A Roman Cemetery at Sampford Road Thaxted Essex

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A Roman cemetery at Sampford Road, Thaxted, Essex

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An excavation in 2007 at Bellrope Meadow, Sampford Road, Thaxted revealed late Iron Age or early Roman enclosure ditches, and a cemetery comprising six cremation and five inhumation graves dating from the 1st to 3rd centuries AD. In addition, a ditch containing late-medieval to post-medieval building materials was discovered, suggesting that a building of this date existed in the vicinity of the site or a little way beyond.

INTRODUCTION

In May and June 2007 Oxford Archaeology carried out excavations at Bellrope Meadow, Sampford Road, Thaxted, for CgMs Consulting on behalf of Charles Church North London. The site lay in the northern part of Thaxted (NGR TL 6115 3170) and was bounded by Sampford Road to the north, playing fields to the west, private housing to the south, and agricultural land to the east (Fig. 1). It was subject to an archaeological evaluation by Archaeological Solutions in October 2006 (AS 2006), which revealed evidence for an Iron Age/Roman-period settlement.

Geology and topography

The site was *c* 1.5 ha in size and formerly a meadow; it lay at a height of *c* 100 m above Ordnance Datum. The solid geology of the site was Upper Chalk overlain by London Clay and Woolwich and Reading Beds, which was in turn overlain by till (BGS Sheet 222, 1:50,000).

Archaeological background

Prehistoric and Roman settlement evidence at Thaxted has been of a somewhat amorphous nature, and little in the way of buildings or cut features have been found. Surface finds, including pottery, building tile, and personal items, including a gold ear-ring, have been recovered around Thaxted (VCH 1963, 187; Ecclestone and Medlycott 1993, 201), but the nature of this material has been uncertain. That said, there are hints of a concentration of Roman-period material north of Thaxted, and the possibility that a villa is represented cannot be discounted (Rodwell 1978, 31). Thaxted is recorded in the Domesday Book as a well-established and prosperous community. An Anglo-Saxon church is thought to lie beneath the existing late medieval church. The town expanded rapidly in the 14th century, due to its thriving cutlery industry. Associated bone-working debris has been recovered from sites on Town Street and Weaverhead Lane (Medlycott 1999). French tokens have been found and indicate that the town had cross-channel trading links.

Excavation methodology

The work comprised the excavation of a *c* 0.4 ha area (Fig. 1). Following the discovery of an area of inhumation graves the excavation area was extended to the west in order to determine their full extent. Topsoil stripping was carried out by a 360° mechanical excavator under close archaeological supervision, and fitted with a toothless ditching bucket. Excavation proceeded by machine to the top of the natural geology, or the first archaeologically significant horizon. The archaeological features were cleaned by hand and the features sampled to determine their extent and nature, and to retrieve finds and environmental samples. All archaeological features were planned and, where excavated, their sections drawn at scales of 1:20. All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (Wilkinson 1992).

STRATIGRAPHIC DESCRIPTION

The late Iron Age or early Roman enclosure ditches (Fig. 2)

The excavations revealed two groups of ditches, which probably defined the south-western and north-western edges of an enclosure, most of which lay beyond the limits of excavation to the north-east. The internal area of the enclosure exposed during the excavations measured approximately 50 m from south-west to north-east by approximately 48 m from north-west to south-east. Its edges were defined by a number of ditches, which sometimes intercut and may therefore be seen as successive redefinitions of the same enclosure boundary. In addition, there were four pits, two of which (270 and 273) were situated between two of the ditches defining the south-western boundary of the enclosure, while the remaining two (162 and 236) were within the enclosure, 162 lying near the north-western boundary and close to the northern limit of excavation, and 236 being in the north-eastern corner of the site. It is not clear whether the two groups of ditches met to the south-west, or whether there was a gap between them in order to allow access into the enclosure. The southern terminus of ditch 259 was unclear in plan, and it is possible that the ditch may have continued to the south-west to join up with ditch 151. In addition, the presence of burials (see below) in the south-western corner of the enclosure makes the presence of an entrance less likely. The enclosure ditches and pits are described in greater detail below.

Ditches aligned north-east/south-west

There were five ditches in the north-west corner of the site, which all continued beyond the northern limit of excavation. Ditch 259, the westernmost of these, was aligned NE-SW and measured approximately 20 m in length. It had a flat base and moderate to steep sides and measured between 1 m and 1.3 m in width and 0.5 m in depth. The earliest two fills lined the sites of the cut, suggesting that they were the result of natural silting. Cremated animal bone was recovered from one of the middle fills which was also very rich in charcoal. Above this fill was a layer of stone, which appeared to be deliberately deposited or dumped, and was in turn overlain by the upper fill. The southern extent of the ditch was not clear, and it may have extended beyond the western limit of excavation. The fills of the ditch produced 38 sherds of late Iron Age or early Roman pottery and a single sherd of residual late Bronze age to early Iron Age material.

Ditch 268, situated approximately 3 m to the east of ditch 259, was aligned NE-SW and measured approximately 16 m in length, 1.1 m in width and 0.6 m in depth. Fourteen sherds of late Iron Age or early Roman pottery were recovered from the ditch fills. This ditch was cut by a short length of undated ditch 309.

Ditch 264 was approximately 2 m to the east of ditch 268 and measured approximately 5 m in length by 1.5 m in width and 0.45 m in depth. It was curvilinear in plan, curving from the northern limit of excavation to the west, where it was cut by undated ditch 207. The small quantity of pottery from its fills was late Iron Age or early Roman in date.

Ditches aligned north-west/south-east

Three ditches belonging to this phase were aligned NW-SE. Ditch 151 was approximately 48 m in length, and was quite irregular in width. At its widest, it measured 2.1 m, and at its narrowest 1.1 m and was 0.9 m in depth. The ditch fills produced a single gram of cremated human bone.

Ditch 170 was approximately 26 m in length by 1.24 m in width and 0.4 m in depth. It contained a single fill. Pottery recovered from throughout the ditch fills dated to the late Iron Age or early Roman period. The fill also contained fragments of smithing hearth bottom (225 g) and furnace fabric (5 g).

Ditch 233 was approximately 44 m in length and had a slightly concave base and steep

sides. It varied in width from 0.8 m to 1.9 m and in depth from 0.14 m to 0.48 m. This irregularity was due to differing levels of truncation. Throughout most of the ditch there was a fairly homogeneous fill, but one intervention (262) also contained a cremation deposit in the top of the fill. Fragments of smithing hearth bottom (1.07 kg) were also recovered from this fill along with fired clay in the form of hearth floor and a triangular oven brick. Pottery recovered from the ditch fills dated to the mid 1st century AD.

North-east/south-west aligned ditches cutting ditches 170 and 233

Ditches 144 and 212, orientated north-east/south-west, cut ditches 170 and 233 and possibly represented internal subdivisions of the enclosure, or a later phase of activity after the enclosure had gone out of use. Ditch 144 was 14 m in length and contained 28 sherds of pottery dated to the late Iron Age or mid 1st century AD. The ditch was fairly uneven in width, measuring 0.85 m in the north and 0.48 m further south. The depth was also inconsistent, being 0.24 m in the north and 0.07 m in the south. This may be due to truncation.

Ditch 212 was approximately 9 m in length by 1 m in width and 1 m in depth; its fill did not produce any pottery, or other diagnostic finds.

Pits

Pit 162 was situated in the north-western area of the site. It was oval in plan and measured 0.8 m in length, 0.75 m in width and 0.2 mm in depth. Its fill produced two sherds of pottery dated AD 43-120.

Pit 273 was sub-circular shaped in plan with steep sides and a concave base. It measured 1.05 m in length, 0.82 m in width and 0.28 m in depth. Twelve sherds of pottery (138 g) were recovered from the single fill and dated to AD 43-60.

Pit 236 was situated in the north-eastern part of the site and was circular in plan, with near vertical sides and a flat base. It measured 0.5 m in diameter and 0.22 m in depth. The fill produced 12 g of burnt animal bone and three sherds of pottery dating to the late Iron Age or early Roman period. Environmental sampling of the fill produced charcoal of mixed species and some charred grain (wheat and rye), but this was not well preserved. It is possible that the fill of the pit represented a deposit of pyre debris.

Pit 270 was sub-oval in plan with fairly steep sides and a concave base. It measured 1.04 m in length, 0.62 m in width and 0.25 m in depth. One sherd of pottery was recovered from the single fill, dated AD 43-120.

The cemetery (Figs. 2-5)

Lying within the south-western corner of the enclosure was a group of 11 burials. The cemetery comprised six cremation graves and five inhumation graves, one of which (cremation 281) cut ditch 259. In addition, small amounts of cremated bone, possibly representing pyre debris or incidental redeposition were recovered from the fills of ditches 151 and 233. Two graves belonged to the late Iron Age or mid 1st century AD, though most appear to date after AD 70, with at least two graves dating to the 2nd century and one belonging to the 3rd or later. The fact that the graves lay partly within the enclosure, combined with the stratigraphic relationship of at least one of them with the enclosure ditch, as well as the slightly later emphasis of the ceramic dating, suggests that they may have been later than the enclosure, rather than contemporary with it. However, it is also possible that the inception of the cemetery was contemporary, or even earlier, with the laying out of the enclosure and that burials continued to be added to it after the enclosure itself had gone out of use.

Grave catalogue

Unurned cremation grave 150 (not illustrated)
Grave 150 was a sub-circular pit (147) measuring 0.68 m in diameter and 0.18 m in depth. Cremated bone (149) was deposited on the grave floor and overlain by a mid greyish brown silty clay backfill.
Cremated bone:
Undisturbed. Total weight 728 g. ?Adult male.
Pyre debris:
Quercus sp. oak; *Acer/Betula* type maple; *Arrhenatherum elatius*, onion couch grass.
?Grave furniture:
Fe nails (x2), fe plate fragment, unidentified fe fragments, possibly from a box.
Grave goods:
Fe hobnails, minimum of 43.
Date: Roman

Inhumation grave 185 (Fig. 3)
Inhumation grave 185 comprised a sub-rectangular grave cut (182) orientated N-S, with gently sloping sides and a flat base, and measuring 1.94 m in length, 0.8 m in width and 0.16 m in depth. It contained a skeleton (183) of which only 25-50% survived due to truncation. The grave was backfilled with a mid greyish brown silty clay deposit.
Human remains:
Undisturbed; placed in an extended, supine position with the right arm extended and the left hand over the pelvis. Adult, male, 25-35 years.
Grave furniture:
Fe strip (SF 4).
Date: Roman

Inhumation grave 202 (not illustrated)
The skeleton (200) was contained within an irregular grave cut (253), orientated N-S, with irregular sides and an undulating base and measuring 3 m in length by 1 m in width and 0.8 m in depth. The skeleton was covered by a dark grey clay silt backfill (201) that yielded twelve sherds of black-surfaced ware pottery, apparently not deposited as a grave-good.
Human remains:
Undisturbed. Two skull fragments. Adult, age and sex indeterminate.
Grave furniture:
Fe nail.
Date: Roman

?Urned cremation grave 242 (Fig. 3)
The grave had been heavily truncated and therefore only a small part of the cremation deposit (240) remained; no cut could be discerned. The fragmented remains of a ceramic vessel and only a small amount of cremated human bone and charcoal were recovered. The grave fill was a mid grey brown silty clay deposit.
Cremated bone:
Heavily disturbed by truncation, total weight 3 g. Age and sex indeterminate.
Pyre debris:
Very small comminuted charcoal.
Grave goods:
Pot 241. ?Urn. Unidentified ceramic vessel in black-surfaced ware, possibly a jar. Not illustrated.
Date: Roman

Unurned cremation grave 251 (Fig. 3)
Cremation grave 251 was a sub-circular pit with moderate to steep sides and a slightly sloping base, measuring 1.43 m in diameter by 0.45 m in depth. The small quantity of cremated bone casts some doubt on whether this was a deliberate cremation burial, rather than redeposited pyre debris or a token burial, a view supported by the discovery of triangular oven bricks in the backfill (319 and 320). However, the possible grave goods comprising the fragmented remains of a minimum of three ceramic vessels suggests that the feature simply represents a disturbed burial (separate vessels were identified during pottery recording). The cremated bone and grave goods were all assigned to the upper fill of the pit (320) during excavation.
Cremated bone:
Disturbed, total weight 2.5 g. ?Adult, sex indeterminate.
Pyre debris:

Quercus sp. oak; *Fraxinus excelsior* ash; *Acer/Betula* type maple, *Conopodium majus* pignut
Grave goods:
Pot 320a. Necked jar (*Cam* 266), grog-tempered ware;
Pot 320b. Jar of indeterminate form, coarse grog-tempered ware. Not illustrated;
Pot 320c. Butt-beaker (*Cam* 113), North Gaulish fine sandy white ware.
Other finds/?grave-goods:
Fragments of sheep/goat femur, unburnt.
Fragments of triangular oven brick.
Date: AD 10-70

Urned cremation grave 280 (Fig. 4)
Cremation grave 280 was circular in plan and measured 0.15 m in diameter and 0.32 m in depth. It produced the cremated remains of one adult and a large amount of charcoal. These were covered by a mid greyish brown silty clay backfill (287). The urn was one of the latest ceramic grave-goods, indicating that the grave was a relatively late addition to the cemetery. The grave also yielded a burnt pin, perhaps from clothing on the body at the time of cremation.
Cremated bone:
Within urn. Total weight 82 g. Adult, sex indeterminate.
Pyre debris:
Quercus sp. oak; *Acer/Betula* type maple; *Triticum* wheat grain.
Pyre goods:
Bone pin.
Grave goods:
Pot 289. Urn. Oval-bodied necked jar (Going G24.1), sandy grey ware. AD 100-410;
Fe hobnails, minimum of 19.
Date: AD 100-410

Urned cremation grave 281 (Fig. 4; Plate 1)
This grave had been inserted into the top of the fill of ditch 259. The cut (260) measured 0.9m in length, 0.65 m in width and 0.15 m in depth, with irregular sides and a flat base. The grave was backfilled with a dark grey silty clay deposit (282).
Cremated bone:
Within urn. Total weight 213 g. Sub-adult 6-12 years, sex indeterminate.
Pyre debris:
Fraxinus excelsior ash; *Prunus spinosa* blackthorn; *Quercus* sp. oak; *Alnus/Corylus* alder/hazel; *Corylus avellana* hazel nutshell; *Cerealia* indeterminate grain and culm.
?Grave furniture:
Fe nails (x12) possibly from a box; Fe fragments (x4).
Grave goods:
Pot 292. Urn: necked jar with cordoned shoulders (Going G17), sandy grey ware, AD 43-120;
Pot 290. Dish (Drag. 36), Central Gaulish samian ware. 'Killed' vessel, chip deliberately removed from rim, AD 120-200;
Pot 291. Flagon, buff ware;
Fe hobnails (x14).
Date: AD 120

Urned cremation grave 283 (Fig. 4)
Grave 283 comprised a sub-circular pit (243), measuring 0.47 m in diameter by 0.30 m in depth. A very small amount of charcoal was recovered from the grey brown silty clay backfill (286).
Cremated bone:
Disturbed, total weight 344 g. Adult ?male.
Grave goods:
Pot 284. Urn. Globular beaker (*Cam* 408), sandy grey ware. AD 225-410.
Date: Mid 3rd century+

Inhumation grave 305 (Fig. 5)
The grave comprised a rectangular grave cut (252) orientated N-S. It had very steep sides and an undulating base, and measured 2.3 m in length, 1.04 m in width and 0.42 m in depth. The skeleton (299) was covered in a mid greyish brown silty clay backfill that produced 18 nails, possibly from a coffin.
Human remains:
Undisturbed; placed in extended, supine position. Skull and limb bones present. Adult, ?female.
Grave furniture:
Fe nails (SFs13-31) from ?coffin.
Date: Roman

Inhumation grave 333 (Fig. 5)
The grave was defined by a sub-rectangular grave cut (250), orientated N-S, steep sides and a concave base, and measuring 1.81 m in length, 0.85 m in width and 0.4 m in depth. The skeleton (317) comprised a few long-bone shaft fragments. The grave was backfilled with a dark brownish grey silty clay deposit (318).
Human remains:
Undisturbed. Long bone fragments only. Adult, age and sex indeterminate.
Grave goods:
Pot 339. Jar, grog tempered ware.
Date: 50 BC-AD 70

Inhumation grave 335 (Fig. 5)
The grave was defined by a rectangular grave cut (247), orientated N-S, with steep sides and a concave base, and measuring 2.44 m in length, 1.16 m in width and 0.7 m in depth. The skeleton (337) was placed in an extended supine position with hands over the pelvis. A ceramic flask (336) was placed next to the head on the western side. The grave was backfilled with a light brownish yellow silty clay deposit.
Human remains:
Undisturbed. Placed in an extended, supine position with the hands placed over the pelvis; the head was to the north. Adult, male, 35-45 years. Pathology: cribra orbitalia; osteoarthritis on left hip and left sterno-clavicular joint; possible fracture on right tibia malleolus; right tibia appears to be bowed medially at proximal end of shaft; small raised dense roundel of bone on distal right tibia, possible benign neoplasm or minor trauma; possible hyperostosis frontalis interna on frontal bone; periodontal disease.
Grave furniture:
Fe nails (SFs 44-48, 50-52 and 54) from ?coffin.
Grave goods:
Pot 336. Flask (Going G40), sandy grey ware. 'Killed' vessel, perforated twice at neck. Rim also removed, though uncertain whether this was through deliberate action or post-depositional truncation.
Date: AD 70-410

Late medieval to post-medieval features (Fig. 2)

Two ditches (125 and 338) and a pit (119) of late medieval to post-medieval date were situated in the south-eastern corner of the site. Ditch 125 contained 15th-17th century floor and roof tile and brick. The ditch may have been part of an enclosure defining a building situated to the south-east of the excavation area. Ditch 338 produced no dating material, apart from a single sherd of Roman pottery, but cut ditch 125 and presumably, therefore, post-dated the demolition of the putative building. Pit 119 also cut ditch 125.

Ditch 125 was orientated NE-SW and measured 44 m in length by 1.10 m in width and 0.36 m in depth. Ditch 338 was orientated E-W, with a north-south return. It measured 35 m in length by 2 m in width and 0.58 m in depth. Pit 119 was sub-circular in plan and measured 2.2 m in diameter by 0.56 m in depth.

THE FINDS

The flint

H. Lamdin-Whymark

A total of 11 worked flints and 663 fragments (1.806 kg) of burnt unworked flint was recovered from the excavations. The flint was in relatively fresh condition with little evidence for post-depositional edge-damage. Most of the flakes were free from surface cortication, but two flakes exhibited a light bluish-white corticated surface and the denticulate scraper bore a mottled bluish-white and white surface with some light orange iron-staining. The burnt unworked flint was generally lightly crazed and red in colour, indicating it was burned at a relatively low temperature.

The flint assemblage, all residual in later deposits, comprised seven flakes, two blades, a denticulated side scraper and a scraper manufactured on a thermally fractured flake (Table 1). A single flake exhibited platform-edge abrasion and irregular form of the flakes suggest a relatively uncontrolled reduction strategy. The two blades are both relatively irregular and appear to have been accidental by-products of a flake-based industry. It is difficult to accurately provide dates for limited flint assemblages, but the reduction strategy is most comparable to middle and late Bronze Age industries.

[Table 1: The worked flint by category type and context.]

The late Iron Age and Roman pottery

E. Biddulph

Introduction

Some 900 sherds, weighing 9279 g, were recovered from the site. Much of this material was dated to the late Iron Age or early Roman period, though a number of 2nd-century or later vessels, mainly from the cemetery, were also present. Three sherds of residual flint-tempered ware, dating to the late Bronze Age/early Iron Age, as well as a few pieces of medieval pottery, were recorded. The assemblage was sorted, within context-groups, first into fabrics and then into 'sherd-families' – collections of sherds sharing certain characteristics, such as rims belonging to the same vessel or pieces with particular decoration, or simply a mass of undiagnostic body sherds. Each sherd-family was quantified by sherd count, weight (in grammes) and estimated vessel equivalence (eve), which records the surviving percentage of a complete rim. Eleven fabrics were recorded (Table 2). These were identified using the series devised by the Essex County Council Field Archaeology Unit (ECC FAU), ensuring compatibility with other Essex sites, and referenced where possible to the National Roman Fabric Reference Collection handbook (NRFRC; Tomber and Dore 1998). Form typology follows Going's Chelmsford series (1987, 13-54), supplemented by the *Camulodunum* typology (Hawkes and Hull 1947, updated in Bidwell and Croom 1999, 468-487) for the late Iron Age material. Normally, vessel types were identified only when a rim was present. However, vessels that belonged, or were likely to have belonged, to the cemetery were identified at least to broad vessel class (and function within the grave, such as urn), if not precise type, even in the absence of a rim. This introduced an additional means of quantification: count of ceramic grave goods.

[Table 2: Quantification and description of fabrics]

Pottery from the cemetery

[Table 3: Pottery from the cemetery]

Eleven vessels were recovered from seven graves; the distribution by fabric and type is given in Table 3. Cremated remains in four graves were urned. The jars used as cinerary vessels were standard types recorded in the region and included an early Roman cordoned necked jar (G17) and an oval-bodied jar (G24). More unusual was a globular beaker (*Cam* 408) with rouletted decoration; beakers were only occasionally employed as urns in the region, but in this case, the vessel's jar-like size made it suitable for such use. Jars may also have been deposited as ancillary vessels, though the two vessels recorded – both from cremation grave 251 – had been disturbed, so any bone that was originally present had long been separated from them. Of course, a jar from inhumation grave 333 was certainly an ancillary vessel. Taken together, ancillary jars account for 27% of the cemetery assemblage. This is much higher than the five ancillary jars, representing 10%, at the nearby and contemporaneous cemetery at Strood Hall (Timby *et al.* 2007, table 3.2), but closer to the 33% seen at the Chequers Lane cemetery in Great Dunmow (Wickenden 1988, 12-23), some 10 km south of Thaxted. Given Thaxted's small assemblage, interpretation is necessarily speculative, but the strong representation of jars at both Thaxted and Great Dunmow ally the sites to a number of late Iron Age cemetery assemblages, like that from Great Chesterford (Wallace 1990, 13-16), that are biased towards cooking- or storage vessels. These appear to represent something of a traditional, indigenous, practice (continued into the Roman period at Thaxted and Great Dunmow), which stands in contrast to the functionally-varied Gallo-Roman traditions – being particularly strong on drinking- and dining-related forms – seen in high-status graves like those at Stanway, Colchester (Crummy 1993; 1998), and adopted at lower-order settlements like Strood Hall (Biddulph 2005, 40-42; Timby et al. 2007, 135).

That said, tablewares were also present at Thaxted. A Central Gaulish samian ware dish or bowl (Drag. 36) was recovered from grave 281. This was unworn and in good condition, except for a small chip on the rim removed in antiquity. The rim may have been knocked accidentally, though damaged rims occur with such frequency in cemetery assemblages in south-eastern Britain that the phenomenon can only have been deliberate. Three dishes or platters from Great Dunmow's Chequers Lane cemetery were mutilated in this way (Going 1988a, fig. 20), as were dishes at Strood Hall (Biddulph 2007, CD Rom chapter 3). The identification of open forms in these cases offers a clear association between the form and treatment, suggesting that the selection and action were quite deliberate. Other forms could be mutilated in different ways; a flask from grave 335 was perforated after firing through the neck by two small holes positioned opposite each other. A third hole further down the vessel appears to have been attempted, but not carried through. This recalls pierced liquid containers, like flasks and flagons, at Great Dunmow (Going 1988a, fig. 20), and again points to a strong relationship between form and treatment. One other flagon was recovered from Thaxted's cemetery: a buff ware vessel from grave 281. A rim fragment of a North Gaulish white ware butt-beaker was found in grave 251, but it is uncertain whether the rim was deliberately placed as a grave good, either as a token rim or a subsequently-disturbed complete vessel; a North Gaulish white ware beaker base from ditch fill 233 may have been part of the same vessel.

Considered together, the pottery suggests that the first burials (250 and 251) were made during the 1st century AD, probably one or two decades either side of the Roman conquest. The pottery from the other burials is less clearly dated, but the Drag. 36 dish from grave 260 belongs to the 2nd century, while the globular beaker from grave 283 indicates that burial continued well into the 3rd century. Interestingly, the cinerary vessel used in grave 281 was a type out of production by the time it was deposited; the G17-type jar did not date later than AD 120, but the samian dish arrived between AD 120 and 200, although it is possible the burial dated not long after 120.

Pottery from other features

[Table 4: Quantification by eve of pottery from non-cemetery features (fabrics marked with * were present, but as body or base sherds only)]

On balance the pottery recovered from ditches and, to a lesser extent, pits, dated to the mid 1st century AD (*c* AD 43-70; Table 4). Two fabrics dominated: grog-tempered ware, which belonged to a regional tradition commencing in the mid 1st century BC and ceasing by AD 70 (Biddulph *et al.* 2007), and black-surfaced ware, a predominantly sand-tempered reduced ware that emerged by the mid 1st century AD, though was mainly used after the conquest. The transitional nature of this fabric – it also contained grog – led C J Going (1987, 9) to term it 'Romanizing ware' at Chelmsford, though pottery of black-surfaced ware tradition continued to be produced throughout the Roman period. At Thaxted, jars and bowls were recognised in grog-tempered ware but not identified to type, although a handle of a bowl or patera-like vessel (Fig. 6), probably copying a metal prototype, was collected from gully 144. Jars only were available in black-surfaced wares. These were necked high-shouldered types (G19 and G20) characteristic of the early Roman period. A neckless bead-rimmed jar (G3) was recorded in shell-tempered ware, and this was joined by a bucket-shaped jar (*Cam* 254) recovered from the subsoil, but overall the fabric is not well-represented. Sandy grey ware – ubiquitous across the region throughout the Roman period – is also relatively scarce in the non-cemetery assemblage, though was more common in graves. The difference is likely to be chronological; sandy grey ware made only a minor contribution to mid 1st-century groups in the region – it accounted for 5% of the mid 1st century assemblage by eve at Strood Hall, compared with 43% for black-surfaced ware (Biddulph *et al.* 2007, table 4.22) – but its presence expanded rapidly subsequently. (This incidentally suggests that, apart from 250 and 251, most graves date after AD 70.) A small amount of fineware and oxidised wares was recovered. Two south Gaulish samian cups join the North Gaulish white ware beaker as continental imports: Ritterling 9 is not likely to date beyond AD 60 (Webster 1996, 71), and a Dragendorff 27 cup, is represented by a body sherd.

The ceramic building material

C. Poole

Introduction

The assemblage of ceramic building material amounted to 37 fragments weighing 3752 g. It was recovered from twelve contexts from pit, ditch and posthole fills. The material was moderately to heavily abraded and had a mean fragment weight of 101 g, reflecting the poor preservation of the group. No complete tiles were found and the only complete dimension measured was thickness.

Fabrics

Fabric A: orange with dark grey reduced core; fine clay, slightly laminated, containing a low density of fine-medium sand. This was used for post-medieval tile.

Fabric B: orange, red; clay matrix contains common to frequent coarse, rounded sand of quartz and iron oxide grains. This was used for medieval and post-medieval tile. The density of sand can be quite variable, and some examples of tile have a high density of very coarse quartz sand (rounded), rose and white in colour; this variation was possibly used exclusively in medieval tile.

Fabric B1: a coarse sandy clay containing rounded quartz and iron oxide sand and occasional coarser grits of flint, ironstone and chalk 2-15 mm. These coarser grits only occur in the Roman tile; otherwise the clay matrix is essentially the same as the medieval – post-medieval fabric B.

Fabric C: orange clay containing in moderate to high density medium - coarse rounded – sub-rounded quartz sand, predominantly white. This is similar to fabric B, but without the iron oxide grit. This was used for medieval tile.

Fabric D: orange fine silty clay containing occasional coarse iron oxide grits (or ferruginous siltstone) up to 10 mm and frequent buff rounded clay pellets 1-5 mm. This was used for Roman brick.
Fabric F: orange, red, brown silty clay, sometimes laminated containing a high density of poorly sorted sand, predominantly rounded – subrounded quartz with lesser quantities of iron oxide and rare chalk sand. This was used for medieval and post-medieval brick.

The Roman assemblage
Only two items were identified as Roman tile. One was a large brick fragment made in fabric D, measuring 38-50 mm thick by >295 mm long and was possibly part of a lydion. The second is probably part of the plain face of a box flue tile made in fabric B1. The brick was found in a context (223) of early Roman date, but the flue tile occurred residually in a medieval or later ditch fill (118). These are discussed in conjunction with the fired clay assemblage.

The medieval assemblage

Roof tile
All the roof tile was fragmentary and measured between 10 and 18 mm thick, most being 11-13 mm. A small number retained circular peg holes measuring 12 to 15 mm in diameter. The general quality and character of the roof tile suggests much of the tile is of late medieval or early post-medieval date (15th-17th century). A few pieces are probably of later post-medieval date (18th -19th century).

Brick
Two small fragments (context 116) with no complete dimensions in fabrics B and F were identified as deriving from bricks, probably of post-medieval date. One with some surface surviving had an ‘ash glaze’ to the surface.

Floor
A very abraded fragment with part of a straight cut chamfered edge measured >19 mm thick. On the surface were remains of white pipe clay overlain by yellow glaze. No pattern can be observed, but the surface finish is of the type found on medieval decorated floor tiles of 13th-15th century date.

[Table 5: Ceramic building material]

Discussion
The assemblage is dominated by late medieval to early post-medieval roof tile. The few fragments of brick and floor tile are thought to be of the same date. The assemblage was found in the south-east corner of the excavation in the area of ditch group 125. Only one small fragment of roof tile was found outside this area at the northernmost extent of the excavation in the uppermost fill of an earlier ditch. The concentration of material suggests it may form the periphery of a scatter of building debris focussed on a structure outside the excavation area to the south-east, possibly enclosed by ditch 338. The dominance of roofing material suggests the building had a tiled roof, and the presence of a possible glazed floor tile may indicate a building of some status. However, the general paucity of other building materials does not support such a conclusion and it is more likely that the floor tile was recycled from another structure outside the immediate vicinity of the site. The condition of the tile suggests it had been subject to considerable abrasion, probably incorporated in the ploughsoil before finally coming to rest in ditch or pit fills.

The fired clay
C. Poole

Introduction
The assemblage of fired clay amounted to 415 fragments weighing 1811 g. It was recovered from nine contexts from four ditches and four pits. The material was poorly preserved, reflected in the mean fragment weight of 4.4 g, and was moderately to heavily abraded. The assemblage is of late Iron Age to early Roman date and is thought to derive from small oven or hearth type structures.

Fabrics
Three fabrics were identified:
FC A was a red laminated clay with cream or grey streaks and containing fine - medium quartz sand.
FC B was a red, reddish brown, grey sandy clay containing a high density of fine-medium quartz sand plus occasional scattered coarse quartz or quartzite sand and grit 1-2 mm, maroon-red rounded iron oxide grains 1-3 mm and rare angular flint c. 6 mm and shell.
FC E was a mottled orange laminated fine sandy-silty clay with pale creamy yellow, grey, or pink streaks. Fabric A forms the basis of the matrix of this fabric, which additionally contained frequent rounded-subrounded chalk grit 0.5-5 mm and occasional flint up to 7 mm.

Forms
A high proportion of fragments had only a single flat or sometimes curving smooth surface, occasionally with evidence of a second surface forming a base or edge, but insufficient to suggest a specific function, though all would be consistent with use in some form of oven.

Hearth
Two examples of possible hearth floor came from contexts 167 (ditch 170) and 315 (ditch 233). Both were very similar in having a smooth flat surface, fired or burnt to dark grey and measuring 18 mm thick. The lower surface was flat and undulating probably reflecting the underlying surface on which it was laid.

Triangular oven bricks
Four examples of triangular oven brick were found in grave 251, pit 273 and ditch 233. The small fragments from pit 273 retained no diagnostic characteristics, but their general character was consistent with this identification. The other examples, though better preserved were all fragmented and many pieces were amorphous, deriving from the core of the objects. However, the similarity of fabric and firing was such that the fragments recovered from each context derived from a single brick in each case. No complete dimensions survived, but that from context 319 (grave 251) has its total thickness estimated at 70 mm, which is average for these objects and suggests they were of a fairly standard size.

Characteristics were similar for all examples; a high proportion of pieces have a flat surface, occasionally rough and irregular, of which a substantial number are heavily burnt to dark grey-black. Red oxidised pieces appear to be core more often than surface pieces. Some pieces have two surfaces at right angles joined by a curved angle The only fragment with the diagnostic characteristic of a perforation piercing the surface at an angle came from context 319. From the others core fragments exhibited parts of perforations. Sizes of perforations were 9 mm, 10 mm, 13 mm and 14 mm in diameter.

Furnace or industrial hearth

Several pieces of heavily fired and slightly vitrified fired clay, were found in ditch 233, associated with a possible cremation deposit or pyre debris. The surface of these fragments was mainly reduced to a vesicular cinder layer 2-4 mm thick overlying a purplish red core of fired clay.

Fragments from context 315 (ditch 233) had a similar appearance to furnace lining but were not as intensely heated and may have formed part of a furnace or hearth structure away from heat core. Mixed with the fired clay from this context were fragments of what appeared to be iron slag. There was also some fragments of furnace or hearth lining with possible iron slag attached associated with the triangular oven brick from context 320 (pit 251).

[Table 6 : Quantities of fired clay forms]

Discussion

The fired clay assemblage is limited both in size and function. The majority was concentrated spatially in the area bounded by ditches 170 and 151 with the largest groups to the west side of the area. All the fired clay is indicative of oven or hearth structures and furniture and the two fragments of ceramic building material are also likely to have been utilised in such structures. Brick and tile found on lower status Roman rural settlements were usually acquired in fairly small quantities and reused in small structures such as ovens, hearths or corndriers. The brick from ditch 151 was found in association with fired clay from an oven or hearth. There is little to indicate the presence of any form of complex superstructure and therefore the assemblage is most likely to represent open hearths for domestic, agricultural or industrial purposes.

The evidence suggests this assemblage may have had primarily an industrial function; both the group in ditch 233 of hearth floor, furnace lining, iron slag and a triangular oven brick and in grave 251 of triangular bricks with small pieces of furnace lining and slag may both represent debris from smithing activity. The presence of smithing bottom from ditch 233 noted by L. Howarth (below) supports such a possibility.

Metalwork

I. Scott

The assemblage was scanned and rapidly quantified, assigned to functional groups and recorded. It was then assessed for group value, taking into account provenance and context type.

Table 7: Metalwork assemblage composition and provenance

The metalwork assemblage comprises 226 iron objects (274 fragments) and one copper alloy object. Hobnails, nails, and small unidentified fragments dominate the assemblage. Most of the metalwork is derived from burial deposits. The only identifiable objects, other than nails or hobnails, were a horseshoe fragment from a probable post-medieval context (122, pit 119), and part of jointed mouth bar from a curb bit from an early Roman context (pit 273). Other finds from non-burial contexts included an iron object of uncertain function and a fragment of copper alloy sheet from context 114 (probable post-medieval ditch fill).

The inhumation graves produced a number of nails, including 18 from grave 305. Most of the complete or near complete nails are of the common Type 1, and fall within the size range 50 mm to 78 mm. By contrast the cremations have produced all the hobnails, including a minimum number of 43 hobnails (75 fragments) from cremation 150, and 39 hobnails (43 fragments) from cremation 280. Cremation 150 produced two nails, and cremation 260 12 nails. The ditch cremation deposit

315 produced no hobnails, but three nails, four small fragments of plate and numerous very small fragments.

Slag
L. Howarth

[Table 8: Occurrence and identification of slag]

The size and morphology of the fragments suggests the likely origin is smithing. Some other less diagnostic material was also recovered and probably represents interactions between the furnace wall and the fuel. The lack of hammerscale associated with fragments, however, does cast an element of doubt on this interpretation. Overall the assemblage of material is probably the waste products of post-smelting refinement of blooms.

The cremated human bone
N. Márquez-Grant

Introduction
Osteological analysis was undertaken by following the recommendations set out by McKinley (2004). The MNI was calculated based on the duplication elements while taking into account differences in age and sex. Where preservation allowed, standard methods for age-at-death and sex determination were employed by following the guidelines set out by Ferembach *et al.* (1980), Buikstra and Ubelaker (1994) and Brickley and McKinley (2004). Non-metric traits, variations in skeletal morphology that may be inherited or environmentally induced, could not be scored due to the lack of skeletal parts available for examination. Pathological lesions were described with reference to standard texts (for example, Ortner and Putschar (1981) and Aufderheide and Rodríguez-Martín (1998). The report below is a summary of the full human remains report, which is held in the site archive.

[Table 9: Weights (g) of cremated human bone by deposit.]

[Table 10: Weights (g) of cremated human bone by anatomical element]

Pyre technology and funerary practice
Overall, the representation of skeletal elements suggests that no priority was given to the collection of certain bones over others from the pyre for burial (Tables 9 and 10). In terms of the cremation burials, most anatomical regions of the skeleton were represented. The relatively high proportion of cranial fragments in the assemblage is largely due to the ease of identification of those elements, while the small quantity of fragments from the axial skeleton is most likely to be the result of preservation rather than deliberate exclusion (Table 11). Furthermore, the presence of small bones suggests that bone collection was undertaken with a certain degree of care.

[Table 11: Bone fragment size by deposit]

Large fragment sizes were frequent in the assemblage (Table 11). The deposits that had the smallest fragments were from contexts that had been truncated. Thus, the fragmentation observed among these is more likely to be the result of modern activity than it is funerary treatment (cf. McKinley 1994). The overall white colour of the remains suggests that the cremated bone was well cremated at a temperature over 600-700ºC (Holden et al., 1995, McKinley 2000a, 404), with relatively even burning throughout. An efficient pyre technology that encountered no specific difficulties would

seem to have been employed. One fragment, that of a femur (deposit 320) was weathered. This may indicate exposure of bone for a length of time prior to burial in the ground. Possibly it suggests that remains were not immediately buried following cremation. However, no other fragments were weathered and this may just be incidental.

The deposit with the largest weight (728g) was an urned cremation burial from grave 150 (Table 9). Adding the weight from another deposit in the same grave brought the total weight to 745 g. Investigations in modern crematoria have found that the average bone weight of a cremated adult individual is approximately 1000-2400 g (McKinley 2000a, 269). The weight of the urned burial does not even match 50% of the expected weight for a cremation burial (male or female). In fact, all deposits that were thought to represent adult individuals weighed less than 50% of the expected weight. This is similar to other Roman cemeteries in southern England and may be due to a number of factors such as loss of bones due to post-depositional disturbance by modern activity (Mckinley 1997, 250). It is very unlikely that this finding reflects superficial collection of bones by the mourners, as most parts of the skeleton were represented in the assemblage, including small bones. Other factors, such as heavy truncation by machining and the poor survival of spongy bone are more likely explanations for the lower than expected weights.

Minimum number of individuals, age and sex

A minimum of one individual was present in each deposit. However, it is likely that there were fewer individuals present if deposits that appear to relate to the same burial are combined (see Table 9), and it is more likely that the assemblage represents a minimum of nine individuals, rather than 14. Of these, five were from burials, including two possibly male adults. A further three individuals were recovered from ditch fills.

[Table 12: Minimum number of individuals, age and sex]

No pathological lesions were observed on the remains, and this may be significant (see Wood *et al.* 1992). However, the small sample size and the absence of specific skeletal parts (such as orbital roofs) have meant that an accurate assessment of pathology has not been possible.

The skeletal remains

H. Webb and L. Loe

Methodology

Standard anthropological and palaeopathological examination was undertaken in accordance with published guidelines (Brickley and McKinley 2004). Condition and completeness were assessed and an inventory was completed of all of the elements that had survived.

Overall, the preservation of the material, was good. There was limited erosion on cortical bone and joint surfaces, trabeculae were largely intact and most elements had retained their overall structural integrity. However, all the remains were highly fragmentary and incomplete. In particular, skeletons 200 and 317 were represented by a few fragments only. The full human remains report is held in the site archive.

Skeleton 183 (Grave 185)

Between 25% and 50% of the skeleton had survived. It was represented by fragments of cranium and mandible, the long bones of the arms (humerus, radius and ulna) and the legs (femur, tibia and fibula) and a few small fragments of pelvis, and vertebrae (including the atlas and axis, the first two cervical vertebrae). Based on the morphology of the occipital protuberance, it was estimated that this individual was possibly male. The age of the individual, estimated by observing the attrition on the molar teeth (Brothwell 1972; Miles 1962), was between 25 and 35 years.

Calculus (tartar) was present on many of the teeth. In most cases the severity was recorded (after Brothwell 1972) as only slight but there were rather heavy deposits on the buccal surfaces of the left maxillary molars. Calculus is formed by the mineralisation of organic material and bacteria and, as such, reflects the lack of importance (or perhaps inability owing to illness) given to maintaining healthy teeth. The fact that the heaviest calculus was present on the cheek side of the upper maxillary molars is not surprising, given that it develops most commonly on the teeth near the salivary glands (Roberts and Manchester 1997, 55).

Skeleton 200 (Grave 202)
Only two small fragments of bone were present. These are possibly fragments of calcaneus, probably of an adult. It was not possible to estimate biological sex or a more precise age based on these remains alone. No pathology was observed.

Skeleton 299 (Grave 305)
The skeleton was between 25% and 50% complete and was very fragmentary. Fragments of cranium, left humerus, femora, tibiae and fibulae had all survived to some degree. Based on the overall size and morphology of the bones, coupled with the fact that the cranial sutures appeared to be closed and almost obliterated in places, the individual was estimated to have reached adulthood. Examination of the sexually dimorphic features of the cranium suggested that the individual was female. No pathology was observed on the post cranial skeleton. However, the endocranial surface of some of the cranial fragments displayed changes that are consistent with bone inflammation. The lesions appeared as thin, plaque like deposits of new bone with a smooth surface, and were possibly caused by trauma, tumours, tuberculosis, syphilis, primary and secondary infections of the meninges, or vitamin deficiencies (cf. Lewis 2004, 93). Whatever the cause of the new bone formation in the present skeleton, the smooth appearance of the deposits indicates that the lesions had healed by the time the individual died.

Skeleton 317 (Grave 333)
Very limited material was present and included three right humeral shaft fragments (which could be reunited) and a further eight small long bone shaft fragments, possibly also from the humerus. The remains represent an adult but no diagnostic features were present that would allow a more precise age, or sex, to be estimated.

Skeleton 337 (Grave 335)
Despite being very fragmentary, this skeleton was the most complete of the assemblage, having more than 75% of its elements surviving. All areas of the skeleton, including the skull, limbs, pelvis, shoulder girdle, vertebrae, ribs, hands and feet, were represented. The sex of the individual was male, based on cranial and pelvic morphology; the metamorphosis of the auricular surface (Lovejoy *et al.* 1985) placed the individual at the upper end of the mature adult category. Of particular note were the large mastoid processes and extremely pronounced occipital protuberance – the latter giving attachment to the Ligamentum nuchae (Gray 1901, 56) – which is suggestive of a powerful jaw and neck.

A number of pathological lesions were recorded for this skeleton. On the distal portion of the right tibia shaft a small rounded area of raised, dense, slightly polished bone was present. It is probable that this lesion is simply a small benign tumour, such as a solitary exostosis or an osteoma (Aufderheide and Rodriguez-Martin 1998, 375), or the result of bony reaction to a minor trauma that happened a long time before death. The upper shaft of the right tibia appeared to be bowed medially, perhaps more than would be expected for a normal tibia. Such bowing may occur as the result of rickets, a disease caused by vitamin D deficiency during the growing period (Roberts and Manchester 1997, 173). However, the left tibia did not display any evidence for bowing, and other

changes (for example, flared mataphyses) that are diagnostic of this disease were not present. It is therefore unlikely that rickets was the cause, and perhaps the bowing was simply morphological variation or the result of an old healed fracture. The distal articular surface of the left tibia displayed a linear groove that ran in a posterior-anterior direction, dividing the medial malleolus from the rest of the joint surface. While it is possible that this is a morphological feature (the right distal articular surface was incomplete so could not be examined for comparison), it is also a possibility that this is an old healed fracture, perhaps the result of a pronation or supination-adduction injury (Galloway 1999, 199-201), such as might be caused when falling and twisting an ankle.

Eburnation (polished bone), osteophytes (new bone growth on a joint margin or joint surface) and bony contour change were present within the left sterno-clavicular joint and in the left acetabulum (hip joint). These changes are consistent with osteoarthritis (Rogers and Waldron 1995).

The left orbit of the frontal bone had a number of scattered, fine foramina (pits). Such lesions are representative of cribra orbitalia (Type 2) (Stuart-Macadam 1991, fig. 9.3a/b), which occurs as the result of iron deficiency anaemia. This may be due to an iron deficient diet, iron withholding as a result of increased pathogen loads or excessive blood loss, for example, through injury or chronic disease such as cancer (Roberts and Manchester 1997, 166). The ectocranial surface of many of the skull fragments, particularly the parietal fragments, was very pitted with fine pores, and this is likely to represent bone inflammation, possibly the result of a minor scalp irritation. The endocranial surface of the frontal bone also displayed bony change in the form of a few small, dense, not particularly pronounced, islands of bone. Such changes may be seen with a condition known as hyperostosis frontalis interna. However, this condition is found almost exclusively in women (Aufderheide and Rodriguez-Martin 1998, 419), and given that the skeleton is a male, the diagnosis is doubtful.

Dental pathology was also present in the form of periodontal disease, or alveolar bone resportion, observed around the right and left mandibular molars. The changes were accompanied by porous new bone that was located around the left mandibular margins and is indicative of bone inflammation. Slight calculus was recorded as present on many of the teeth. A carious lesion in the individual was relatively small and no abscess was visible on the external surface of the mandible.

ENVIRONMENTAL EVIDENCE

Animal bone

L. Strid

Introduction

The animal bone assemblage from the site comprises 378 re-fitted fragments from ditches and pits dated to the late Iron Age/early Roman period. The bones were recovered through hand collection and from wet sieved bulk samples (processed using a 500 μm residue mesh). While 92.6% of the assessed bones derive from hand-retrieved contexts and 7.4% derived from sieved samples, the majority of the bones from the sieved contexts were very small (0.4% of the total weight) and mostly consisted of indeterminate fragments. A full record of the bone assemblage can be found with the site archive.

The assemblage

[Table 13: Anatomical distribution of all species, including NISP, MNI and weight. Skeletal element used for MNI is marked with an asterisk]

Forty bones (10.6%) could be determined to species (Table 13). The animals present included cattle, sheep/goat and horse. Most bones were in a somewhat poor condition. Traces of burning and animal

gnawing were found on 39 and 2 bones respectively.

The predominance of domestic animals in the assemblage is typical for most archaeological sites from this period. The absence of pig is somewhat unusual, but is likely to be due to the overall small number of bones in the assemblage. Judging by epiphysial fusion, bone size and surface structure, the cattle, sheep/goat and horse bones mainly derived from sub-adult or adult animals. One juvenile cattle was present. Due to the small number of identified bones, a slaughter age pattern could not be discerned for the three taxa. Butchering marks were only found on a cattle metatarsal, which displayed cut marks on its distal shaft. The placement suggests skinning.

The wood charcoal and charred plant remains
D. Challinor

Introduction and methodology
This report presents the results of the full analysis of charcoal from two of the cremation burials (150 and 281), and the assessment of other samples which produced charred plant/charcoal remains. Standard analytical methods were applied to both the assessment and the analysis, in which the identifications from the assessment data are provisional, but those of the analysis were confirmed at high magnification.

Results: the cremation burials
The results of the assessment and analysis from the cremation burials are given in Table 14. Grave 242 produced no charcoal, while 280 and 283 produced a few fragments of *Quercus* (oak), *Fraxinus* (ash) and *Acer/Betula* type (maple/birch). The identification of *Acer/Betula* is tentative since there are several species with a similar diffuse porous pattern and the identification was not confirmed. However, it appeared that a single species was represented. Burial 251 contained a larger assemblage of the same range of species, but was not analysed since the integrity of the deposit was uncertain. However, it is notable that a single tuber of *Conopodium majus* (pignut) was also present.

[Table 14: Charcoal and charred plant remains from the cremation burials. Samples highlighted in bold were analysed in full; the numbers represent fragment count and the crosses an estimate of abundance (r=roundwood; s=sapwood; h=heartwood; + = up to 5 items; ++ = 5-25; +++ = 25-100).]

Context 149 from the cremation deposit of grave 150 was entirely composed of *Quercus* charcoal, although a fragment of *Acer/Betula* type was noted in the backfill sample (148). Grave 281 was also clearly dominated by *Quercus*, with a quantity of *Fraxinus*. Other taxa were rare, with *Prunus spinosa* (blackthorn) roundwood fragments in context 282 and a single *Alnus/Corylus* (alder/hazel) piece in pot 290. The assessment of other samples within the same context (282) indicates consistency in the species distribution throughout the backfill of 281 and there were no significant differences in the composition of the ancillary pot fills and the main pit backfill. This fill also produced a couple of badly degraded cereal grains and a fragment of *Corylus avellana* (hazel) nutshell. The low incidence of non-charcoal remains suggests that their inclusion was probably accidental. However, the large quantity of *Arrhenatherum elatius* (onion couch grass) tubers from Grave 150 (context 149) is more significant.

Results: ditches and pits

None of the samples from ditches and pits were analysed in full, but the results of the assessment are presented in Table 15. The range of charcoal taxa was similar to the cremation burials, mainly *Quercus*, with *Fraxinus, Acer/Betula* type and *Prunus*, but there were other diffuse porous species as well. Generally the assemblages from the ditch samples were more mixed than the cremation samples, but the deposits may well represent mixed dumps of domestic and pyre debris.

Two contexts produced more significant charred plant remains. Contexts 238 and 315 produced assemblages with 30-50 degraded cereal grains, mainly *Triticum* (wheat) and some *Hordeum* (barley). There were also a few grains which had the superficial appearance of *Secale* (rye) but this identification was not confirmed. Chaff and weed seeds were scarce and limited to occasional crop weeds such as *Galium* (cleavers) and *Rumex* (dock) and uncharred *Fumaria* (fumitories). In summary, the grain was not well preserved and other remains, such as chaff and weeds seeds, were present only in small quantities.

[Table 15: Charcoal and charred plant remains from ditches and pits (+ = up to 5 items; ++ = 5-25; +++ = 25-100, ++++ = >100).]

Discussion

The cremation samples from Thaxted are consistent with the general picture from Roman Britain, and are strikingly similar to the samples from a cremation cemetery examined at Strood Hall, Essex (Challinor 2007). Oak, ash and maple dominated all the assemblages, from all categories of pyre deposit. The abundance of oak or ash in cremation deposits, compared with other species, may relate to the pyre structure. If the timber from these trees were providing the supports in a central position they would be less likely to have been totally reduced to ash (Gale 1997). The presence of occasional other taxa in the assemblages is likely to represent the remains of kindling.

The presence of charred tubers, particularly onion couch, is not uncommon in cremation assemblages, where the grass may have been accidentally uprooted, or the pyre structure was on grass, or grass was used as packing (Challinor 2006). Another possibility is that the tubers were collected for food, although significant preparation would be required to ensure their edibility. This does seem the likely provenance for the pignut tuber in 251, since these tubers detach easily from their stems and are unlikely to have been uprooted accidentally (Moffet 1999).

The two samples which produced reasonable quantities of charred cereal grains are likely to have resulted from cooking or the accidental burning of stored products or the end cycle of crop processing. The chaff and weeds which would indicate earlier phases of crop processing activities are absent. The remains may also be mixed with feasting or ritual activities associated with pyre debris. The cereal remains from Thaxted were generally wheat grains which were consistent with Triticum spelta/dicoccum (spelt or emmer wheat) but the absence of chaff and the high degradation of the grains limited identification. It is likely that the main cereal crop was spelt wheat, which had largely taken over from emmer at other sites in this area in the late Iron Age (Carruthers 2007).

DISCUSSION

Prehistoric evidence

While no prehistoric features were uncovered, flint and pottery collected as residual finds in later deposits suggests that a Bronze Age settlement existed near the area of excavation. This material adds to the scatter of near-contemporaneous finds from other areas around Thaxted, for example Neolithic or Bronze Age pottery recovered from fieldwalking east of the town at Goddards Farm (Ecclestone and Medlycott 1993, 201), but little can be gleaned in terms of settlement character from it.

The late Iron Age or early Roman enclosure and cemetery

Chronology and regional context

Pottery recovered from the fills of the enclosure ditches and the pits dates to the 1st century AD, while that from the burials spans a broader period from the 1st to the 3rd century or later. This may be taken to suggest that activity can be divided neatly into two phases, with the enclosure going out of use before most burials were made, an interpretation supported by the insertion of one cremation grave (281) into the upper fill of ditch 259. However, the earliest graves (251 and 333) appear to date to the early or mid 1st century AD and it may be better to imagine that the enclosure and cemetery were established simultaneously around this time, with the enclosure serving to demarcate a space set aside for burial. The enclosure was then allowed to silt up relatively rapidly, probably by the late 1st century AD, while the cemetery continued in use through the 2nd century and into the 3rd century, as demonstrated by the pottery from grave 283.

The most obvious local comparisons for the cemetery are those from Stood Hall (Biddulph 2007, 117-138), Chequers Lane, Great Dunmow (Wickenden 1998) and Stansted (Havis and Brooks 2004). Of these three cemeteries, that at Great Dunmow, comprising 17 cremation burials contained within a sub-rectangular enclosure and abutting a trackway ditch is the most like Thaxted. However, here the cremations were all contained within the enclosure and no inhumation burials were present. The funerary pottery from Great Dunmow, along with that from Great Chesterford (Wallace 1990, 13-16), is also most like the material from Thaxted (see Biddulph above). While the Thaxted cemetery shares some characteristics with that at Strood Hall – both were defined by enclosures and were mixed-rite – the funerary pottery from Stood Hall differs from that of Thaxted, belonging to a Gallo-Roman tradition (Biddulph 2007, 135; and see above). There are also differences between Stansted and Thaxted, the former consisting of dispersed groups of cremations, which were not enclosed by ditches and produced a funerary assemblage of wealthy Gallo-Roman tradition, more akin to that at Strood Hall (Havis and Brooks 2004, 195). However, the long chronology of Thaxted's cemetery suggests that other burials exist nearby, which could point to a rather more dispersed pattern.

Of the other features at Thaxted, the distribution of ditches suggests the presence of a substantial enclosure, only the south-western corner of which was revealed during the course of the excavations. The presence of a number of intercutting ditches, on slightly different alignments, suggests that the enclosure boundary was remodelled on several occasions, despite being relatively short-lived. Although the enclosure was probably constructed in order to define a burial area, the graves were not confined to its interior; grave 150 was situated to the south, while grave 281 had been cut into infilled ditch 259. This loose observance of boundaries is not uncommon in Roman-period cemeteries, as can be seen at the nearby site of Strood Hall where several burials lie outside the main enclosure (Biddulph 2007, 119).

Funerary and burial rites

The fragmentary evidence recovered from the cremation graves reveals that the deceased were

generally cremated on oak- and ash-built pyres, which possibly rested on grassy fields. The fires were lit with the aid of kindling taken from alder or hazel, blackthorn, and maple, and cereal waste may have been used also. A burnt pin from grave 281 probably came from the clothing worn by the deceased on the pyre. The cremated remains were collected carefully, with no apparent bias towards any particular anatomical element, and placed in pots, or bags, or loose within the grave. Unburnt shoes, pots, and metal objects were then deposited. For the inhumation burials, unburnt bodies were placed in coffins within the grave, and occasionally accompanied by a similar range of grave goods. The presence of late Iron Age or early Roman inhumation graves at Thaxted could be seen as unusual in a period in which cremation dominated. However, the inhumation rite is by no means unknown during this time, and, indeed, where recorded, has been regarded as a survival of native Iron Age tradition (Philpott 1991, 57; Whimster 1981). The discovery of a rich grave at Kelvedon, in which a warrior was buried unburnt with his sword, shield and spear and drinking equipment in the 1st century BC (Sealey 2007), supports this view, and other high-status Iron Age inhumation burials are known further afield in Kent, for example at Deal (Parfitt 1995). Crucially, the Thaxted graves add to the growing list of late Iron Age and early Roman lower-status inhumation graves from the county – uncovered, for example, at Strood Hall, North Stifford, and West Ham (Timby *et al.* 2007, 124; Wilkinson 1988, 37; Hiller and Wilkinson 2005) – and help to define a more widely-distributed tradition.

As to the status of the deceased and the settlement from which they derived, the finds assemblage, and in particular the pottery, is too small to draw any firm conclusions, but its general character hints at a fairly lowly status, perhaps a rural settlement. But as the samian from the cemetery indicates, this is not to say that the inhabitants did not enjoy wider trading contacts or appreciate the use of continental-style ceramics. At the time that the burials were made, the town of Great Dunmow and, to a lesser extent Great Chesterford, provided markets for ceramics, and Thaxted doubtless also benefited from its proximity to the road that connected the two (Going 1988b, fig. 64). The residual Roman box flue tile and brick add to the building material known at Thaxted; the remains of a building, including tesserae and roof tile were found a just over a kilometre to the north near Bow Croft Wood (VCH 1963, 187). The Sampford Road site may have belonged the hinterland of a villa, although Strood Hall, whose late Roman phase included an otherwise modest farmhouse that had a tiled roof, hypocaust, and glazed windows (Biddulph 2007, 112), reminds us that not all tiles are associated with villas.

The late medieval and post-medieval features

Chronology and character

The late medieval and post-medieval features are dated by floor and roof tile and brick from the fills of the earliest ditch 125. This material is likely to have come from a late medieval building, possibly somewhere in the immediate vicinity, perhaps to the south-east of the excavation area. Ditch 338 and pit 119 are assumed to date to the post-medieval period, by virtue of the fact that they cut ditch 125.

It is difficult to be certain of the function of these features, given that they were only partially exposed within the limits of the excavation. However, the presence of ceramic building material from the fills of ditch 125 suggests that it may have served as a boundary ditch defining a building. Ditch 338 may reflect post-medieval reorganisation of this boundary and pit 119 may have been associated with the same activity.

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CAPTIONS

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Plate

Plate 1: Grave 281

Table 1: The worked flint by category type and context.

	Context									
CATEGORY TYPE	102	155	299	303	310	318	327	171	287	**Total**
Flake	1	2		1	1		1	1		7
Blade			1			1				2
Side scraper									1	1
Scraper on a non-flake blank	1									1
Total	2	2	1	1	1	1	1	1	1	11

Table 2: Quantification and description of fabrics.

Ware	**Description**	**NRFRC**	**Sherds**	**Weight (g)**
BSW	Black-surfaced ware		142	894
BUF	Misc. buff wares		165	155
CGSW	Central Gaulish samian ware	LEZ SA 2	1	304
COLB	Colchester buff ware	COH WH	10	64
ESH	Early shell-tempered ware		43	75
GROG	Grog-tempered ware	SOB GT	148	1525
GROGC	Coarse grog-tempered ware		26	1376
GRS	Sandy grey ware		285	4757
NGWFS	North Gaulish white fine sandy ware	NOG WH 2/3	5	45
RED	Misc. red wares		1	2
SGSW	South Gaulish samian ware	LGF SA	2	17
		TOTAL	828	9214

Table 3: Pottery from the cemetery.

Fabric	Vessel class						Total vessels
	Jar (ancillary)	**Beaker**	**Flagon/ flask**	**Dish**	**Jar (cinerary)**	**Beaker (cinerary)**	
BSW					1		1
BUF			1				1
CGSW				1			1
GROG	2						2
GROGC	1						1
GRS			1		2	1	4
NGWFS		1					1
Total vessels	3	1	2	1	3	1	11

Table 4: Quantification by eve of pottery from non-cemetery features (fabrics marked with * were present, but as body or base sherds only).

	Vessel type						
	Bowl	Jar				Cup	
Fabric	**C unident.**	**G unident.**	**G19**	**G20**	**G3.2**	**Ritt. 9**	**Total Eve**
BSW		0.28	0.28	0.14			0.7
BUF							*
COLB							*
ESH					0.04		0.04
GROG	0.03	0.26					0.29
GROGC							*
GRS		0.11					0.11
NGWFS							*
RED							*
SGSW						0.08	0.08
Total Eve	0.03	0.65	0.28	0.14	0.04	0.08	1.22

Table 5: Ceramic building material.

Form	**Numbers**	**Weight (g)**	**Fabrics**	**Comments**
Roof tile	30	988	B, C, A, F	A few positively identified as peg tile. Both medieval and post-medieval
Brick	2	165	B, F	
Floor tile	1	128	B	?Decorated
RB brick	1	2080	D	?Lydion brick
RB flue	1	378	B1	
Unident.	2	13	F	?Post-medieval brick fragment
Total	37	3752		

Table 6: Quantities of fired clay forms.

Form	**Nos**	**Wt (g)**	**Fabrics**
Furnace	23	117	A/B
Hearth	3	83	A
Triangular oven brick	258	983	E
Utilised	131	628	E, A, B
Total	415	1811	

Table 7: Metalwork assemblage composition and provenance.

Stratigraphic group	Context	Function						
		Transport	Personal (hobnails)	Nails	Misc	Query	Unknown	Totals
Subsoil	210				1			1
Ditch 125	114					2*		2
Pit 273	279	1						1
Pit 248	312			4			1	5
Pit 119	120			4				4
	122	1						1
Grave 185	184					1		1
Grave 335	321			9				9
Grave 202	201			1				1
Grave 305	299			1				1
	300			1				1
	304			16			2	18
Grave 281	315			3	4		22	29
	282		14	12	2		4	32
Grave 150	148		2		1			3
	149		41	2		1	2	46
Grave 280	287		17					17
	288		14			20		34
	295		8				13	21
Totals		**2**	**96**	**53**	**8**	**24**	**44**	**227**

* includes one fragment of copper alloy

Table 8: Occurrence and identification of slag.

Context	Feature	Weight (g)	Comments
201	Grave 202	10	Fuel ash slag (FAS)
114	Ditch 125	110	Undiagnostic slag (possible bloom fragments?)
167	Ditch 170	225	Smithing bottom
139	Ditch 170	275	Undiagnostic slag (possible bloom fragments?)
167	Ditch 170	<5	FAS – from furnace fabric
102	Subsoil	75	Undiagnostic slag
315	Ditch 233	1075	FAS x4 Smithing bottom fragments x16

Table 9: Weights (g) of cremated human bone.

Context	Group	Weight (g)
145	Ditch 151	1
148	Grave 150	17
149	Grave 150	728
167	Ditch 170	1
240	Grave 242	3
282	Grave 281	59.5
285	Grave 283	326
286	Grave 283	16
287	Grave 280	0.5
288	Grave 280	0.5
291	Grave 281	154
295	Grave 280	82
315	Ditch 233	5
320	Grave 251	2.5

Table 10: Weights (g) of cremated human bone by anatomical element.

Anatomical region	**Context and weight (g)**													
	145	**148**	**149**	**167**	**240**	**282**	**285**	**286**	**287**	**288**	**291**	**295**	**315**	**320**
Skull	0	4	178	0	0	16	30	1	<0.5	<0.5	33	49	0	0
Axial	0	1	68	0	0.5	4	18	2	0	0	3	6	0.5	0
Upper limb	1	2	87	0	1	11	70	4	0	0	15	10	2	0
Lower limb	0	3	143	0	0.5	4	113	7	0	0	15	2	0	1
Unidentified	0	7	252	1	1	24.5	95	4	0.5	<0.5	88	15	3	1.5
TOTAL	1	17	728	1	3	59.5	326	18	0.5	0.5	154	82	5.5	2.5

Table 11: Bone fragment size by deposit

Size	Context and weight (g)													
	145	**148**	**149**	**167**	**240**	**282**	**285**	**286**	**287**	**288**	**291**	**295**	**315**	**320**
>10 mm	1	0	158	0	0	3	144	5	0	0	56	14	0	2
10-5 mm	0	17	570	0.5	3	56.5	181	13	0.5	<0.5	98	68	5.5	0.5
<5 mm	0	0	0	0.5	0	0	1	0	<0.5	<0.5	0	0	0	0
TOTAL	**1**	**17**	**728**	**1**	**3**	**59.5**	**326**	**18**	**0.5**	**0.5**	**154**	**82**	**5.5**	**2.5**

Table 12: Minimum number of individuals, age and sex.

Contexts	**Type**	**Sex**	**Age**
148, 149	Unurned cremation grave 150	Possible male	Adult
240	Urned cremation grave 242	No data	No data
282, 291	Urned cremation grave 281	Unknown	Subadult (6-12 years)
285, 286	Urned cremation grave 283	Possible male	Adult
287, 288, 295	Urned cremation grave 280	Unknown	Adult
320	Unurned cremation grave 251	Unknown	Possible Adult
145	Ditch 151, possibly redeposited burial	Unknown	Subadult
167	Ditch 170, possibly redeposited burial	Unknown	Unknown
315	Ditch 233, possibly redeposited burial	Unknown	Unknown

Table 13: Anatomical distribution of all species, including NISP, MNI and weight. Skeletal element used for MNI is marked with an asterisk.

	Cattle	**Sheep/goat**	**Horse**	**Medium mammal**	**Large mammal**	**Indeterminate**
Mandible	2					
Loose teeth	7	4				4
Atlas		1				
Axis		1				
Vertebra				45	13	
Rib				12	20	
Scapula	1					
Humerus	2*		1			
Ulna		2				
Metacarpal	1					
Pelvis		2				
Femur	1			1		
Tibia	3			1		
Calcaneus	1					
Astragalus	1					
Tarsal bones	2					
Metatarsal	4					
Phalanx 1	2	1				
Phalanx 2	1					
Long bone				23	19	
Indeterminate					2	198
Total (NISP)	28	11	1	82	54	202
MNI	2	1	1			
Weight (g)	1338	65	131	196	195	254

Table 14: Charcoal and charred plant remains from the cremation burials. Samples highlighted in bold were analysed in full; the numbers represent fragment count and the crosses an estimate of abundance (r=roundwood; s=sapwood; h=heartwood; + = up to 5 items; ++ = 5-25; +++ = 25-100).

Grave		**150**		**251**	**280**		**281**		
Context number		148	149	320	287	295	282	290	291
Sample number		101	**102**	137	121	123	**125**	**128**	**153**
% flot identified		-	12.5	-	-	-	12.5	100	25
Charcoal									
Quercus sp.	oak	+	96hs	+++	+	+	71rs	26s	87rs
Alnus/Corylus	alder/hazel							1	
Prunus spinosa	blackthorn						12r		
Acer/Betula type	maple	+		+	+				
Fraxinus excelsior	ash			++			36hr	7	10
Indeterminate							2		1
Total			96				121	34	98
Charred plant remains									
Triticum sp.	wheat grain				+				
Cerealia indet.	indeterminate grain						+		
Cerealia indet.	culm						+		
Corylus avellana	hazel nutshell						+		
Conopodium majus	pignut			+					
Arrhenatherum elatius	onion couch grass		+++						
Weed seeds							+		

Table 15: Charcoal and charred plant remains from ditches and pits (+ = up to 5 items; ++ = 5-25; +++ = 25-100, ++++ = >100).

Group number	Fill of	Context	Sample	Charcoal	Grain	chaff	weeds
170	166	167	143	++ *Quercus*, *Acer/Betula*, *Prunus*, other diffuse			
259	174	171	103	++++ Predom. *Quercus* (roundwood), *Fraxinus*	+		
188	191	188	108	++++ Predom. *Quercus*			
233	214	213	142	+ *Quercus*			
315	261	315	147	++++ *Fraxinus*, *Quercus*, Maloideae, other diffuse	+++ *Triticum*, *Hordeum*	+ glume base	+
236	-	238	115	+++ Maloideae, *Quercus*, *Fraxinus*, *Prunus.* Lots roundwood.	+++, *Triticum/Secale*		++ *Galium*

Figure 1: Site location

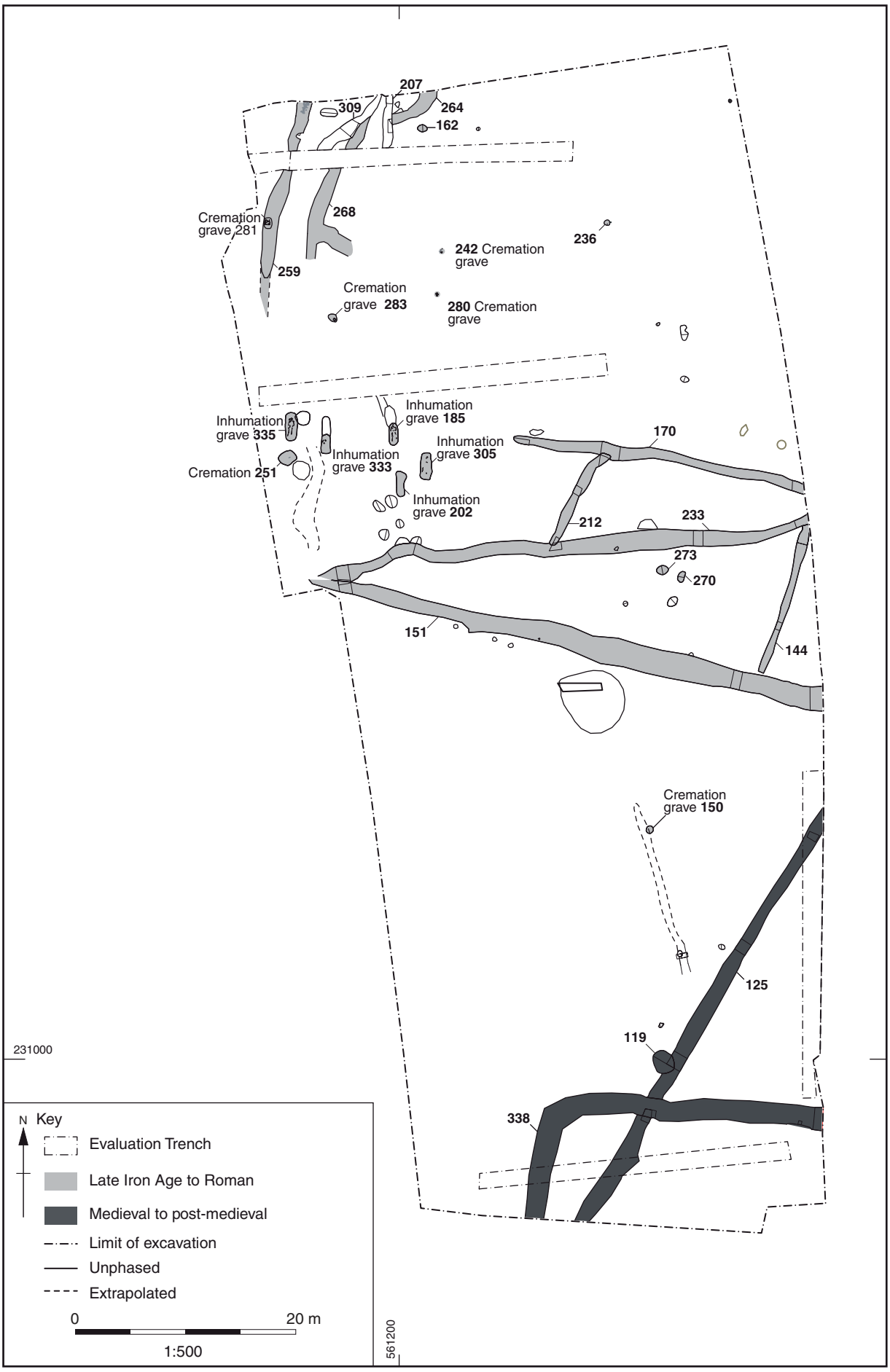

Figure 2: Phased plan of excavation area

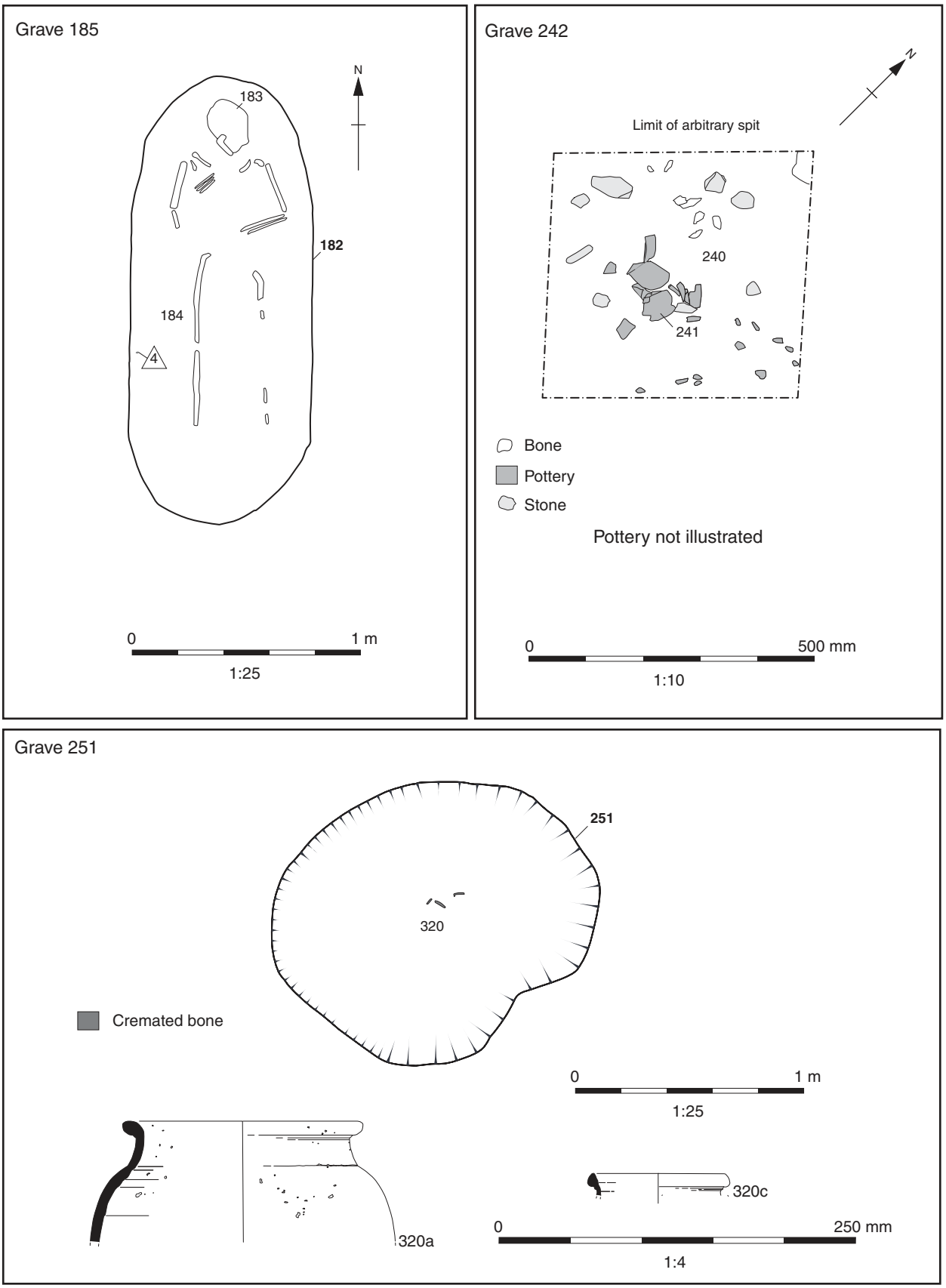

Figure 3: Plans of graves 185, 242 and 251

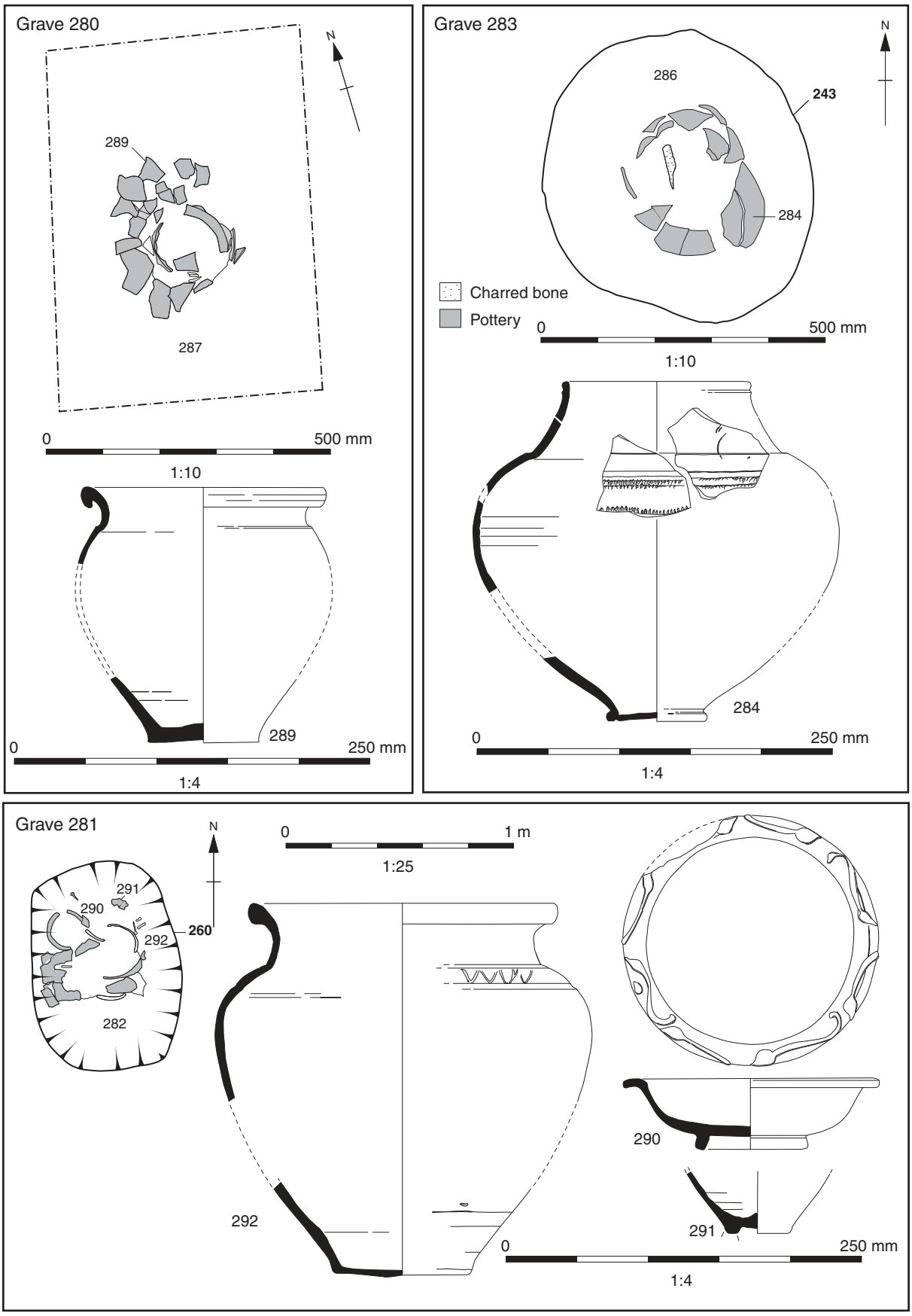

Figure 4: Plans of graves 280, 281 and 283

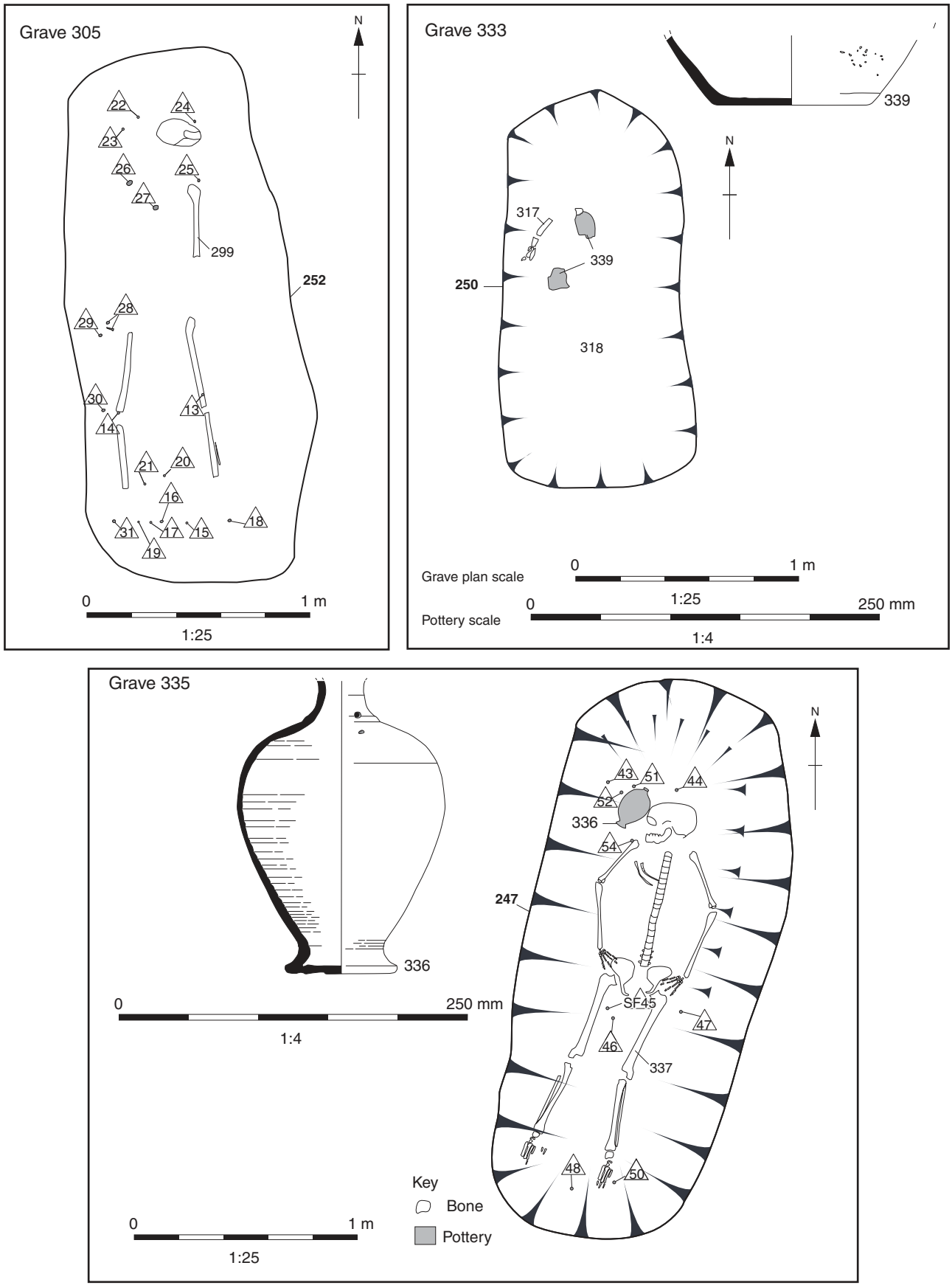

Figure 5: Plans of graves 305, 333 and 335

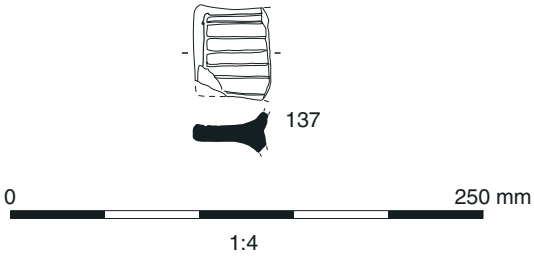

Figure 6: Roman pottery handle

Plate 1: Cremation 281, during excavation

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