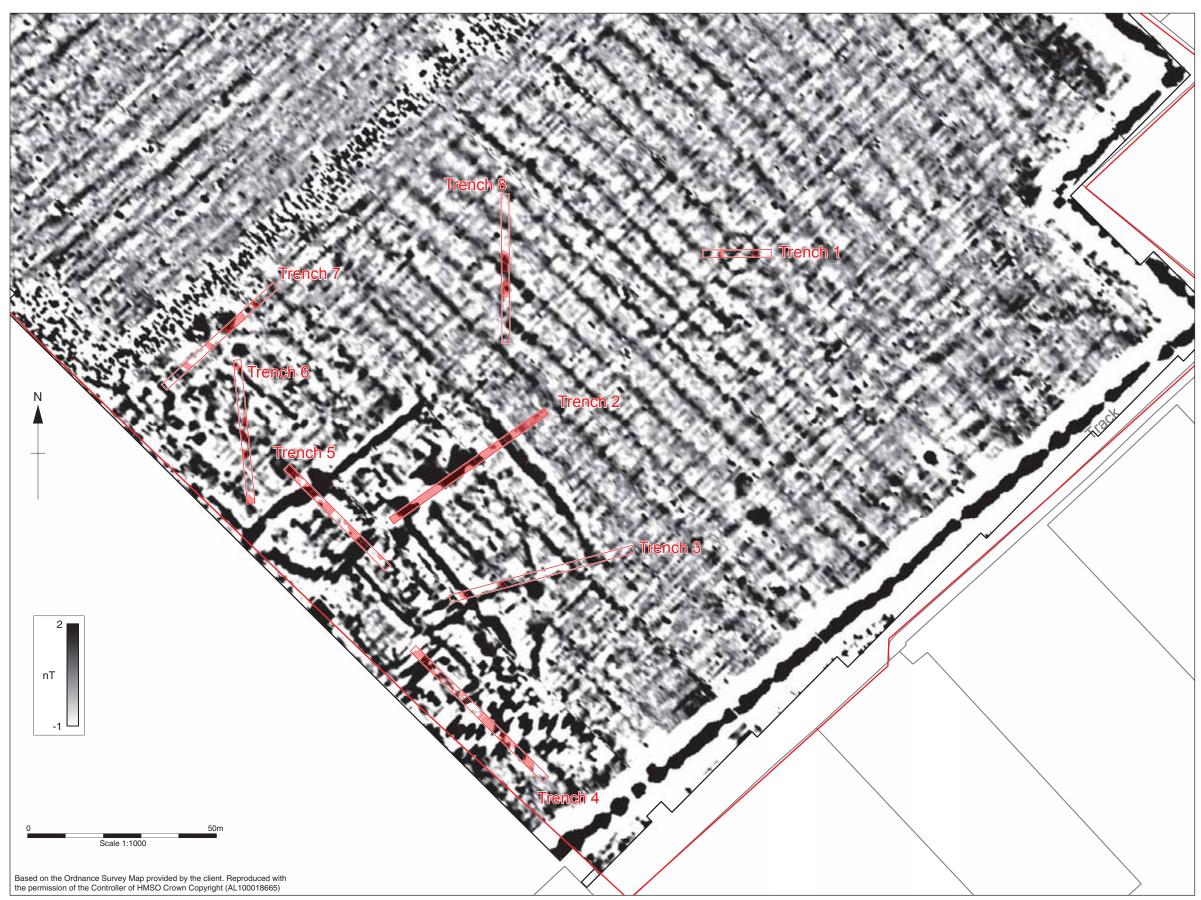


Figure 5: Trenches with archaeological remains overlying results of geophysical survey



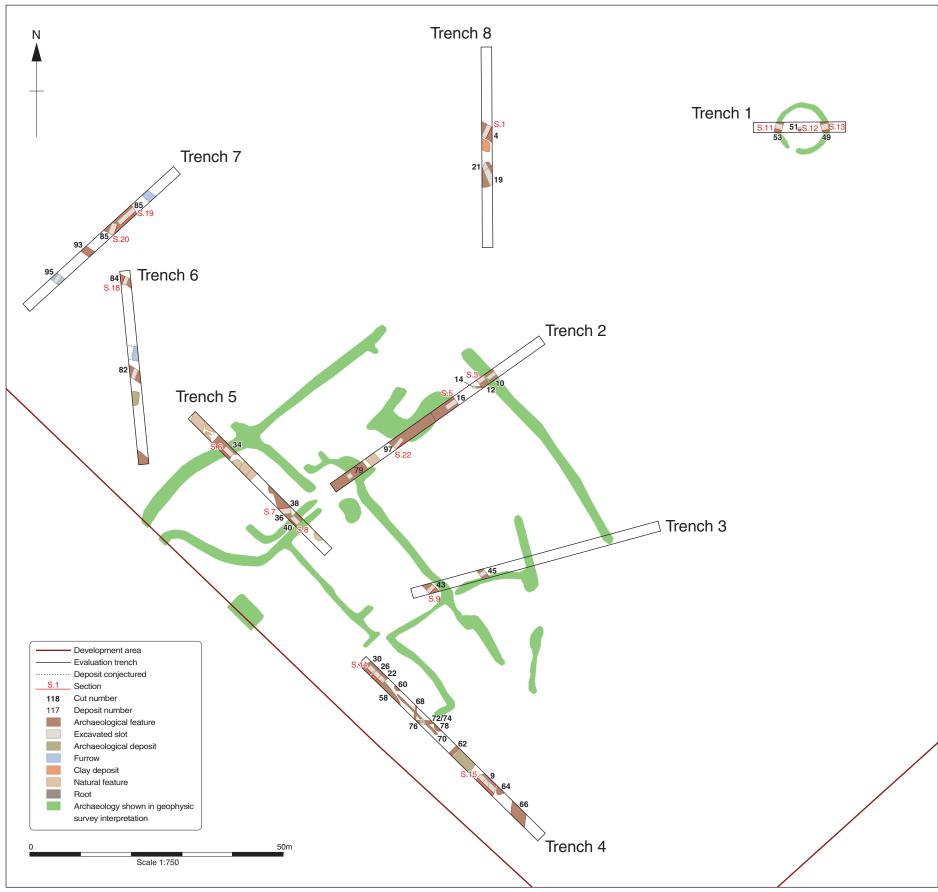


Figure 6: All features plan overlying the geophysical survey interpretation (Tanner 2015)



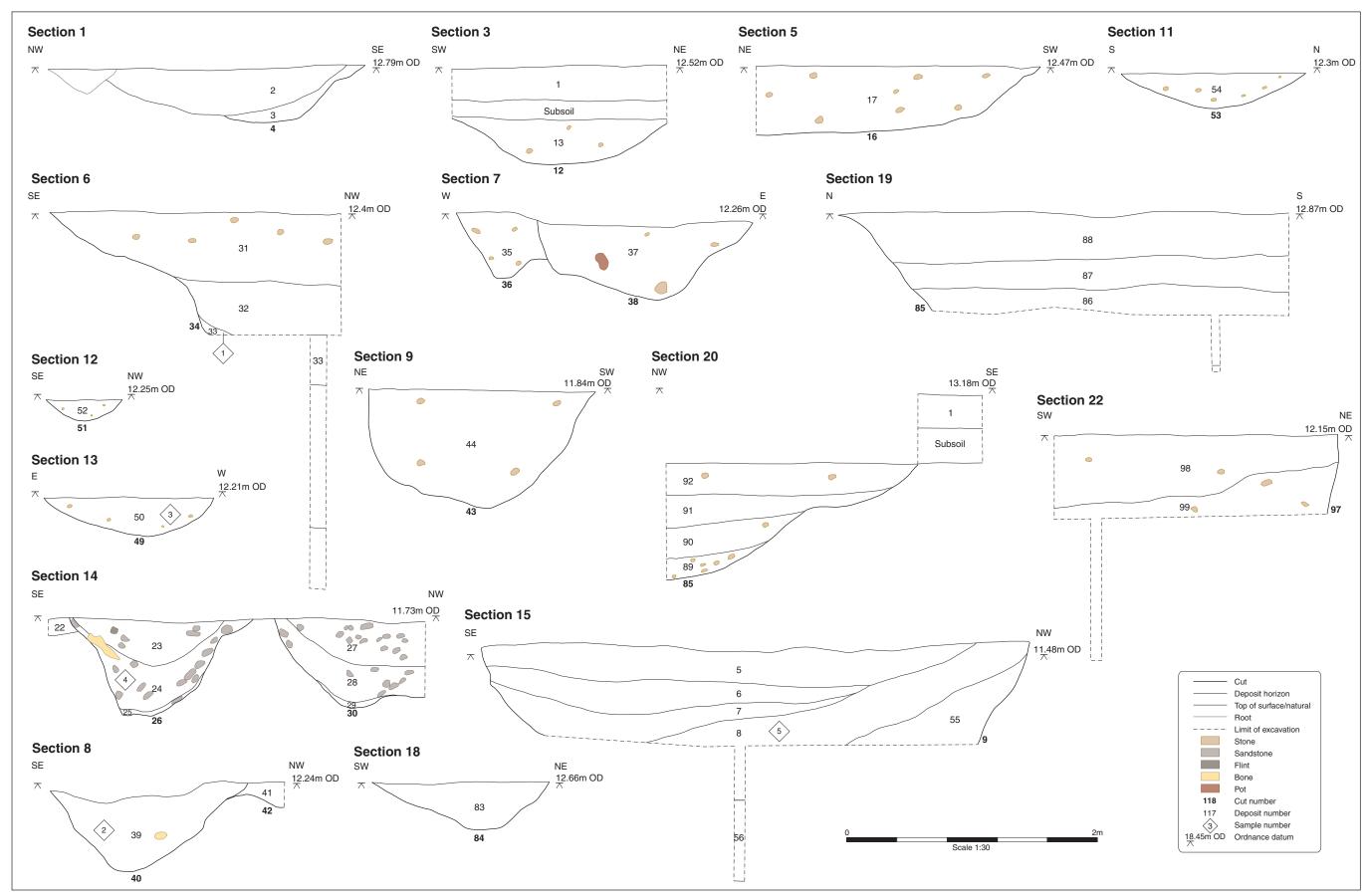


Figure 7: Selected sections





Plate 1: Trench 1 ring-ditch 53 and 49 looking south-east



Plate 2: Trench 2 looking north-east with ditch 43 in foreground





Plate 3: Trench 3 looking north-east



Plate 4: Trench 4 looking south-east with ditches 26 and 30 in foreground





Plate 5: Trench 4 ditches 26 and 30 looking south-west



Plate 6: Trench 3 ditch 43 looking south-east





Plate 7: Trench 7 pit 85 looking north-east

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