Worcestershire Archaeology

EXCAVATIONS IN 2011–13 AT REDHILL (*UXACONA*), TELFORD, SHROPSHIRE

ARCHIVE REPORT

Andrew Mann, Jane Evans, Laura Griffin,
Elizabeth Pearson, Suzi Richer and Derek Hurst

Archive and Archaeology Service
www.worcestershire.gov.uk/archaeology

worcestershire county council

Excavations in 2011–13 at Redhill (*Uxacona*), Telford, Shropshire

ARCHIVE REPORT

Worcestershire Archaeology
Archive and Archaeology Service
The Hive, Sawmill Walk,
The Butts, Worcester
WR1 3PD

Status:	
Date:	4 September 2015
Principal author:	Andrew Mann
Contributors:	various
Illustrator:	Carolyn Hunt
Project references:	3765, 3798
Report reference:	2209
Museum Accession reference:	E.00159

Contents

Excavations in 2011–13 at Redhill (*Uxacona*), Telford, Shropshire

Andrew Mann, Jane Evans, Laura Griffin, Elizabeth Pearson, Suzi Richer and Derek Hurst

With contributions by Joanna Bird, Hilary Cool, Nicholas Daffern, Robert Hedge, Catherine King, and Gwladys Monteil

Summary

An archaeological excavation and watching brief was undertaken at Redhill Reservoir, Telford, Shropshire (NGR SJ 7261 1097) in 2011-2013 on the site of the Roman settlement at Uxacona *(the 'high place'). It was undertaken on behalf of Mott MacDonald Bentley (MMB; the Client) working on behalf of Severn Trent Water who intends to construct a nitrate filtration plant on the site.*

The earliest structure was part of a mid-1st century Roman fort represented by a north–south Punic ditch to the south-west of the larger fort explored in the 1970s. There is a suggestion from the artefactual evidence that the army unit was cavalry.

Most of the activity across the whole site was 2nd century in date and in the nature of civilian settlement. Possibly sitting within an enclosure, there were five earth-fast buildings, in at least three plots, facing onto Watling Street to the south (though neither the road nor the building frontages were exposed). Up to eight fired clay ovens were also excavated, three of which appear to have sat within one of the building, perhaps indicating commercial activity, such as a bakery, taking advantage of its roadside position. Overall the site produced a large number of coins, metallic small finds, and pottery artefacts were associated with this main occupation phase, some of the artefacts being of particular interest as very unusual items. Environmental evidence revealed a generally low level of charred cereal crop waste, suggesting that crop processing was not a significant activity here. One building, however, produced free-threshing wheat (the predominant wheat of post-Roman Britain), in addition to the glume wheats characteristic of Roman sites. This raises the possibility that the wheat supply was for a specific purpose, perhaps for baking on a commercial scale as suggested above, since this more easily processed wheat would have been more suited for this purpose.

During the 3rd century a large east–west V-shaped ditch was dug across the rear of the settlement area on a new alignment, parallel (it is presumed) to Watling Street (modern A5). There is little sign that the settlement went much beyond the mid-3rd century, after which only a thin spread of finds was present here. Subsequently the site was abandoned and the evaluation had shown that no later finds were associated with overlying soils other than a few post-medieval and modern finds from the 17th century onwards. As a result the plough-soil was carefully removed in spits and the Roman artefacts recovered as an integral part of site reconstitution.

Report

1 Background

1.1 Reasons for the project

This report summarises the archaeological remains discovered at Redhill Reservoir (NGR SJ 7261 1097*;* Fig 1) during fieldwork undertaken in 2011 and 2013–14 for Mott MacDonald Bentley (MMB) on behalf of Severn Trent Water (STW). This was associated with the construction of a nitrate improvement facility and associated pipework which impacted on a site of archaeological interest (Shropshire Historic Environment Record; SHER 01113), and on to a small part of a Scheduled Ancient Monument (area of the settlement and military depot; SAM 1003811) which extends to over 100m to the north and south of the A5 and includes the south-east corner of STW Redhill site.

An archaeological impact assessment (AIA; Mott MacDonald 2011a) identified the potential for significant Roman archaeology including possible military and road-side settlement along the course of Roman Watling Street, so site evaluation was undertaken. This demonstrated that Roman deposits were present, and, following assessment of the results (Mann 2011), an excavation and watching brief were undertaken between 20 March and 10 December 2013, initially mainly excavation, then a watching brief on specific areas of work.

1.2 Topography, geology and prior archaeological context

The site occupies raised ground with a wide panoramic view and the excavation site was located just below the crest of the hill, and just north of the presumed line of the Roman road, Watling Street, in the vicinity of where this climbs to *c* 187m above O.D., its highest point along its length. The solid geology across the majority of the site is Enville Member Sandstone or Mudstone of Westphalian date (Permian/Carboniferous) (BGS 2014). This site was observed during the excavation to be very exposed and to be particularly prone to harsh weather conditions. Prior to excavation the site was under grass with occasional shrubs and trees.

The previous archaeological history of the site has been generally collated and assessed by Bryant (2005). The site is located in the vicinity of where rescue excavation had confirmed Roman military and civilian settlement in 1973 (summary reporting by Browne and Boon 2002; Mott MacDonald 2011a), which has been equated with the settlement known by the mid-2nd century as *Uxacona*, as mentioned in the Antonine Itinerary '… 11 miles from Urioconio [Wroxeter] and 12 from Pennocrucio [Kinvaston, Penkridge, Staffs]'. Appropriately, the translation of this British name has been taken to be 'high place' (Rivet and Smith 1979, 482). The site is taken to lie alongside the north edge of a major Roman road, Watling Street, the surface of which has been observed during a small excavation on the southern edge of the field to the west, and was recorded as '1½ feet' beneath the modern ground surface (AIA).

Browne identified a pre-Flavian early military fort (DIII; Fig 2) followed by a hiatus till the Antonine period, when the settlement developed a strong presence, though with military activity reappearing in the later 3rd-?early 4th century, and with further occupation in the 4th century marked by the large ditch (DVII), with activity then continuing into the late 4th/early 5th century.

The current project has been able to expand on this previous (largely unpublished) excavation work undertaken by David Browne, since, in the course of the project, the archive was located and collected from David Browne. A parallel project was designed and has now been undertaken, with funding by English Heritage (now Historic England), aimed at auditing the earlier excavation archive and preparing it for museum deposition. Where features have been identified overlapping with the 2013 excavation area, their 1973 records have now also been reassessed, and so can contribute to this report, and so provide as comprehensive an account as possible.

1.3 Project parameters

Overall the project conforms to the CIfA standards and guidance for archaeological evaluation, excavation, and watching briefs (IfA 2008a, 2008b/2012, 2008c respectively). Specifically the project also conforms with the Written Scheme of Investigation (WSI) prepared by Mott MacDonald (Mott MacDonald 2011b) and for which a project proposal (including detailed specification) was produced (WA 2012a).

The project also conforms to:

> WA 2012b *Manual of Service Practice: Recording Manual*, Worcestershire Archaeology internal report, **1842**. Of particular significance for this project is the *Finds recovery policy*, and *guidelines for environmental sampling*.
>
> WA 2007, *Manual of Service Practice: archiving*, as amended, Historic Environment and Archaeology Service, Worcestershire County Council, internal report, **1582**.

1.4 Aims and objectives

The aims and scope of the project are given in the WSI (Mott MacDonald 2012, Sec 4). In particular the project had the following aims (where possible):

- to preserve the archaeological remains *in situ*, and;
- to avoid direct impact on the Scheduled Area (Fig 2).

Where this is not possible archaeological investigations were undertaken to preserve the archaeological resource 'by record' and so offset the loss of the historic resource caused by the development.

Project research framework

Though not framed in detail, research aims included the further characterisation of settlement activity at the Redhill site, as understanding of this complex site is still quite limited, partly by the minimal nature of earlier (eg 1970s) rescue archaeological works, with their focus on locating ditches and establishing the plan-forms of these as a larger context. Such aims would be in accordance with the recent Research Frameworks developed for the west Midlands, where Red Hill is listed as one of seven Shropshire military fort sites at strategic locations on the new Roman road network, and as one of three roadside settlements in Shropshire that developed in a *vicus* outside a fort (Roger White forthcoming, *Shropshire in the Roman Period*). Placing the site in the ready-made context of the Wroxeter hinterland study (Gaffney *et al* 2007) was also regarded as an objective of any work at Redhill.

In general the value of Roman sites in the west Midlands has been pointed out for understanding patterns of production and distribution (ie trade), due to the large number of production centres (pottery, minerals etc), and the generally heavily industrial nature of the Roman west Midlands (Evans 2003).

2 Methods

2.1 Desk-based assessment

Prior to any fieldwork being undertaken an archaeological impact assessment was undertaken (Mott MacDonald 2011a), which assessed the effects of the proposed development on the then known archaeological remains, and, based on this, a WSI was produced (Mott MacDonald 2011b).

2.2 Evaluation

Fourteen evaluation trenches and three watching brief trenches were excavated across the site between 31 October to 11 November 2011. These were excavated using a 360º tracked excavator employing a toothless bucket and under archaeological supervision (Mann 2011).

The evaluation identified significant Roman settlement remains: ditches, pits and postholes, dating from the 1st–3rd centuries AD. This fieldwork also identified two possible oven bases and significant quantities of exotic and high-status pottery and metal small finds. Significantly it also identified a buried soil, which contained significant quantities of the Roman material, and this covered the southern half of the excavation area. No evidence was seen to suggest that the nearby military enclosures extended into this part of the site or that Roman Watling Street was present in the evaluation area. With a view to mitigation the quality of the Roman artefactual assemblage was especially noted, as well as the probability of substantial parts of Roman structures, though the more specific presence of buildings did not emerge from this stage of work.

2.3 Excavation and watching brief

Following evaluation a WSI was produced for further mitigation of the impacts of development by preserving a record of the remains by excavation and watching brief (Mott MacDonald 2012).

2.3.1 Fieldwork strategy

The excavation and watching brief phases, in parts, were run simultaneously. These zones can be seen In Figure 2. An excavation area amounting to just over 1784m² was striped and deposits considered not to be significant were removed using a 360º tracked excavator, employing a toothless bucket and under archaeological supervision. Subsequent excavation was undertaken by hand with clean surfaces being inspected and selected deposits excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Service practice (WA 2012b).

The buried soil observed during the evaluation was machine excavated in three spits under archaeological supervision, and in the presence of a metal-detectorist to recover as many small finds as possible, any small finds being 3-D located (each spit 0.15-0.20m thick, with final spit to full thickness only to the west ie downslope). Subsequently, excavation was undertaken by hand.

The watching brief was focused on the alterations to the site entrance, the removal of the current access road, and the insertion of a new water pipe to the west and north-east of the main excavation area.

2.3.2 Structural analysis

Field records were all checked and a single stratigraphic matrix produced for all the fieldwork.

3 Structural evidence

A phased site sequence, with detailed area plans and sections, is shown in Figures 1–14 (with Plates 1–30). Detailed descriptions of the Context Groups (CG) in phase (P) order are presented in

Appendix 1. Individual cut features are referred to below by their context/cut numbers (unprefixed), unless otherwise indicated. Dating of contexts is also tabulated in the Appendix.

A number of ovens were recorded during the excavation and the possibility of archaeomagnetic dating was discussed for these, but was not undertaken due to the fragmentary nature of the fired clay linings which had been heavily root damaged and, therefore, disturbed. Instead, it was decided to rely on radiocarbon dates, where possible for better dating these features.

Pits were generally isolated features and so were just grouped generally by phase across the site according to associated finds dating.

3.1 Phase 1 (*c* mid–1st Century AD)

Military ditch CG2

A substantial ditch, cut 528 (CG2), was only seen in the narrow pipe trench excavated to the west of the main excavation area. It was aligned north to south and had a *Punic* ditch profile, with a near vertical western edge and a gradual, 30º, sloping eastern side, breaking to a near V-shaped base (Figs 3–4, Plate 2). This ditch profile and its dating indicate a military origin (Webster 1979, 174, fig 29), however, its direction and plan outside of the pipe trench was not established.

The primary fills of ditch [528] were predominantly pinkish red sandy clays, probably originating from the erosion of the ditch edges or an associated bank (although none was identified). Above these was a band of charcoal and angular fire-cracked stone, although there wasn't any evidence for *in situ* burning. Charcoal from this deposit was radiocarbon date to 60 cal BC-70 cal AD, likely use, therefore, being between AD 43-70 (ie pre-Flavian).

This ditch, therefore, can be related to other military activity across the hill also dated to the mid-1st century AD (Fig 2; Browne and Boon 2002). A re-cut (context 541; 2.42m wide and 0.90m deep) of this ditch had a more gradual profile, with a concave base. Unlike the deposits in the original cut its fills were sterile consisting of mid-brownish orange sandy silts and clays. Given the sterile nature of the fills it is likely to have been infilled prior to the Phase 2 occupation of the (late 1st and 2nd century AD) when Roman artefacts abounded.

?Military ditch CG1

This ditch (CG1) was excavated at a number of locations across the site, during the evaluation (Trench 2; Fig 3, Plate 1); also recorded by Browne in 1973 (ditches DVb and DVc). No re-cuts of this ditch were seen in 2013, unlike in 1973, probably due to its more recent truncation. Few stratigraphic relationships were observed between this ditch and other features, but it was established that it was cut by a large enclosure ditch (CG8; P2) and by Browne Ditch VI. A military origin has been assumed due to its apparent association with the main fort as described in Browne and Boon (2002) rather than due to any inherent characteristics, with its being interpreted as demarcating a possible annex (*c* 95.0 x 93.0m; 0.8ha) to the fort.

This ditch was 0.29–0.48m deep and 0.86–1.25m wide, truncation being evident from its dimensions being 0.60–0.84m deep and between 1.90–3.4m wide in 1973. Although variable in places, the ditch was generally V-shaped in profile with a concave base. The basal fills were typically pale brownish yellow sandy silts or sterile greyish yellow, silty sands and probably resulted from natural weathering. In places the primary and secondary fills appear to have originated from the northern edge suggesting they had eroded from an associated internal bank or rampart, although none was identified in situ.

During 2013 the excavated slots of this ditch further to the east of the site contained increasing amounts of charcoal flecking, fired daub and pottery. A similar sequence was also seen in the fills

of Browne ditches DVb and DVc which also contained larger amounts of charcoal, sandstone blocks, artefacts and burnt clay. All these upper deposits are thought to have formed from episodes of deliberate backfilling.

The 2013 dating evidence from the ditch primary fills was only broad (mid 1st–2nd century), whereas in 1973 finds, including samian ware of pre-Flavian and 2nd century date, were only recovered from its upper fills, and so more likely to reference its disuse. In 2013 finds of much later Roman date became included due to re-excavation of 1973 excavation backfill (eg slot 506).

Other features

A small number of discrete features of this phase were also assigned to this phase based on finds dating. A 5m long elongated pit (CG3) contained a near-complete amphora (Dressel 20) in its northern terminus (Fig 3, Plates 3-4). The north–south aligned pit (0.87m deep, 1.32m wide and 4.92m long) had an almost V-shaped profile with a wide, flat basal slot. It contained three fills, the lowest two being light yellowish brown silty sands with occasional charcoal flecks or lenses. The upper fill was a mid-brown sandy loam which contained a number of large sub-angular sandstone blocks that had been used to support the amphora in the northern terminus. There was no evidence that the amphora had been inserted into an already infilled pit, and so the pit must have gradually infilled/been backfilled around it. The fill of the amphora was sterile apart from a large sub-rounded elongated sandstone block, and the function of the pot in this positon could not be readily established. The infilling of this feature as a whole has been assigned to AD 50–85 (pre-Flavian/Flavian) based on the samian ware.

A group of six intercutting sub-circular pits (CG30), also located on the south side of the main excavation area, with moderately steep concave sides and flat bases measuring between 0.33m–0.44m deep and 0.52–1.80m in diameter. The fills of these pits were very similar, generally being mid greyish-brown soft silty sands, containing varying levels of charcoal flecking. The purpose of the pits is unclear and they do not appear large enough to have been quarry pits (except Cut 339) and they did not contain enough finds to be obviously indicative of rubbish pits. One pit (345) had a flat sandstone capping stone. The associated pottery was almost exclusively mid-1st century (pre-Flavian).

Artefactual evidence

Both the pottery and the non-ceramic artefacts confirmed the military character of the site in this phase. The latter hints at a cavalry contingent. The first phase of the legionary fortress at Wroxeter in AD 57–66 (Webster 2002, 17) established a strong base linking together many units working in the area, and a Thracian cavalry unit has been posited on tombstone evidence (White 2010, 193). One of the principal military tasks may well have been to ensure that a road was quickly engineered, and *Uxacona* could well have been a useful staging point in its construction. The samian ware then suggests that site activity declined and may well have ceased here (as it turned out temporarily) in the early Flavian period (ie soon after AD 70).

3.2 Phase 2a: Civilian settlement (2nd century–early 3rd century AD)

This phase contains the greatest number of structures and features that are broadly aligned NNW-SSE and so still conformed to the earlier Phase 1 alignment (eg CG1; Fig 5). There was a row of features that were similar in character. There were up to six buildings, three being of timber-post and three of timber beam-slot construction. Three distinct parallel plots (discussed below as Plots 1–3) were demarcated by small ditches, each containing buildings, ovens and rubbish pits. As this settlement was aligned to ditch CG1 it suggests that it still functioned as a boundary ditch with the smaller ditches originally extending up to it, but now truncated up-slope. Small postholes and ditches further west could indicate that settlement occupation continued some way down the slope,

but the restricted nature of the evidence (within the new water-pipe trench) prevented any more definitive interpretation.

?Enclosure

An east–west ditch, CG39, was on the same alignment as the rest of Phase 2 features and may represent an enclosure for the plots listed below. It was seen in an area which was otherwise truncated and so its original dimensions could not be established. There was no definite sign of its other sides. The only length of stone-built structure (CG42; now robbed) shared its same orientation, and could just conceivably have been a remnant of a gatehouse which would have on the main north-south axis through the military enclosures to the north and towards Watling Street. Such a feature, executed in stone, may have been particularly instrumental in setting the angle of plots to the main road, and so account for this apparent anomaly where the site layout does not respect the presumed line of Watling Street to its south.

Plot 1

Curvilinear ditch

Only part of Plot 1 was excavated, with its minimum width being 6.90m. A possible building comprised a small curvilinear ditch (CG11) with shallow concave sides and base (Figs 5–6), between 0.18-0.31m deep and 0.45–0.94m wide, and filled with pale, yellowish brown silty sand, similar to the natural in this part of the site, and so probably naturally infilled. Its diameter was *c* 8.90m (ie not seen in evaluation Trench 2), and there were no associated postholes or internal structures. The feature was reminiscent of the drip gully of a prehistoric-style roundhouse, right down to its having an easterly aspect to an entrance (cf Pope 2007, 212–13). Pottery indicated its being disused sometime during the 2nd century AD.

Ovens

Though originally in an area separated by a single ditch (55) from other plot 1 features to the west, a group of three ovens and associated features (CG16, 17 and 18) seemed most likely part of this plot. Two of these ovens (CG16 and 18) consisted of elongated shallow scoops that had been lined by pinkish red clay, up 0.10m thick that had been fired. The better preserved oven (CG18; 0.22m deep, 0.87m wide and 3.04m long; Plates 5–8) had a fired clay lining of flat base and vertical walls, the lowest 0.05m of which had survived. At the west end there was a 0.40m wide opening which butted against a small group of flat sandstone slabs (context 288), which may have formed an integral floor, external to the main structure, perhaps for stoking. At the north-east corner of the oven there also another small opening or flue, 0.25m wide. In places the clay lining (fired differentially to buff yellowish brown on the base, and bright red on the side walls), was 0.15m thick.

A less well preserved but similar oven (CG16) was aligned (approx) north–south although parts of the clay lining, appeared to turn at right angles towards an east–west alignment. Only the bottom of the oven survived and consisted of a fired clay base in a shallow elongated scoop (0.05m deep, 0.44m wide, 1.20m long). Again the central area of fired clay remained a light yellowish brown colour, while the outer edges were fired bright pinkish red. A solitary flat sandstone slab (285; 0.30m x 0.16m), may be the remains of flooring. Across the ovens there were six postholes (CG15; 0.10m–0.48m deep and 0.30m–0.61m in diameter), circular in plan with vertical sides and flat bases with one (Context 297) cutting through oven CG16. They have been considered to be broadly contemporary with the ovens and may have been part of simple shelter or wind break above or around them. Oven CG18 replaced CG16, and all three ovens were finally sealed under demolition layers CG19, consisting of a number of small spreads of oven material and charcoal, suggesting they had all gone out of use at the same time.

Both ovens CG16 and 18 had been filled with a mid-dark brownish loam very similar to the overlying soils without fired clay fragments in either of the ovens to suggest the superstructures had collapsed inwards, though, *c* 0.10-0.15m above these structures, there were spreads of fired clay fragments in the overlying soils (contexts 13, 15 and 16) suggestive of superstructures remnants.

Another oven (CG17) was different in form to the other two ovens. It was within a square pit (context 280; 0.08m deep, 1.10m wide and 1.20m long) with a sandstone slab (0.05m thick, 0.34m wide and 0.44m long) surrounded by stone fragments at the base (281; Plates 9–10). Angular pieces of sandstone and river gravels had been covered with pinkish red clay that had been lightly fired. There was no evidence for walls or any superstructure. Such a design would have provided a heat reservoir, and so some of oven was probably intended but for a different purpose to the others given its different form.

Oven type and function

The main type of oven on the site (rather long and narrow with a vent to one side at the end) was unusual in design. A non-industrial application was favoured as there was little sign of metalworking or any other high temperature industrial use. However, it has proven difficult to assign a domestic use based on a parallel elsewhere. The standard domestic Iron Age oven was usually round in plan, and, though the baking ovens of Roman times, were most often rectangular in plan, including examples at military sites usually built into the back of ramparts (eg at Wroxeter, and incorporating stone in the base; Webster 2002, 31, fig 2.20), none seems quite the same as the Redhill type.

Pits

To the south of the possible building CG11 was an elongated pit (CG10; 1.20m deep, 1.54m wide and 3.40m long) aligned east to west (Plates 11–12). The original pit cut had a similar profile to CG3 to the east, being almost V-Shaped with a wide, flat basal slot. The basal fills of CG10, however, contained AD 135–170, (Antonine) pottery and represented natural erosion and weathering. The upper two fills of this pit looked to have been purposefully deposited as they contained frequent charcoal lenses, medium angular sandstone fragments and pottery sherds.

Following the same alignment and shape another elongated pit (context 293; see section on Fig 6) was cut into the top of this pit. As this reflected the original cut it is likely that the original cut was still visible as a depression and was not fully backfilled. This re-cut (0.40-0.61m deep, 0.99m wide and 1.41m long) was sub-oval in plan, with steep concave sides and a flat base, and at its eastern end there was a deeper depression approximately 0.20m below the main pit base. The feature had been lined (0.08-0.29m thick) with firm orangey pink, sandy clay (292), containing charcoal flecks, occasional small rounded stones and mid brown loam patches possibly introduced from rooting. Large angular sandstone blocks, including a quern fragment, sat at its deepest point. A relining of the pit with a similar clay deposit (context 19; Plate 12) had occurred. Clay lining suggests a function containing a liquid, though they may be the lower (and so unfired) bases of ovens similar in form and size to others elsewhere on the site (eg CG18).

Pit group

The larger (context 44) of two pits (CG12) due to its large size was taken to be a quarry pit for stone, its light brown silty sand fills originating from natural weathering, so indicating that it had been left open after use. Its fills were then re-cut twice by two other pits (contexts 51 and 53), their sandy loam fills (contexts 50 and 52) containing frequent charcoal flecks and small fired clay lumps including demolition rubble (CG19), probably from the ovens to the west. That association would suggest that these pits were contemporary with the oven activity and that their function related to the ovens, perhaps using the stone for lining their floors.

Boundary ditches

Separating Plots 1 and 2 there were three small NNW-SSE aligned ditches (CG14), all similar in size and profile having moderate concave sides and flat bases between 0.10m--0.24m deep and 0.40–0.43m wide. One of these (context 33) had been cut by oven CG18, suggesting that by that point the main division between these plots was ditch cut 35. Another ditch of similar proportions (context 55, CG13) to the west cuts pit 53, and may have been intended to demarcate the ovens area from the rest of Plot 1.

Plot 2

Buildings I and II

The middle plot has a minimum width of 10.80m (Figs 5 and 7), and contained two structures (CG20 and 21), which had been constructed using postholes and beam slots respectively, and there were no floor surviving floor surfaces. A possible post-pipe (0.60m in diameter, 0.23m deep) was seen in posthole (125; CG20), and many postholes contained medium-sized angular sandstone blocks likely to have been post-packing. Building I (CG20) exhibited recuts/replacement postholes (generally 0.55–1.60m in diameter and up to 0.60m deep, were circular in plan with vertical sides and flat/concave bases), suggesting a long period of use (Plate 13). This building (*c* 5.40m wide and up to 16m long, assuming Watling Street lays directly beneath the current A5) was poorly dated, with a late 3rd century *tpq* date for its demise, based on pottery dating from posthole 123/5.

Building II (CG21; 2.30m wide and a minimum of 2.80m long) had a squared beam-slot foundation, and was heavily truncated downslope on its west side. The beam slots were up to 0.21m deep and 0.41m wide with overlapping in the corners, mostly containing sterile mid-yellowish brown silty sand, with occasional concentrations of charcoal and fired clay daub, suggesting that the structure may have finally been burnt down. To its east there were two small postholes (contexts 170 and 198) which may have housed supports support for the main structure.

Pits

Across this plot there was also a number of pits (CG22; mostly sub-oval in plan, 0.28m–0.54m deep, 0.90m–1.60m wide and 1.34m–1.60m long; Plate 14) grouped together because they contained fills with similar dates and seemingly being the result of rubbish disposal. Pit 152, succeeding Building II, contained a greenish humic cess like primary fill which had been capped with a layer of pinkish red clay, possibly deliberately, with laminated fills of charcoal and sandstone fragments above. Another one of these pits (210) was similar in size and shape to pit 44, and so a possible quarry pit.

Boundary ditches

A short length of boundary plot ditch (CG23), running through the centre of this plot may be a later re-ordering of the plot as seems to have occurred with Plot 1. Between Plots 2 and 3 there were two ditches, CG24 and 25, without any obvious signs of banks. While these may indicate modification to the boundary over time, there is also the possibility that, if contemporary, they indicate an alley-way between the plots.

Plot 3

Plot 3 is the largest plot at at least *c* 22.0m wide, and this may indicate that two 11m wide plots (ie similar to the width of Plot 2) have been combined. Although this development was not confirmed, each side of the plot is discussed separately below.

Plot 3.1

Buildings

This plot is likely to have extended from boundary plot ditches CG24/25 in the east to just beyond the western edge of Building II (CG30; Figs 5, 9). It contained two structures, a post-built building aligned NNW-SSE (CG30) and a beam-slot building identified in Browne's 1973 excavations (CG40). Building III dominates this plot and is the largest building identified on site. It measured 7.80m wide and was a minimum of 13.40m long, although it could extend up to approximately 23.0m long if it abutted Watling Street. As with all the structures on site, no floor surfaces survived, although oven bases survived in the northern end of this structure (CG29). Sixteen postholes are associated with this building forming two parallel walls which also extended off site to the south. There appeared to be numerous repairs around all sides of the structure, and six postholes had been replaced. These sub-circular postholes (0.37–0.51m deep and between 1.22–1.46m in diameter) with near-vertical sides and flat bases. Four of the original postholes (115, 261, 277 and 331) had fired daub material (from walls) as packing with their associated post-pipes measured around 0.30m across (Fig 10, Plates 15–16), and two others (291 and 343) had used angular medium-sized sandstone blocks instead, leaving square sockets 0.40m and 0.30m across respectively (Fig 10, Plate 17). The use of large sandstone packing in these two postholes, specifically for 291, the deepest posthole in this group, may indicate it marks the location of a door jamb.

Building IV (CG40; 3.35m wide and 5.50m long), was of beam-slot construction, with a beam slot up to 0.50m wide, and was only identified but not excavated by Browne in 1973. It remains undated but it has been placed in to Phase 2 based upon its spatial fit with other features.

Ovens

Towards the rear of Building III, facing away from the main road, there were four ovens which had been repeatedly built on the same spot (CG29). No superstructures survived and their bases sat in a large, shallow sub-oval scoop (367) 0.30m deep, 2.40m wide and 4.78m long (Fig 9, Plates 18–21). In the base of this scoop was a small square depression (0.10m deep and 0.50m wide), which contained frequent angular medium sandstone fragments and medium rounded river cobbles (Context 411) overlain by a 0.05m thick lightly fired pinkish red clay, which was quite comparable to oven structure CG17 in Plot 1.

After the dismantling of the first oven, a 0.08m thick layer of pinkish red clay (368 and 366) was spread across the base of the scoop, and two more oven bases (342 and 363; 0.04m thick, 0.50m wide and 1.36m long and 0.04m thick, 0.40m wide and 1.22m long respectively) rest directly upon this clay deposit. Their outlines are defined through the localised firing of this clay spread with the same coloration as in the case of CG18. At the northern end of oven 363 there was a small spread of sandstone slabs (364; cf CG18), though it remained unsure whether this was external or internal to the oven (Plate 19). Towards the southern end of this oven base was a small spread of charcoal (416; 0.04m thick, 0.50m wide and 0.70m long) above a lightly heat affected area of natural, which was interpreted as oven waste. Though not certain it appeared that oven 342 replaced oven 363, which in turn, when defunct, was partially sealed with a 0.09m thick mixture of sandy loam soil and pinkish red clays also containing frequent charcoal flecks and angular fired clay lumps (330; ?demolition rubble). Oven 342 was subsequently constructed and sealed with another layer of firm pinkish red clay up to 0.12m thick (329). Yet another oven (318; 0.03m thick, 0.54m wide and 1.46m long; Plate 20) was then built above, as a final 0.08m thick spread of pinkish red clay (316), though this was virtually indistinguishable from layer 329 (Plate 21). The largely unfired clay capping of the ovens would suggest that, when Building III was abandoned, it did not finally burn down.

Pits

Between Buildings III and IV there was a solitary rubbish pit (307; sub-circular in plan with near vertical sides and a flat base; Figs 9–10; Plate 22) with multiple fills probably dumped in from the south, and so rubbish disposal from Building III. The lower fills of the pit contained numerous fired clay fragments, possibly from the dismantling of the nearby ovens (CG29).

Plot 3.2

Buildings

Plot 3.2 had no clear boundaries to either west or east (truncation may have accounted for this on the eastern side). It also (ie as in Plot 3.1) had a post-built building towards Watling Street (modern A5) and a beam-slot building to the north. The plan of the post-built structure (CG26) could not be established, as it extended beyond the limits of the excavation area (Fig 11, Plate 23) or was truncated by construction in the 1970s. The majority of the postholes were rock-cut features, and a number contained angular sandstone post packing material (Figs 11–12; Plate 24). Only two post-pipes were confirmed and these measured 0.35m and 0.48m across. Where sandstone post packing was not identified, it is likely the post fitted tightly into the sockets. In plan these posts were square suggesting a different building technique was employed, whereas elsewhere posts were rounder. The size of these postholes at 0.40–0.78m was smaller than those for Buildings I and III, also suggesting that the squared posts were intended to occupy fully the post sockets.

Building V (CG28) comprised a pair of parallel beam slots (58 and 60; 0.15-0.21m deep and 0.35–0.37m wide; Figs 11–12, Plate 25), which had vertical sides with flat bases. The building was 4.60m long and 5.10m wide, with no evidence for walls to the east and west, suggesting that this was an unsecured shelter of some kind.

Ovens

In between the two buildings there was the heavily truncated remains of an oven (CG41), comprising an elongated base of fired clay (Fig 11, Plate 26). This (surviving as 0.04m thick, 0.31m wide and 0.52m long) was, as elsewhere on the site, formed of pale yellow clay with the edges fired bright orange, and was associated with charcoal flecking.

Pits

Across Plot 3 there was a number of pits and postholes of uncertain function, 420, 424 and 9005 possibly being quarry pits for sandstone to the rear of the plot. One pit (64) seemed more likely to have originated as a rubbish pit, as it contained frequent charcoal rich sandy loams stratified with a layer of orangey pink clay capping.

3.3 Phase 2b (late 2nd/early 3rd century)

Enclosure ditch CG8

The largest feature recorded during this phase is a large east to west aligned V-shaped ditch (CG8; partially excavated in 1973 (as ditch DVII), to its full depth in only one area). Browne's 1973 slots were partially re-excavated in 2013 (as context 511). Four new slots were excavated across this ditch in 2013 (394, 395, 376 and 379) on the west side of the excavation area. This ditch (2.75-4.26m wide and between 1.45-1.72m deep) had a steep V-shaped profile with a basal slot and a flat base (Fig 5, 13, Plates 27–28). and contained multiple fills ranging from dark pinkish red sands with occasional angular sandstone fragments in the base (representing natural weathering and erosion of the edges), under browner loams and silty sands with charcoal flecks and bone fragments, the latter representing the stabilisation of the ditch. The lower parts of the ditch are

likely to have quickly infilled due to weathering erosion (late 2nd century), these 0.40–50m thick primary fills being followed by thinner bands of browner sandy soils and loams formed, reflecting the gradual stabilisation of the ditch. There was no obvious indication from the fills of a bank/rampart to one side (?south), but its rapid infilling suggests an unconsolidated bank must surely have existed, as well as showing (see below) that it was not well maintained. If present to the south, it would have also impinged on Phase 2a structures, so confirming their disuse. Nor were any recuts to the main ditch identified in either 1973 or 2013 fieldwork.

Browne had originally dated the construction of this ditch to the 4th century due to the presence of occupation on the hill summit of that period. However, fresh appraisal of the finds from both 1973 and 2013 shows that the pottery from the primary and lower fills of this ditch have a late 2nd/early 3rd century *tpq* date for construction, with finds from the lower and middle fills spanning the 1st–late 2nd/early 3rd centuries. This ditch was, therefore, considered as belonging to the end of Phase 2 activity, but assigned to a separate and slightly later sub-phase, as it was on a different alignment to most other features.

Based on the date, shape and size of ditch 514 and 523 (Figs 4–5; Plate 29) this has been interpreted as a north–south continuation of CG8 (Fig 8, Plate 29). This cut had a broad V-shaped profile and a rounded base and, although had been truncated by modern ploughing, was 0.92m deep and 2.72m wide. Finds from the fills span the 1st to 3rd centuries with a late 2nd to early 3rd century tpq date for infilling. This enclosure ditch has been tracked by geophysical surveys on the south side of the Roman road (A5). The eastern limits of such an enclosure have not yet been established but the geophysical survey suggests its minimum length as 120m.

Artefactual and environmental evidence (Phase 2)

The most precise pointer to when the structures to the south of the military fort were founded seems to be the samian ware, which recommenced arriving in the Antonine period (see below), and none of the other finds contradict this date for the renewed activity. Taking the samian as a guide it is also clear that a high proportion of the Phase 1 pottery has also been incorporated into Phase 2 deposits, and so been recycled in the archaeological record.

The structural remains suggested that the settlement was engaged in production since ovens were frequent, and, in the absence of any industrial residues, these have been interpreted as baking rather than malting ovens. Unfortunately only very slight use-deposits were recovered from within the ovens (eg CG29), and so there were too few artefacts associated to make any more detailed functional connections. As a result review of the general pottery from this phase did not lead to any particular links being made with the ovens. An interesting departure from the norm was that Building III (CG30) was the source of free-threshing wheat regarded as an advancement on the older and, therefore, more native strains of wheat. Since this may have been one of the many improvements being introduced by the Romans, it quite possible that its good transport links made *Uxacona* an early beneficiary of this. It is unknown whether there was an improved taste as well, which would have made its sourcing attractive to bakery looking to increase its sales. Some on-site milling of grain occurred but there was no sign that this was for more than domestic consumption.

It is less clear how long this main phase of activity had lasted but the buildings are unlikely to have lasted much longer than a generation or two, for where repairs to structures occurred (eg Building III) this was only the once, and earth-fast posts are unlikely to last more than 50 years. Pottery was still arriving on the site towards the mid-3rd century, but none was found in use-deposits (eg on floors and in ovens, though such deposits were scarce). The latest pottery from the postholes of buildings was late-3rd century (Building I) suggesting that they were disused/dismantled by that date, and other indicators, such as the minimal Phase 3 deposition/activity, suggest a decline by the mid-3rd century.

3.4 Phase 2a/b

The majority of site features have been dated either through artefactual remains or through stratigraphic relationships, however a number of features have remained undated. Of most interest is a potential wall foundation trench located to the north of Plot 3.2 (CG42; Plate 30) seen during monitoring of the excavation of a pipe trench extending from the main excavation area to the rear of the reservoir (Fig 5), but in circumstances where only a small length of wall foundation could be recorded. The 0.70m deep and 1.20m wide foundation trench, with vertical sides and a flat base, was aligned in a north-north-east to south-south-west direction. It was infilled with a sterile brownish pink sandy clay with angular sandstone fragments, and is possibly the robbed-out stone wall of a building (CG42), potentially the only non-timber building on site.

3.5 Phase 3 (Mid 3rd–4th century AD)

Very little activity could be assigned to this phase and assuming that the large defensive ditch remained intact, it looks as if this part of *Uxacona* was no longer regularly used for domestic occupation (Fig 14). The 'upper' fill/s of the ditch CG8 towards the west of the excavation area are largely sterile, and so may be the result of an associated bank being eroded. The latest *tpq* date of 3rd/4th century, compared with the Browne sequence may suggest that the ditch here was truncated, and, besides, it gives a clear impression here that it was not well maintained and, despite its size, had been filling up from late 2nd century.

The upper ditch fills recorded by Browne (in archive) were very different and had charcoal and fired daub material, looking as if deliberately dumped, with the upper surface of the fill directly below being heated affected and heavily burnt, as if scorched in this position.

During the 1973 excavations a small Roman coin hoard was also identified in the upper fill of this ditch that was thought to have originally been in an organic container that had not survived. This contained 69 coins ranging in date from AD 253–80 and 80 barbarous radiates (Browne and Boon 2002, 6–9). As the final ditch fill was latest Roman, given that a coin of Honorius (AD 395-402) was associated, the final hoard deposition was assigned this *tpq* date. However it is unclear quite what position the hoard had within what was termed the 'upper fills' and so its date of deposition may be less clear than was thought at the time. The coin evidence also, with coins from throughout the Roman period, shows that the upper ditch fill was very mixed, and so there is even a possibility that the hoard had been moved without discovery in the course of some clearance episode. That this ditch was infilled by the 4th century is shown by Pit 370 also dated to the same century.

The 3rd century pottery from post pipe 124 in posthole 125 (CG20) may also tentatively suggest that the 2nd century settlement may have been dismantled and cleared during the 3rd rather than 4th century. The picture is therefore one of changed circumstances with this part of the built settlement being deserted. The latest feature to have succumbed was probably a clay-lined pit 287 (CG10) infilled with dark, humic sandy loams very similar to the overlying soils. A small number of scattered pits (CG34) were also assigned to this reduced phase of activity.

Artefactual evidence

There was little evidence of 4th century activity, as also in the buried soils above, so suggesting that the area within this part of the CG8 enclosure was not much used in this period for activities resulting in artefact breakage/deposition. Clearly some minimal activity continued past the mid-3rd century into the latter part of the century, but this seems to have barely reached the 4th century.

3.6 Phase 4 (4th–20th century)

This phase was represented by a buried soil preserved across the southern half of the site. It was up to 0.50m thick and consisted of a friable dark brown sandy loam (CG35, 36 and 37) and contained significant quantities of Roman pottery, metalwork, fired clay and charcoal. This was

carefully removed in spits in an attempt to recover as much artefactual material as possible. Finds from the soil were not entirely consistent with this however, the upper spits containing 1st to 2nd century material with medieval and post-medieval contamination, while the middle and lower spits were dominated by 1st and 2nd century material with some 3rd to 4th century finds. As plough-marks were recorded cutting Phase 2 features (specifically the CG29 ovens), it eventually became clear during the excavation that this 'buried' soil had in fact been cultivated post 3rd century AD and that some mixing had occurred. Spreads of fired clay within the lowest buried soil spit, approximately 0.10m above ovens CG16, 17 and 18, will also undoubtedly have originated from these structures, again presumably showing the effect of ploughing.

3.7 Phase 5 (c 1970–present)

The final phase of activity was the 1970s construction of the reservoir and associated landscaping (CG38) revealed in various clay levelling layers sealing the buried soil, the current topsoil, a large water pipe cut running north east to south west across the main excavation area, and two soak-aways. Only the modern topsoil was investigated during excavation, which produced a small assemblage of material of Roman to modern date.

4 Material culture

Assessment was undertaken on all the finds from the site (Table 1) and a select post-excavation strategy then undertaken in accordance with MoRPHE standards (English Heritage 2006), the results of which are presented here.

artefact/sample type	evaluation quantity	excav/WB quantity	total quantity
Prehistoric lithics	2	4	6
Roman silver Small Finds	-	1	1
Roman copper alloy Small Finds	7	32	39
Roman iron Small Finds	2	61	61
Roman lead Small Finds	2	19	21
Roman glass Small Finds	-	46	46
Roman frit Small Finds	-	1	1
Roman coins	6	45	51
Roman pottery	223	1893	2116
Roman building materials	39	28	65
Roman worked stone	1	8	9
Roman stone (burnt/unworked?)	15	4	19
Roman slag/production waste	5	29	34
Roman fired clay	21	766	787
post-medieval pottery	9	31	40
modern pottery	1	-	1
post-medieval building materials	3	1	4
Modern glass	-	7	7
Modern coins	-	3	3
Animal bone	3	138	141
Bulk samples	4	71	75

Table 1. Quantification artefactual and environmental material at assessment

4.1 Metalwork and glass (by Hilary Cool)

4.1.1 Introduction

The site was metal-detected for archaeological purposes and this has produced a relatively large assemblage of metalwork, much of it from the buried soil and subsoil levels. Whilst the latter

contexts produced Roman material, a noticeable amount of post-medieval and modern items were also found. The approach taken with this report has been to include all the material stratified in Phase 1-3 contexts, and those items from Phases 4–5 where a Roman date is certain or possible. The condition of the metalwork is variable, with some pieces retaining white metal coatings, whilst on others the surfaces are eroded and it is likely that here some decoration has been lost (Figs 15–17).

The assemblage is summarised by Phase and function in Table 2. The amount stratified within the Phase 1 contexts is small, but, as will become apparent, the military occupation in the mid 1st century is well attested from items found in later contexts. This will be considered further in the overview at the end. Overall, this is an interesting assemblage of finds belonging to the 1st–2nd centuries AD, with the later Roman activity evidenced by the pottery not being visible.

Function	**1**	**2**	**3**	**4**	**Total**
Personal equipment	1	16	1	9	27
Toilet/medical equipment				1	1
Household items	1	3		1	5
Writing equipment		1			1
Military and transport equipment		2		3	5
Building material	1	22	4	10	37
Fasteners		1		4	5
Miscellaneous		6	1		7
Total	**3**	**52**	**6**	**27**	**88**

Table 2: distribution of the metalwork and glass by phase and function.

4.1.2 Personal equipment

This category is dominated by brooches which clearly belonged to both the soldiers stationed at Redhill in Phase 1, and the inhabitants of the 2nd century settlement. Belonging to the first category there is a fragment from an Aucissa brooch (no. 1). It is in poor condition and the damage on the head area means that it is not possible to see the decoration there. Most probably it belongs to either the uninscribed series or the transitional form (Mackreth 2011, 132–3). Aucissas are a Claudio-Neronian form, generally considered to have gone out of use by the early Flavian period. Of interest given the geographical location of Redhill is that they are very strongly represented amongst the assemblage of the legionary fortress at Wroxeter (Mackreth 2002, 100–103).

Nos. 2–3 are fragments of Hod Hill brooches. The two pieces both have an upper panel which is very similar and has the same width. It is very tempting to suggest that they came from the same brooch. The thin displaced strip on no. 3, however, is not ribbed, as would be expected if it came from part of the upper side lug. It can also be noted that it is not normal to have two pairs of lugs at top and bottom of the upper bow panel. Hod Hills, within the Hull classification system, are assigned to type depending on whether they have lugs at the base of the panel (Type 61), the centre (Type 62) or the top (Type 63) (Crummy 1983, 10). Mackreth (2011, 134–9) classifies the Hod Hills by the form of the upper bow, and does not consider the lugs and their positions to be a defining feature. Both nos. 2 and 3 clearly fall into his HH 4, which he notes has few matching designs, and so the possibility that a brooch could have two sets of side lugs cannot be entirely ruled out, though does seem unlikely. He admits that the sub-divisions based on the number of vertical ribs on the panel is arbitrary, but those with a smaller number of ribs as here (his type HH 4b) regularly have Claudio-Neronian dates, and are thus early in the sequence. Like no 1, no. 3 came from a Phase 1 context, and, again, both it, and no. 2 from the middle buried soil horizon, were probably worn by Phase 1 soldiers.

The fragment no. 4 from Phase 2 seems most likely to have come from a Nauheim Derivative brooch, but is not in such poor condition that the identification is not certain. Given the strong presence of Claudio-Neronian brooches on the site, the recovery of a Nauheim Derivative would not be surprising, as they are pre-conquest form whose use continued into the late Neronian period (Mackreth 2011, 14-5).

There are two examples of Polden Hill brooches where the spring is secured by a rod running through the centre of it and lodged in the ends of the spring cover. This is the preferred spring fixing arrangement for Colchester Derivative brooch from the west of Britain. In general the family has a general dating stretching from the very late Neronian/early Flavian period to the mid 2nd century. No 5 is an example of a Mackreth Type CD PH 3 which was in use by the 70s and is thought to have been manufactured in the mid Severn area (Mackreth 2011, 71). No. 6 belongs to Mackreth's Type CD PH 4c (*ibid* 72–3) whose earliest examples come somewhat later in the first century. No. 5 was recovered from a modern context, but it is possible that it could have been associated with the military occupation. No. 6 is likely to have been contemporary with its Phase 2 context.

The rest of the brooches all come from buried soil contexts and are types which would have been in use in the Phase 2 settlement. The first three are all trumpet brooches. The eroded surfaces of no. 7 now only hint at what an impressive brooch it would originally have been. One from an antiquarian collection found at Bredon Hill, Kemerton, in Worcestershire (Mackreth 2011, pl. 79 no. 4907) precisely parallels the distinctive lug, and shows the inlaid pattern on both upper and lower bow, of which only faint ghosts remain on the Redhill brooch. The eye feature on the lower bow, for example, was probably the upper part of running scrolls down both sides. Both brooches are part of Mackreth type TR 1.2.a, where the cells were inlaid with another metal or alloy to produce a contrasting pattern (Mackreth 2011, 119). No. 7 has been found in the heartland of the type which is mainly in the West Midlands and into Wales. Dated examples are generally found in later 1st century to mid-2nd century contexts.

No. 8 belongs to Mackreth type TR 1.3b (Mackreth 2011, 121–2). The sub-variant with a cast-on headloop as here, is less common than the type without. It is a Severn Valley form with the main period of use being in the later 1st to earlier 2nd century. The third trumpet brooch (no. 9) has a distinctive head, where, like no. 8, the upper bow has a junction with a disc-like trumpet head. Here the head is thick, unlike the thin head of no 8. The brooch is similar to Mackreth Trumpet Type 1.4 (Mackreth 2011, 122). The brooches in that came from Alcester (Warks) and Wycomb (Bucks) and it is thus a rare western form. The head of these brooches is characterised by cross-cuts around the edge. The surface of no 9 is somewhat eroded like much of the copper alloy from the site, but there are traces of marks which could be the remnants of such cross-cuts. It seems likely, therefore, that it should be regarded as another example. The Alcester ones come from contexts spanning the Neronian to Antonine period (Mackreth 1994, 166 nos. 51–2, figs. 78–9), and thus it cannot be closely dated within the normal later 1st to mid-2nd century *floruit* of trumpet brooches.

The very poor state of preservation of the headstud brooch no. 10 makes it difficult to be certain of many of the diagnostic features which would help characterise it. It is certainly hinged with a loose wire headloop and has rectangular cells down the front. The latter feature is generally found on brooches early in the series (Mackreth 2011, 106–107, Headstud Type 3) with a *floruit* of the last third of the 1st century. The pin fixing arrangement places it within his Headstud Type 4, which can have this enamelling pattern and is broadly contemporary, possibly running a little later. A late 1st century date is most likely.

The fantail brooch no. 11 with a reserved scroll pattern on the foot, originally set against a brightly coloured enamelled background, forms Hull Type 36 (Hattatt 1985, 117 no. 461) and Mackreth Type CD 7.b3 (Mackreth 2011, 90-91). Hattatt, basing his discussion on the unpublished Hull corpus, considered it an eastern type of the early 2nd century. The Mackreth corpus shows it to be

primarily an East Midlands type, and he suggested an origin in Lincolnshire. The distribution of the type at Castleford certainly suggests that it is a 2nd century form, as there a moderately large assemblage of fantail brooch types was found in a range of relatively closely dated contexts, and this type was only found in mid-2nd century ones (Cool and Philo1998, Table 8, 45 nos. 55-7). No. 11 is another brooch where the extant remains do little justice to the original appearance. The surface of the front retains an indication that it was originally treated with white metal like the example from Owmby (Lincs) discussed by Hattatt (*op. cit.*). The enamel would thus have been set against a shining silvery background.

A common type of copper alloy hair pin (no. 13) of the 2nd centuries is decorated by grooves cut into the top of the head (Cool 1991, 157). The grooves can be spiral, diagonal, cross-hatched or horizontal (sub-groups A-D). Very occasionally the head is of a larger diameter than the shank as in the case of this example, which would thus fall into sub-group A. It has similarities with a pin from Ditchley (Oxfs), where the cylindrical unit is cross-hatched and the finial ovoid (Cool 1991, fig. 4 no 7). It is noticeable that diagonal, spiral and cross-hatched grooves generally seem to be much more frequently used in the western part of Britain than in the eastern part (for data see Cool 1983, 544-56), so, though this pin cannot be precisely paralleled, it fits happily within a western milieu. It is undoubtedly contemporary with its Phase 2 context.

Two beads were found, both from Phase 2 contexts. One (no. 14) was an example of the ubiquitous turquoise frit melon bead. These are extremely common finds from the mid 1st to mid-2nd centuries, especially on military sites. At the Webster excavations at Wroxeter, for example, a quarter of those found were stratified in the legionary contexts (Cool and Price 2002, 252). The other bead (no. 15) is a small blue/green annular bead. Beads started to be made of blue/green glass after a ready supply of the raw material in the shape of broken fragments of glass vessels became available in the mid-1st century. The annular shape belongs to the native bead-making tradition (Guido 1978, 65-7 Group 6). Small ones such as no. 15 were not particularly common but were clearly in use by *c*. AD 80, as an example was found at Leadenhall Court, London in a context of that date (Milne and Wardell 1996, 77 no. 27).

Hobnails, attesting to the wearing of nailed shoes, occurred throughout the sequence, and were associated with the military occupation (no. 16), the 2nd century settlement (nos. 17-9), and found in a late Roman pit (no. 20) and residually (no. 21).

1: Aucissa brooch; hinge and upper body. Copper alloy. Hinge cover rolled up and forward enclosing part of hinge bar; head damaged but faint traces of a beaded transverse row; upper bow with two long vertical ribs transversely nicked, originally probably three but one side damaged; two transverse ribs separated by concavity. Tip of upper edge of catch plate on broken rear edge. Flattened out of shape. Present length 35mm; hinge width 12mm, weight 2.5g. 309: CG30: sf102. Phase 2.

2: Hod Hill brooch; hinge and upper bow fragment. Copper alloy. Part of hinge cover to one side of pin slot, rolled up and forward enclosing part of hinge bar; head expanding to transverse rib and concavity between squared panel on upper bow, panel has three vertical concavities forming four vertical ribs; parts of side lugs on upper corners, probably originally consisting of concavity and rib. Traces of white metal on head at edge of transverse rib. Width of upper panel 11mm, weight 2.1g. 15: CG36: sf28. Phase 4.

3: Hod Hill brooch; bow fragment. Copper alloy. Squared panel on upper bow, panel has three vertical concavities forming four vertical ribs; side lugs on lower corners consisting of two concavities with central rib; deep concavity separating panel from lower bow; three transverse ribs with intervening concavities; triangular tapering lower bow with groove parallel to each long edge; transverse rib and small expanded foot. Broken catch-plate. Small strip of bow at top left-hand

corner almost detached and bent out of shape. Present length excluding strip 39mm, width of upper panel 11mm, weight 2.8g. 129: CG22: sf70. Phase 2.

4: Nauheim derivative brooch; bow fragment with detached single turn of spring. Copper alloy. Very shallow 'D'-sectioned, tapering bow with traces of three beaded ribs. Now bent out of shape. Present length c. 30mm, hoop section 5.5 x 2.5mm. 146 : CG21: sf94. Phase 2.

5: Polden Hill brooch. Copper alloy. Short semi-cylindrical spring cover with perforated ends holding bar running through centre of spring of five turns on each side of missing pin; chord held in place originally by rear hook, now broken. Moulded plate either side of humped head; D-sectioned tapering bow with two vertical ribs running down centre of upper two-thirds, beaded mouldings between; tip of bow and catch-plate missing. Breakage of catch-plate possibly indicative of perforation originally. Present length 54mm, width wings 19mm, weight 11.9g. 4001: CG38: sample 8. Phase 5.

6: Polden Hill brooch. Copper alloy. Short semi-cylindrical spring cover with perforated ends holding bar running through centre of spring of four and three turns either side of missing pin; chord held in place originally by (?)rear hook, now broken; pronounced rib at either end of spring cover. Moulded plate either side of humped head; D-sectioned tapering bow with three vertical ribs running down centre of upper half, central one beaded; ribs end in rounded terminal; bow tapers to small forward projecting, flat-based foot knob; triangular catch-plate with spine running up to central moulding. Length 57mm, width wings 18mm, weight 14.7g. Trench 3 surface find: sf2. Unstratified.

7: Trumpet brooch. Copper alloy; surfaces eroded. Trumpet head with perforated central lug; lug has shallow 'D'-shape with point projecting above head and lower part with scalloped edge and hooked lower edge to hold chord from missing spring. Trumpet head has two grooves around upper edge; trumpet and upper bow have remnants of cells for inlay, probably originally triskeles; central moulding with squashed central button, details of ribs above and below obscured, but traces of moulded narrow petals grasping central button visible; triangular-sectioned tapering lower bow, small ring and dot cell at top; cylindrical hollow foot knob with remains of shank internally. Catch-plate broken and missing. Length 65mm, width of head 14mm, weight 22.5g. 13: CG37: sf55. Phase 4.

8: Trumpet brooch, complete. Copper alloy. Disc-shaped head with integral cast circular head loop; central D-shaped perforated lug behind with wire spring of one and two turns and complete pin, pin now bent out of shape; tall D-sectioned upper bow not occupying all of head, tapering to central moulding of three narrow transverse ribs with deep concavities between, mouldings on front of bow only, faint traces of white metal on edges of mouldings; triangular-sectioned lower bow tapering to flat-based foot knob with rib above; trapezoidal catch-plate. Length 49mm, length excluding headloop 44mm, width head 10mm, weight 8.5g. 15/16: CG36: sf54. Phase 4

9: Trumpet brooch. Copper alloy. Thick disc head, possibly with very slight cross-cuts on edge; central lug on back with slight upward hook at bottom; lug retains spring of one turn on one side and two on other, chord runs below lug and is held in place by upward hook; pin missing. Upper triangular bow meeting disc head centrally. Central mouldings run around back and front of bow; mouldings consist of narrow rib on either side of disc-shaped button with deep concavities between, groove around each rib, and top and bottom of button. Triangular-sectioned tapering lower bow, flat-based projecting foot knob; triangular catch-plate with spine running up to central moulding. Length 60mm, head width 14mm, weight 20.6g. 7003: CG37: sf14. Phase 4.

10: Headstud brooch. Copper alloy with heavily degraded surfaces. Short wings with closed hinge cover behind retaining wire hinge bar and part of pin with spur; small fragment of loose wire headloop with ribbed collar now detached; raised circular cell at head of bow; rectangular

sectioned bow tapering to foot knob probably with horizontal rib(s); front of bow has row of rectangular cells, enamel now decayed but regularly retaining traces of deep red. Broken catch-plate. Length 48mm, width wings 19mm, weight 15.8g. 15: CG36 : sf60. Phase 4.

11: Fantail brooch; lacking pin. Copper alloy. Short wings with semi-cylindrical hinge cover behind retaining hinge bar; broken integral headloop. Curved rectangular upper bow tapering in from wings with triangular forming lower bow. Two vertical grooves on upper bow; lower bow has sunken field leaving reserved scroll pattern with diamond-shaped cell above. Cells originally filled with enamel, now missing. Broken trapezoidal catch-plate. A silvery appearance where original surface survives on front, especially on fantail. Length (excluding headloop) 31mm, width wings 13.5mm, weight 3.8g. 15: CG36: sf57. Phase 4.

12: Bow brooch. Currently obscured by iron corrosion. 308: CG10: sample 53: Phase 2.

13: Hairpin. Copper alloy. Small conical terminal; deep groove below; slightly convex-sided cylindrical unit bevelled inward at top and bottom, and decorated by spiral diagonal grooves; slightly diagonal rib at base; circular-sectioned shank tapering to slightly chipped point. Length 100mm, head section 6.5mm; shank section 2.5mm. 257: CG30: sf 95. Phase 2.

14: Melon bead. Turquoise frit, retaining bright glaze in band around centre and at one edge of perforation. Regular gadroons; cylindrical perforation. Approximately three-quarters extant. Length 15mm, diameter 19mm, perforation diameter 9mm, weight 3.5g. 151: CG22 : sf93. Phase 2.

15: Annular bead. Blue/green glass. D-sectioned, oval with irregular cross-section. Diameter 10 x 8mm, section (max.) 3.5 x 3mm, (min.) 2 x 1.5mm, weight 0.2g. 309: CG 30: sf103. Phase 2.

16: Hobnail. Iron. Broken head. Head width 7mm, length 13mm. 338: CG5: sample 56. Phase 1.

17: Hobnail. Iron. Head diameter 9mm. 399: CG8. Phase 2.

18: Hobnails (6). Iron. Probably domed heads, two corroded together at angle. Head widths *c*. 7mm. 276: CG30: sample 42. Phase 2.

19: Hobnail. Iron. Domed head; shank tip bent to one. Head width 7mm, length 12mm. 65: CG31: sample 17. Phase 2.

20: Hobnail. Iron. Flattened head. Head width 9mm, length 12mm. 371: CG8. Phase 3.

21: Hobnails (2). Iron. Pyramidal head length 14mm, head width 8mm. Domed head. Head width 10mm, length 14mm. 16: CG35. Phase 4.

4.1.3 Toilet equipment

The only item in this category is the long instrument no. 22, which has lost one terminal. The extant terminal is an elongated spoon and the missing terminal is most likely to have been an olivary probe, as this was the commonest pairing known as a *cyathiscomele* (see, for example, Bliquez 1994, 145–54). These were duel-purpose instruments used in both cosmetic preparation and in medical pharmacy. This example has a complex moulding behind the spoon and a carefully faceted shank. These are features regularly seen in the spoon and spatula probes from undoubted sets of surgical instruments (Jackson 1986, 156, fig. 4), and so no. 22 would certainly have been suitable for medical use. A date within the first two centuries AD is appropriate, but as it came from the buried soil it is unclear whether it was associated with the military occupation or the later settlement.

22: Spoon (probe). Copper alloy. Hexagonal-sectioned shank, broken at one end. Other end has elongated, bent and broken spoon; cylindrical circular-sectioned unit between shank and spoon consisting of three sets of narrow transverse ribs (three, three and two) with two elongated zones with faint ribbing parallel to axis of instrument between. Shank bent. Present length *c* 130mm, shank section 3mm, cylindrical unit section 4mm. 7003: CG37: sf5. Phase 4.

4.1.4 Household equipment

The fill of a Phase 1 pit (337, CG5) produced a decorative moulded medallion depicting a face from the base of a handle of a glass jug (no. 23). The body of the jug has been carefully removed from the back of the medallion turning it into a curio in its own right. The leaves either side of the headband across the forehead indicate that this is Bacchus, god of wine, an appropriate motif for a jug that may have contained that beverage. A variety of designs representing Bacchus and his companions are known to have been used on glass jugs (see discussion in Cool and Price 1995, 118–20). The type represented here is of particular interest as it has occurred on the western military sites of Wroxeter, Mancetter and Abergavenny, as well as two examples from London (for discussion see Cool and Price 2002, 230, 250 no. 185). All of those from the military sites have been re-worked, as is the case here. Those from Mancetter and Abergavenny came from Neronian contexts, but they may have been old by that time, as an example was found in a Tiberian context at Vindonissa in Switzerland.

The Wroxeter example was from a post-military context. In discussing it Cool and Price (1995) have pointed out that, as it had been re-used, there was no certainty it had arrived during the period of the legionary occupation. The fact that three examples have now come from Neronian contexts might well suggest that it was associated with the initial occupation at Wroxeter, and so no. 23 would then provide an interesting link to the legionary fortress there. The pattern of recovery of these medallions is intriguing, and it would be fascinating to know quite what the appeal was that this particular design held for the Neronian soldiers stationed in the west, other than a devotion to Bacchus and his wine.

The only other types of glass vessel represented were utilitarian blue green glass bottles in very common use from the later 1st century into the 3rd century (Price and Cottam 1998, 194–200). They are represented by the strain-cracked handle fragment (no. 24), and body fragments from contexts 149 (CG22) and 520 (CG8), suggesting they were in use in the 2nd century settlement.

The enamelled disc no. 25 from the buried soil is clearly part of a composite item given the rebated lower edge which is clearly designed to fit with another element. There is white metal on both parts of the rebate, presumably remains of the solder which would have joined the pieces. The most obvious suggestion is that it is from an enamelled vessel. The best known of these are the small saucepan-like vessels sometimes decorated with inscriptions that can be linked to the forts on Hadrian's wall. There was clearly though, a whole range of other vessel forms made up from separate components soldered together. The complexity of these can be seen from the moulds used to make enamelled canteens at Castleford during the last two decades of the 1st century (Bayley and Budd 1998, 203-22). Other closed vessels include hexagonal stemmed flasks, such as that found with a cremation burial dating to the first half of the 2nd century at Corbridge (Casey and Hoffmann 1995, 24 no. 6, fig. 3). A handled globular flask with lid is known from a grave at Nijmegen in the Netherlands which was contemporary with the context of the Castleford moulds (Koster 1997, 82–3). A stemmed conical bodied flask with lid and handled has been recovered from the Camarina A wreck off of Sicily (Wilson 1995, 71 fig. 5), which can be dated to the final quarter of the 2nd century. So far, a type that would require a disc like this, possibly acting as a base, has not been recovered to my knowledge. As will be obvious from the types of contexts quoted for the complete ones, special circumstances are needed for a complete example to be recovered. There are certainly other forms yet to be found given the component parts sometimes found. A square panel from Aldborough (Cool 1997), for example, has two rebated sides like the rebated face on no. 25, and that cannot be accommodated in any of the known forms. Amongst the

Castleford moulds there were some fragments that did not belong to canteens. One of these was from a conical vessel and the mould preserved a rim edge (Bayley and Budd 1998, 214 pattern 13, fig.86). It was suggested that this might have been from a beaker with a flaring rim. Possibly no. 25 might have come from the base of such a vessel. If the identification as part of an enamelled vessel is correct, then no. 25 can be dated to within the late 1st and 2nd centuries (ie too late to be associated with the military occupation). The milled effect around the edge is a feature it shares with enamelled studs of the mid 2nd century, possibly hinting at a 2nd century date rather than an earlier one.

23: Complete mask medallion with fragment of handle and side of jug. Light yellow/brown glass. Applied oval medallion with flat border. Well moulded, rounded face with features in high relief; hair shown as undulating ridges either side of central parting, latter almost obscured by lower part of extant applied handle attachment; head band running across forehead between bunches of leaves on either side; diagonally ridged ringlets on either side of face. Trail from formation of medallion runs across the chin, up the side of the face, across the hair from left to right, merging into right-hand side of medallion. Body of jug neatly broken off behind medallion with grozing visible on right-hand side (as viewed from rear). Upper edge of medallion chipped by handle attachment. Dimensions 38 x 38mm, weight 26.6g. 338: CG1: sf106. Phase 1.

24: Bottle; handle fragment (1 large piece and *c.* 25 small strain-cracked pieces and chips). Blue/green. Wide ribbon handle retaining one rounded edge and very faint reeding. Dimensions (largest) 43 x 19mm, weight (all) 16.1g. 308: CG10: sf104. Phase 2.

25: Vessel component. Copper alloy. Disc with rounded upper edge with grooves around giving a beaded/milled effect; back rebated at edge. Front has central triskele cell set with enamel now appearing green, three pointed oval/petal cells around edge with red enamel. Traces of white metal around rebased edge on underside with two small patches on plain central part of back. Diameter 34.5mm, maximum thickness 3mm, weight 13.6g. 16: CG35: sf73. Phase 4.

4.1.5 Writing equipment

No. 26 from a Phase 2 context is the base of a lozenge-shaped seal box. In general seal boxes were in use during the first three centuries AD, and the lozenge shape exists from the 1st century and was generally enamelled (Andrews 2012, 27-8,Shape L1), frequently with a chequerboard fashion. A complete example from Wroxeter with such a combination of shape and decoration had a lower unit very similar to no. 26 (Bushe-Fox 1916, 27 no. 25 pl. XVIII), and the Atkinson excavations produced a similar lid (Atkinson 1942, 211 no. A314, Pl 51), whilst the Barker excavation produced a lid with an enamelled lyre shape (Cool *et al* 2014, 77 no. 3517).

26: Seal box base. Copper alloy. Short lozenge-shaped with four perforations; double-lugged hinge retaining hinge element from (missing) lid; small moulded knobs at each corner other than the hinge, two central ones have channels for string. Bent out of shape. Length 32mm, width 22mm. 271: CG19: sf98. Phase 2.

4.1.6 Military and transport equipment

Whilst in the Crummy functional categories these two types of equipment would be discussed separately, here they will be discussed together, as the horse fitting no. 27 is clearly a military type. When complete the loops on the back, now only represented by stumps, would have had a leather strap threaded through. This strap would have kept the saddle in place passing around either the breast or rear of the horse (see Jenkins 1985, figs. 1 and 15). The third loop would have articulated with a pendant. A virtually complete example with the pendant only slightly damaged was recovered from Wroxeter, where the fronts of both elements were coated with white metal and had black niello decoration (Bushe-Fox 1916, 30 no. 30, pl XVIII). These are typical fittings of the mid to

later 1st century army (Bishop and Coulston 1993, 105), and so the association of no. 27 with the early military occupation is certain, despite coming from the buried soil.

The identification of no. 28 as another harness roundel is less secure, as only about one-quarter of the rim remains. The convex profile and front treated with white metal would be consistent with it coming from one of the larger roundels and pendants that the sets of harness fittings, which no. 27 came from, normally had (see Jenkins 1985, 143 Group A; Webster 1971, fig. 10 no. 3). The traces of curving lines that can be seen coming in from the broken edge could well be the grooves for the inlaid niello tendrils, with which it would have been decorated.

Lunula pendants like no. 29 are a regular component of military assemblages and could be used on both apron fittings and in horse-harness. No. 29 is broken where there may have been a hook, suggesting it was part of a composite pendant. Webster (2002, 110 no. 66, fig. 4.13) suggested that this was how a very similar one from the fortress at Wroxeter was used. Though from a Phase 2 context, this piece is also likely to be residual from Phase 1.

The cylindrical ferrule no. 30 is included with more caution here. It is from the lower spit of the buried soil, and so a Roman date cannot be guaranteed. However, short ribbed tubes or ferrules are a regular feature of 1st century military assemblages (Bishop 1998, 81 no. 343, fig. 28; Webster 1992, 132 nos. 132-3), and no 30 could well be another. Their specific function is unknown.

No. 31 may have been a link from a two-link snaffle bit, where the rings at either end were in the same plane (Manning 1985, 66–7).

27: Harness roundel. Copper alloy. Circular disc with dished front, central part has three concentric ribs. Central perforation for shank of missing central boss; front retains traces of white metal. One short rectangular loop on rear with stumps of four others from two similar, longer, loops at right-angles to extant loop. Diameter 40mm, thickness 1.5mm. 7003: CG37: sf3. Phase 4.

28: Harness roundel, rim fragment. Copper alloy. Approximately one-quarter of hollow-backed convex rim; groove around edge producing slight rib; front retains white metal with patches of copper alloy corrosion; traces of curving grooves by broken edge. Original diameter *c*. 70mm, thickness 3mm. 61: CG28: sf49. Phase 2.

29: *Lunula* pendant. Copper alloy. Hollow-backed *lunula* pendant with arms tapering to centre and meeting at a small ribbed moulding. Centre of upper edge broken. Dimensions 27 x 26mm, thickness 2mm. 298: CG 15: sf100. Phase 2.

30: Ferrule. Copper alloy. Cylindrical with chipped ends; horizontal grooves producing ribbed effect on outer surface. Length 17mm, diameter 11mm, thickness 1.5mm. 16: CG35: sf63. Phase 4.

31: (?)Bridle bit link. Iron. Bar with curved elements at both ends. Length 41mm. 151: CG 22. Phase 2.

4.1.7 Items associated with buildings

Structural ironwork was not common on this site. Excluding two long examples in contexts 151 (CG22, P2) and 399 (CG8, P2) which appear to be intrusive modern pieces, Phase 2 produced a total of 22 nails (quantified by heads) with CG22 being the most prolific with nine examples. Phase 1 produced one nail and Phase 3 produced a joiners' dog (no. 32; Manning 1985, 131) and three nails (CG10). The buried soil horizons produced a few additional pieces, including a second joiners' dog (no. 33) and nine nails. In the latter category the obviously modern examples have been excluded, but naturally there is no security that the other nails in Phase 4 contexts relate to

the Roman occupation. Of the complete nails, thirteen are less than 70mm long (range 39–68mm) and thus fall into the commonest category of Roman joiner nails (Manning 1985, 134). There are also three slightly longer ones measuring 85–90mm.

32: Joiners' dog. Iron. Slightly bent out of shape. Length 82mm. 372: CG8. Phase 3.

33: Joiners' dog. Iron. Length *c*. 75mm. 18: CG36: sf36. Phase 4.

4.1.8 Tools and craft waste

No items belonging to this context were found in Roman contexts but a fragment of copper alloy casting waste was found in the subsoil (sf10, context 4001) and this could possibly relate to activity during the Roman period.

4.1.9 Fasteners

The only fastener found in a Roman context was the small stud no. 34 (Phase 2), but there were four other items from the buried soil which were of Roman date. The key handle no. 34 is a type thought to have come into use during the 2nd century (Crummy 1983, 126 no. 142), though Webster published an example from Wroxeter as part of the suite of finds associated with the legionary occupation there (Webster 2002, 117 no. 129), and noted that there were two similar ones from earlier excavations. It is unclear why this association was made, as the context does not appear to be associated with the use of that site as a fortress.

There are also three pottery repairs (nos. 36–8). Nos. 36–7 belong to the clamp variety and are probably lacking a lower bar, and no. 38 is of the plug form retaining a fragment of pottery. Most probably these belong to the 2nd century settlement. It has been noted that rural sites in the Gloucestershire region show a high incidence of lead pottery repairs (Cool 2007, 347). There it was suggested that the impetus for repair was not necessarily poverty, but might have been associated with religious/ritual behaviour. The possibility that the high incidence of repairs in this relatively small Redhill assemblage might be similarly explained, should be considered.

34: Stud. Copper alloy. Small hemispherical head; circular-sectioned shank tapering to wedge-shaped point. Length 13mm, head section 4.5mm, shank section 1.5mm. 52: CG12: sf97. Phase 2.

35: Key handle. Copper alloy. Small trefoil handle of fleur-de-lys shape with key-hole opening centrally and circular opening in each side petal; square-sectioned hollow ribbed unit at base retaining part of iron key shank. Present length 36mm, maximum width 20.5mm, section at base 6mm. 15: CG36: sf23. Phase 4.

36: Pot repair, clamp. Lead alloy. Approximately square-sectioned bar with two rivets at end, terminal of one in-turned. Length 42mm, section bar 5.5mm, total depth 16mm. 16: CG 35: sf75. Phase 4.

37: Pot repair, clamp. Lead alloy. Rectangular-sectioned bar with remains of two rivets at end. Length 35mm, bar section 10 x 6mm. 16: CG36: sf74. Phase 4.

38: Pot repair. Plug. Lead alloy. Circular with 'H'-shaped profile; retaining fragment of reduced pottery. Diameter 15mm, depth 10mm. 15: CG36: sf27. Phase 4.

4.1.10 Miscellaneous

The Phase 2 contexts also included a number of fragments that could not be assigned to functional type, including fragments of copper alloy sheet and wire, and pieces of iron straps. The only recognisable item was an iron ring (no. 38).

39: Ring. Iron. Diameter 39mm, section 4mm. 308: CG10: sf101. Phase 2

4.1.11 Overview

As will be clear from the foregoing, the finds divide into two groups. One is clearly associated with the military occupation of Phase 1, though the pieces are often found in Phase 2 or buried soil contexts (nos. 1–4, 16, 23, 27–30). Comparanda can often be offered from the legionary fortress at Wroxeter, and the military occupation at Redhill would have been contemporary with the earlier occupation in the fortress. The presence of the harness fittings nos. 27–8 make it tempting to suggest this was the base for a unit of cavalry, though it should be remembered that legions also had mounted sections which would have needed horse harness. There is though, an absence of the type of copper alloy buckles and other fittings from *lorica segmentata*, the legionary form of armour. The comparison with the Wroxeter assemblage where such fittings are very numerous is marked (see Webster 2002, 105-107 nos. 1–31, fig. 4.9-10). The absence is especially noticeable at Redhill because the metal-detecting recovered so much metalwork.

A larger group of finds can be associated with the 2nd century settlement on the basis of both their context and their typological date (nos. 5-15, 17-9, 24-6, 31, 34-8). Given that many of the diagnostic pieces come from the buried soil, the assemblages that can be attributed to the different plots are too small to attempt any characterisation of the type of occupation being carried out in each one. As a whole though, the assemblage does have useful things to tell us about life in this settlement. Given its location, Redhill can be viewed as lying within the hinterland of Wroxeter, though in a part not covered by the Wroxeter Hinterland Project (Gaffney *et al* 2007, fig. 2.5). That project broadly painted a picture of communities who were not particularly engaged with the material culture seen so abundantly within the town (Gaffney *et al* 2007, 283). This is not the picture that emerges from Redhill, where, whilst not as abundant as assemblages from sites further south in the Worcestershire/Gloucestershire area, the assemblage is diversified and not impoverished. Generally the types recovered are regional ones belonging to the broad West Midlands/Severn Valley area. This indicates that the inhabitants were well embedded in the systems that distributed these things. There are also occasional indications, such as the enamelled vessel component no. 25 and the fantail brooch no. 11, that items were reaching the site from further away. This neatly corresponds with the scenario recently proposed by White (2014) that roadside Wroxeter hinterland settlements have notably higher levels of cultural material than those even a short distance away from the roads.

It has been possible to regularly cite comparanda for items from Wroxeter, just as it was for the military finds. Again though there is are slight but interesting differences in the assemblage if the brooches are closely considered. Table 3 shows the later 1st–2nd century brooches from Redhill with the equivalent figures for Wroxeter derived from the principal excavations that have taken place there. The Redhill assemblage is small in comparison, but it can be seen that the focus is very different. The Colchester Derivative/Polden Hill family dominate the Wroxeter assemblage, whereas, at Redhill, it does not, where, instead, the focus is on the brooch types that form a smaller component of the Wroxeter assemblage. We still do not understand the motives that drove people to choose one brooch type rather than another in Roman Britain, but this is not the first time it has been possible to identify urban/rural differences in that choice (Cool 2007, 345 Table 13.12). The people at Redhill certainly found more of a use of mainstream Romano-British material culture than those on some other sites in the Wroxeter Hinterland did, but there were still elements that would have distinguished them from their urban neighbours.

Type	Redhill	Wroxeter	Total
Colchester Derivative	2	59	61
Trumpet	3	29	32
Headstud	1	5	6
Fantail	1	3	4
Total	7	96	103

Table 3: A comparison of the late 1st to 2nd century brooch assemblages from Redhills and Wroxeter. (Data for Wroxeter from Bushe-Fox 1913, 1914, 1916; Atkinson 1942; Ellis 2000, Webster 2002, Cool et al 2014).

4.2 Coins (by Cathy King)

sf no	context	CG	phase	ruler	obverse	reverse	mintmark	mint	date	denom	broken	imit	reference	wt.(g)	condition
53	15	36	4	Claudius I	[Antonia], head r.	Figure standing l.	S C	-	41-42	dupondius	-	-	Giard, 1988, pl.24, 143-8	17.39	very worn
61	15	36	4	Claudius I	female head, r.	Figure standing l.	S C	-	uncertain	dupondius	-	-	-	15.57	very worn
108	259	30	2	Antoninus Pius	ANTONINVS PIVS,laur, r.	Female figure stg. L, SC	-	Rome	2c	~	-	-	-	21.59	v. worn
112	371	8	3	Antoninus	head, r.	Figure standing l.	SC in field	Rome	2c	-	-	possibly	-	16.34	very worn
78	16	35	4	Faustina?	female head, r.	uncertain	-	-	-	-	-	-	cf.BMC IV, p.863 for refs	12.01	bronze disease
6	-	-	-	Septimius Sev?	illeg	SECVRITAS [ ]	-	Rome ?	193-211	denarius	-	-	-	2.60	quite good
72	16	35	4	Gallienus	GALLIENVS[ ]	FORTVNA[ ]	S r. in field	-	c. 260-86	Ant	broken	yes	-	2.36	worn
45	16	35	4		head r.,Gallienus (?)	Figure standing r.	-	-	260-268	Medallion	-	-	-	13.12	very worn
42	16	35	4	Salonina?	head, r.	SAL[VS]	-	-	3C	Ant	broken	yes	-	1.57	worn
7	13	37	4	Claudius II	illeg	Minerva	-	-	c. 260-86	Ant	-	-	-	7.68	encrusted
88	16	35	4	Tetricus I or II	TETR[ ]	Figure standing l.	Illeg	-	c.270-73	Ant	~	yes	-	1.09	worn
109	421	31	2	Tetricus Caes	[ ]RICVS CAES	[ ]RIA, stg. fig, hldg corn.	-	?	270-273	Ant	-	yes	uncertain	1.98	slightly worn
116	505	1	1	Licinius	[ ]LICIN[ ]	Figure standing l.	T/F/PTR	Trier	308-324	nummus	-	-	-	3.98	very worn
38	16	35	4	Constantine I?	laur., bare, r.	SALVS [ ], stg., r.	-	-	c.306-337	nummus	-	yes	-	2.71	worn
51	15	36	4	Helena	head r.	PAX PVBLICA, figure stg. Left	Illeg	Cons	337-341	nummus	-	-	LRBC 1046	2.43	very worn
37	16	35	4	H.o.C.	diademed head, r.	GLORIA EXERCITVS, 1 stan	-	-	c.330-348	nummus	broken	yes	-	0.89	worn
76	16	35	4	H.o.C.	head r.	GLORIA EXERCITVS 1 STAN.?	Illeg	-	c.335-348	nummus	broken	yes	-	0.37	very worn
4	7003	37	4	illeg	Head r.	Stg. figure	-	-	Late 1c?	-	-	-	-	10.61	very worn
62	16	35	4	illeg	head,r.	illeg	-	-	1c-2c?	As?	-	-	-	6.24	very worn
65	16	35	4	illeg	Laureate head, r.	altar	-	-	1c-2c?	As?	-	-	-	7.38	worn
66	16	35	4	illeg	Laureate head, r.	illeg	-	-	1c-2c?	As	-	~	-	7.86	bronze disease
90	111	30	2	illeg	head r.	Figure standing l.?	Illeg	-	1c-2c?	-	-	-	-	19.61	worn
91	114	30	2	illeg	female head, r.	Figure standing l.	S field l,	-	1c-2c?	-	-	-	-	20.52	worn
96	52	12	2	illeg	diademed head, r.	Figure stg. l, 2nd figure behind	-	-	1c-2c?	-	yes	yes	-	0.92	worn
10	16	35	4	illeg	Female head, ?	Figure standing l.	-	-	1c-2c?	-	-	-	-	17.56	worn

5															
113	371	8	3	illeg	head, r.	Figure standing l.	SC in field	Rome ?	1c-2c?	-	-	-	-	9.18	worn,encrusted
114	371	8	3	illeg	head, r.	Figure standing l.	SC in field	Rome ?	1c-2c?	-	-	-	-	15.86	very worn
82	214	25	2	illeg	[ ] COS III	PIETAS [ ]	-	-	2c?	denarius	-	yes	-	2.57	worn
68	15	36	4	illeg	head r.	illeg	Illeg	-	c. 260-86	Ant	broken	yes	-	2.51	
9	13	37	4	illeg	radiate crown	illeg	-	-	c. 268-86	Ant	slightly	yes	-	0.99	frags
39	16	35	4	illeg	head, r.	Britannia?, seated l.	-	-	3C	-	-	-	-	21.45	worn
14	15	36	4	illeg	head, r.	illeg	?	-	3c-4c	-	broken	yes	-	1.43	worn
15	15	36	4	illeg	radiate head r.	illeg	-	-	3c-4c	-	broken	yes	-	0.71	worn
52	15	36	4	illeg	head r.	illeg	Illeg	illeg	3C-4C?	-	-	-	-	4.77	very worn
71	16	35	4	illeg	head r.	illeg	-	-	3c-4c?	-	broken	yes	-	0.31	worn
11	9001	38	5	illeg	illeg	illeg	Illeg	-	3c-4c?	-	-	yes	-	1.89	v. worn, encrusted
50	16	35	4	illeg	head r.	figure seated, left	Illeg	-	4c poss.	nummus	-	possibly	-	5.89	very worn
107	369	34	3	illeg	diademed head, r., cuir.	Figure standing l.,	-	-	4c?	nummus?	yes	yes	-	0.69	v. worn
7	8000	38	5	illeg	head r.	figure seated, left	Illeg	-	4c	-	-	-	-	5.15	worn, encrusted
21	15	36	4	-	illeg	illeg	-	-	-	-	broken	yes	-	0.37	worn
44	16	35	4	illeg	head, r.	figure seated, left	-	-	-	-	-	-	-	11.15	worn
67	15	36	4	illeg	head r.	illeg	-	-	uncertain	As	broken	yes	-	7.72	bronze disease
77	16	35	4	illeg	head r.	illeg	Illeg	-	-	-	-	-	-	6.14	very worn
81	-	-	-	illeg	head r.	2 standing figures	-	-	-	bronze core of denarius	-	-	-	2.77	very worn
84	48	12	2	illeg	head r.	illeg	-	-	-	-	-	-	-	11.20	worn, bronze disease
86	16	35	4	illeg	head, r.	Figure standing r.	-	-	-	-	-	-	-	2.06	worn
87	15	36	4	illeg	head r.	illeg	-	-	uncertain	-	-	-	-	21.66	very worn
110	52	12	2	illeg	head, r.	illeg	-	-	-	-	chipped	yes	-	6.76	worn,encrusted
1	2006	7	2	illeg	illeg	illeg	illeg	illeg	-	-	yes	yes	-	2.26	very worn
12	9001	38	5	illeg	head, r.	Standing figure?	Illeg	illeg	-	nummus?	yes	yes	-	0.33	worn
22	15	36	4	-	-	-	-	-	-	-	-	-	-	18.89	worn
59	15	36	4				-	-	-	-	-	-	-		missing
1	12	38	5	George II	[ ] II REX		-	-	1714/27	halfpenny	-	-	-	8.07	worn

11	13	37	4	-	-	-	-	-	-	sixpence	-	-	-	~	excluded

Table 4: Coins from Redhill (abbreviations - LRBC: Carson 1990; BMC: Mattingley 1940)

The condition of the coins is poor, with a high proportion being worn, a smaller number very worn or encrusted, and a few are in fragments or suffering from bronze disease. A significant proportion are ancient copies (imitations of genuine coins). There is also a potentially interesting number of possible 1st and 2nd century coins than tends to occur on British sites if one excludes hoards. However, confirmation of this is precluded by the low level of coin legibility and uncertainty that cleaning would improve this situation.

Most of the Roman coins had been incorporated into the overlying soils, and mainly into the slightly disturbed original ('buried') ploughsoil. Out of the 51 Roman coins, thirteen were from within the occupation deposits that were mainly of phase 2 date, with which they were considered to be generally contemporary. None of this group was, however, of 1st century date, and so they could all have been associated with the later (ie phase 2) civilian activity, since their illegibility might be caused by the extreme wear that such coins had, since they often circulated until late in the 3rd century, in addition to the soil conditions. Only one of these coins was more closely dated (Antoninus Pius). The coins from the later sealing deposits, apart from a conquest period coin and one of the later 1st century AD, were almost entirely of mid 3rd–4th century date, the latest having a final date of AD 348.

4.3 Pottery (by C Jane Evans)

4.3.1 Introduction

A total of 2131 sherds of Roman pottery was recovered, weighing 54.5kg (Table 5), and the focus of the study presented here is mainly the pottery from Roman deposits, Phases 1 to 4. The largest assemblage, by count and estimated vessel equivalent (rim EVE), came from Phase 2 deposits (Table 5, Fig. 18). The high proportion of pottery from Phase 1, particularly when calculated by % weight, is biased by a large quantity of heavy, Dressel 20 amphorae (435 sherds weighing 24,466g). The majority of this (384 sherds, 21,774g) came from the lower portion of a single vessel found in the fill of an elongated pit (CG3, linear 67, fill 82). This alone makes up 18% of the recorded assemblage by count, and 41% by weight. This amphorae also distorts the average sherd weight for Phase 1; excluding this the average weight is 17g, more similar to figures for Phases 2 to 4. Phase 4 also produced a significant proportion of the pottery, but a much smaller assemblage was recovered from Phase 3 deposits, but this just broadly reflects the volumes of excavated deposits across phases.

The Phase 1 deposits included some more-complete vessels; these are more likely to represent primary dumps. The pottery from later phases was more mixed and is thought to include much re-deposited. The Phase 2 assemblage included residual vessels from Phase 1, and the Phase 3 and 4 assemblages have residual pottery from all earlier phases.

Phase	count	% count	wt. (g)	% wt.	rim EVE	average wt.
1	642	30%	28001	52%	3.74	44
2	764	36%	14692	27%	11.08	19
3	146	7%	2141	4%	2.22	15
4	531	25%	8654	16%	7.39	16
5	9	0%	21	0%	0	2
unstratified	6	0%	113	0%	0	19
Total studied	**2098**	**98%**	**53622**	**99%**	**24.43**	**26**
phase 5 not studied)	30	1%	481	1%	na	16
unstrat (not studied)	3	0%	91	0%	na	30
Total	**2131**	**100%**	**54194**	**100%**	**na**	**25**

Table 5: summary of all the Roman pottery by phase

Pottery was recovered from 142 Phase 1-4 contexts, the vast majority of which produced less than 10 sherds (Table 6); 27 contexts (19%) produced only 1 sherd apiece. The two largest assemblages came from the Phase 1 pit containing the in situ amphora (fill 82, 389 sherds) discussed above, and the Phase 4 buried soil (context 16, 274 sherds). The pottery was excavated from a range of feature types, the majority coming from ditches, pits and the buried soil (Table 7).

sherd count	number of contexts	% of contexts
200-400	2	1%
50-76	4	3%
20-49	18	13%
10-19	20	14%
1-9	98	69%
total	142	

Table 6: Roman pottery sherd count by context, Phases 1-4

Feature type	count	% count	weight(g)	% weight	% rim	% rim EVE
Beam slot	3	0%	18	0%	6	0%
Buried soil	488	23%	8229	15%	669	27%
Colluvium	2	0%	4	0%	0	0%
Ditch	1023	49%	35817.5	67%	941	39%
Layer	81	4%	777	1%	118	5%

Oven	76	4%	1007.5	2%	32	1%
Pit	287	14%	5948	11%	494	20%
Pit/ tree throw	6	0%	116	0%	12	0%
Post Hole	117	6%	1571	3%	171	7%
Subsoil	4	0%	0	0%	0	0%
Topsoil	6	0%	48	0%	0	0%
Unstratified	5	0%	86	0%	0	0%
Total	**2098**	**100%**	**53622**	**100%**	**2443**	**100%**

Table 7: Recorded Roman pottery by feature type

4.3.2 Methodology

Sherds were analysed at x20 magnification and fabrics (Table 8) and forms were recorded, where possible, with reference to the series published for the Wroxeter baths and macellum (Timby *et al* 2000). Initial work on the fabrics showed that a wide range of coarse ware fabrics was present. Given the distance of Redhill from Wroxeter, and the location of the site on a major road, it could not be assumed that these would directly correlate with the Wroxeter coarsewares. For this reason, a site specific fabric type series was devised, cross-referenced where possible with the Wroxeter codes. Some later fabrics and forms, types not included in the baths and macellum assemblage, were recorded with reference to the baths basilica report (Symonds 1997). First-century fabrics and forms were also described with reference to the more detailed publication on the legionary assemblage (Darling 2002). Where appropriate, fabrics were also cross-referenced with the National Roman Fabric Reference Collection (Tomber and Dore 1998). Precise form types and broad vessel classes (for example bowl, cook pot) were recorded. Evidence for manufacture (eg firing, potters stamps), use (eg sooting or limescale) and repair (eg rivet holes) were recorded, where evident. However, much of the assemblage was abraded, so surface treatments, for example colour coating, generally did not survive well. Diagnostic forms and fabrics provided dating evidence for activity on the site, contributing to the site phasing. These forms are illustrated by phase, showing contemporary vessels that date the phase as well as residual vessels of interest (Figs. 24, 27, 32). Published parallels are provided for more fragmentary, diagnostic rims that are discussed in the text but not illustrated. The assemblage was quantified by sherd count, weight and rim EVE. Data for base EVEs are recorded in the archive. The pottery data were analysed using Microsoft Access 2007.

4.3.3 Discussion by fabric

Seventy-one individual fabrics were identified (Tables 8–9), divided into twelve fabric classes (Table 10). The bias caused by the amphorae has already been noted, these representing more than half the assemblage by weight, a quarter of the assemblage by count, and none of the assemblage by rim EVE (Table 10). Percentages by count and rim EVE are, therefore, arguably, more reliable than weight for analysing the assemblage. Based on these, the most common fabrics are: regionally produced sandy oxidised and reduced wares; Severn Valley wares, particularly oxidised Severn Valley without organic temper; and Black burnished ware (BB1). A wide range of other sources are represented. In addition to amphorae, imports include significant quantities of samian (Monteil below) and colour-coated wares from Central Gaul and Lyon. 'Traded wares', the products of major Romano-British industries, include: colour-coated wares and/or mortaria from Oxfordshire, the Nene Valley, Mancetter-Hartshill, and the Verulamium region; and cooking wares from the Malvern area and Dorset (BB1).

As at Wroxeter (Timby *et al* 2000, 247), there were sometimes problems separating the Severn Valley wares from the finer Wroxeter-type sandy wares, and some typical Severn Valley ware forms occurred in sandier fabrics (eg nos 33, 50). A range of Severn Valley fabrics was noted; including reduced ware, typically early organic-tempered wares, sandier variants, and a fabric with more abundant than usual soft white inclusions (Fabric O13). The latter is similar to a fabric recorded in Worcestershire, thought to be from a Malvern source (Evans 1991; Bryant and Evans 2004, 257), and similar inclusions are noted in the Malvernian Severn Valley ware described in the

National Roman Fabric Reference Collection (Tomber and Dore 1998, 148, SVW OX 1), identified as decayed feldspar, though they are also present to varying degrees in the un-sourced ware (Tomber and Dore 1998, 149, SVW OX 2). It is quite feasible that Severn Valley wares from the Malvern area were reaching Redhill, given that handmade Malvern ware (Fabric MALVH) was present. However, Severn Valley ware with sparse sand (Fabric O6) was by far the most common variant, and this is thought to have been made at Wroxeter, or perhaps more locally. Some sherds in Severn Valley ware were cream-slipped (Fabric 04).

Some variation was noted in the range of forms produced in the Severn Valley ware fabric groups, the widest range being in the oxidised Severn Valley wares (Fig 19, SVW OX); unsurprising as this was the largest group. Standard Severn Valley ware vessels, such as narrow-mouthed jars, wide-mouthed jars and tankards, dominated this group. The emphasis amongst the less common organic oxidised fabrics was on wide-mouthed jars, tankards, lids and carinated bowls (Fig 19, SVW ORG OX). The reduced Severn Valley ware (Fig. 19, SVW R) had a distinctly different profile, with medium-mouthed jars and beakers. Lids were noted in all groups, and were the only form recorded in the reduced, organic ware.

A range of sandy fabrics was noted, distinguished on the basis of coarseness and the presence of other distinguishing inclusions. It is not certain how significant these fabric divisions are; they may represent unintentional variations within the local fabrics. The vessel profiles (Fig 20) are quite different to the Severn Valley wares. The reduced wares are dominated by medium-mouthed jars, while flagons and bowls are more common in the oxidised wares. Most of the forms in these wares are similar to vessels produced at Wroxeter. It is possible that these vessels were also produced there, particularly given that Wroxeter mortaria were reaching the site. If not, they were at least produced by potters working in a very similar tradition. Some vessels, however, are not typical Wroxeter types, for example a globular jar with distinctive rouletted decoration (Fig. 24, no 3). These are likely to have another source, probably elsewhere in the Midlands.

The other main class of regional ware was the early Roman, grog-tempered wares. There was significant variation within these, with 14 fabrics recorded. This could indicate a number of different sources for these wares, or might reflect a lack of standardisation in these early-Roman, native fabrics. The overall proportion of these (Table 10) is higher than in the Wroxeter military assemblage, where all the native wares combined represented <1%. The most common forms were medium-mouthed jars and bowls (Fig 21), followed by wide-mouthed jars, beakers, and a possible tankard.

A number of cream ware fabrics were recorded, again separated on the basis of coarseness. Some of these may be Wroxeter products, as cream ware mortaria were produced there in the military period and into the Antonine period, and Wroxeter potters are also known to have been using a pipe clay fabric to make very fine cream ware vessels (Timby *et al* 2000, 250). Other likely sources include Mancetter-Hartshill and Oxfordshire. Verulamium region white ware was recorded separately

archive fabric code	source	Common name	Timby *et al* code	Reference/Description
AMDR20	Import	Dressel 20 amphorae	AMDR20	Peacock and Williams 1986, class 25; BAT AM 2, Tomber, R, and Dore, J, 1998 (T&D) 85, pl 62
AMDR2-4	Import	Dressel 2-4 amphorae	AMDR2-4	Peacock and Williams 1986, class 10; T&D ?
AMGAU4	Import	Gauloise 4 amphorae		Peacock and Williams 1986, class 27; GAL AM 1, T&D 93, pl 69
AMSPAIN	Import	Southern Spanish amphorae (fish sauce)	AMSPAIN	Form/precise fabric uncertain
BB1	Traded	South-east Dorset BB1	BB1	DOR BB 1, T&D 127, pl 100; Williams 1977; Seager Smith and Davies, 1993
BB1 SW	Traded	South-west Dorset BB1		SOW BB 1, T&D 129, pl 102

CGBS	Import	Central Gaulish Black-slipped ware		CNG BS, T&D 50, pl 36
CGCC	Import	Central Gaulish (cream) colour-coated ware	CGCC	T&D 53, pl 54
CREAM1	Regional/traded	White/cream ware (sand)	CREAM	Fine pipe-clay fabric with abundant sand <0.3mm and sparse red and black inclusions
CREAM2	Regional/traded	White/cream ware (fine sand)	CREAMF	Abundant very fine, silty sand and red and black inclusions
CREAM3	Regional/traded	White/cream ware (moderate sand)	CREAM	Moderate milky white quartz <1mm, and occasional conglomerate check term!! Of sand. Sparse red/brown clay pellets and black inclusions
CREAM4	Regional/traded	White/cream ware (coarse sand)	CREAMC	Abundant sand <0.8mm, sparse red and black inclusions
CREAM5	Regional/traded	White/cream ware	CREAMF	Sparse sand <0.2mm, occasional red clay pellets, moderate silt-sized black inclusions
GROG1	Regional	Grog-tempered ware (wheelmade, oxidised, coarse)	NATIVE	Wheelmade, oxidised surfaces and reduced core, ill-sorted rounded/sub-rounded clay pellets <1mm, sparse soft white inclusions and black organic
GROG2	Regional	Grog-tempered ware (wheelmade, oxidised, fine)	NATIVE	Wheelmade, oxidised surfaces and reduced core, sparse rounded/subrounded clay pellets <0.5mm, sparse/moderate fine sand <0.2mm, sparse soft white inclusions, occasional black shiny inclusions
GROG3	Regional	Grog-tempered ware (handmade, reduced, coarse)	NATIVE	Handmade, dark grey/black surfaces and brown core, with abundant, ill-sorted, angular grog and rounded clay pellets ranging in colour from buff, red/brown, to pale grey, giving a distinctive multi-coloured appearance. Occasional black organics.
GROG4	Regional	Grog-tempered ware (wheelmade, reduced, fine)	NATIVE	Wheelmade, reduced? (patchy firing); external surface partially reduced, dark grey external margins, grey core. Moderate, ill-sorted, rounded/sub-rounded grog/clay pellets <1mm, varying in colour from buff, red/brown, grey/black, white
GROG5	Regional	Grog-tempered ware (wheelmade?, pale reduced, coarse)	NATIVE	Wheelmade? Pale reduced fabric with abundant, ill-sorted, angular/sub-angular grog <3mm, ranging from cream, pale orange, to black. Sparse sand <0.2mm
GROG6	Regional	Grog-tempered ware	NATIVE	Wheelmade, reduced, with fumed dark grey surfaces and a grey core. Abundant, ill-sorted, angular/sub-angular, grey grog <1mm, sparse fine sand and occasional black inclusions
GROG7	Regional	Grog-tempered ware (wheelmade, oxidised, with fine sand)	NATIVE	Wheelmade, oxidised surfaces and margins, pale reduced core. Distinctive laminar fabric with abundant, ill-sorted sub-angular grog <3mm, ranging in colour from pale oxidised, pale reduced to red/brown. Abundant, fine sand <0.1mm
GROG8	Regional	Grog-tempered ware (handmade, oxidised, vesicular)	NATIVE	Handmade, pale buff surfaces and dark grey core. Abundant, ill-sorted, rounded/subrounded grog/clay pellets <2mm, mainly buff but with occasional dark grey fragments. Moderate elongated voids and occasional shell plates
GROG9	Regional	Grog-tempered ware (handmade, oxidised, very coarse)	NATIVE	Handmade, oxidised surfaces and reduced core, Abundant, very coarse, ill-sorted, angular/sub-angular grog <5mm
GROG10	Regional	Grog-tempered ware (handmade, reduced, with shell)	NATIVE	Handmade, fumed dark grey/black ext surface, pale reduced external margin, pale oxidised internal margin. Abundant, ill-sorted, sub-angular, pale grey grog <2mm and moderate shell plates
GROG11	Regional	Grog-tempered ware (wheelmade, reduced, fine micaceous)	NATIVE	Wheelmade, reduced, micaceous fabric. Fumed dark grey surfaces, oxidised margins and grey core. Sparse, fine grog <0.5mm
GROG12	Regional	Grog-tempered ware (handmade, reduced, fumed surface)	NATIVE	Handmade, reduced, with fumed black external surface, red/brown external margin/internal margin and surface, dark grey core. Moderate, ill-sorted, rounded/sub-rounded grey/dark grey grog <1mm
GROG13	Regional	Grog-tempered ware (wheelmade, oxidised, sand)	NATIVE	Wheelmade, oxidised with a pale reduced core. Abundant, ill-sorted, milky white quartz <0.5mm and moderate ill-sorted, rounded clay pellets <0.5mm
GROG14	Regional	Grog-tempered ware (wheelmade, reduced, hackly with sand)	NATIVE	Wheelmade, reduced throughout, with a distinctive hackly fracture. Type sherd very hard fired. Abundant, ill-sorted, angular, grey grog <3mm and moderate, ill-sorted angular quartz <1mm. Occasional black shiny inclusions and black organic
LYON	Import	Lyon colour-coated ware	LYON	LYO CC, T&D 59, plate42
MALVH	Traded	Malvernian Group A,	MALVH	MAL RE A ,T&D 147, plate 120; Peacock 1967,

		handmade ware		Peacock 1968
MANCH	Traded	Mancetter-Hartshill mortarium	MANCH	MAH WH, T&D 189, pl 157a-d
MOCR	Traded	Caerleon/Gloucester	-	-
MOVR	Traded	Verulamium Region mortaria	MOVR	VER WH, T&D 154, pl 126a-b
MOXFRC	Traded	Oxfordshire red-slipped mortaria	MOXFRC	OXF RS, T&D 176, pl 147
MOXFW	Traded	Oxfordshire white mortaria	MOXFW	OXF WH, T&D 175, pl 146a-b
MWWOCR	Regional	Wroxeter white Colour-coated mortaria	MWWCR	WRX WS, T&D 180, pl 151
MWWOF	Regional	Wroxeter fine oxidised mortaria	MWWOF	WRX OX, T&D 178, pl 149a-b
MWWR	Regional	Wroxeter reduced mortaria	MWWR	Timby et al 2000, 250
MWWWW	Regional	Wroxeter white mortaria	MWWWW	WRX WH, T&D 179, pl 150a-c
NVCC1	Traded	Nene Valley colour-coated ware (cream/white)	NVCC1	LNV CC, T&D 118, pl 91
NVCC2	Traded	Nene Valley colour-coated ware (pink/buff)	NVCC2	LNV CC, T&D 118, pl 91
O1	Regional	Oxidised sandy ware	WWO	Moderate-abundant, ill-sorted, sub-angular, milky quartz <1mm, and sparse black inclusions
O2	Regional	Oxidised sandy ware	WWOF	similar to Fabric 01 but moderate quartz
O4	Regional	Cream slipped, oxidised Severn Valley ware fabric	SVO	Oxidised fabric with cream slip. very sparse sand <0.1mm, and sparse black, and soft white inclusions
O5	Regional	Oxidised sandy ware	WWO	Similar to fabric O1 but with sparse black inclusions
O6	Regional	Severn Valley ware, oxidised (sparse sand)	SVO	Severn Valley ware fabric with sparse sand
O7	Regional	Cream-slipped, oxidised sandy ware	WWOC	cf Fabric O1 but cream slipped
O8	Regional	Oxidised sandy ware (coarse)	WWO	Similar to Fabric O1 but with very abundant ill-sorted quartz <1mm
O11	Regional	Severn Valley ware, oxidised (fine)	SVOF	No visible inclusions
O12	Regional	Severn Valley ware, oxidised (organic)	SVORGO	Organic Severn Valley ware
O13	Regional	Severn Valley ware, oxidised (soft white inclusions)	SVO	Severn Valley ware with moderate soft white inclusions (cf Worcestershire Fabric 12.6)
O14	Regional	Oxidised sandy ware (coarse, cream slipped)	WWOCC	cf Fabric O8 but with cream slip
O15	Regional	Oxidised sandy ware (fine, cream slipped)	WWOCF	cf Fabric O11 but with cream slip. Type sherd overfired
OXFRCC	Traded	Oxfordshire red-slipped ware	OXFRCC	OXF RS, T&D 176, pl 147
R1	Regional	Reduced sandy ware (coarse, rouletted)	WWR?	Fumed, dark grey external surface, oxidised internal surface and margin, grey core. Abundant, fairly well-sorted quartz < 0.8mm (Fig JEa. 3)
R2	Regional	Reduced sandy ware (fine blue-grey)	WWRF	Fired blue-grey throughout, sparse-moderate sand
R3	Regional	Reduced sandy ware (soft brown inclusions)	WWRF	Sparse-moderate fine sand, soft brown inclusions
R4	Regional	Reduced sandy ware	WWR	Moderate-abundant sand
R5	Regional	Reduced sandy ware (coarse, soft brown inclusions)	WWR	sand and brown inclusions, coarser than R3
R6	Regional	Reduced sandy ware (sparse grog)	WWR?	Moderate sand <0.5mm, occasional red/brown clay pellets <0.2mm
R9	Regional	Severn Valley ware, reduced (sparse sand)	SVR?	very fine, sparse sand
R10	Regional	Severn Valley ware, organic reduced	SVORGR(F)	Fumed, dark grey external surface and red/brown core and internal surface. Moderate, fine sand <0.3mm, and sparse black and white inclusions (rusticated jar?)
R11	Regional	Severn Valley ware, reduced (fine)	SVRF	fine cf O11
R13	Regional	Reduced sandy ware (fine)	WWRF	fine abundant sand
R14	Regional	Severn Valley ware, organic reduced	SVORGR	organic Severn Valley ware with occasional rounded clay pellets and soft white inclusions
R15	Regional	Reduced sandy ware (fine)	WWRF	Grey throughout. Abundant, very fine sand <0.2mm and abundant, ill-sorted black inclusions <0.8mm giving a distinctive 'salt and pepper' appearance
SAMLG	Import	South Gaulish samian, La Graufesenque	SAMSG	LGF SA, T&D 28, pl 17

MLEZ	Import	Central Gaulish samian, Les Martres-de-Veyre (pre-import)	SAMCG	
SAMMV	Import	Central Gaulish samian, Les Martres-de-Veyre	SAMCG	LMV SA, T&D 30, pl 19
SAMCG	Import	Central Gaulish samian, Lezoux	SAMCG	LEZ SA 1, T&D 31, pl 20 & LEZ SA 2, T&D 32, pl 21
SAMEG	Import	East Gaulish samian, Rheinzabern/Trier	SAMEG	RHZ SA, T&D 39, pl 27 / TRI SA, T&D 41, pl 29
VRW	Traded	Verulamium Region White ware	VRW	VER WH, T&D 154, pl 126a-b
WHEG	Traded	White eggshell ware (unknown source)	WHEG	Sparse silt-sized brown and black inclusions

Table 8: list of Roman pottery fabrics

fabric class	fabric code	count	% count	weight (g)	% weight	rim %	% rim EVE	av wt
Amphorae	AMDR20	496	24%	29396	55%	0	0%	59
Amphorae	AMDR2-4	8	0%	110	0%	0	0%	14
Amphorae	AMGAU4	29	1%	722	1%	0	0%	25
Amphorae	AMSPAIN	4	0%	216	0%	0	0%	54
Colour-coated ware	CGBS	2	0%	42	0%	0	0%	21
Colour-coated ware	CGCC	1	0%	15	0%	0	0%	15
Colour-coated ware	LYON	1	0%	2	0%	7	0%	2
Samian	MLEZ	1	0%	2	0%	4	0%	2
Samian	SAMCG	78	4%	1104	2%	208	9%	14
Samian	SAMEG	7	0%	56	0%	27	1%	8
Samian	SAMLG	41	2%	232	0%	35	1%	6
Samian	SAMMV	5	0%	83	0%	14	1%	17
Cream-slipped ware	O14	4	0%	31	0%	0	0%	8
Cream-slipped ware	O15	5	0%	48	0%	0	0%	10
Cream-slipped ware	O4	1	0%	22	0%	0	0%	22
Cream-slipped ware	O7	13	1%	197	0%	0	0%	15
Grog-tempered	GROG1	4	0%	158	0%	6	0%	40
Grog-tempered	GROG10	2	0%	4	0%	0	0%	2
Grog-tempered	GROG11	4	0%	28	0%	15	1%	7
Grog-tempered	GROG12	1	0%	14	0%	0	0%	14
Grog-tempered	GROG13	5	0%	56	0%	6	0%	11
Grog-tempered	GROG14	2	0%	96	0%	0	0%	48
Grog-tempered	GROG2	18	1%	524	1%	18	1%	29
Grog-tempered	GROG3	8	0%	75.5	0%	10	0%	9
Grog-tempered	GROG4	6	0%	109	0%	21	1%	18
Grog-tempered	GROG5	2	0%	23	0%	0	0%	12
Grog-tempered	GROG6	6	0%	57	0%	10	0%	10
Grog-tempered	GROG7	1	0%	40	0%	8	0%	40
Grog-tempered	GROG8	5	0%	93	0%	0	0%	19
Grog-tempered	GROG9	1	0%	35	0%	0	0%	35
Mortaria	MOCR	1	0%	12	0%	0	0%	12
Mortaria	MWWOF	2	0%	435	1%	5	0%	218
Mortaria	MWWR	1	0%	79	0%	0	0%	79
Mortaria	MWWWW	1	0%	41	0%	0	0%	41
Sandy oxidised	O1	142	7%	1452	3%	265	11%	10
Sandy oxidised	O2	77	4%	905.5	2%	136	6%	12
Sandy oxidised	O5	32	2%	648	1%	41	2%	20
Sandy oxidised	O8	25	1%	300	1%	0	0%	12
Sandy reduced	R1	7	0%	138	0%	26	1%	20
Sandy reduced	R2	74	4%	1560	3%	197	8%	21
Sandy reduced	R3	2	0%	57	0%	0	0%	29

Sandy reduced	R4	71	3%	776	1%	96	4%	11
Sandy reduced	R5	1	0%	5	0%	0	0%	5
Sandy reduced	R6	2	0%	18	0%	0	0%	9
Sandy reduced	R13	1	0%	2	0%	0	0%	2
Sandy reduced	R15	1	0%	9	0%	0	0%	9
Severn Valley ware	O11	52	2%	430	1%	52	2%	8
Severn Valley ware	O13	35	2%	470	1%	10	0%	13
Severn Valley ware	O6	358	17%	5535.5	10%	522	21%	15
Severn Valley ware organic	O12	19	1%	409	1%	31	1%	22
Severn Valley ware organic reduced	R10	5	0%	48	0%	4	0%	10
Severn Valley ware organic reduced	R14	2	0%	43	0%	0	0%	22
Severn Valley ware reduced	R11	16	1%	120	0%	36	1%	8
Severn Valley ware reduced	R9	35	2%	386.5	1%	57	2%	11
Cream ware	CREAM1	12	1%	108	0%	10	0%	9
Cream ware	CREAM2	5	0%	18	0%	0	0%	4
Cream ware	CREAM3	14	1%	213.5	0%	0	0%	15
Cream ware	CREAM4	17	1%	145.5	0%	0	0%	9
Cream ware	CREAM5	3	0%	26	0%	15	1%	9
BB1	BB1	230	11%	2843	5%	358	15%	12
BB1	BB1 SW	1	0%	25	0%	20	1%	25
Colour-coated ware	NVCC1	3	0%	14	0%	0	0%	5
Colour-coated ware	NVCC2	5	0%	94	0%	0	0%	19
Colour-coated ware	OXFRCC	8	0%	424	1%	68	3%	53
Mortaria	MANCH	26	1%	1103	2%	77	3%	42
Mortaria	MOVR	4	0%	544	1%	11	0%	136
Mortaria	MOXFRC	2	0%	25	0%	0	0%	13
Mortaria	MOXFW	3	0%	112	0%	8	0%	37
Native ware	MALVH	36	2%	362	1%	9	0%	10
White ware	VRW	3	0%	91	0%	0	0%	30
White ware	WHEG	3	0%	4	0%	0	0%	1
total		2098	100%	53622	100%	2443	100%	26

Table 9: summary of the Roman pottery by fabric

source	Fabric class	count	% count	weight (g)	% weight	Rim %	% rim EVE
Import	Amphorae	537	26%	30444	57%	0	0%
	Colour-coated ware	4	0%	59	0%	7	0%
	Samian	132	6%	1477	3%	288	12%
Regional	Cream-slipped ware	23	1%	298	1%	0	0%
	Grog-tempered	65	3%	1312.5	2%	94	4%
	Mortaria	4	0%	555	1%	5	0%
	Sandy oxidised	276	13%	3305.5	6%	442	18%
	Sandy reduced	159	8%	2565	5%	319	13%
	Severn Valley ware (ox.)	445	21%	6435.5	12%	584	24%
	Severn Valley ware (ox.org.)	19	1%	409	1%	31	1%
	Severn Valley ware (red. org)	7	0%	91	0%	4	0%
	Severn Valley ware (red.)	51	2%	506.5	1%	93	4%
	Severn Valley ware (all)	*522*	*25%*	*7442*	*14%*	*712*	*29%*

Regional/ traded	Cream ware	51	2%	511	1%	25	1%
Traded	BB1	231	11%	2868	5%	378	15%
	Colour-coated ware	16	1%	532	1%	68	3%
	Mortaria	36	2%	1796	3%	96	4%
	Native ware	36	2%	362	1%	9	0%
	Cream ware	6	0%	95	0%	0	0%
total		**2098**	**100%**	**53622**	**100%**	**2443**	**100%**

Table 10: summary of the Roman pottery by fabric class

4.3.4 Discussion by phase

A detailed quantification of fabrics by phase is included in Appendix below. For the purpose of analysing general trends, the pottery is quantified and discussed here by fabric class, only discussing specific fabrics where these are significant. Where catalogue pottery numbers are listed without an individual figure reference these refer to Figures 24, 27 and 32.

Phase 1 (Mid-1st century AD)

The majority of the Phase 1 assemblage came from ditches (573 sherds, 26,771g), the remainder coming from various pits. The closest dating for the assemblage came from the samian, a Dressel 20 amphora handle and a stamped mortarium. The samian forms suggested a pre-Flavian date, prior to *c* AD 70 (Monteil, below). The Verulamium mortarium, stamped by the potter Albinus, is dated by Kay Hartley to *c* AD 60–80 (Fig. 24, no 14). The Dressel 20 handle (no 13) is a broadly Flavian-Trajanic type but, at the time of writing, the only other known example of the stamp is from a Flavian context. The diagnostic coarse wares are broadly consistent with a 1st century date. A number of forms and some of the fabrics have parallels in the military assemblage at Wroxeter (nos 1–14), associated with occupation dating to *c* AD 56–90. A sherd of East Gaulish samian, dated *c* AD 150–250, from ditch 396 (fill 410, CG1), is considered intrusive.

The Phase 1 fabrics are totally dominated by amphorae (Fig. 22); mainly Dressel 20 olive oil amphorae from southern Spain, but also six sherds of Dressel 2-4 amphorae from Lyon or the Rhône Valley, used to transport wine, dates or fish sauce. A similar pattern was noted in the Flavian assemblage at Pentrehyling fort and Brompton camp where, in phase 2, Dressel 20 made up 46% of the assemblage (Evans 2015, table 6; Evans 2007, fig 5.8e). Excluding this, sandy wares are the most common fabric class. Reduced sandy wares in particular make up a significant proportion of the assemblage when quantified by rim EVE, the most common fabrics being Wroxeter sandy ware types R2 (WWRF), R4 and R1 (WWR). Fabrics O1 (WWO) and O2 (WWOF) are most common amongst the oxidised wares. Other Wroxeter fabrics include a single sherd of Wroxeter reduced mortaria (MWWR) and, perhaps, the cream-slipped ware. The next main class comprised the grog-tempered wares, which were more common in Redhill Phase 1 than in the Wroxeter military assemblage and may represent a range of sources. Grog-tempered wares are fairly common at 1st century sites in the Midlands, for example at Metchley fort (Greene and Evans 2002, 90-3, Table 17, Fabrics 5.3, 6.2, 6.3, 7.3) and at Wall (eg Leary 1998, 26-7, Fabrics GTA1-3, BSB1, OAA2). Small quantities were also recorded at the Flavian fort and vicus at Brompton, to the west of Wroxeter (Evans 2015, table 5, SANDRG1/2, GROGWC). Severn Valley wares, although not common, were slightly more common than in the Wroxeter military assemblage, where they each represented <1% (Darling 2002, 143). Traded wares reaching Redhill included white ware (VRW) and mortaria (MOVR) from the Verulamium region, a small quantity of handmade Malvernian ware from Worcestershire, and possibly the cream wares. The handful of BB1 and Mancetter-Hartshill mortaria are considered intrusive.

The Phase 1 assemblage comprised a limited range of vessel form types (Fig 23; nos 1-14), dominated by globular or ovoid, medium-mouthed jars. Most of these are types paralleled in the Wroxeter military assemblage. One (no 3), however, was in a coarser fabric and had distinctive rouletted decoration, and another, found in a Phase 2 context (no 22) was in a grog-tempered fabric, neither of which are characteristic of the Wroxeter wares. Bowls were the second most common class. These again included a mixture of forms typical of the Wroxeter military assemblage (no 11) and forms likely to be from elsewhere. The latter group included Belgic-derived, carinated bowls and a grooved bowl (nos 8-10). Other vessels included: flagons, a pulley-rimmed type (no 1) and a fragmentary rim from a Hofheim-type flagon (not illustrated, cf no 15); a Malvernian tubby cooking pot (no 7); and in samian, a Dr 36 dish or shallow bowl, and a Dr 18R platter.

Various, more exotic forms found in the Wroxeter military assemblage were absent at Redhill, for example tazze, lamps, and triple vases. The Phase 1 assemblage also produced a narrower range of fine wares than found at Wroxeter, since, for example, there were no sherds of glazed ware, mica-dusted ware, or Pompeian red ware, and no imported mortaria. This might, however, just reflect the much smaller Redhill assemblage size, rather than being a real variation in pottery supply and use.

Phase 1 pottery (Figure 24, nos 1–14)

1: Pulley-wheel rimmed flagon; the commonest military flagon type at Wroxeter (Darling 2002, fig. 5.26, F1; Timby *et al* 2000, 196, fig. 4.49). 1st century. Fabric O11, diameter 6cm (15%). CG1, ditch 385, fill 386. Form F2, Rec 562

2: Globular jar with a thickened, everted, grooved rim (Darling 2002, fig. 5.26, 4.5; Timby *et al* 2000, 214, 4.58). 1st century. Fabric R4, diameter 13cm (11%). CG1, ditch 396, fill 410. Form JM3.1, Rec 88

3: Globular jar with a short, everted rim. The form in general is paralleled in the military assemblage at Wroxeter (Timby *et al* 2000, fig. 4.58) but the distinctive, rouletted decoration is not. Fabric R1, diameter 14cm (26%). CG1, linear 506, fill 505. Form JM4, Rec 27

4: Short-necked jar with thickened, elongated rim; a type found in military deposits at Wroxeter (Darling 2002, fig. 5.28, 30.5; Timby *et al* 2000, fig. 4.60, JM7.87). 1st century. Fabric O1, diameter 10cm (14%). CG5, pit 339, fill 340. Form JM7.87 Rec 73

5: Short-necked jar with slightly hooked rim, a type associated with military deposits at Wroxeter (Darling 2002, fig. 5.28, JM8; Timby *et al* 2000, fig. 4.61, JM8). 1st century. Fabric R2, diameter 13cm (60%). CG1, linear 506, fill 505. Form JM8, Rec 32

6: Short-necked jar with an angular bead rim, a type associated with military deposits at Wroxeter (Darling 2002, fig. 5.28, 27.5; Timby *et al* 2000, fig. 4.60, JM7.5). 1st century. Fabric R2, diameter 14cm (59%). CG1, linear 506, fill 505. Form JM7.5, Rec 30

7: Malvernian ‘tubby cooking pot’ with near upright walls and thickened rim (Timby *et al* 2000, 207, fig. 4.54, JC1.1). No examples of this form are illustrated from the Wroxeter military assemblage (Darling 2002), but the form is present in 1st century deposits elsewhere in the west midlands: for example the pre-Flavian, assemblage at Metchley fort, Birmingham (Green and Evans 2002), and the Flavian-Trajanic assemblage at Pentrehyling fort, Shropshire (Evans 2015). Fabric MALVH, diameter 14cm (8%). CG5, pit 339, fill 340. Form JC1.1, Rec 69

8: Bowl with a low carination and tall, slightly flaring walls. This form has native origins (cf Webster 1976, fig 9. H59, 60) rather than military. A few examples, however, are recorded from the military assemblage at Wroxeter in a vesicular Severn Valley ware fabric (Darling 2002, fig. 5.37,

217-220; Timby *et al* 2000, 222-224, fig. 4.64, B3.4). 1st-early 2nd century. Fabric GROG2, diameter 17cm (13%). CG5, pit 339, fill 340. Form B3.4, Rec 65

9: Rim, probably from a carinated bowl similar to no. 8 above. 1st –early 2nd. Fabric R2, diameter 19cm (7%). CG3, linear 249, fill 246. Form B3, Rec 48

10 Body from a waisted, carinated bowl with tooled or pushed out cordons. The waisted form is reminiscent of Belgic types found in Claudio-Neronian assemblages elsewhere in the region (eg Evans 2014, fig. 18.12). This is not a type recorded in the military assemblage at Wroxeter, but a similar form is illustrated from the pre-Flavian assemblage at Metchley fort, also in a grog-tempered ware. 1st century. Fabric GROG2. CG5, pit 339, fill 340. Form B3.4, Rec 64

11: Reeded-rim bowl. While this form is typical of the military assemblage at Wroxeter, Darling notes that it is not common on other early military sites in the west Midlands, such as Wall and Metchley (Darling 2002, fig. 5.32, 88.9; Timby et al 2000, 227-228, fig. 4.67). 1st century. Fabric O1, diameter 22cm, (23%). CG5, pit 339, fill 340. Form B13.6, Rec 75

12: Fragmentary, flared rim, possibly from a carinated bowl. This was not a typical military form at Wroxeter; a single example was found in the military demolition phase, thought to be intrusive (Darling 2002, Fig. 5.31, 86.3; Timby *et al* 2000, 224, fig. 4.64). Another similar bowl, residual in a 3rd century deposit, was dated to *c* AD 85–105, based on a parallel from Southwark (Timby *et al* op cit, B2.22). 1st- early 2nd. Fabric R2, diameter 23cm (9%). CG5, pit 339, fill 340. Form B2.2, Rec 78

13: Most of a Dressel 20 handle with a complete impressed stamp *in ansa*. David Williams reported as follows:

> The stamp reads C E L S I (Callender, 1965, no. 293; Carreras and Funari, 1998, no.142; Berni Millet, 2008, 562). This stamp is not common in Britain, only previously occurring as far as the writer is aware at Southwark (Carreras and Funari, 1998, no.142). Production of Dressel 20 vessels bearing this stamp is associated with a workshop at Cerro de los Pesebres, to the north-east of Celti, on the south bank of the River Guadalquivir (Berni Millet, 2008, Lamina X). The shape of the handle associated with this stamp has been dated to the Flavian–Trajanic period (Étienne and Mayet, 2004, 320), though at Southwark this stamp was found in a Flavian context (Carreras and Funari, 1998, no.142).

Fabric AMDR20. CG3, linear 249, fill 246. Rec 19.

14: Mortarium in Verulamium region fabric. Kay Hartley reported as follows:

> An identical rim profile was recorded at Colchester (cf Hartley 1999, 189, fig 4.18, no.20). The fabric may be overfired rather than burnt, but traces of the creamy buff slip survives. The well-sorted trituration grit is smallish to tiny and extends up to the bottom of the bead; it was used in combination with close, concentric scoring. The trituration grit has been completely worn away by heavy usage so that it survives for only 2-2.5cm below the bead. The incomplete, right-facing stamp was impressed diagonally across the rim. It is a counterstamp of Albinus and when complete reads LVGD\FEC with a curved, diagonal spacer between D and F; for published examples see Dennis 1978 (377, fig.171, no. M7) and Symonds and Wade 1999 (196, fig 4.24, S6-S9). This stamp, with its accompanying name stamp of Albinus (*ibid*, no. S5) is often impressed diagonally or along. This positioning, plus the use of small to tiny trituration grit up to the bottom of the bead, combined with concentric scoring may mean that it should be dated earlier rather than later in Albinus's activity. His overall date of production is *c* AD 60–90, but a date before AD 80 should be appropriate for this vessel.

Verulamium mortaria were noted in the military assemblage from Wroxeter (Darling 2002, fig. 5.38, 254, 255; Timby *et al* 2000, fig. 4.74, M7). Fabric MOVR, diameter 31cm (21%). CG3, ditch fill 85. Form M7, Rec 22

Phase 2 (2nd to early 3rd century)

The majority of Phase 2 pottery came from ditches (367 sherds, 7555.5g), pits (209 sherds, 4571.5g) and post-holes (117 sherds, 1571g), the remainder coming from assorted layers, ovens, beam slots and miscellaneous deposits.

The samian provides some of the best dating evidence for this phase of activity, where there were very few early 2nd century vessels and only a few Hadrianic ones, the bulk of the samian dating to the Antonine period. A number of residual, 1st century vessels were also identified. The presence of residual first century pottery was also apparent amongst other fabrics (nos 15–28; Figs 25–6), with fabrics such as grog-tempered and Lyon wares, and forms such as a Hofheim type flagon and carinated bowls (nos 15, 24, 25). Of particular interest, in terms of dating but also its possible cultural significance, was a sherd from a decorated Central Gaulish black-slipped ware beaker dated to *c* AD 150–200 (no 30 and Plate 31; described in detail below).

A range of traded wares also provided useful dating evidence for this phase. The presence of BB1 indicated a *tpq* of at least *c* AD 120, the date at which this ware is generally thought to have become more widely distributed. Forms ranged in date from the early-mid 2nd to late 2nd–early 3rd century (nos 31, 39, 40; cf Timby *et al* 2000, fig. 4.55, JC3.1, JC3.2, JC3.4, JC3.6, JC3.7; fig 4.70, D3.13). The mortaria included a fragmentary Mancetter-Hartshill vessel dating to *c* AD 180–230 (not illustrated; cf Darling and Precious 2014, fig 162, 1661, form MTRB) and an Oxfordshire white ware mortarium dating to *c* AD 100–170 (not illustrated, Young 2000, fig 19, M6). Three sherds of Nene Valley colour-coated ware (NVCC2) also suggested a mid-2nd century *tpq* for the contexts in which they occurred. Apart from the residual forms, the other coarse ware vessels were consistent with this date range. These included Severn Valley ware jars and tankards (nos 33 35 37; Webster 1976 fig 1.A6, fig 5.C23, fig 7.E40) and a ring-necked flagon in a sandy oxidised ware (Fig JE2, 29). The pulley rim jar (no 34) is a type usually dated to the 3rd or 4th century and so may be intrusive.

This phase saw an increase in the quantity of Severn Valley ware reaching the site (Fig 25), particularly oxidised Fabric O6. Sandy wares were also fairly common, although in contrast to Phase 1 oxidised wares (mainly O1, O2, O5, O8) were more common than reduced wares (mainly R4 and R2). Some vessels in these fabrics are likely to be residual, but others are 2nd century types, indicating that these sandier fabrics continued to be produced. Small quantities of Wroxeter mortaria were also present. BB1 represented a significant proportion of the assemblage, as would be expected in a group of this date, mainly cook pots (1.05 rim EVE) and dishes (0.69 rim EVE). A single sherd of BB1 from South west Dorset was recorded (BB1 SW). Other traded wares included mortaria from Mancetter-Hartshill (MANCH) and Oxfordshire (MOXFW), colour-coated ware from the Nene Valley (NVCC1 and 2), and probably the Malvernian wares, though these might be residual. Imported, samian table wares were far more common in this phase. Amphorae still made up a significant proportion of the assemblage, though less so than in Phase 1. Dressel 20, olive oil amphorae (AMDR20) were still the main type, some possibly being residual, but Dressel 20 were produced into the 3rd century so some may well be contemporary. Other amphora types comprised: 1st–3rd century, Gauloise 4 wine amphorae (AMGAU4); 1st–mid 2nd century, Italian Dressel 2-4 amphorae, used mainly for wine but also for dates and fish sauce; and southern Spanish fish sauce amphorae (AMSPAIN).

A much wider range of vessel classes was present in Phase 2 than Phase 1, though this includes residual forms (Fig 26). Flagons appear the most common type, although this is biased by the presence of a near-complete rim from a 1st century, Hofheim-type flagon, alone representing 9%

of the phase assemblage (no 15). There was, however, a wider range of flagon types, including diagnostically 2nd century types (eg no 29). Medium-mouthed jars were now less common than narrow-mouthed jars and cooking pots, bowls, beakers and dishes.

Phase 2, residual mid–late 1st century pottery (Figure 24, nos 15–28)

15: Collared, Hofheim-type flagon, a type associated with military deposits at Wroxeter (Darling 2002, fig. 5.26, 1.2; Timby *et al* 2000, 196, fig. 4.49). 1st century. Fabric O1, diameter 9cm (96%). CG22, pit 210, fill 211. Form F1.11, Rec 181

16: Beaker with a slightly cupped rim. No exact parallels for this Lyon ware form are published from the military assemblage at Wroxeter, though various Lyon ware beakers were recorded (Darling 2002, fig.5.38, 234, 235) and similar forms were being produced by local, military potters (ibid, fig. 5.30, 55.1-2; Timby *et al* 2000, fig. 4.52, BK6.1). A better parallel is illustrated from the pre-Flavian military assemblage at Usk (Greene 1979, fig. 12.7, form 20.1). *c* AD 43–79. Fabric LYON, diameter 8cm (7%). CG30, posthole 291, fill 289. Form BK6, Rec 268

17: Ovoid beaker with an angular shoulder, no exact parallels in the Wroxeter assemblage. ?1st century Fabric R11, diameter 7cm (14%). CG19, layer 27. Form BK4.61, Rec 253

18: Ovoid beaker with a grooved, cornice rim, similar to forms noted in the military assemblage at Wroxeter (Darling 2002, fig.5.30, 59.4, 60; Timby *et al* 2000, fig. 4.53, BK7.1). 1st century. Fabric R4, diameter 10cm (20%). CG30, post hole 291, fill 289. Form BK7.1 Rec 270

19: Globular beaker with grooved, cornice rim, a type found in military deposits at Wroxeter (Darling 2002, fig. 5.30, 59.3; Timby *et al* 2000, 205. Fig. 4.53). 1st century. Fabric O1, diameter 11cm (13%). CG8, ditch 379, fill 384. Form BK7.1, Rec 228

20: In-sloping rim from a beaker, similar to a carinated form found in military deposits at Wroxeter, copying Camulodunum type 120 (Darling 2002, fig. 5.30, 62.1-3; Timby *et al* 2000, 205-206, fig. 4.53, 10.11, 10.12). 1st century. Fabric R11, diameter 12cm (10%). CG31, pit 62, fill 63. Form BK10, Rec 655

21: Globular jar with a short everted rim, similar to types found in military deposits at Wroxeter (Darling 2002, fig. 5.29, 40.1; Timby *et al* 2000, 214, fig. 4.58, JM4.31). 1st century. Fabric R9, diameter 10cm (10%). CG31, pit 424, fill 426. Form JM4.31, Rec 152

22: Necked jar with a simple out-turned rim. No similar forms in grog-tempered ware are published from Wroxeter, though related forms were produced in more typical Wroxeter fabrics (Darling 2002, fig. 5.29, 43; Timby *et al* 2000, fig. 4.58, JM4.41). 1st century. Fabric GROG3, diameter 10cm (10%). CG22, pit 131, fill 132. Form JM4.4, Rec 188

23: Globular jar with an in-sloping neck, similar to types found in military deposits at Wroxeter (Darling 2002, fig. 5.29, 46.2; Timby *et al* 2000, 216, fig. 4.59 JM6.1). 1st century. Fabric R4, diameter 12cm (16%). CG33, ditch 538, fill 537. Form JM6.1, Rec 371

24: Rim from a bowl, probably with a low carination and tall, slightly flaring walls. This form has native origins (cf Webster 1976, fig 9. H59, 60) rather than military. A few examples, however, are recorded from the military assemblage at Wroxeter in a vesicular Severn Valley ware fabric (Darling 2002, fig. 5.37, 217-220; Timby *et al* 2000, 222-224, fig. 4.64, B3.4). mid 1st–early 2nd. Fabric GROG4, diameter 15cm (11%). CG8, ditch 394, fill 401. Form B3.4, Rec 132

25: Similar form to No 24 above, in organic-tempered Severn Valley ware (Webster 1976, fig 9. H59, 60).1st–early 2nd. Fabric O12, diameter 16cm (8%). CG12, pit 53, fill 52. Form B3.4, Rec 208

26: Grooved bowl or wide-mouthed jar, a form with native origins (cf Webster 1976, fig.4, C19), not typical of the military assemblage at Wroxeter, but found in Claudio-Neronian assemblages elsewhere in the region (eg Evans 2014, fig. 18.21).1st century. Fabric GROG1. CG8, ditch 394, fill 402. Form B5.2, Rec 135

27 Finely finished base from a bowl. Fabric R3, diameter 7.5cm (43%). CG31, pit 307, fill 353. Rec 693

28: Mortarium with a high, hooked flange, down-turned at the tip; no trituration grits. The form is similar to types found in the military assemblage at Wroxeter (Darling 2002, fig. 5.34, 131-2), and has the clumsily finished base typical of Wroxeter mortaria of this date (op cit 128.3, 129.2). 1st century. Fabric MWWOF, diameter 26cm (5%). CG8, ditch 394, fill 401. Form M5, Rec 133

Phase 2 diagnostic pottery (Figure 27, nos 29–40)

29: Ring-necked flagon, with an out-curving neck and poorly defined rings, a 2nd century type (Timby *et al* 2000, fig. 4.49, F3.2). Fabric O1, diameter 5cm (22%). CG8, ditch 379, fill 384. Form F3.2, Rec 227

30: Decorated body sherd from a handled jar, Déchelette (1904) form 74 jar; c AD 150–200. A detailed report on this vessel, by Joanna Bird, is included below. Fabric CGBS. CG29, fill 330 of shallow pit 367. Rec 24

31: Jar of wide girth with short, cavetto rim, a 2nd century type (Timby *et al* 2000, fig 4.55, JC3.1; cf Gillam 1976 fig 3, 30-32). Fabric BB1, diameter 15cm (12%). CG19, layer 27. Form JC3.1, Rec 251

32: Narrow-mouthed jar with a thickened rim, the illustrated example has tooling beneath the rim. A late-1st to mid-2nd-century Severn Valley ware form (Timby *et al* 2000, fig. 4.56, JN4.11-4; Webster 1976, fig. 1, A2), in a Severn Valley ware fabric. Fabric O6, diameter 13cm (68%). CG8, ditch 523, fill 521. Form JN4.1, Rec 349

33: Narrow-mouthed jar with an out-curving, near-triangular rim; a broadly 2nd-4th-century Severn Valley ware type (Timby *et al* 2000, fig. 4.56, JN4.34; Webster 1976, fig. 1.A4), in a sandy oxidised fabric. Fabric O5, diameter 12cm (31%). CG8, ditch 395, fill 404. Form JN4.34, Rec 164

34: Narrow-mouthed jar with a pulley rim, lower bead more pronounced; a Severn Valley ware type dating broadly to the 3rd-4th centuries (Timby *et al* 2000, 4.57, JN4.71-2; Webster 1976, fig 3, A10-11). In a Severn Valley ware fabric. Fabric O6, diameter 12cm (17%). CG8, linear 508, fill 507. Form JN4.7, Rec 342

35: Wide-mouthed jar with a slightly thickened rim, a Severn Valley ware type, probably dating to the 2nd century (Timby *et al* 2000, fig. 4.61, JW2.2; Webster 1976, no exact parallel but similar to fig. 4, C21). In an organic-tempered, Severn Valley ware fabric. Fabric O12, diameter 17cm (12%). CG31, pit 64, fill 69. Form JN4.3, Rec 632

36: Wide-mouthed jar with a slightly thickened rim, a broadly 2nd century type (Timby *et al* 2000, fig. 4.61, JW2; no exact parallels in Webster 1976 but broadly contemporary with fig 4, C22). In a Severn Valley ware fabric. Fabric O6, diameter 25cm (8%). CG8, linear 508, fill 507. Form JW2.1, Rec 339

37: Wide-mouthed jar with a thickened, near-triangular rim, a 2nd to 3rd century, Severn Valley ware type (Timby *et al* 2000, fig.4.61, JW2.22-23; Webster 1976, fig. 4, C22). In a Severn Valley ware fabric. Fabric O6, diameter 30cm (7%). CG8, ditch 394, fill 400. Form JW2.2, Rec 119

38: Segmental bowl with a flanged rim; a broadly 2nd to 3rd century type (cf Timby *et al* 2000, fig. 4.66B12.41-2). In a sandy oxidised ware. Fabric O1, diameter 24cm (8%). CG30, pit 258, fill 257. Form B12.4, Rec 618

39: Dish with a slight bead rim, an early 3rd century type (Timby *et al* 2000, fig. 4.70, D2.2; Gillam 1976, fig 5 73). Fabric BB1, diameter 14cm (6%). CG29, layer 367, fill 330. Form D2.2, Rec 280

40: Dish with very slightly splayed walls and a sagging base, a late 2nd to early 3rd century type (Timby *et al* 2000, fig. 4.70, D3.1; Gillam 1976, fig 5 78). Fabric BB1, diameter 20cm (9%). CG8, linear 508, fill 507. Form D3.1?, Rec 338

Phase 3 (Mid 3rd–4th century)

Phase 3 produced the smallest pottery assemblage, coming from a narrow range of feature types: ditches (81 sherds, 1491g), ovens (54 sherds, 503.5g) and pits (11 sherds, 146.5g).

The best dating evidence for this phase came from the traded wares. BB1 forms included jars and bowls dating to the mid-late 3rd and late 3rd-4th centuries (no 41; Gillam 1976, fig 1.8, fig 2.10–12, fig 4.45–6). Oxfordshire red colour coated ware (OXFRCC) appeared on the site for the first time, including a bowl dated to the 4th century (no 43). Other forms dating to the mid-late 3rd to 4th century included a Mancetter-Hartshill mortarium (no 44), splayed Severn Valley ware tankards (no 45), and a wide-mouthed jar (not illustrated, cf Webster 1976, fig 5, C27). A number of fabrics were by now residual, including the samian, grog-tempered ware, amphorae, organic tempered Severn Valley ware, and probably the sandy wares.

The assemblage was dominated by oxidised Severn Valley ware (mainly Fabric O6) and BB1 (Fig 28). Other traded wares comprised small quantities of Nene Valley ware (NVCC2), Oxfordshire red colour coated ware (OXFRCC), and Mancetter-Hartshill mortaria (MANCH).

The vessel profile (Fig 29) was quite different to that for Phase 2. The assemblage was dominated by Severn Valley ware tankards; bowls, in samian and Oxfordshire red colour-coated ware (DR 31 not illustrated, and no 43) rather than Severn Valley ware; and cooking pots. The latter were the most common BB1 form (0.42 rim EVE), along with a dish and a bowl/dish (0.06 and 0.10 rim EVE respectively). Wide-mouthed and narrow-mouthed jars were present, but no medium-mouthed jars.

Phase 3 pottery (Figure 27, nos 41–45)

41 Jar/cook pot of near-equal girth with a splayed rim, a mid-to-late 3rd century type (Timby *et al* 2000, fig. 4.55, JC3.72; Gillam 1976, fig 1, 8). Fabric BB1, diameter 16cm (16%). CG8, ditch 376, fill 372. Form JC3.72, Rec 306

42 Narrow-mouthed jar with a near-triangular rim, a broadly 2nd to 4th century type (Timby *et al* 2000, fig. 4.56, JN4.3; Webster 1976 fig 1, A4). In a Severn Valley ware fabric. Fabric O6, diameter 17cm (18%). CG8, ditch 376, fill 372. Form JN4.3, Rec 302

43 Oxfordshire red colour-coated, wall-sided, bead-rim, carinated bowl, with no evidence for decoration; a 4th century type (Young 2000 fig 64, C81; Symonds 1997, fig. 361, 208-9). Fabric OXFRCC, diameter 20cm (15%). CG34, ditch 370, fill 369. Not in Timby *et al* 2000 form series, Rec 398

44 Mancetter Hartshill, reeded, hammer-head mortarium, a broadly mid 3rd to 4th century type (Timby *et al* 2000, fig 4.74, M9.1). Fabric MANCH, diameter 24cm (8%). CG34, ditch 370, fill 369. Form M9.1, Rec 397

45 Severn Valley ware tankard with markedly splayed walls, a 4th century type (Timby *et al* 2000, fig. 4.77, TK4; Webster 1976 fig 7, E44). Fabric O6, diameter 15 (22%). CG8, ditch 376, fill 372. Form TK4, Rec 301

Phase 4 (4th-20th century)

The phase 4 assemblage came from buried soils and layers (CG35, 36, and 37). The pottery was very mixed, including a range of diagnostic forms dating to the 1st century (nos 46–48), the 2nd–early 3rd century (nos 49-54) and the late 3rd–4th century (nos 55-60). A couple of more unusual forms, including a cheese press, were not closely datable (nos 61-2). The latest forms appear to be broadly contemporary with the Phase 3 assemblage. These include BB1 jars, bowls, and a 'fish dish' (nos 55, 57, 58), an Oxfordshire ware bowl (no 56), a Mancetter-Hartshill mortarium (no 59) and a Severn Valley ware tankard (no 60). Although activity seems to have continued into the 4th century, there was no clear evidence for later 4th century occupation. No late-Roman shell-tempered ware was recorded, which was increasingly common in the latest deposits at Wroxeter, in particular phase Z (Symonds 1997, figs 366 and 372), and was also found in 4th century deposits at Whitley Grange (Evans 2007, 157). Two sherds of BB1 showed evidence of repair. This phenomena is also increasingly common in later assemblages at Wroxeter, first appearing in contexts dated *c* 367-450 (Barker *et al* 1997, 218, table 16; Evans 2007, 158). However, one of the forms repaired here dates to the later 2nd to early 3rd century (Gillam 1976, fig 5.78), while the other, a body sherd from a jar with obtuse lattice decoration, can only be dated broadly to the later 3rd to 4th century. Oxfordshire red colour-coated ware occurred in similar proportions to Phase 3 (1% by count, 4% by weight, 7% by rim EVE). This is also more common in the latest phases at Wroxeter (Symonds 1997).

Vessel class and fabric class profiles are presented below, for completeness and comparison with the other phased assemblages (Figs 30–31). However, these mainly serve to illustrate the mixed character of the assemblages, with a range of early to later Roman fabrics and forms being represented.

Phase 4 pottery: residual 1st century (Fig 32, nos 46–48), 2nd–3rd century forms (nos 49–54), late 3rd–4th century forms (nos 55–60), and not closely datable forms (nos 61–2)

46: Globular beaker with a cornice rim, a type associated with military deposits at Wroxeter (Darling 2002, fig. 5.30, 59.3-4; Timby *et al* 2000, fig 4.53, BK7.1). 1st century. Fabric O2, diameter 11cm (19%). CG35, buried soil, layer 16. Form BK7, Rec 510

47: Globular jar with a thickened, everted rim, a type more commonly associated with later military deposits (Darling 2002, fig. 5.29, 34.3; Timby *et al* 2000, fig 4.58, JM3.5). 1st–?early 2nd century Fabric O2, diameter 15cm (24%). CG35, buried soil, layer 16. Form JM3.5, Rec 511

48: Wide-mouthed jar or bowl with an angular, everted rim, not a typical Wroxeter military type. The surviving profile is short, but the form may be similar to a vessel illustrated from the pre-Flavian military assemblage at Metchley (Greene and Evans 2002, fig 35, J24). 1st century. Fabric GROG4, diameter 20cm (10%). CG36, buried soil, layer 15. Form JW3, Rec 447

49: Jar/cook pot of wide girth with near upright rim, decorated with a burnished wavy line on the neck; an early–mid 2nd century type (Timby *et al* 2000, fig 4.55, JC3.4; Gillam 1976 fig 1.1-3). Fabric BB1, diameter 14cm (11%). CG37, buried topsoil, layer 2002. Form JC3.4, Rec 711

50: Medium-to-large bowl with a stubby everted rim, a broadly 2nd to 3rd century type (Timby et al 2000, fig 4.66, B8.4). Similar to types found in Severn Valley ware, but in a sandy oxidised fabric. Fabric O2, diameter 21 (23%). CG35, buried soil, layer 16. Form B8, Rec 509

51: Large, flange-rim bowl, with an internal lip; a typical Severn Valley ware form dating broadly to the late 2nd to 3rd century (Timby *et al* 2000, fig 4.66, B9.11; Webster 1976, fig 8, F50). Fabric O6, diameter 31cm (5%). CG37, buried soil, layer 13. Form B9.1, Rec 457

52: BB1 type plain-rimmed dish, dating to the late 2nd to early 3rd century (Timby *et al* 2000, fig. 4.70, D3.1; Gillam 1976, fig 5.77). Fabric BB1, diameter 20cm (21%). CG 35, buried soil, layer 16. Form D3.1, Rec 518

53: BB1 type dish with a flange rim and near upright walls, decorated with acute cross-hatch burnish; dating to the early–mid 2nd century (Timby *et al* 2000, fig 4.70, D1.1; Gillam 1976, fig 4.57-61). Fabric BB1, diameter 16cm (13%). CG35, buried soil, layer 16. Form D1.1, Rec 517

54: Mortarium flange, Kay Hartley reports as follows:

> Flange fragment from a mortarium with a distal bead, in a cream-slipped, oxidised fabric with pale grey core in the flange. The ill-sorted, fairly frequent inclusions consist mainly of quartz with rare black. The fragmentary, retrograde stamp probably reads [.]BRI?[.]; the B is probable rather than certain, it may or may not be the first letter in the stamp. Neither the potter nor the source can be identified with certainty, though other parts of the mortarium and certainly other examples of the stamp could clarify both. The profile with distal bead would best fit with production at a workshop in South Wales or the Gloucester area, which was working in the Caerleon tradition, but using a white slip; see Hartley (1993, 422, no. 12) for a stamped mortarium which could be from the same workshop. This combination is very rare, but it is possible, and undoubted Caerleon products certainly reached sites in Wroxeter and other areas in the west Midlands. Their mortaria can be dated within the period AD110–180.

Fabric MOCR. CG37, buried soil, layer 13. Rec 23

55: Jar/cook pot with a markedly splayed rim, decorated with obtuse cross-hatch burnish, an early 4th century type (Gillam 1976, fig 2.12; Timby *et al* 2000, fig 4.55, JC3.8; Symonds 1997, fig 358, 154-7). Fabric BB1, diameter 21cm (8%). CG35, buried soil, layer 16. Form JC3.8, Rec 513

56: Shallow bowl in Oxfordshire red colour coated ware, a type dated to c AD 270–400+ (Young 2000, fig 58, C45; Symonds 1997, fig 361.199; Timby *et al* 2000, fig 4.65, B7.31). Fabric OXFRCC, diameter 25cm (53%). CG35, buried soil, layer 16. Form B7.3, Rec 552

57: BB1 type conical bowl with drop-flange rim, a late 3rd century type (Gillam 1976, fig 4.45; Symonds 1997 fig 357, 135, 140; Timby *et al* 2000, fig 4.69, B24.1). Fabric BB1, diameter 26cm (7%). CG35, buried soil, layer 16. Form B24.1, Rec 519

58: BB1 type oval fish dish, a late 3rd to 4th century type (Gillam 1976, fig 6.85; Symonds 1997 fig 356, 118-9). Fabric BB1. CG36, buried soil, layer 15. Form D4.1, Rec 424

59: Mancetter-Hartshill reeded, hammer-head mortarium, a broadly mid 3rd to 4th century type ((Timby *et al* 2000, fig 4.74, M9.1). Fabric MANCH, diameter 25cm (9%). CG36, buried soil, layer 15. Form M9.1, Rec 439

60: Severn Valley ware tankard with markedly splayed walls, a 4th century type (Timby *et al* 2000, fig. 4.77, TK4; Webster 1976 fig 7, E44). Fabric O6, diameter 14cm (22%). CG35, buried soil, layer 16. Form TK4.1, Rec 494

61: Dish, copying a BB1 type, with a thickened upright rim. The date of this is uncertain, but based on BB1 forms, the angle of the walls might indicate a late 2nd to early 3rd century date. Fabric R4, diameter 14cm (18%). CG35, buried soil, layer 16. Form D2. Rec 535

62: Cheese press; a flat bottomed dish with holes through the walls and base, and concentric ridges inside the base. In Britain this form is found in small numbers throughout the Roman period, but is not closely datable (Cool 2006, 95–6). Examples are illustrated from 2nd and 3rd century contexts in the Wroxeter Macellum (Timby *et al* 2000, fig. 4.80, MCP1.11–12) and from a later Roman context at the baths basilica (Symonds 1997, fig. 353, 76). Fabric R2, diameter 14cm (22%). CG35, buried soil, layer 16. Form MCP, Rec 540

Post-medieval

The post-medieval pottery included fragments of 17th century Staffordshire slip wares, manganese streaked ware, and black glazed ware from the buried soils horizon.

4.4 Samian ware (by Gwladys Monteil)

4.4.1 Introduction

An assemblage of 139 sherds of samian ware was submitted for this report. The fabric of each sherd was examined, after taking a small fresh break, under a x20 binocular microscope. Each archive entry consists of a context number, fabric, form and decoration identification, condition, sherd count, rim EVEs (Estimated Vessel Equivalents), rim diameter, weight, notes and a date range. The presence of wear, repair and graffiti was also systematically recorded.

Rubbings of the decorated fragments were undertaken during analysis. They were mounted, scanned and submitted as illustrations. Catalogues of the decorated ware and potters' stamps are included below.

Out of the 139 sherds, only 84 fragments were from stratified deposits assigned to the Roman period (Phases 1 to 3), with an additional 40 sherds coming from 'buried soils' , the upper Roman levels disturbed by later activity (Phase 4); the rest is from modern or unstratified deposits (Table 11). The following report concentrates on the assemblage recovered in Phases 1 to 4 and provides a summary for each of the main samian fabric production centres recovered in those phases.

An unusual decorated 'black samian' sherd is reported separately below.

	Phase 1				Phase 2				Phase 3			Phase 4				Phase 5				Unstratified			Total			
	count	Wt (g)	RE	MNV	count	Wt (g)	RE	MNV	count	Wt (g)	MNV	count	Wt (g)	RE	MNV	count	Wt (g)	RE	MNV	count	Wt (g)	MNV	count	Wt (g)	RE	MNV
South Gaulish	11	102	0.14	10	18	66	0.18	18				10	61	0.06	7	3	27		3	1		1	43	256	0.38	39
pre-import Lez					1	2	0.04	1															1	2	0.04	1
Les Martres					3	71	0.14	3				1	7		1								4	78	0.14	4
Lezoux					44	644	1.75	33	1	4	1	27	464	0.44	21	9	24	0.03	5	2	52	2	83	1188	2.22	62
East Gaulish	1	9	0.06	1	5	50	0.23	3				2	17	0.08	2								8	76	0.37	6
Total	12	111	0.2	11	71	833	2.34	58	1	4	1	40	549	0.58	31	12	51	0.03	8	3	52	3	139	1600	3.15	112

Table 11: samian ware assemblage by phase and fabric/source

Source	count	% count	av weight (g)
South Gaulish	39	31.45%	6.74
pre-import Lez	1	0.81%	2
Les Martres	4	3.23%	19.50
Lezoux	72	58.06%	20.22
East Gaulish	8	6.45%	12.67
Total	**124**	**100%**	**14.97**

Table 12: samian ware fabrics, count and average weight (Phases 1-4)

4.4.2 Discussion by samian ware fabric/source

South Gaulish

With 39 fragments recovered in Phases 1 to 4, South Gaulish samian makes up just under a third of the assemblage, though few fragments were recovered in Phase 1 and most is residual in Phases 2 to 4 (Table 11). It has the lowest average weight (Table 2) and several of the fragments are small and abraded. The group is nevertheless interesting, as it is made up of a coherent range of forms and potters from La Graufesenque.

Form	count	weight (g)	RE	MNV
bowl	2	5		2
cup	3	8		3
dish	5	15		5
dishR	3	21		1
DR15/17	2	9	0.08	2
DR18	2	20	0.04	2
DR18R	4	65	0.06	3
DR27	3	7	0.05	3
DR27g	1	4		1
DR29	9	51	0.06	8
DR33a	1	1	0.01	1
DR36	1	8		1
RT12	1	13	0.08	1
unidentified	2	2		2
Total	**39**	**229**	**0.38**	**35**

Table 13: samian ware, South Gaulish forms (Phases 1-4)

The earliest diagnostic piece was residual in a boundary ditch (fill 399, CG8), a platter with a stamp by potter Pastor i- Ce- dated AD 50–65 (see Cat. no. 15). The rest of the plain ware cannot be dated as precisely but includes several forms typical of the pre-Flavian period: dishes (form Dr.15/17 and Dr.18), a bowl form (Rt.12) (pit fill 340, CG5, P1), at least three large platters (form Dr.18R) and cups (forms Dr.27, 27g and 33a) (Table 13).

Decorated ware is also represented and interestingly only by examples of form Dr.29, of which there are eight bowls. The absence of Dr.37 and the styles represented amongst the Dr.29s that can be identified (Cat. Nos. 1-3; 10) suggest a main phase of occupation prior to AD 70.

A single dish, form Dr.36 (pit fill 308, CG10, P2), points to a reduced occupation in the Flavian period. The scarcity of Flavian samian material is entirely consistent with previous assemblages recovered from Redhill and the area. Flavian forms were absent from the main fort area (Browne and Boon 1974, 6) and similarly reduced quantities of Flavian material have been noticed in the assemblage from Wroxeter (Dannell 2002, 155).

Central Gaulish - Les Martres-de-Veyre

There are only four fragments from the Trajanic Central Gaulish industry of Les Martres-de-Veyre, three plain vessels, and one decorated bowl that is too abraded to be assigned to a potter (Table 14). The relatively small quantity of this ware is not unusual for Britain (Dickinson 2000, 282) but seems lower than the percentages from Wroxeter itself (ibid) and provides meagre evidence for occupation in the early 2nd century AD.

Form	count	weight (g)	RE	MNV
CU11	1	39	0.14	1
DR18/31	1	24		1
DR37	1	7		1
DR38	1	8		1
Total	**4**	**78**	**0.14**	**4**

Table 14: samian, Les Martres-de-Veyre forms (Phase 1-4)

Central Gaulish - Lezoux

Form	count	wt (g)	RE	MNV
bowl	4	20	0.17	3
CU11	1	17		1
dish	2	10		2
DR15/31	1	13	0.05	1
DR16	1	2	0.04	1
DR18/31	7	69	0.28	5
DR18/31 or 31	1	5		1
DR18/31R	2	28	0.06	2
DR31	11	202	0.58	10
DR31R	6	141	0.05	4
DR33	6	48	0.41	3
DR35	1	11		1
DR36	10	110	0.19	6
DR37	10	201	0.13	10
DR45	3	166	0.23	2
WA79	3	28	0.04	1
WA79R	1	26		1
unidentified	3	17		2
Total	**73**	**1114**	**2.23**	**56**

Table 15: samian, Lezoux forms (Phases 1-4)

With 73 sherds recovered in Phases 1 to 4, samian ware from Lezoux dominates this assemblage and with an average weight of c 21g, it is also the better preserved (Tables 11–12, and 15). The Lezoux group includes a single fragment of pre-import samian with its characteristic micaceous fabric and pale slip, which was residual (pit fill 426, CG31, P2). This abraded rim sherd is from a dish form Dr.16. In the absence of a stamp, this piece is difficult to date precisely. The form itself is pre-Flavian and this vessel is likely to be contemporary with the material from La Graufesenque. There is a little Hadrianic material in this phase assemblage: the two diagnostic pieces both recovered from post-hole 77 (Cat. nos. 7 and 8); a single Cu.11 and a few Dr.18/31 that could equally be early Antonine, and there was, for instance, no Dr.27.

There is little Hadrianic material in this assemblage with only two diagnostic decorated pieces both recovered from posthole 77 (Cat. nos. 8–9). In the plain form assemblage the characteristically Hadrianic cup form Dr.27 is absent, there is a single bowl form Cu.11 and a few dishes form Dr.18/31 that could equally be early Antonine.

Typically Antonine material is, on the other hand, well-represented, Forms include: several dishes of form Dr.31; a number of dishes of form Dr.36 with barbotine decoration, from the 'buried' Roman soils (15, 16), and a large boundary ditch fill (371, CG8, P3); a number of decorated bowls, including one with a signature recovered from an oven (fill 292, CG10, P2- see Cat. Nos. 5 and 16); and an example of the slightly rarer dish form Dr.15/31 from a pit fill (353, CG31, P2).

Later forms are also present, albeit in small numbers, and several coming from the large boundary ditch CG8: a Dr.37 (Cat. no. 4) and a mortarium Dr.45, both recovered (in fill 521); a repaired bowl form Dr.31R (404); and a Dr.31R (384). Two burnt fragments of a Wa.79 come from a Building III posthole (276, CG30, P2), and a platter form Wa79R and a mortarium rim were recovered from the 'buried' soils (16, CG35, and 2002, CG37 respectively).

East Gaulish

Form	count	Weight (g)	RE	MNV
DR31	4	39	0.21	2
DR31R	1	20	0.1	1
DR36	1	9	0.06	1
mortarium	1	4		1
platter	1	4		1
Total	**8**	**76**	**0.37**	**6**

Table 16: samian, East Gaulish forms (Phases 1-4)

A little samian comes from Eastern Gaul (Table 16), and, although it adds up to almost 6% of the total samian sherd count, only six vessels are represented. The fabrics suggest the later industries of Rheinzabern and Trier, though in the absence of stamps and decorated ware, it is difficult to be certain. The range of forms is limited with only plain types being represented: a dish Dr.36 found intrusive in Phase 1 (fill 410), a platter and a dish Dr.31 (fills 404 and 372, CG8, respectively), and another Dr.31 and a mortarium (buried soils 16, CG36, and 15, CG35, respectively.

4.4.3 Decorated samian catalogue

The following catalogue is organised by phase then group, and lists the decorated pieces attributable to individual potters or groups of potters. Each entry gives the catalogue number, the excavation context number with details of the decoration. The letter and number codes used for the non-figured types on the Central Gaulish material (such as B223, C281, etc) are the ones created by Rogers (1974). The figured-types referred to as Os. are the ones illustrated by Felix Oswald (1936) in his *Index of figure-types on terra sigillata*.

The Inventory Numbers (Inv. no.) quoted are taken from European intake of Roman Samian ceramics (http://www.rgzm.de/samian/home/frames.htm).

Phase 1

1: Two body sherds, Dr.29, La Graufesenque. The two fragments do not join but have similar decoration. The small double circle occurs on T-1 moulds especially ones used by Niger ii (Inv. Nos. 0000796; 0000587) and Senicio (Inv. No. 0001298). The leaf is on a bowl with an internal stamp by Bassus ii-Coelus (Inv. No. 0000162) and on one with a stamp by Niger ii (Inv. No. 0002020). The wreath of trifid leaves is on a Dr.29 with an internal stamp by Melainus (Inv. No. 0001602). AD 50–70. 82, CG3.

2: One body sherd, Dr.29, La Graufesenque. Very little of the decoration remains, the central cordon and a fragmentary upper frieze where some leaf tips are visible. AD 40–85. 3006, CG3.

3: One body sherd, Dr.29, La Graufesenque. The swirl, rosette, astragalus and the leaf making up the scroll are similar to the ones found on bowls with internal stamps by Masclus i: Inv. Nos. 0003366 and 0003367. AD 50–70. 336, CG5.

Phase 2

4: One body sherd, Dr.37, Lezoux. Panelled decoration where two panels separated by beaded borders are visible. The base of Q43 is visible in a double circle medallion and three leaves on top of swirls (J23 perhaps) in another panel. All of these motifs are on a Dr.37 attributed to Iullinus ii (Stanfield and Simpson 1990, pl.126 no. 12). AD 160–200. 521, CG8.

5: One base, Dr.37, Lezoux. With an infra-decorative signature by Criciro v (see Cat. no. 16). Very little decoration remains, part of snake and rock motif Os.2155, a detail often associated with this signature (Hartley and Dickinson 2008b, 195). AD 135–170. 292, CG10.

6: One body sherd, Dr.29, La Graufesenque. The remaining decoration is partial and only consists of a panel of leaf tips fillers. They appear close to the ones found on Dr.29 with internal stamps of Masclus i (Inv. No. 0000691). Pre-Flavian probably. 205, CG11.

7: One body sherd, Dr.29, La Graufesenque. Too little of the decoration remains for this piece to be identified. AD 40–85. 52, CG12.

8: One body sherd, Dr.37, Lezoux. Only the ovolo remains, it looks like B76, the ovolo used by Geminus iv (Inv. No. 0011657). AD 120–145. 76, CG26.

9: One body sherd, Dr.37, Lezoux. Os.595 next to vertical beaded border, Os.595 is known for a number of Hadrianic potters with stylistic links, in particular P-14, X-6 and Pugnus. The style of the beaded border is perhaps closer to the one used by X-6, including the pieces with signatures by Catull- (Rogers 1999, pl. 26, no. 1). AD 125–150. 76, CG26.

10: One body sherd, Dr.29, La Graufesenque. See Inv no. 0001025 for similar gadroons and a line of rosettes on a Dr.29 with an internal stamp by Bassus ii-Coelus. AD 50–70. 69, CG31.

Phase 3

11: One body sherd, Dr.37, Lezoux. A partial double circle medallion and a beaded border are all that remain of the decoration, they are not characteristic enough to assign to a specific potter. AD 120–200. 369, CG34.

Phase 4

12: One body sherd, Dr.37, Lezoux. The lower part of a scroll decoration is visible with the top of a large leaf (H51?) placed up-side-down and a rosette (C51). Both of these recall the work of Cinnamus ii (Inv. Nos. 0011195, 0011202). AD 140–180. 16, CG35.

13: One body sherd, Dr.29, La Graufesenque. Very little of the decoration remains, part of the rouletted upper band, a beaded border and leaves tips. AD 40–85. 7003, CG37.

14: One body sherd, Dr.37, Lezoux. The slip is abraded but the ovolo shows a tongue with a rosette ending on the left and is perhaps B14, an ovolo known for Lezoux potters Sacer i (Stanfield and Simpson 1990, pl. 82, 1) and Criciro v (Inv. No. 0011358). Probably AD 120–150, 7003, CG37.

Catalogue of samian potters' stamps and signatures

The following catalogue lists the potters identified by phase then group. Each entry gives a catalogue number, the excavation context number; group number, potter's name (i, ii etc, where homonyms are involved); die form; form type, reading (using font samian5), pottery of origin, a reference to published drawing (where available) and date.

Phase 2

15: Pastor i- Ce-, 2a, Dr.18R, P□STORCE, La Graufesenque, Hartley and Dickinson 2011, 31, AD 50–65. 399, CG8.

16: Criciro v, MS4, Dr.37, CR ←, Lezoux, Hartley and Dickinson 2008b, 195, AD 135–170. 292, CG10.

Phase 5

17: Albucius ii, 6b, Dr.31, AL[, Lezoux, Hartley and Dickinson 2008a, 138, AD 145–175. 10, CG38.

4.4.4 Conclusions

Although the assemblage is relatively small, it suggests two distinct phases of occupation on site; one with a military character in the pre-Flavian period, then reduced activity until the Antonine period when the quantities of samian increase. A few late samian types from Central and Eastern Gaul seem to suggest that samian reached the site until the mid-3rd century AD, albeit in small quantities. The chronological evidence provided by this samian assemblage is consistent with previous assemblages recovered from Redhill (Browne and Boon 1974, 6).

The group is too small to undertake much in terms of statistical or functional analysis but some remarks are possible, particularly regarding the 1st century AD assemblage. Decorated vessels are well-represented within the South Gaulish group and this fits with published profiles for military sites, especially early ones (Willis 2005, table 35). The relative frequency of samian forms from these types of sites in Britain is generally dominated by dish and platter forms with decorated bowls in second place and cups in third position (*ibid*, charts 13); the Redhill group again broadly conforms with this. The presence of a pre-import Lezoux platter is also consistent with the military occupation in the pre-Flavian period, as such ware is relatively rare in Britain (Willis 2005, 6.4), but it has been found at Wroxeter (Dickinson 2000, 283) and often occurs on military sites (*ibid*).

Though the group is small, the absence of graffiti and samian inkwells is perhaps a little surprising, both these types of evidence for literacy being relatively common at military sites, especially forts (Willis 2006, 108), and with South Gaulish inkwells being present at Wroxeter (Dickinson 2000, Table 4.25; Darling 2002, Table 5.7).

4.5 A central Gaulish black-slipped ware ('black samian') decorated sherd (by Joanna Bird)

Sherd, from a handled jar, Déchelette form 74, decorated with applied motifs above a band of heavy rouletting (Fig 27, no 30; Plate 31). The surviving motif shows the Trojan prince Aeneas, the legendary founder of Rome, carrying his elderly father Anchises from the destruction of Troy, with his young son Ascanius holding his hand. Aeneas and Ascanius are naked, reflecting their status as heroes, while Anchises is clothed and veiled, and carries the *cista* holding the family's household gods. The figures are no 78 in Déchelette's catalogue of applied types (1904, vol 2); Déchelette notes only two other examples, both from central France, and no comparable motifs were recorded by Grace Simpson (1957; 1973) in her two studies of black-slipped samian ware from Britain. The image is not apparently known on mould-decorated samian.

The thin micaceous red fabric is characteristic of Lezoux samian, but the outer edge is fired to a paler greyish tone on the high points of the relief and over the rouletting. This is probably the effect of the reduction firing needed to turn the slip black rather than red. The slip is a dark brownish black on both surfaces, thinner and paler on the high points, and has a slightly iridescent finish suggesting some degree of over-firing. The clay luting used to attach the appliqué is thick and heavy, and there are traces of what appear to be finger or thumb prints on the figures. An undecorated sherd could easily be taken for a piece of the barbotine-decorated 'Rhenish' ware produced in the Lezoux workshops (eg Greene 1978, fig 2.3, 7-9), and a variant of form 74 illustrated by Simpson (1973, fig 1, 29) has the high hollow foot typical of the 'Rhenish' beakers; the rouletting characteristic of form 74, however, is much deeper and coarser, as on the Redhill sherd.

Red- and black-slipped Lezoux jars with applied decoration are usually dated *c* AD 150–200, the same date range as the Lezoux 'Rhenish' ware (Greene 1978, 18–19). Makers of the contemporary mould-decorated form Déchelette 68 include Paternus v, who produced a black-slipped version and was active *c* AD 150–185 (Stanfield and Simpson 1958, pl 104, 1; Hartley and Dickinson 2011, 58-63). Déchelette (1904, vol 2, 214) notes that this image of Aeneas occurs on coins of Antoninus Pius, and Richard Reece has kindly commented that it is present on rare denarii and on very rare sestertii, part of a series celebrating the 800th anniversary of the founding of Rome in AD148; other images in the series include the She-wolf and Twins. There is nothing similar from Marcus Aurelius onwards, emphasising the special nature of the issues. It is possible that the maker of this jar took his design from the image on a coin, which would provide useful additional support for the starting date given above, and it is tempting to speculate further that the jar itself may have been made to mark the centennial celebrations.

4.6 Amphorae by C Jane Evans with specialist comment by David Williams

537 sherds of amphorae were recovered, predominantly Dressel 20. Most of the amphorae was recorded in-house, but a stamped handle (Fig 24, no 13) and a selection of more problematic sherds were sent to David Williams for identification. The amphorae is quantified and discussed with the rest of the pottery above.

The majority of the amphorae comprised Dressel 20, made along the banks of the river Guadalquivir and its tributaries, between Cordoba and Seville, and used for transporting southern Spanish olive oil. This is by far the commonest amphora form found on Roman-British sites of all types, and was imported to Britain over a period of some 250 years, peaking around the mid-2nd century AD. Production seems to have ceased shortly after the middle of the 3rd century AD, with the latest stamps found on these vessels dating to the reign of Gallienus (Rodriquez-Almeida 1989). Most of the Dressel 20 came from Phase 1 deposits, though it was present in gradually reducing quantities throughout the sequence (see Appendix). The stamped, Dressel 20 handle (Fig 24, no 13) was from the same ditch (fill 246, CG3, P1) as produced another fragmentary, impressed stamp in ansa, on one of two, small, non-joining parts of a Dressel 20 handle. The two remaining letters on this, however, were too badly damaged to read. Most of the Dressel 20 comprised undiagnostic body sherds, but a few other sherds of interest were noted. These included: a basal wort (plug) from the base spike of an amphora; a sherd with a number of finger impressions made in the wet clay on the inner surface, showing where a large join between two sections of clay has been luted together and smoothed out during the making of the vessel; and a small Dressel 20 bodysherd with part of a drilled hole on one corner, indicating the vessel had been repaired with rivets. David Williams notes that there is good evidence to suggest that once emptied and cleaned, the large rotund shape of Dressel 20 favoured local reuse, probably for dry goods (cf van der Werff 1987), and it is likely the vessel was repaired for this purpose.

A flat-bottomed, southern French wine amphorae, Gauloise 4 was represented by 29 sherds, all from Phase 2. This form first appeared in Britain shortly after the Boudiccan revolt, and by the 2nd

century AD had become the most commonly imported wine amphora reaching the province (Peacock 1978). Production lasted until at least the late 3rd century AD (Laubenheimer 1985).

Eight sherds of Dressel 2-4 were recorded. Six sherds, from Phase 1, were thought to be from Lyon or the Rhone Valley, while two further sherds, from Phase 2, were thought to be Italian. Dressel 2-4 were used to transport wine, dates and fish sauce, and were imported to Britain from the late 1st to mid-2nd century.

Southern Spanish fish-sauce amphora, was represented by 4 sherds, three from Phase 2 and one from Phase 3. It was not possible to identify the form of these, based on fabric alone.

4.7 Pottery conclusions with suggestions for future study (by C Jane Evans)

The Phase 1 assemblage has affinities with the Wroxeter military assemblage, particularly the various sandy oxidised and reduced wares. These wares may have been supplied from Wroxeter or, if not, may have been made more locally by potters working in the same, continental tradition. This implies that the occupants of the site at this time had the same requirements, in terms of the range and types of vessels used, as the soldiers based at Wroxeter. A military influence was also seen in the south Gaulish samian, which included a high proportion of dishes, platters and decorated bowls. The presence of significant quantities of amphorae is also consistent with the military presence, though this is biased by a substantial portion of a single vessel. The quantity and range of grog-tempered wares, however, is higher than in the military assemblage at Wroxeter, and such wares occur on other military sites in the midlands, for example at Wall and Metchley. Redhill (*Uxacona*), seems therefore to have been well supplied being on an arterial route linking Wroxeter with these other midlands sites.

During the 2nd to early 3rd century, when the settlement character has changed to civilian, it continued to receive pottery from a range of sources; whether regional, more widely traded or imported. The proportion of amphorae remained high, and while some of this may be residual it is worth noting that similarly high proportions of amphorae, and samian, were noted at the roadside settlement of Meole Brace to the west of Wroxeter (Evans 2007, fig 5.8l). This site was thought to have functioned as an in-transit stopping point for commodities (Evans 1994, 89), which may have also been the case at Redhill, though given that there is thought to have been a mansio in the vicinity, it is tempting to speculate that it was travellers and traders who were in-transit, and that the olive oil, wine, fish sauce and/or dates were for their benefit. The Central Gaulish black-slipped ware depicting Aeneas is of immense significance. No parallels for this vessel are known to date from Britain. A vessel depicting the legendary founder of Rome must surely have had cultural importance to its owner, and suggests the presence of someone strongly identifying themselves as 'Roman.' It is possible, perhaps, that this sherd was curated after the vessel broke.

The 2nd century saw an increase in the proportion of Severn Valley ware, similar to the proportions noted at the Meole Brace roadside settlement (Evans 1994, fig 5.8l). This reflects a similar trend to that noted at Wroxeter, with a movement away from specialist military production to supply by regional potters. Much of the Severn Valley ware could have been made fairly locally; kilns are known at Wroxeter and Meole Brace (Houghton 1964; Evans *et al* 1999; Faiers 2003) and it is quite possible that further production sites remain to be discovered. Some of the Severn Valley ware, however, is likely to have come from further afield, perhaps the Malvern area in Worcestershire. A mortarium flange dated by Kay Hartley to *c* AD 110–180 (Fig 32, no 54) was thought to be from Caerleon or Gloucester. Although residual in a Phase 4 context this is also indicative of 2nd-century trade links to the south.

The Phase 3 assemblage was much smaller making it harder to draw any meaningful conclusions. It included a significant proportion of samian but, even assuming that vessels may have been curated for some time, much of this is likely to be residual by this time. Severn Valley wares were increasingly common and tankards represented a significant proportion of the assemblage for the

first time. The site continued to be integrated into wider trade routes, as would be expected given its location, with tables wares from the Nene Valley and Oxfordshire being used.

Analysis of the Redhill assemblage starts to fill an important gap in our knowledge of the pottery from this area. The pottery from Wroxeter and its hinterland, to the west, has now been well studied and published. The pottery from the mansio sites to the east, at Wall and Mancetter, is less-well studied. Analysis of the material from David Browne's excavations at Redhill would provide a larger, more statistically valid assemblage for comparison, allowing patterns of pottery use and supply in this region to be studied further.

4.8 Ceramic building material (by Laura Griffin)

The site produced a small assemblage of Roman tile, amounting to 42 fragments weighing 1731g. Tile was recorded by fabric type and, in the case of diagnostic fragments, specific form.

Fabric

Two main fabric types could be identified within the group, both appear consistent with those identified from other sites in the Wroxeter Hinterland (White 2007, 204):

> Fabric 1: Coarse, sandy orange/brown fabric containing frequent, poorly-sorted, sub-rounded white clay pellets measuring <7.0mm.
>
> Fabric 2: Fine, sandy orange fabric with powdery feel, containing occasional white clay pellets, white quartz and soft red ?iron stone pellets.

Tile form

Owing to the abraded and fragmentary nature of much of the tile assemblage, the vast majority of fragments were undiagnostic with just one box-flue *(tubulus)* form identifiable. This tile consisted of two non-adjoining fragments and was distinctive, not only for being the single diagnostic form within the ceramic building material assemblage but also because it was the only example of Fabric 1 in the group. One of the fragments displayed keying in the form of a partial arc, made with a 5-toothed comb. The underside of the tile was sanded.

The remainder of the assemblage consisted of various, abraded fragments of flat tile. Most of these fragments did not even represent the full thickness of original tile but where the lower surface was present, it could be recognised by a thin layer of sand.

Discussion of the ceramic building material

Due to the small size of the assemblage, a phased discussion of the ceramic building material has not been included. However, it has been possible to make general observations about the assemblage, including dating and use.

The earliest tile in the assemblage could be dated from the civilian occupation of phase 2 onwards. There is nothing inherently to indicate that any of these tiles were associated with the military structures on the site, nor given that none of the tile was from phase 1, was there any other reason to think so. However, the assemblage was made up of just small, undiagnostic fragments. Indeed, perhaps the most striking aspect of the assemblage is its small size and lack of diagnostic pieces, suggesting reused material. In the absence of any diagnostic roofing tile, it could be suggested that this site assemblage itself resulted entirely from re-use of reclaimed material from elsewhere, and that, therefore, none of the buildings in the excavated area had a ceramic tiled roof. Likewise, the presence of the box-flue tile fragments is not necessarily evidence of a structure here with a heated room, particularly in the absence of any other hypocaust-related tiles.

4.9 Fire clay (by Laura Griffin)

A total of 44.05kg of fired clay was retrieved from the site. Much of this material was extremely friable and, therefore, could not be accurately quantified by count. The majority of the assemblage could be divided into two main categories, oven material and building material, with remaining material consisting of small, undiagnostic fragments.

Building material

A large amount of fired clay (575 fragments, weighing 36.54kg) was retrieved from the foundations of a posthole building (CG30; Building III). This material was retrieved from the fills of postholes (114, 260, 276, 309 and 332) where it had been used as packing material, and appeared to have originated from an earlier structure that had burnt down, thus firing the clay walls.

The clay is thought to have come from wattle panels of a timber framed building. Many of the fragments had wattle impressions, indicating the interwoven rods and posts to have ranged from 2 - 3.5cm in diameter. In addition, two pieces had more regular, rectangular impressions which identified them as having come from the join between the substantial timbers of the building frame and a wattle panel (Plate 32). The surfaces of many of the fragments were nicely finished, being smoothed and having a skimmed layer of finer, lighter coloured clay which measured up to 4mm thick. On pieces where this skimmed layer had been lost, keying in the form of an impressed or roller-stamped herringbone pattern was revealed (Plate 33). The use of this technique is most commonly associated with buildings of 1st–2nd century date (Perring 2002, 123). There is also some evidence of decoration in the form of red paint on a small number of fragments (context 332). Painted wall decoration is relatively rare but was becoming more widespread in buildings of Flavian date and it would appear that red was one of the colours most commonly used and along with yellow, was indicative of a room of medium status (*ibid* 124).

The dating of the subsequent posthole building (CG30) to the early 2nd century would indicate that building from which these fired clay walls originated was of late 1st century-early 2nd century date, therefore fitting in nicely with the accepted date ranges given for use of paint and the keying of walls as described above. It is not possible to say where the original building stood on the site, it may not even have been within the excavated area. However, what can be surmised is that it was a fairly substantial structure of some significance or status due to the care taken in finishing and decorating the internal walls. It is also possible that the small amount of ceramic tile also originated from this same building.

A further 44 fragments of this fired clay building material was retrieved from across the site, primarily from the post-Roman buried soils (P4).

Oven material

A total of 5.37kg of fired clay was identified as oven material. The majority was identified on the basis that it came from Phase 2 structures interpreted on-site as ovens (CG10, 16, 18 and 19). The remainder was retrieved in small amounts from across the site, mainly coming from buried soil and general layers of post-Roman date.

The clay itself was a fine sandy, orange fabric with occasional white streaking and containing small amounts of organic material. The majority was undiagnostic and extremely friable and it is thought that these fragments formed a lining for the ovens, rather than being part of the actual superstructure.

It is not clear how these structures themselves actually functioned or what the originally structure would have looked like. However, the fact that this friable clay appears baked rather than fired,

supports the on-site interpretation of use as domestic ovens reaching only relatively low temperatures for a short length of time, rather than having been used for an industrial process.

In addition to the above fragments, there were a small number of more highly fired pieces. Two of these had a definite shape and are thought to have been part of the superstructure, although as we do not have a clear idea of form or construction of these ovens, it is not clear which part of the structure these pieces represent (context 18). Furthermore, the a curved piece is particularly confusing as it appears to have been fired on all external surfaces rather than just one, as would be expected. One possible explanation is that this indicates secondary burning following demolition of the oven rather than having been fired in its original location.

4.10 Lithics (by Robert Hedge)

Index No.	Context	SF No.	Description	Material	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Dating
1	203		Flake from multi-platform core.	Dark grey flint	2g	26.2	25.7	6.3	Early Neolithic
2	246		Debitage	Mid grey flint	0.1g	9.2	8.3	1.4	Prehistoric
3	16		Flake, poss. utilised	Light grey flint	0.5g	23.5	15.4	3.5	Prehistoric
4	12		Soft-hammer flake with ventral lipping	Mid grey chert	2g	31.4	19	6.1	Mesolithic to Early Bronze Age
5	U/S	92	Serrated blade	Dark grey flint	8g	72	16.8	6.8	Early Neolithic

Table 17: quantification of lithics

Description

1. Flake on dark-grey flint with 25% dorsal cortex from multi-platform core: platforms at 90°, suggesting early Neolithic date. Removal perpendicular to a well-worked platform showing signs of abrasion.

2. Very small debitage flake.

3. Small flake, possible use-damage at distal end suggesting possibly utilised as piercer.

4. Flake on coarse mid grey chert, pronounced ventral lip suggesting soft-hammer percussion. Clean break at distal end.

5. Fine long serrated blade on high-quality dark grey flint; hard-hammer struck with cortex covering platform. Ventral to dorsal serrations along central 50% of right lateral margin. Some edge-damage apparent. Left lateral margin retouched ventral to dorsal along proximal half of blade and dorsal to ventral along distal half, in order to produce straight margin, presumably to facilitate hafting. Abrupt blunting retouch at distal end. Serrated blades are frequently found within early Neolithic assemblages (Butler 2005, 130).

Brief discussion

The assemblage comprises five pieces of prehistoric worked stone and one natural flake, weighing 18.6g in total; two pieces were techno-typologically datable to the early Neolithic. Condition of the artefacts was good, with little recent damage evident. A range of raw material sources are

represented, with dark grey flint of probable 'clay-with-flints' origin accounting for the two early Neolithic artefacts; two flakes are of lighter flint of unknown origin, and the remaining flake is of mid-grey coarse-grained chert.

The assemblage is consistent with that recovered during 1973 investigations on the site, and while residual, represents compelling evidence for prehistoric human activity here, especially during the early Neolithic period.

4.11 Worked stone (by Derek Hurst, with geological identifications by Kate Andrew)

A small number of worked stone objects were present. The commonest Roman object type was the quern, including a single fragment of a Nierdermendig quern (CG5, P1), while most pieces came from the same type of rotary quern in a coarse sandstone (possibly of Cambrian, Stiperstones origin; CG6, 30, 31; all P2). The latter possibly represented a single quern or parts of querns of the same size and type. Other objects were a crudely made ?playing counter/pot-lid (533; CG32, P2; *c* 53mm in diameter and 14mm thick) made from a fine-grained sandstone (not identified but showing a distinctive weathering pattern resulting in a pock-marked surface), and two stones with polished surfaces (CG22, P2; 34, P3) suggesting some specific use, the nature of which was unknown. A very broken, presumably residual, quern fragment was also noted in Phase 4 (CG36).

Plates 34–35

Upper and lower stones of a rotary quern, possibly from a set; both working faces are grooved. The upper surface of the upper stone is also decorated with grooves radiating from the centre; 110, CG30, P2.

Not illustrated

Spindle whorl in a fine micaceous laminar grey stone; 515, CG8, P2.

Unworked stone

There was a small amount of coal which mostly came from pits CG7, 11, 20, 31 (all P2) and postholes of Building III (CG30, P2) across the site. There did not seem to be any special association with any specific part of the site. A very small amount of lignite (eg 518; P2) may indicate another source of fuel being exploited.

4.12 Slag (by Derek Hurst)

There was a small amount of ironworking slag (18 pieces weighing 863g) from deposits mainly relating to Phase 2 features, and much of the assemblage comprised smithing hearth bottom. During processing environmental samples had been tested for the presence of hammerscale, including during the course of the excavation in the course of seeking to establish the function of the ovens on the site, and these had been found negative. Therefore, the conclusion is that any metalworking activity, as represented by the finds evidence so far, must had been located outside the area of excavation. On this occasion it seems to have been recycled instead as handy material for post-packing (eg 99, CG20/building I, P2).

Possible billet

Possible piece of iron billet from context 16 (P4). This was maximum of 65mm wide and 40mm thick, and could have been from a billet such as shown by Paynter (320(l)x75(w)x55(th)mm; 2007, 28) from Westhawk Farm in Kent.

4.13 Other artefacts

In addition to post-medieval or later metalwork (see Cool above), small quantities of post-medieval and modern pottery, three post-medieval bricks, three unidentified iron objects from the topsoil, and seven fragments of modern bottle glass were recovered. Three modern coins were also recorded by Cathy King.

5 Environmental evidence (by Elizabeth Pearson)

5.1 Methods

5.1.1 Sampling policy

Samples were taken according to standard Worcestershire Archaeology (2012) practice. A total of 75 samples were taken from the excavation, watching brief and evaluation, of which 36 samples were selected for assessment, and three samples taken to full analysis (Appendix). Animal bone was also hand-collected on site.

The environmental project conforms to relevant sections of the *Standard and guidance for archaeological excavation* (IfA 2012), and of *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2010).

5.1.2 Processing and analysis

The samples were processed by flotation using a Siraf tank. The flots were collected on a 300μm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were fully sorted by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammerscale. The flots were fully sorted using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the *New Flora of the British Isles*, 3rd edition (Stace 2010).

Charcoal was identified from context (276), in addition to a small number of charcoal fragments identified for radiocarbon analysis. The cell structure of all the non-oak identification samples was examined in three planes under a high power microscope and identifications were carried out using reference texts (Schweingruber 1978, Brazier and Franklin 1961 and Hather 2000) and reference slides maintained by Worcestershire Archaeology.

5.1.3 Discard policy

Samples will be discarded after 6 months following the submission of this report, unless there is a specific request to retain them

5.2 Hand-collected animal bone

A small assemblage totalling 1.36kg (141 fragments) was collected during evaluation, watching brief and excavation. Much of the bone showed dark mottling which suggests that either the bone was waterlogged for long periods of time, or that it had been exposed on the surface before deposition. As this was a small assemblage, no detailed assessment was carried out, and no further work was recommended for full analysis. It was clear that site conditions were not favourable to the preservation of bone, as teeth represented a large proportion of what remained.

5.3 Charred plant remains

Assessment showed that charred cereal crop remains were sparsely scattered across the site in most Phase 1 and 2 features (Appendix), consisting mainly of emmer or spelt wheat (*Triticum dicoccum/spelta*) or hulled barley (*Hordeum vulgare*) grains in low levels with occasional weed seeds (grasses and other weed seeds). Free-threshing wheat (*Tritium* sp free-threshing) identified, for example, in a pit fill (149, CG22, P2) is not considered to be characteristic of Roman deposits as a principle wheat crop, although it is an occasional find on sites of this date.

The only chaff material identified at assessment was the occasional glume base of emmer/spelt wheat associated with burnt clay (66, CG18, P2), and also of note was the presence of charred grape (*Vitis vinifera*) in post hole fill 276 (CG30, P2). The weed assemblage, although sparse, indicates a variety of environments – nitrogen-rich, neglect ground (common nettle), light, possibly sandy soils (sheep's sorrel), and even wet environments (sedges and spike-rush) – despite being on such an elevated site, and so presumably much of this material had been brought onto site.

Context				**190**	**276**	**332**
Sample volume (L)				**40**	**40**	**30**
Latin name	**Family**	**Common name**	**Habitat**			
Uncharred plant remains						
Urtica dioica	Urticaeae	common nettle	ABCD	+	+	
Reseda luteola	Resedaceae	dyer's rocket, weld	ABDF	+		
unidentified root fragments	unidentified					++++
Charred plant remains						
Triticum spelta glume base	Poaceae	spelt wheat	F	1		
Triticum dicoccum/spelta grain	Poaceae	emmer/spelt wheat	F	12	6	33
Triticum dicoccum/spelta glume base	Poaceae	emmer/spelt wheat	F		1	
Triticum sp (free-threshing) grain	Poaceae	free-threshing wheat	F	1	1	24
Triticum sp grain	Poaceae	wheat	F	2		
Triticum sp tail grain	Poaceae	wheat	F			3
Hordeum vulgare grain (hulled)	Poaceae	barley	F	26	12	15
Hordeum vulgare tail grain (hulled)	Poaceae	barley	F			1
Secale cereale grain	Poaceae	rye	F	6		
Cereal sp indet grain	Poaceae	cereal	F	28		20
Avena sp grain	Poaceae	oat	AF	5		
Fumaria sp	Papaveraceae	fumitory	ABC	1		
Ranunculus acris/repens/bulbosus	Ranunculaceae	buttercup	CD		1	
Ranunculus arvensis	Ranunculaceae	corn buttercup	A		1	
Vitis vinifera	Vitaceae	grape-vine	F		1	
Melilotus/Medicago sp	Fabaceae	melilot/medick	ABD	12	21	
Prunus spinosa (fragment)	Rosaceae	sloe	C	+		
Rubus idaeus	Rosaceae	raspberry	CD		1	
Fragaria vesca	Rosaceae	wild strawberry	C		3	
Linum catharticum	Linaceae	fairy flax	D			1
Raphanus raphanistrum (pod fragments)	Brassicaceae	wild radish	ABG		1	
Persicaria hydropiper	Polygonaceae	water-pepper	E	1		

Context				190	276	332
Persicaria mitis	Polygonaceae	tasteless water-pepper	E	1		
Polygonum sp	Polygonaceae	knotgrass	AB	1		
Persicaria/Polygonum sp	Polygonaceae	knotgrass	AB		1	
Rumex acetosella	Polygonaceae	sheep's sorrel	ABD	2	1	1
Rumex sp	Polygonaceae	dock	ABCD	2	73	
Spergula arvensis	Caryophyllaceae	corn spurrey	AD	6	1	
Chenopodium sp	Amaranthaceae	goosefoot	ABD	4		
Atriplex sp	Amaranthaceae	orache	AB	7		
Plantago lanceolata	Plantaginaceae	ribwort plantain	ABD		1	
Prunella vulgaris	Lamiaceae	selfheal	D	1	4	
Mentha arvensis	Lamiaceae	corn mint	ACDE		1	
Centaurea cf *cyanus*	Asteraceae	cornflower	D	1		
Tripleurospermum inodorum	Asteraceae	scentless mayweed	AB	5		
Valerianella dentata	Valerianaceae	narrow-fruited cornsalad	AB		1	
Eleocharis sp	Cyperaceae	spike-rush	E		2	
Carex sp (2-sided) nutlets	Cyperaceae	sedge	CDE	1	6	
Festuca/Lolium sp grain	Poaceae	fescue/rye-grass	ABD		4	
Glyceria/Melica sp	Poaceae	sweet grass/melick	CDE		3	
Bromus sp grain	Poaceae	brome grass	AF	3	4	
Poaceae sp indet grain	Poaceae	grass	AF	11	2	
Poaceae sp indet grain (small)	Poaceae	grass	AF	1		
Poaceae sp indet grain (2mm size)	Poaceae	grass	ABD		13	
Poaceae sp indet grain (1mm)	Poaceae	grass	AF		140	
unidentified	unidentified					1

Table 18: Plant remains from selected samples. Habitat: A= cultivated ground; B= disturbed ground; C= woodlands, hedgerows, scrub etc; D = grasslands, meadows and heathland; E = aquatic/wet habitats; F = cultivar

Phase 2 Roman occupation (2nd century to early 3rd century)

The exceptions to the pattern of sparsely scattered charred cereal crop debris were three post holes: contexts (190, CG26, and 276 and 332, CG30/Building III). In these, cereal crop debris was more abundant. The weed component of these samples was also more diverse, including small legumes, as well as those listed above.

Uncharred weed seeds, which included common nettle (*Urtica dioica*) in post hole fills (190 and 276) and dyers rocket (*Reseda luteola*) in post hole fill (190),are assumed to be intrusive and would not normally be expected to have survived uncharred in the local sandy soils for long. However, dyers rocket, a dye crop producing yellow dye, is rarely cultivated today and is only found growing as a casual in small pockets around the country, so the date of cultivation as a crop, as opposed to growth as a relic of cultivation is uncertain but of interest. The Botanical Society of the British Isles (BSBI) database and mapping of plant species (BSBI 2015) shows no growth of dyers rocket since 1970 to 1986 around Lilleshall but scattered pockets of more recent growth to the south and north (around Donnington and Egmond). This may indicate historical cultivation in the area of unknown date.

In fill 190 (CG26), of posthole [191] an assemblage of cereal crop debris indicated cultivation principally of two crops: emmer or spelt wheat (*Tritium dicoccum/spelta*) and hulled barley (*Hordeum vulgare*), with some rye (*Secale cereale*) and free-threshing wheat (*Tritium* sp free-threshing). Although the number of cereal grains was low, barley was dominant. The assemblage overall was dominated by weed seeds, principally melilot or medick (*Melilotus/Medicago* sp), which

are small Fabaceae or legumes, with smaller numbers of other weed seeds. These included as small grasses (Poaceae sp), oats (*Avena* sp) and brome grass (*Bromus* sp), and for example, weeds which indicate sandy soil (corn spurrey or *Spergula arvensis*), disturbed nitrogen-rich ground (fat hen, or *Chenopodium album*), grassy areas (self heal or *Prunella vulgaris*) and wet ground (sedge or *Carex* sp (2-sided nutlets)). The low levels of oats and brome grass present was noticeable, as these grasses are commonly the most abundant grasses in cereal crop assemblages of Roman date. Occasional fragments of sloe (*Prunus spinosa*) were also recovered.

Fill (276; CG30) of posthole [277] also indicated cultivation of emmer or spelt wheat, with hulled barley being slightly dominant. A single grain of free-threshing wheat was also recovered. The weed assemblage was dominant, particularly small weed seeds such as sheep's sorrel (*Rumex acetosella*) and small grass grains (of up to 1mm size), which may include annual meadow grass (*Poa annua*).

Fill (332; CG30) of posthole [331] was a smaller assemblage but of different composition, being dominated by cereal grain. It is of note, in that free-threshing wheat is almost as frequent as emmer or spelt wheat, and barley is also relatively common. The only weed species identified were fairy flax (*Linum catharticum*) and knotgrass (*Persicaria/Polygonum* sp). Occasional hazelnut shell fragments were also noted.

The charred remains identified in post holes fills (190 and 276) could indicate crop processing waste, potentially waste from fine sieving, having been present in Building III, although the lack of cereal chaff, which would be an expected component of such waste, is significant. Glume bases from glume wheats, such as emmer or spelt wheat, are very robust and are usually ubiquitous on sites of Roman date where charred cereal crop remains survive. This type of waste may have formed as a result of fire in a building such as a barn where cereals were stored as clean grain and the weed component simply present in the building and charred along with the grain. Alternatively, this may be spent fuel from ovens in the vicinity. In contrast, the charred remains in post hole fill (332), appear to derive from a cleaned crop.

Phase 3 (3rd to 4th century)

No identifiable charred remains were noted from this phase.

Phase 4 (4th century buried soil)

Only occasional emmer/spelt wheat and unidentified wheat (*Tritium* sp) grain was identified during assessment of a 'buried' soil (16, CG35), and a single unidentified cereal grain from layer (7003, CG37).

5.3.1 Discussion

The low levels of charred cereal crop remains suggest that cereal crop processing was not an extensive and significant activity, at least in the area covered by the excavation, despite the site being the location of a *vicus* or roadside settlement adjacent to a fort. The exception is Building III where cereal crops were potentially stored or cereal waste used as fuel for ovens. As a fort would, presumably, need cereal crop products in some quantity, this may imply either that the focus of crop processing was elsewhere, or alternatively that supplies were brought in as clean grain, or even flour, potentially taking advantage of its position alongside a road which may be a supply route for such commodities. Poor preservation of charred cereal crop remains, as a result of the sandy soils, has been discounted on account of the well preserved charred remains in the postholes. The sandy soils did, however, result in poor animal bone preservation.

The lack of cereal chaff (except in one sample) suggests the remains are the residues of grain storage or imports other than crop processing. If processing was taking place, it is likely to have

been on a small scale, carried out in a piecemeal fashion. The occasional charred grape pips, fragments of sloe kernels and hazelnut shell may also be the residues of stored food, or food which ended up getting charred on a hearth.

Free-threshing wheat was, at least in one sample, almost as numerous as emmer or spelt wheat which are the most commonly found wheats on Roman sites. Free-threshing wheat is often present in small quantities, but rarely as a co-dominant crop. As the assemblage (332, CG30, Building III) is relatively small, and a single sample, importance is only attached to this tentatively, and in the context of free-threshing wheat being similarly noticeable in charred assemblages at the Basilica at Wroxeter (Charles *et al* 1997). This appears to be characteristic of an assemblage which is transitional between a typically Roman assemblage and one more typical of a post-Roman site where free-threshing wheats are dominant. The position of the site on a supply route to a fort may have been key in bringing in supplies produced under a different agricultural regime to that found on most Roman-British sites, and hence possibly from some distance away. Free-threshing wheat may have been more suited to commercial use in an urban setting, as it could be more easily processed than glume wheats, and could have been imported as clean grain or flour for rapid use rather than storage. The gluten in the dough was also more robust and less likely to be over-kneaded, potentially making it more suitable for large-scale bread-making.

Rye, present in small quantities, may have been a crop in its own right and could reflect local cultivation, as it is well adapted for sandy soils which are dominant locally.

5.4 Charcoal

Latin name	Family	Common name	Habitat	276
Quercus robur/petraea wood	Fagaceae	oak	C	30
Alnus glutinosa (wood)	Betulaceae	alder	CE	6
Corylus avellana wood	Betulaceae	hazelnut	C	20
Alnus/Corylus sp	Betulaceae	alder/hazel	C	2
unidentified wood fragments	unidentified			1

Table 19: Charcoal from post hole fill (276, CG30, P2a)

Oak (*Quercus robur/patraea*) was identified in a number of samples during assessment. Oak from the fill (276, Building III) of posthole [277] consisted of predominantly oak (*Quercus robur/petraea*) and hazel (*Corylus avellana*), with small quantities of alder (*Alnus glutinosa*) and hazel or alder (*Alnus/Corylus* sp). This would be consistent with the majority of the charcoal deriving from structural wood of Building III, although alder is more likely to derive from wood fuel.

Non-oak charcoal, identified for radiocarbon dating included guelder rose (*Viburnam opulus*), hazel (*Corylus avellana*), and possible lime (cf *Tilia* sp).

6 Radiocarbon dating (by Suzi Richer and Nicholas Daffern)

6.1 Introduction

A total of three radiocarbon dates were obtained during post-excavation analysis. The dating was undertaken to assist with understanding the chronology of the site, in particular to address the period of usage of the ovens (CG10, CG29) and to establish the date for the Punic ditch [528].

6.2 Methods

Charcoal from short-lived species, *Corylus* (hazel), was chosen for all samples. This type of selection reduces the probability of the sample having a high inbuilt age. No sources of contamination or non-contemporaneous carbon were evident during the fieldwork or during the subsequent assessment.

Three samples were dated by Accelerator Mass Spectrometry (AMS) at the Scottish Universities Environmental Research Centre (SUERC) in 2013 and 2014. The calibrated date ranges have been calculated using the maximum intercept method (Stuiver and Reimer 1986), and are quoted with end points rounded outwards to ten years. These ranges have been calculated using OxCal v.4.2 (Bronk Ramsey 2009) and the current internationally-agreed atmospheric calibration dataset for the northern hemisphere, IntCal13 (Reimer et al 2013).

6.3 Results

Context and <sample number>	Laboratory code	Material	$\delta^{13}C$	Radiocarbon Age BP	OxCal calibrated age (95.4% probability or 2 sigma)
(526, CG2, P1) <77>	SUERC-54004 (GU34351)	Charcoal: *Corylus*	−26.9 ‰	2003±26	60 cal BC– cal AD 70
(416, CG29, P2) <70>	SUERC-49766 (GU32333)	Charcoal: *Corylus avellana*	−25.3 ‰	1934±32	cal AD 0–130
(30, CG10, P3) <5>	SUERC-49765 (GU32332)	Charcoal: *Corylus avellana*	−26.9 ‰	1799±27	cal AD 130–330

Table 20. Radiocarbon dating results

The results are conventional radiocarbon ages (Stuiver and Polach 1977) for the three samples submitted are listed in Table 20, shown in Figure 33 and in Appendix 4. The ages have been calculated using the reported $\delta^{13}C$ (AMS) values measured by conventional mass spectrometry. The calibrated date ranges for all samples are given in Table 20.

Discussion

The absence of material suitable for radiocarbon dating in the primary fill of the Punic ditch [528] and the lack of other dating evidence (eg pottery) from either the primary or secondary fills, meant that a piece of charcoal from the secondary fill (CG2; context 526) was sent for dating. There was no evidence of *in situ* burning within the ditch, therefore the deposit is assumed to have been dumped. A date of 60 cal BC–cal AD 70 (SUERC-54004) was obtained, suggesting that the wood had been cut and was subsequently burnt during the early part of Phase 1 of the site, or before. However, the period of time between the burning and dumping of the charcoal is not known; therefore it is possible that the cutting of the ditch and the dumping of the material within it may have occurred at a slightly later date than when the wood was originally burnt.

No comparative artefactual dating was available for context 416 (oven CG29), a charcoal rich layer, possibly the rake out from an oven, which was radiocarbon dated to cal AD 0–130 (SUERC-49766), this date range falls within the general dating assigned to Phases 1 and 2.

The radiocarbon date of cal AD 130–330 (SUERC-49765) was from the upper fill (CG10; context 30) of a possible oven structure yet to be fired. This radiocarbon date agrees favourably with the dating derived from the associated 2nd–3rd century pottery (Jane Evans, pers comm; this report). This is particularly the case when the lower probability (79.8%) date range of cal AD 132–260 is considered.

See Appendix for details of radiocarbon dating results.

7 Discussion

7.1 Prehistoric

A small number of residual flints, some definitely Neolithic, suggest an early prehistoric presence at Redhill. These finds are consistent with the 1973 investigations (reviewed in Hurst 2015; 14 residual prehistoric flint), which also produced nine Early Bronze Age sherds, possibly from a disturbed barrow given the elevated location. Other prehistoric finds have also come to light in the general area, a cache of arrowheads at Priorslee (PRN 00756) and a stone macehead from Shifnall (PRN 00753), suggesting that there is considerable prehistoric potential.

7.2 Roman, mid 1st century military occupation

The earliest structural remains comprised two early Roman ditches, CG1 and 2, the first of which having a definite Punic style ditch profile. The pre-AD 70 date for their infilling agrees with the dating given for the main early fort (DIII) just to the north by Browne and Boon (2002, 6).

Browne (2002) has speculated about the fort to the north being a supply base facility because of a lack of buildings and that its southern annex (CG1/DVb and DVc) likely to have been a paddock for horses or a temporary occupation area for passing military personnel to camp, due to the lack of internal features. The former suggestion is now given some credibility from the metalwork evidence, which suggests the presence of horses and, therefore, of a cavalry garrison, possibly linked with a Thracian auxiliary unit attached to Wroxeter, though this is by no means certain, as Roman legions also used cavalry.

The discovery of another early military ditch (CG2) much closer to Watling Street may indicate a camp situated right on the line of the road, most likely before it had been built. If so, this may be analogous to a camp seen at *Salinae* (Droitwich, Worcs; Hurst *et al* 1988) which also predated a major Roman road, suggesting that an element of the occupation strategy was to reconnoitre the line of the new roads and then mark them with camps next to key points that could initially serve as bases for their construction. A presumably slightly later fort site which clearly had a more extended life was then established nearby on the better site at Dodderhill (McAvoy 2006), again potentially analogous to the military sequence at Redhill.

7.3 Roman civilian occupation 2nd to early 3rd century

The main phase of site activity is the roadside settlement which was established to the south and east of the military enclosures in the 2nd century and then continued into the early 3rd century, with no 4th century occupation being corroborated by the latest fieldwork (cf Browne and Boon 2002). This broadly agrees with the Browne dating for this phase of activity, that is commencing in the Antonine period (138–193). However, the overall settlement area of *Uxacona* covered *c* 16.5ha, with the excavation area so far only representing less than 1% this area, so any current conclusions about the evolution and life of the settlement should for the moment remain quite tentative, especially as the core area of the site has yet to be established, and this would be the earliest part.

This settlement is typical of a number of other excavated roadside settlements described by Smith (1987). In terms of their location the majority of these settlements, as at *Uxacona*, do not appear to have been located on earlier pre-Roman/Iron Age sites. As many, approximately, 20% (potentially more) of these settlements appear are associated with military forts (*ibid*, 5), it has been suggested that entrepreneurs and camp-followers established them to provide services for soldiers with money to spend (*ibid*, 7). Whether they survived after the military moved on depended upon local economic conditions and position, and being close to a major road, as at *Uxacona*, must have been an important factor. Few places have provided evidence for civilian settlement being contemporary with military installations (Black 1995; Smith 1987), so *Uxacona* follows the main trend, with there being an hiatus between the abandonment of the military instillations and the

formation of the civilian settlement. The mid-2nd century date for civilian settlement at *Uxacona*, also lies within the main period of roadside settlement growth (Smith 1987, 9).

It is unclear how far official involvement played a role in the establishment of roadside settlements such as *Uxacona*, after the military presence had evaporated. Some settlements may have seen occupation due to exploitation of natural resources, such as at Pentrehyling for lead (Bayley and Eckstein 2015), Droitwich for salt (Hurst 2006) and Holditch for iron working (Burnham and Wacher 1990). At *Uxacona* there is no evidence for large-scale industrial processes having been undertaken. It is likely, therefore, that settlements like this will have served another purpose, such as supporting a coherent communications system across the province following (some way) behind the military advancement. In that case *Uxacona* will have formed part of this early system that would later be formalized into a system of stopping points and accommodation for state officials (the *cursus publicus*). *Uxacona* may be regarded as just such an official stopping point, as it was recorded on Route 2 on the *Antonine Itinerary* (Black 1995). Certainly it is likely that the settlement arose from its roughly equidistant position on Watling Street between *Viroconium* (Wroxeter), and Kinvaston, Penkridge, and, more specifically from its sitting on a rise where travellers would have been glad of refreshment after tackling a long incline, and where horses/oxen could be fed/watered before moving on. The number of coins from the site would seem to support such scenario and the frequent ovens might well imply that cooking was a mainstay activity in support of this service role.

The plot divisions, consistent with many other roadside settlements, abutt the nearby roads end-on, indicating that access to the road was at a premium. Plot 2 provided the only confirmed plot width at Uxacona (17.0m), and, although this is on the smaller side of frontage widths (Smith 1987), it still falls within the recorded range (15.20-60.0m). The depth of these plots elsewhere is in the range of 60-90m long and, although the full dimensions of those at *Uxacona* could not be established, here they are more likely to have been up to 40m (max) long (ie up to ditch CG39). Later these were made even shorter with the insertion of the large ditch (CG8), though then they were more likely already defunct. That these plots are not perpendicular to the main Roman road, but more in line with the earlier fort alignment (eg CG1) requires explanation as such plots are usually at right angles to the road. Smith (1987), however, also provides examples, such as at Hibaldstow (Lincs), Ixworth (Suffolk) and Chelmsford (Essex) where the plots were not aligned on the main roads, but, instead, on other features, such as branch roads, or to obtain a greater area of land for each plot.

Each of the plots at *Uxacona* appeared to contain a comparable set of features: a posthole-built building, with its gable-end fronting onto Watling Street, and, behind this, a smaller ancillary beam-slot structure/building, rubbish pits, and ovens. It is likely the post built-buildings were for domestic habitation, while the smaller structure at the rear was a workshop, store, or for livestock. The largest building (Plot 3.1 Building III, CG30) is clearly a strip building, as commonly found in rows next to roads in suburban settlements (Perring 2002, 55), usually arranged with a shop on the frontage, a workroom in the middle and living quarters at the rear. No internal divisions were recorded in Building III, however an oven (CG29) to the rear of the structure, close to a side door (indicated by posthole 291) is comparable to other excavated examples in Britain (Perring 2002, 56). A side-entrance in this position would have provided access to the living area, and would have been handy for ventilating the oven.

The civilian settlement had good connections with long trade routes, as evidenced by the 2nd–early 3rd century finds assemblage revealing that the inhabitants had access to pottery, wine, olive oil, dates and fish sauce from the Continent (including modern-day France, Italy and Spain). This also demonstrates that the occupants were actively engaged in the use of Romanised material culture, unlike as suggested for the majority of rural communities surrounding Wroxeter (Gaffney *et al* 2007, 283). The inhabitants of *Uxacona* may well have had the pick of goods heading for Wroxeter. However, chronology may be important for any final understanding here, as its civilian settlement may well have occurred at a peak in the economic life of the new province, when the

Empire was flourishing economically and there was a flood of Romanised goods available that could be afforded. The range of finds, apart from their number and quality of preservation, all serve to project a highly Romanised way of life, and is crowned by the black samian handled jar depicting the legendary figures Aeneas and Anchises (the sherd deliberately shaped to retain these images). That such a symbolic image of Rome reached Roman Britain is striking, as the figures form part of the national epic poem, *The Aeneid*, by Virgil celebrating the foundation of the Empire.

About the late 2nd century a substantial ditch (CG8; same as ditch DVII assigned to the 4th century by Browne; see Figs 2 and 13) was cut parallel with the presumed line of Watling Street, over-riding the military alignment of earlier features. It is possible that a remnant of its associated ditch seen in the west pipe trench marks the north-south line of this same ditch, while a bank up to 2m high to the west of the excavation area had previously been interpreted as town defences (Corbyn 1974), and although unconfirmed through excavation, has since been ploughed away. It appears, therefore, that the north-west corner of *Uxacona*, including the 2011–13 excavation site, was enclosed in a defensive circuit. This period saw larger towns being fortified (eg Wroxeter in the late 2nd century; Ellis and White 2006), and smaller settlements could be also treated in the same way (Black 1995), including *Pennocrucium* (Penkridge, Staffs) in the later 2nd century (Crickmore 1984).

7.4 3rd century ?decline

In this part of *Uxacona*, the erection of defences seems to be rapidly followed by a relative cessation of activity here, such that it is even possible that the inhabitants were excluded from this part of the settlement. The ditch itself remained open until the final backfilling around AD 395-402, but this may not be very informative as the size of the ditch was such that it will have taken much longer than any other feature to fill up naturally. Assuming this part of Watling Street was being secured then just inside it might have been practical to set aside an area for storage of convoys (animals and equipment). Clearly *Uxacona* lay on a major route-way and being listed on the *Antonine Itinerary* may well have had official functions controlling the passage of men and equipment. Elsewhere, only a portion of roadside settlements were protected during this period (Esmonde Cleary 1989, 167-8), and so this is likely to be a sign of the elevated status of *Uxacona*.

7.5 4th/5th century to modern

Uxacona has been claimed as the site of a *burgus* (Gould 1999) – located 125m further east up the road from the 2011-13 excavation where there was a small fortified enclosure (*c* 53m E–W x *c* 60m N–S) with a 6m wide ditch separated by a berm 5m wide from a sandstone wall (4.2m wide) (investigated by Pagett in the early 1960s) with a cobbled area, possibly Watling Street itself, and the remains of a gate tower, also being uncovered (as cited in Bryant 2005). *Burgi* enclosures have also been claimed at *Pennocrucium*, *Letocetum*, *Manduessedum*, and *Tripitonium*, as parts of a large scheme of such sites *(*Burnham and Wacher 1990; Gould 1999*).* Such enclosures are apparently situated at regular intervals along Watling Street, however there is debate as to their function (Gould 1999). It is possible they were used as secure storage depots for equipment, horses and convoys of the *cursus publicus* using Watling Street. Their position athwart the road itself gives a strong impression of being designed to control movement along it, perhaps also with some other centralised purpose such as for levying tolls as part of taxation. The date of the *Uxacona burgus* is not secure, but 4th century pottery was recovered during the excavation and others have been dated to the later 3rd or 4th centuries (Gould 1999). If the *burgus* enclosure at *Uxacona* proves to date to 4th century, then it may be a successor to the substantial enclosure to its west (CG8).

Other later Roman activity has been indicated by Browne and Boon (2002) to the north of the 2011–13 excavation site, but its nature still remains relatively unclear. No finds datable to later than the late 4th/early 5th have yet been recovered, though the intensity of activity across *Uxacona* may still suggest that the site remained key until the very end of Roman Britain. The 2011–13

excavation in particular has provided a very rare opportunity to investigate the upper levels of a west Midlands Roman site where the final deposits had been little disturbed once incorporated into surface soils at an unspecified date. However, even this level of disturbance is likely to have adversely affected any more ephemeral evidence of very late settlement, so that its possibility should not yet be discounted, especially as a burgus just to the east might suggest a shift in settlement focus.

8 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological excavation and watching brief was undertaken at Redhill Reservoir, Telford, Shropshire (NGR SJ 7261 1097) in 2011-2013 on the site of the Roman settlement at Uxacona *(the 'high place'). It was undertaken on behalf of Mott MacDonald Bentley (MMB; the Client) working on behalf of Severn Trent Water who intends to construct a nitrate filtration plant on the site.*

The earliest structure was part of a mid-1st century Roman fort represented by a north–south Punic ditch to the south-west of the larger fort explored in the 1970s. There is a suggestion from the artefactual evidence that the army unit was cavalry.

Most of the activity across the whole site was 2nd century in date and in the nature of civilian settlement. Possibly sitting within an enclosure, there were five earth-fast buildings, in at least three plots, facing onto Watling Street to the south (though neither the road nor the building frontages were exposed). Up to eight fired clay ovens were also excavated, three of which appear to have sat within one of the building, perhaps indicating commercial activity, such as a bakery, taking advantage of its roadside position. Overall the site produced a large number of coins, metallic small finds, and pottery artefacts were associated with this main occupation phase, some of the artefacts being of particular interest as very unusual items. Environmental evidence revealed a generally low level of charred cereal crop waste, suggesting that crop processing was not a significant activity here. One building, however, produced free-threshing wheat (the predominant wheat of post-Roman Britain) in addition to the glume wheats characteristic of Roman sites. This raises the possibility that the wheat supply was for a specific purpose, perhaps bread making as suggested above, making use of a wheat that, being more easily processed, could have been brought in as clean grain or flour, and so was more suited to commercial bread making.

During the 3rd century a large east–west V-shaped ditch was dug across the rear of the settlement area on a new alignment parallel (it is presumed) to Watling Street (modern A5). There is little sign that the settlement went much beyond the mid-3rd century, after which only a thin spread of finds was present here. Subsequently the site was abandoned and the evaluation had shown that no later finds were associated with overlying soils other than a few post-medieval and modern finds from the 17th century onwards. As a result the plough-soil was carefully removed in spits and the Roman artefacts recovered as an integral part of site reconstitution.

9 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the conclusion of this project, Maurice Hopper (Mott MacDonald), Hugh Hannaford (Shropshire

Council), William Klemperer (Historic England), Natasha Kharbanda (Mott MacDonald Bentley), Alastair Sayers (J N Bentley) as well as the J N Bentley site team and machine driver. Dean Crawford undertook the systematic metal-detecting survey for Worcestershire Archaeology which added so many significant Roman objects to this report.

The authors are most grateful to Roger White for his comments on a draft of the report.

Derek Hurst managed the project and edited this report.

10 Bibliography

Andrews, C, 2012, *Roman Seal-boxes in Britain*, BAR British Series **567**. Oxford: British Archaeological Reports

Atkinson, D, 1942, *Report on Excavations at Wroxeter (the Roman City of Viroconium in the County of Salop 1923-1927).* Oxford: Birmingham Archaeological Society

Barker, A, White, R H, Pretty, K B, Bird, H, Corbishley, M H, 1997 *Wroxeter, Shropshire; excavations on the site of the Baths basilica, 1966–90*. London

Bayley, J, & Budd, P, 1998, The clay moulds, in Cool and Philo, 195–222

Bayley, J, and Eckstein, K, 2015 Metalworking debris, in J Allen, J Cane and A Jones, Pentrehyling fort and Brompton camps, Shropshire: excavations 1977–98, *Trans Shropshire Archaeol Soc*, **88**, 85–88

Berni Millet, P, 2008 *Epigrafía anfórica de la Bética. Nuevas formas de análisis*, Col Lecció instrumenta, **29**, Barcelona

BGS 2014 *Geology of Britain Viewer*, http://mapapps.bgs.ac.uk/geologyofbritain/home.html, British Geological Survey, accessed XX July 2014

Bishop, M C, 1998, Military equipment, in Cool and Philo, 61–81

Bishop, M C, and Coulston, J C N, 1993, *Roman Military Equipment from the Punic Wars to the Fall of Rome*. London: Batsford

Black, E W, 1995 *Cursus Publicus: the infrastructure of government in Roman Britain*, Brit Archaeol Rep (Brit Ser) 241. Oxford: Tempus Reparatum

Bliquez, L J 1994, *Roman Surgical Instruments and other Minor Object in the National Archaeological Museum of Naples.* Mainz: Verlag Philipp von Zabern

Brazier, J D, and Franklin, G L, 1961 *Identification of hardwoods: a microscope key, Dept of Scientific and industrial research*, Forest Products Research Bulletin, 46. London: HMSO

Bronk Ramsey, C, 2009 Bayesian analysis of radiocarbon dates, *Radiocarbon*, **51**, 37–60

Browne, D M, and Boon, G C, 2002 Excavations at Redhill, Lilleshall, Shropshire: an interim report, *Transactions of the Shropshire Archaeological and Historical Society*, **77**, 1–9

Bryant, V, 2005 Archaeological assessment of Redhill, Shropshire, in H Dalwood and V Bryant *Extensive Urban Survey - The Central Marches Historic Towns Survey 1992-6* [data-set]. York: Archaeology Data Service [distributor] (doi:10.5284/1000325)

Bryant, V, and Evans, C J, 2004 The Roman pottery, in H Dalwood and R Edwards, *Excavations at Deansway, Worcester, 1988-89, Romano-British small town to late medieval city*, CBA Research Report **139**, York, 235–280

Burnham, B C, and Wacher, J, 1990 *The 'small towns' of Roman Britain*. London: Batsford

Bushe-Fox, J P, 1913, *First Report on the excavations of the Roman town at Wroxeter, Shropshire*, Rep. Res. Comm. Soc. Ant. Lond. 1. London: Society of Antiquaries of London

Bushe-Fox, J P, 1914, *Second Report on the excavations of the Roman town at Wroxeter, Salop*, Rep. Res. Comm. Soc. Ant. Lond. 2. London: Society of Antiquaries of London

Bushe-Fox, J P, 1916, *Third Report on the excavations of the Roman town at Wroxeter, Shropshire*, Rep. Res. Comm. Soc. Ant. Lond. 4. London: Society of Antiquaries of London

Butler, C, 2005 *Prehistoric flintwork*. Stroud: Tempus Publishing.

Callender, M, 1965 *Roman Amphorae: with index of stamps*, London

Cappers, T R J, Bekker, R M, and Jans, J E A, 2012 *Digitale Zadenatlas van Nederland: Digital seed atlas of the Netherlands*, Groningen Archaeological Studies, **4**, Barkhuis Publishing and Groningen University Library: Groningen

Carreras, C, and Funari, P P, 1998 *Britannia Y El Mediterraneo: estudios sobre el abastecimiento de aceite betico y africano en Britannia*, Barcelona

Carson, R A, 1990 *Late Roman bronze coinage*

Casey, P J, and Hoffmann, B, 1995 Excavations on the Corbridge Bypass, 1970, *Arch. Aelianna Series 5*, **22**, 17–45

Charles, M P, Colledge, S M, and Monk, M, 1997 Appendix 6: Plant remains, P Barker (ed), *The Baths Basilica, Wroxeter: excavations 1966–90*. English Heritage, 324–345

Cool H, 1997, Panelled enamel vessels, *Roman Finds Group Newsletter,* 13, 2–3

Cool, H E M, 1983 *A study of the Roman Personal Ornaments made of metal, excluding brooches, from southern Britain*, PhD Thesis University of Wales. Http://ethos.bl.uk/

Cool, H E M, 1991 Roman metal hair pins from southern Britain, *Archaeol J.*, **147** (1990), 148–82

Cool, H E M, 2006 *Eating and drinking in Roman Britain*, Cambridge

Cool, H E M, 2007 The small finds in their regional context, in D Miles, S Palmer, A Smith, and G P Jones, *Iron Age and Roman settlement in the upper Thames valley: excavations at Claydon Pike and other sites within the Cotswold Water Park*, Thames Valley Landscapes Monogr **27**, 342–350. Oxford: Oxford University School of Archaeology

Cool, H E M, and Philo, C (eds), 1998, *Roman Castleford Excavations 1974-85. Volume I: the small finds*, Yorkshire Archaeology 4. Wakefield: West Yorkshire Archaeological Service

Cool, H E M, and Price, J, 1995, *Roman Vessel Glass from Excavations in Colchester 1971-85*, Colchester Archaeol Rep **8**. Colchester: Colchester Archaeological Trust

Cool, H E M, and Price, J, 2002, Vessel glass associated with the military occupation, in Webster, 225–53

Cool, H E M, White, R, Griffiths, D, Linnane, S, Bliss, A, & Pretty, K, 2014, *The small finds from the Baths Basilica Wroxeter: a digital resource,* ADS Collection: 1640 doi:10.5284/1023596

Corbyn, D B, 1974 *Recent surface finds at Redhill, nr Oakengates, Salop,* unpublished manuscript, SCC SMR file

Crickmore, J, 1984 *Roman-British urban defences*, BAR (Brit Ser) **126**. Oxford

Crummy, N, 1983, *The Roman Small Finds from Excavations in Colchester 1971-9*, Colchester Archaeol. Rep. 2. Colchester: Colchester Archaeological Trust

Dannell, G B, 2002 Catalogue of South Gaulish Samian. In G Webster. (ed by J. Chadderton), *The legionary Fortress at Wroxeter. Excavations by Graham Webster 1955-85*, Archaeological Report **19**, English Heritage, London, 168–77

Darling, M J, 2002 Pottery, in G Webster, (ed by J Chadderton), *The legionary Fortress at Wroxeter. Excavations by Graham Webster 1955-85*, Archaeological Report **19**, 137–223. London: English Heritage

Darling, M J, and Precious, B, 2014 *A corpus of Roman pottery from Lincoln*, Lincoln Archaeological Studies No **6**

Déchelette, J, 1904 *Les vases céramiques ornés de la Gaule Romaine*, 2 vols, Paris

Dennis, G, 1978 in J Bird, A H Graham, H Sheldon, and P Townend, *Southwark Excavations 1972-1974*, 1-7 St Thomas Street, London Middlesex Archaeol Soc and Surrey Archaeol Soc Joint Publication No. 1

Dickinson, B M, 2000 The samian, in P Ellis, *The Roman baths and Macellum at Wroxeter. Excavations by Graham Webster 1955-85*, Archaeological Report **9**, English Heritage, London, 282–302

Ellis, P (ed), 2000 *The Roman Baths and Macellum at Wroxeter*. English Heritage Archaeological Report 9. London: English Heritage

Ellis, P, and White, R (eds), 2006 Wroxeter archaeology: excavation and research on the defences and in the town, 1968–1992, *Trans Shropshire Archaeol Hist Soc* **78**

English Heritage 2006 Management of research projects in the historic environment: the MoRPHE project managers' guide

English Heritage 2010 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines

Esmonde-Cleary, S, 1987 *The ending of Roman Britain*. London: Batsford

Étienne, R, and Mayet, F, 2004 *L'huile hispanique. Corpus des timbres amphoriques sur amphores Dressel 20,* Paris

Evans, C J, 1994 The pottery, in P Ellis, J Evans, H Hannaford, G Hughes and A Jones, Excavations in the Wroxeter hinterland 1988–1990: the archaeology of the Shrewsbury bypass, *Trans Shropshire Archaeol Soc*, **69**, 76–91

Evans, C J, 2003 *Joined up thinking: Reconstructing the Roman West Midlands from the ceramic evidence*, West Midlands Regional Research Framework seminar paper. Available at http://www.birmingham.ac.uk/schools/historycultures/departments/caha/research/arch-research/wmrrfa/seminar3.aspx

Evans, C J, 2007 The Roman pottery from Wroxeter's Hinterland, in V L Gaffney, R H White, and H Goodchild, *Wroxeter, the Cornovii, and the urban process. Final report on the Wroxeter Hinterland Project 1994-1997, vol 1, Researching the Hinterland*, Journal of Roman Archaeology, supplementary Series **68**, 146–68

Evans, C J, 2014 The pottery, in J Wainwright, Archaeological investigations in St John's, Worcester, Archive and Archaeology Service, Worcestershire County Council, report **1751**, 13–27 Does this now have an online publication reference?

Evans, C J, 2015 The Roman pottery, in J Allen, J Cane and A Jones, Pentrehyling fort and Brompton camps, Shropshire: excavations 1977–98, *Trans Shropshire Archaeol Soc*, **88**, 89–126

Evans, C J, Jenks, W E, and White R H, 1999 Romano-British kilns at Meole Brace (Pulley), Shropshire, *Trans Shropshire Archaeol Soc*, **74**, 1–27

Evans, J, 1991 *Neutron activation analysis of Severn Valley wares: analytical assessment programme report* (unpublished)

Faiers, J, 2003 A mortarium kiln near the Bell Brook, in P Ellis and R H White (eds) 2003, Wroxeter archaeology: excavation and research on the defences in the town, 1968-1992, *Trans Shropshire Archaeol Soc*, **78**, 149–152

Gaffney, V L, White, R H and Goodchild, H, 2007, *Wroxeter, the Cornovii, and the Urban Process. Final Report on the Wroxeter Hinterland Project 1994-1997. Volume 1. Researching the Hinterland*. Journal of Roman Archaeology Supplementary Series **68**

Giard, J-B, 1988 *Catalogue des monnaies de l'empire romain*. Paris: Bibliothèque Nationale

Gillam, J P, 1976 Coarse fumed ware in north Britain and beyond, *Glasgow Archaeol J*, **4**, 57–90

Gould, J, 1999 The Watling Street burgi, *Britannia*, **30**, 185–198

Green, S and Evans, J, 2002, Coarse wares, in A Jones, Roman Birmingham 1. Metchley Roman forts, excavations 1963-4, 1967-9 and 1997, *Trans Birmingham Warwickshire Archaeol Soc,* **105** (for 2001), 90–97

Greene, K, 1978 Imported fine wares in Britain to AD 250: a guide to identification, in P Arthur and G Marsh (eds), *Early fine wares in Roman Britain*, BAR British Series **57**, Oxford, 15–30

Greene, K, 1979 *Report on the excavations at Usk 1965-1976: The pre-Flavian fine wares*, Board of Celtic Studies. Cardiff

Guido, M, 1978, *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*, Rep. Res. Comm.. Soc. Ant. London 35. London: Society of Antiquaries of London

Hartley, B R, and Dickinson, B M, 2008a *Names on Terra Sigillata. An Index of Makers' stamps and signatures on Gallo-Roman Terra Sigillata (Samian Ware). Volume 1 (A to AXO).* Bulletin of the Institute of Classical Studies Supplement **102-01**. Institute of Classical Studies, University of London, London

Hartley, B R, and Dickinson, B M, 2008b *Names on Terra Sigillata: Volume 3 (Certianus to Exsobano)*, Bulletin of the Institute of Classical Studies Supplement **102-03**. Institute of Classical Studies, University of London, London

Hartley, B R, and Dickinson, B M, 2011 *Names on terra sigillata. An index of makers' stamps and signatures on Gallo-Roman terra sigillata (samian ware), vol 7 (P to Rxead)*, Bulletin of the Institute of Classical Studies Supplement **102-07**, Institute of Classical Studies, University of London, London

Hartley, K F, 1993 The mortaria, in Manning, W H (ed), *Report on the Excavations at Usk 1965-76: The Roman Pottery*, 389–437. Cardiff: Univ. of Wales

Hartley, K F, 1999, The stamped mortaria, in R P Symonds and S Wade (eds) P Bidwell and A Croom), *Roman Pottery from excavations in Colchester, 1971-86*, 195–211. Colchester Arch Trust

Hather, J G, 2000 *The identification of the northern European hardwoods: a guide for archaeologists and conservators*, Archetype Publications Ltd

Hattatt, R, 1985, *Iron Age and Roman Brooches*, Oxford: Oxbow

Houghton, A W J, 1964 A Roman pottery factory near Wroxeter, *Trans Shropshire Archaeol Soc*, **57**, part 2 (1962-3), 101–111

Hurst, D (ed), 2006 *Roman Droitwich: Dodderhill fort, Bays Meadow villa, and roadside settlement*, CBA Res Rep **146**. York: Council for British Archaeology

Hurst, J D, Roberts, R, and Woodiwiss, S, 1988 A possible second Roman fort at Droitwich, *Trans Worcestershire Archaeol Soc 3 ser*, **11**, 75–80

IfA 2008a *Standard and guidance for archaeological field evaluation*, Institute for Archaeologists

IfA 2008b *Standard and guidance for archaeological excavation*, Institute for Archaeologists

IfA 2008c *Standard and guidance for an archaeological watching brief*, Institute for Archaeologists

IfA 2012 *Standard and guidance for archaeological excavation*, Institute for Archaeologists

Jackson, R, 1986 A set of medical instruments from Italy, *Britannia*, **17**, 119–67

Jenkins, I, 1985, A group of silvered-bronze horse-trappings from Xanten (Castra Vetera), *Britannia*, **16**, 141–64

Koster, A, 1997 *Description of the Collections in the Provincial Museum G.M. Kam at Nijmegen13: The Bronze Vessels 2. Acquisitions 1954-1996 (including vessels of pewter and iron.* Nijmegen: Provincie Gelderland

Laubenheimer, F, 1985 *La production des amphores en Gaule Narbonnaise*. Paris

Leary, R, 1998 Coarse pottery, in A Jones, 1998, Excavations at Wall (Staffordshire) by E Greenfield in 1962 and 1964 (Wall excavation report no 15), *Trans Staffordshire Archaeol Hist Soc*, **37**, 26-37

McAvoy, F, 2006 Dodderhill, Droitwich:excavations 1977–85, in D Hurst, Hurst, D (ed), *Roman Droitwich: Dodderhill fort, Bays Meadow villa, and roadside settlement*, CBA Res Rep **146**, 3–45

Mackreth, D F, 1994, Copper alloy and iron brooches, in S Cracknell and C Mahany (eds), *Roman Alcester: Southern Extramural Area 1964-1966 Excavations. Part 2: Finds and Discussion*. Roman Alcester Series 1, CBA Res Rep 97, 162–74. York: Council for British Archaeology

Mackreth, D F, 2002. Military brooches, in Webster, 89–104

Mackreth, D F, 2011, *Brooches in Late Iron Age and Roman Britain*. Oxford: Oxbow Books

Mann, A, 2011 *Archaeological evaluation and watching brief at Redhill reservoir, Telford, Shropshire*, Worcestershire Archaeology rep **1886**

Manning, W H, 1985, *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum*. London: British Museum Press

Mattingley, H, 1940 *Coins of the Roman Empire in the British Museum; vol IV, Antoninus Pius to Commodus.* London: British Museum Publications Ltd

Milne, G, and Wardle, A, 1996, Early Roman development at Leadenhall Court, London and related research, *Trans London and Middlesex Archaeol Soc*, **44** (1993), 23–169

Mott MacDonald, 2011a *Lilleshall Nitrate Improvement Archaeological Impact Assessment*, Mott Macdonald internal document

Mott MacDonald, 2011b *Lilleshall Nitrate Improvement Scheme Written scheme of Investigation for Archaeological Evaluation*, Mott Macdonald internal document

Mott MacDonald 2012 *Lilleshall Nitrate Improvement Scheme*: *written scheme of investigation for archaeological mitigation*

Oswald, F, 1936–7 *Index of figure types on terra sigillata*. Liverpool

Pagett, J A, 1960 Redhill, *West Midlands Archaeol News Sheet,* **3**, 9

Pagett, J A, 1961a Redhill (SJ 728109), *West Midlands Archaeol News Sheet,* **4**, 8

Paynter, S, 2007 Romano-British workshops for iron smelting and smithing at Westhawk Farm, Kent, *Historical Metallurgy* **41**(1)

Peacock, D P S, 1967 Romano-British pottery production in the Malvern district of Worcestershire, *Trans Worcestershire Archaeol Soc 3 ser*, **1**, 15–28

Peacock, D P S, 1968 A petrological study of certain Iron Age pottery from western England, *Proc Prehist Soc*, **34**, 414–27

Peacock, D P S,1978 The Rhine and the problem of Gaulish wine in Roman Britain, in J du Plat Taylor and H Cleer (eds), *Roman shipping and trade: Britain and the Rhine provinces*, CBA Res. Rep. **24**, 49–51

Peacock, D P S, and Williams, D F, 1986 *Amphorae and the Roman economy*. London

Perring, D, 2002 *The Roman House in Britain*. London: Routledge

Pope, R, 2007 Ritual and roundhouse: a critique of recent ideas on the use of domestic space in later British prehistory, in C Haselgrove and R Pope (eds), *The earlier Iron Age in Britain and the near Continent*, 204–228. Oxford: Oxbow

Price, J, & Cottam, S, 1998 *Romano-British Glass Vessels: a Handbook*, CBA Practical Handbook in Archaeology 14. York: Council for British Archaeology

Reimer, P J, Bard, E, Bayliss, A, Beck, J W, Blackwell, P, Bronk Ramsey, C, Buck, C E, Cheng, H, Edwards, R L, Friedrich, M, Grootes, P M, Guilderson, T P, Haflidason, H, Hajdas, I, Hatté, C, Heaton, T J, Hoffmann, D L, Hogg, A G, Hughen, K A, Kaiser, K F, Kromer, B, Manning, S W, Niu, M, Reimer, R W, Richards, D A, Scott, E M, Southon, J R, Staff, R A, Turney, C S M, and van der Plicht, J, 2013 IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP, *Radiocarbon*, **55**, 1869–87

Rivet, A L F, and Smith, C, 1979 *The place-names of Roman Britain*. London: Batsford

Rodriguez-Almeida, E, 1989 *Los Tituli Picti de las Anforas Olearias de la Betica*, Madrid

Rogers, G B, 1974 *Poteries sigillées de la Gaule centrale: I, Les motifs non figurés*, Gallia Suppl, **28**

Schweingruber, F H, 1978 *Microscopic wood anatomy: structural variability of stems and twigs in recent and subfossil woods from central Europe*, Swiss Federal Institute of Forestry Research

Seager Smith, R, and Davies, S M, 1993 Black burnished ware type series: the Roman pottery from excavations at Greyhound Yard, Dorchester, Dorset, in P J Woodward, S M Davies, and A H Graham, Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester 1981-1984, *Dorset Natur Hist and Archaeol Soc*, **12**, 229–89

Simpson, G, 1957 Metallic black slip vessels from Central Gaul with applied and moulded decoration, *Antiquaries Journal* **37**, 29–42

Simpson, G, 1973 More black slip vases from Central Gaul with applied and moulded decoration in Britain, *Antiquaries Journal* **53**, 42–51

Smith, R F, 1987 *Roadside settlements in lowland Roman Britain*, British Archaeological Reports (Brit Ser) **157**. Oxford

Stace, C, 2010 *New flora of the British Isles* (3 ed). Cambridge: Cambridge University Press,

Stanfield, J A, and Simpson, G, 1958 *Central Gaulish potters*. London

Stanfield, J. A, and Simpson, G, 1990 *Les potiers de la Gaule centrale,* Revue Archéologie Sites, Gonfaron

Stuiver, M, and Polach, H A, 1977 Reporting of ^{14}C data, *Radiocarbon*, **19**, 355–63

Stuiver, M, and Reimer, P J, 1986 A computer program for radiocarbon age calculation, *Radiocarbon***, 28,** 1022–30

Symonds, R P, 1997 Appendix 4: Roman pottery, in P Barker, R White, K Pretty, H Bird and M Corbishley, *The Baths basilica Wroxeter: excavations 1966-90*, English Heritage Archaeol Rep 8, 269–318

Timby J, with Anderson, A, Anderson, S, Braithwaite, G, Dannell, G, Darling, M J, Dickinson, B, Evans, [C] J, Faiers, J, Hartley, K, Simpson, G, Webster, G, and Williams, D, 2000 The Roman pottery, in P Ellis (ed), *The Roman Baths and Macellum at Wroxeter: excavations by Graham Webster 1955–85*, English Heritage Archaeol Rep **9**, 193–313

Tomber, R, and Dore, J, 1998 *The national Roman fabric reference collection: a handbook*, MoLAS Monogr **2**

van der Werff, J H, 1987 Roman amphoras at De Horden (Wijk bij Duustede), *Berichten van de Rijksdienst voor het Oudheidkundig Boedemonderzock Jaargand*, **37**, 153–172

WA 2007 *Manual of Service Practice: archiving*, as amended, Historic Environment and Archaeology Service, Worcestershire County Council, internal report, **1582**

WA 2012a *Proposal for excavation and watching brief at Redhill Reservoir, Telford, Shropshire – Lilleshall Nitrate Improvement Scheme*, dated May 2012

WA 2012b *Manual of service practice, recording manual*, Worcestershire Archaeology, Worcestershire County Council, report 1842

Webster, G, 1971 A hoard of Roman military equipment from Fremington Hag, in R M Butler (ed), *Soldier and Civilian in Roman Yorkshire*, 107–25. Leicester: Leicester University Press

Webster, G, 1979 *The Roman imperial army* (2 ed). London: A & C Black

Webster, G, 2002 *The Legionary Fortress at Wroxeter*, English Heritage Archaeological Report **19**. London

Webster, J, 1992 The objects of bronze, in D R Evans, and V M Metcalf, *Roman Gates Caerleon*. Oxbow Monograph **15**, 103–61. Oxford: Oxbow

Webster, P V, 1976 Severn Valley Ware: a preliminary study, *Trans Bristol Gloucestershire Archaeol Soc*, **94**, 18-46

White, R, 2007 Building materials, in Gaffney and White 2007, 203–3

White, R H, 2010 Wroxeter, in B C Burnham and J L Davies (eds), *Roman frontiers in Wales and the Marches* (3 ed), 193-6

White, R H, 2014 The Wroxeter Hinterland Project: exploring the relationship between country and town', in D Breeze (ed), *The impact of Rome on the countryside. A conference organised by the Royal Archaeological Institute, Chester, 11-13 October 2013,* Royal Archaeological Institute, 7-11

Williams, D F, 1977 The Romano-British Black Burnished industry: an essay on characterisation by heavy mineral analysis, in D P S Peacock (ed), *Pottery and early commerce: characterisation and trade in Roman and later ceramics*, 163-220. London: Academic Press

Willis, S, 2005 *Samian pottery, a resource for the study of Roman Britain and beyond: the results of the English Heritage funded Samian Project. An e-monograph.* [*Supplement to Internet Archaeology 17]:* http://intarch.ac.uk/journal/issue17/willis_index.html

Wilson, R J A, 1995, Archaeology in Sicily 1988-1995, Journal of Hellenic Studies Archaeological Reports 42, 59–123

Young, C J, 2000 *The Roman pottery industry of the Oxford region*. British Archaeological Reports (British Series) **43**

Figures

Location of the site *Figure 1*

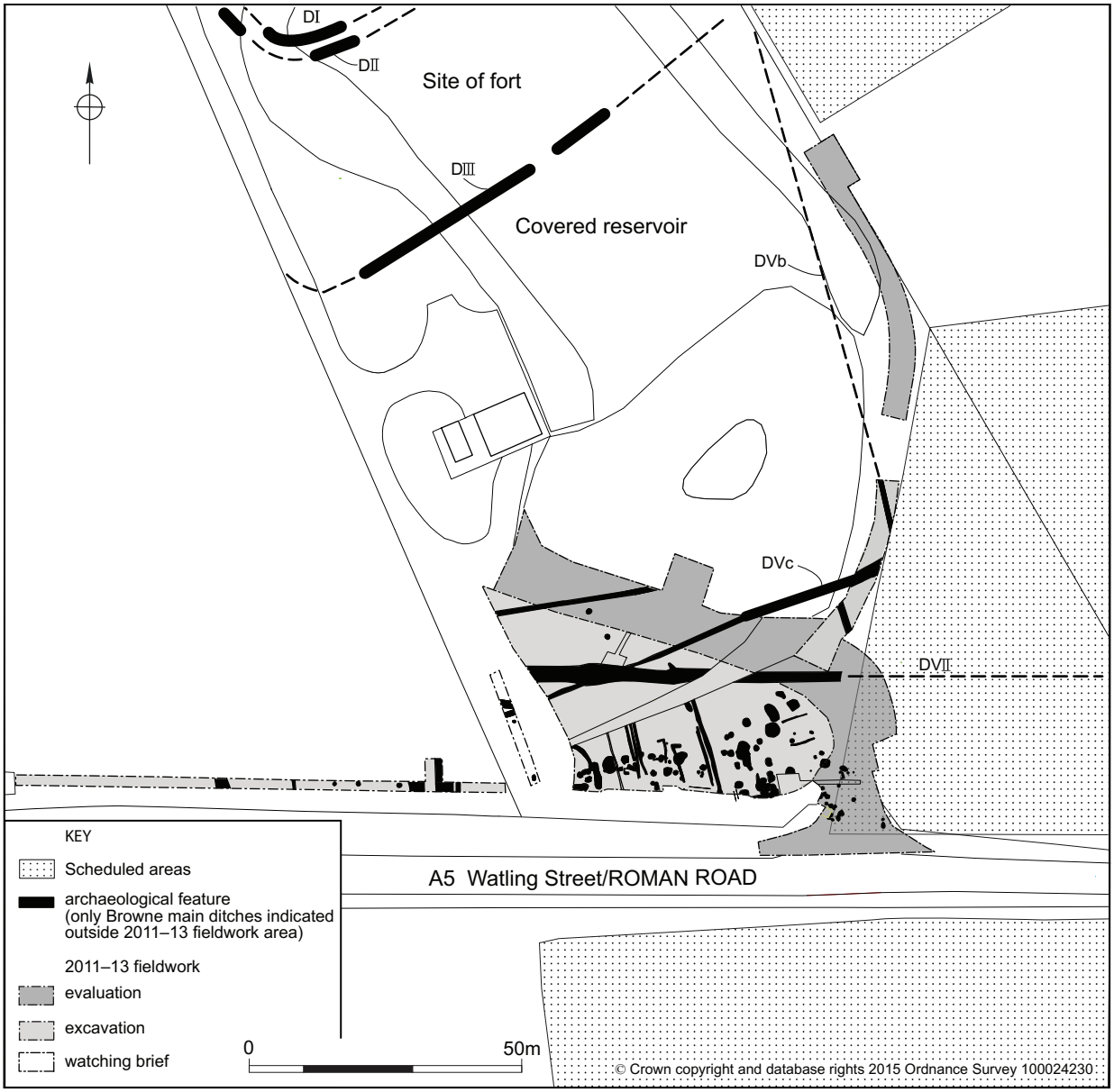
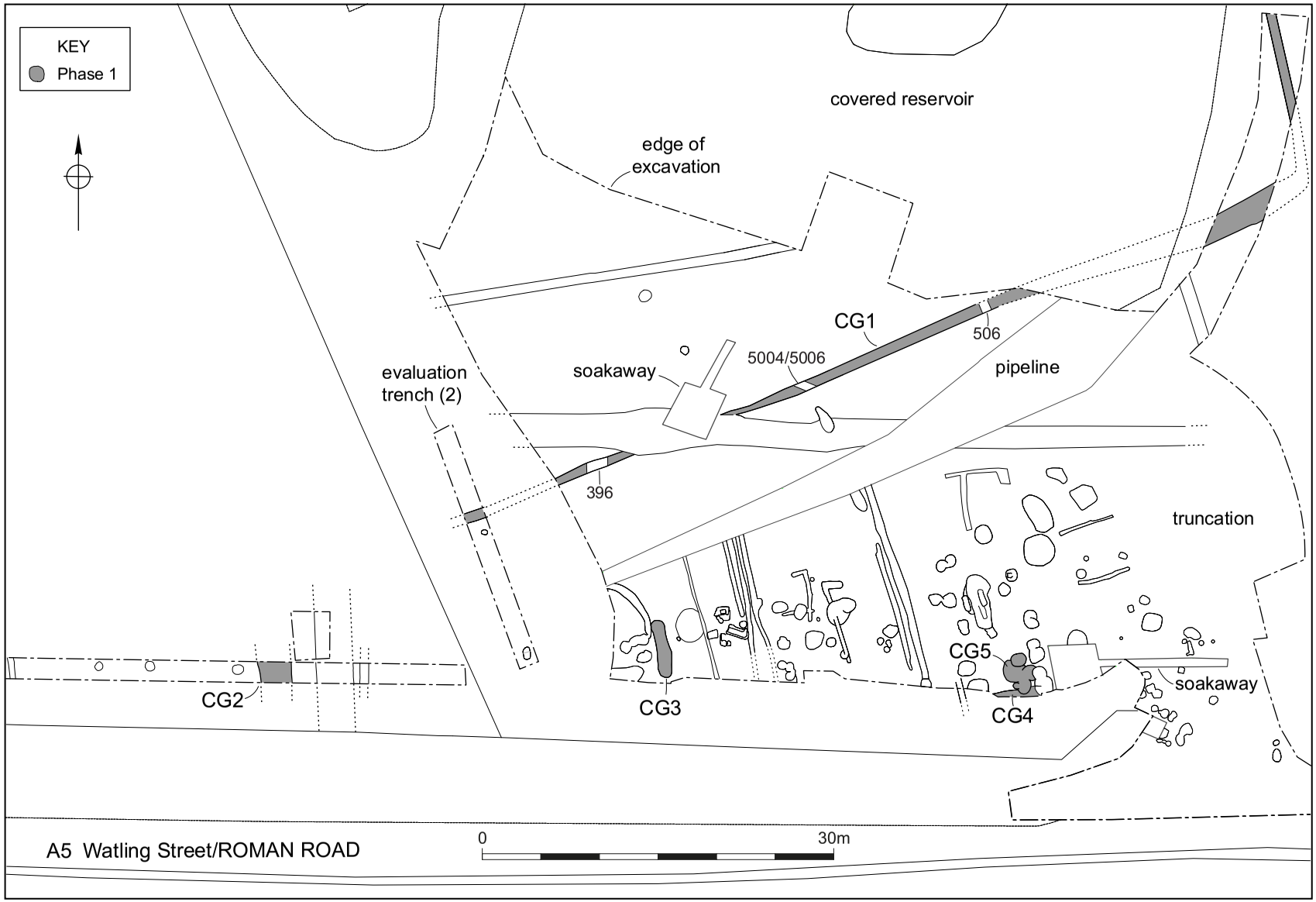
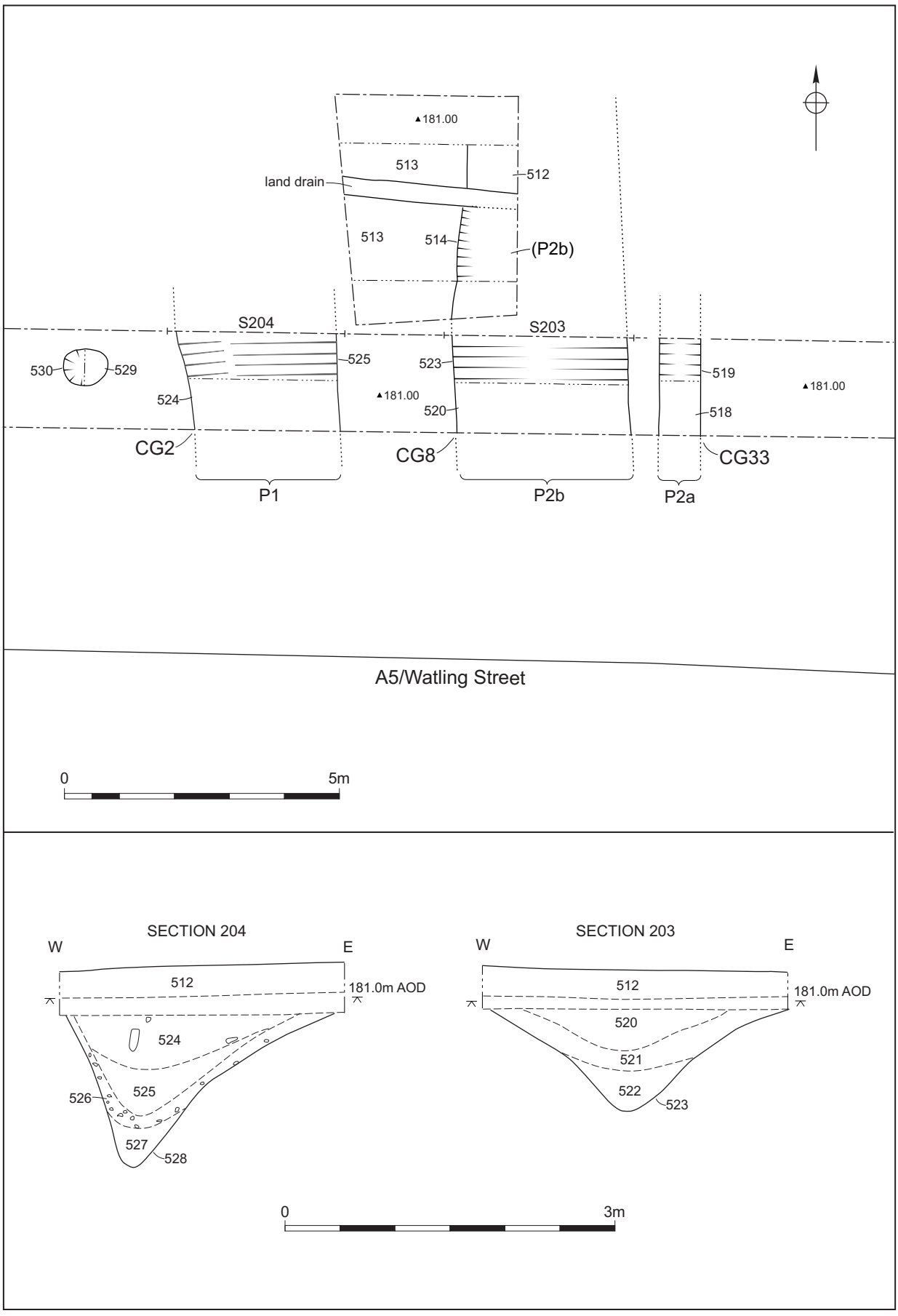


Figure 2: Excavation areas (with fort ditches as recorded in 1972–3, based on Browne and Boon 2002 fig.1, also indicated - these ditches labelled DI etc.)

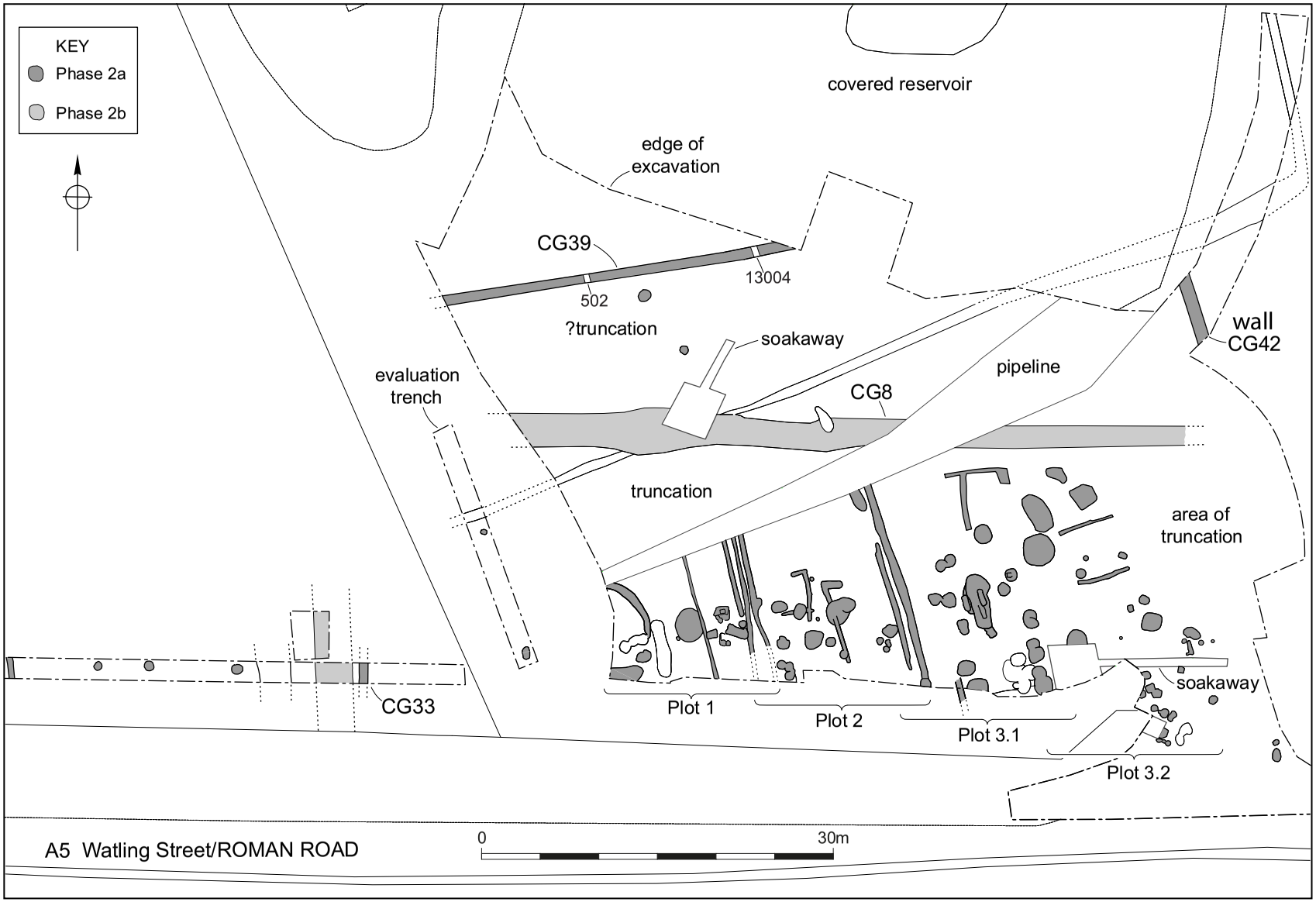


Phase 1 features (CG1 is same as Browne DVc)

Figure 3

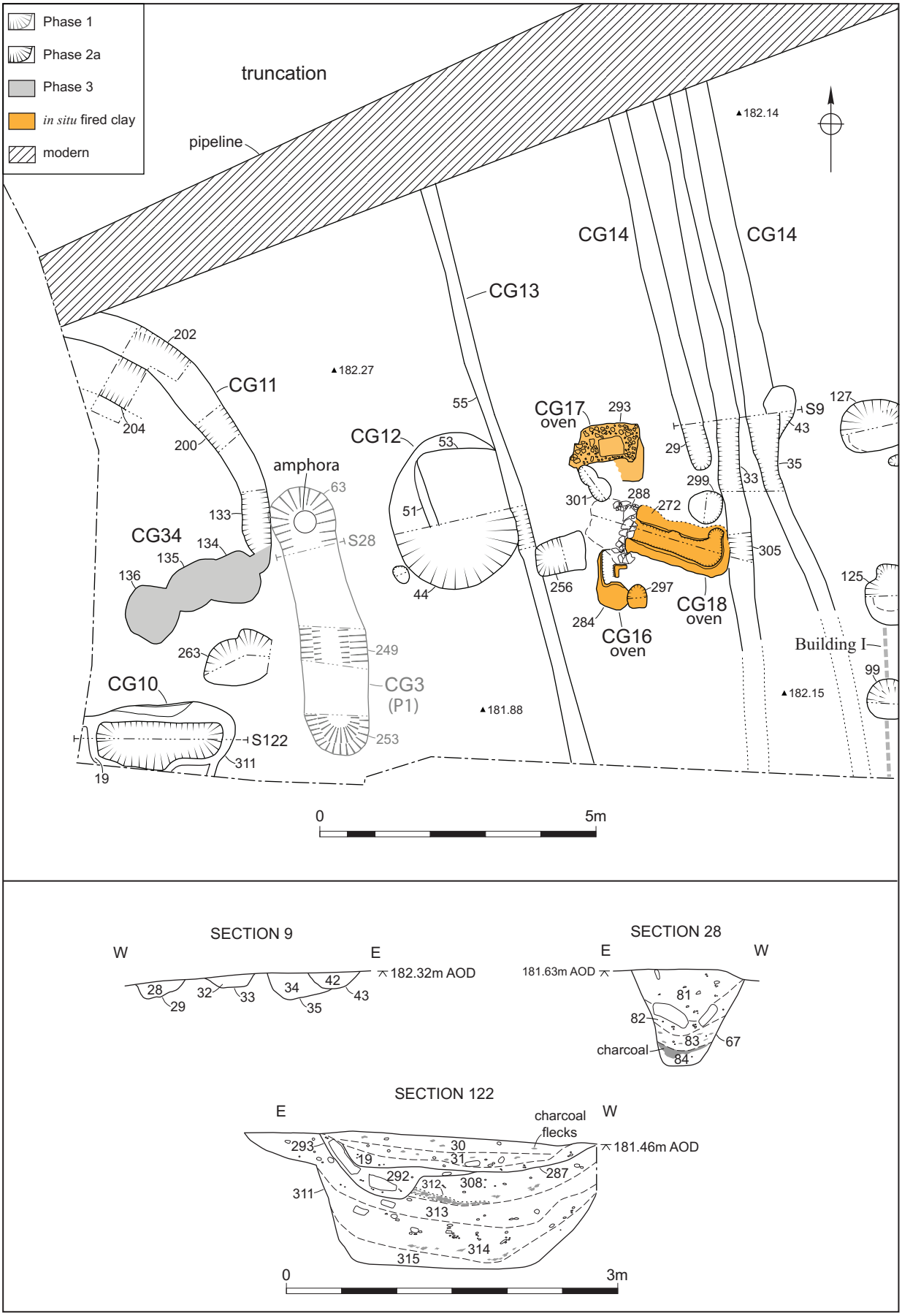


Plan and sections of features to west of main excavation site *Figure 4*



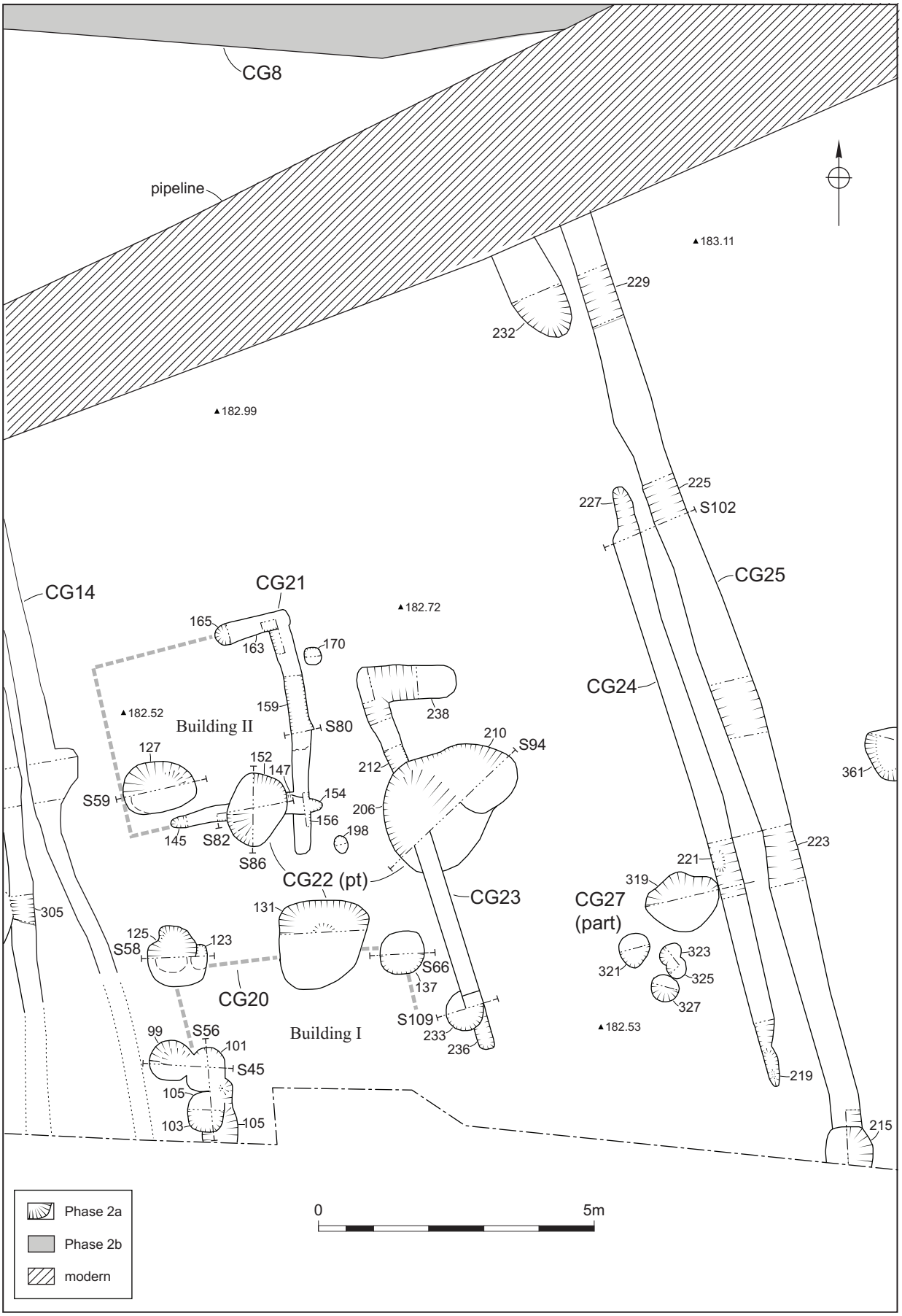
Phase 2a-b features

Figure 5

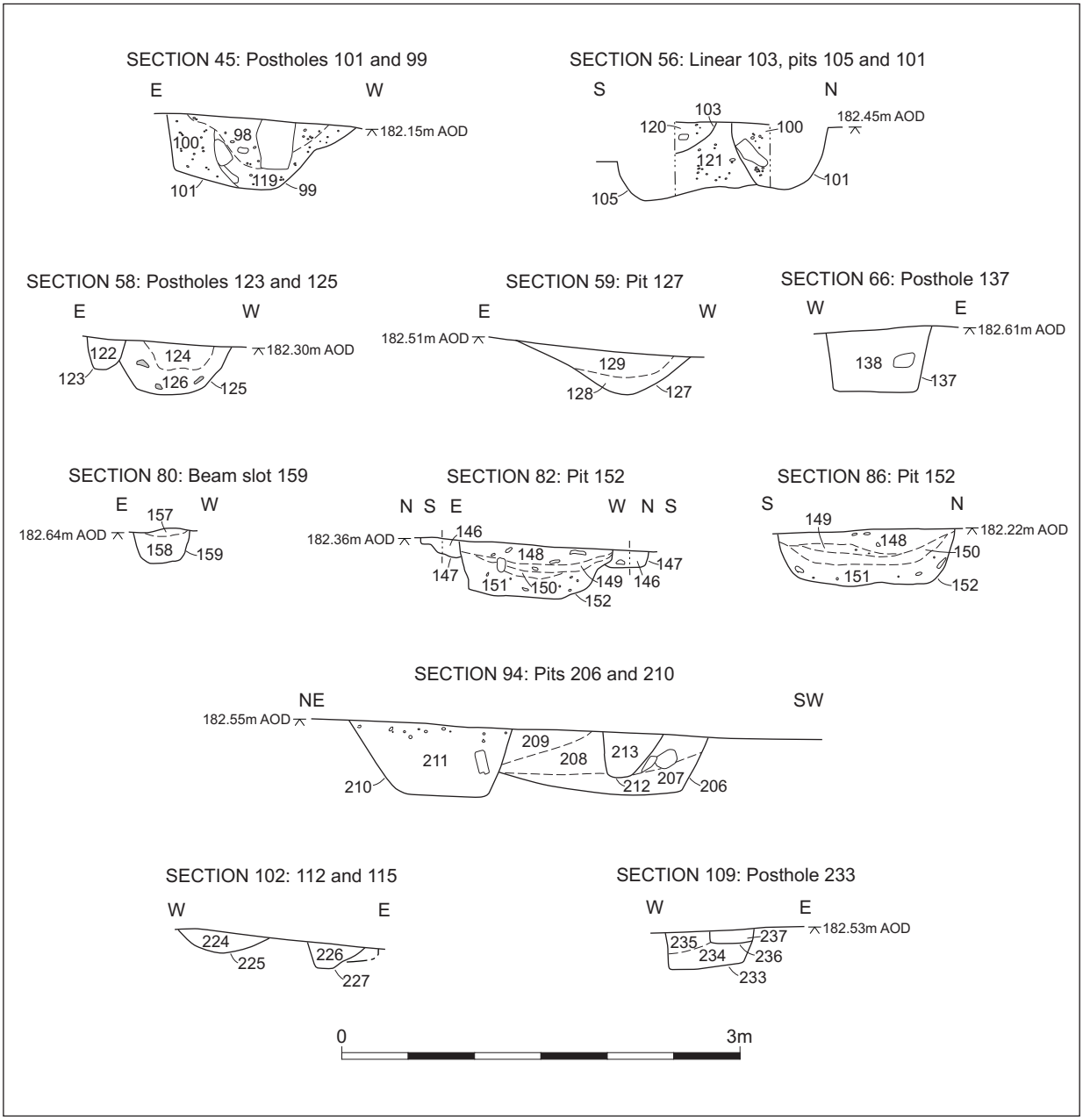


Plot 1 (Phase 2a) with earlier and later features also shown. Illustrated section numbers (S) shown on plan

Figure 6

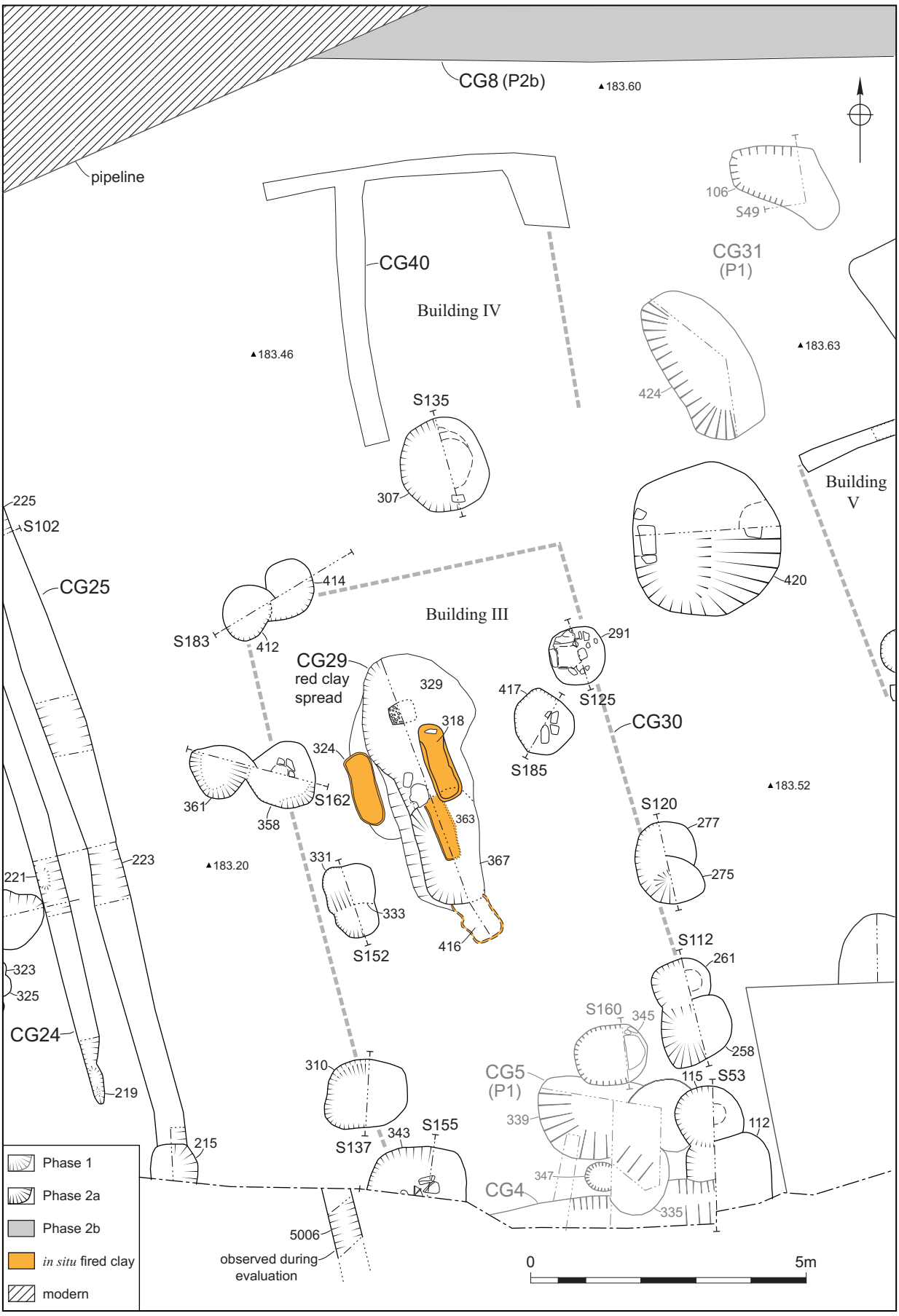


Plot 2 (Phase 2a-b) with later features also shown *Figure 7*



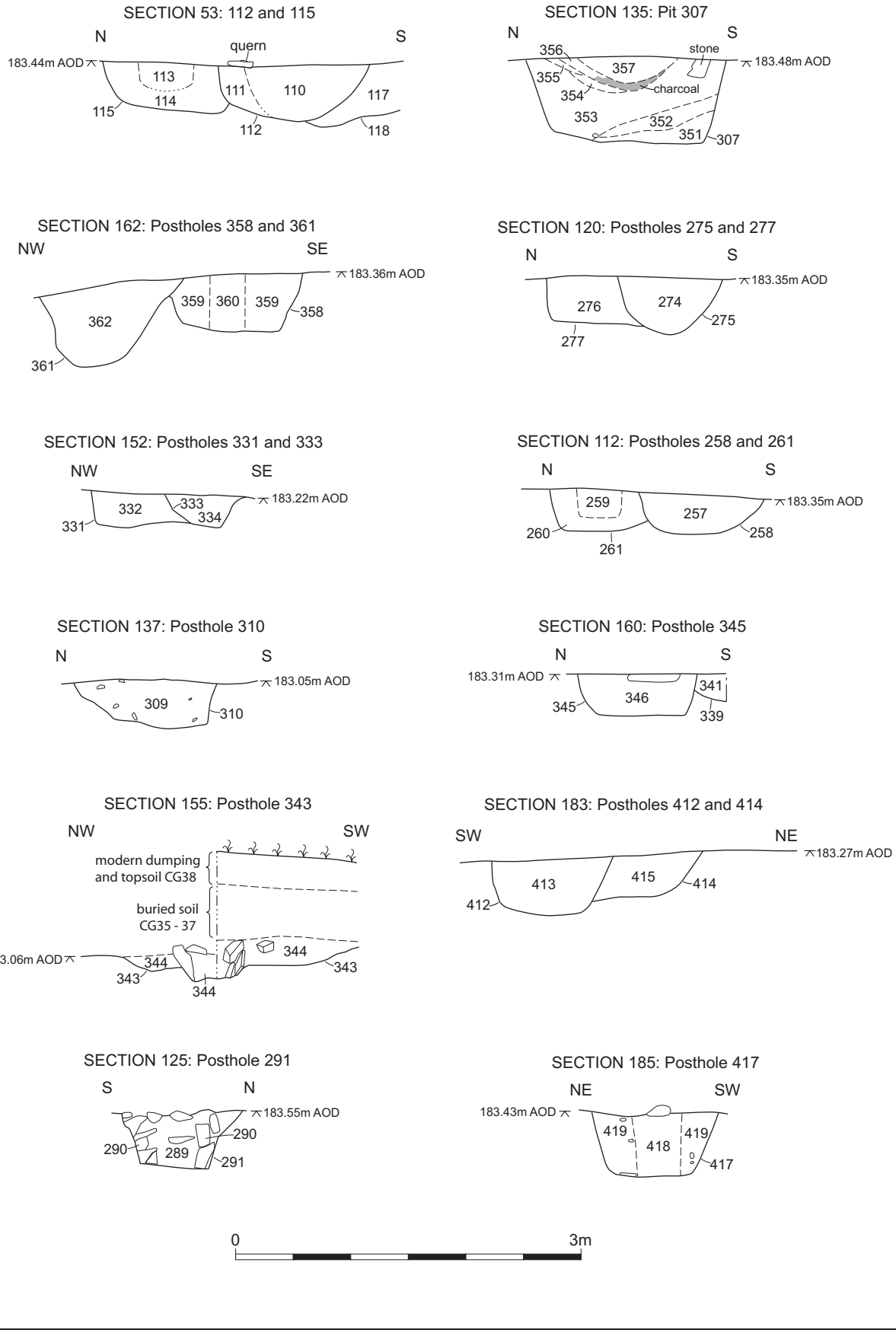
Plot 2 sections (Phase 2a)

Figure 8



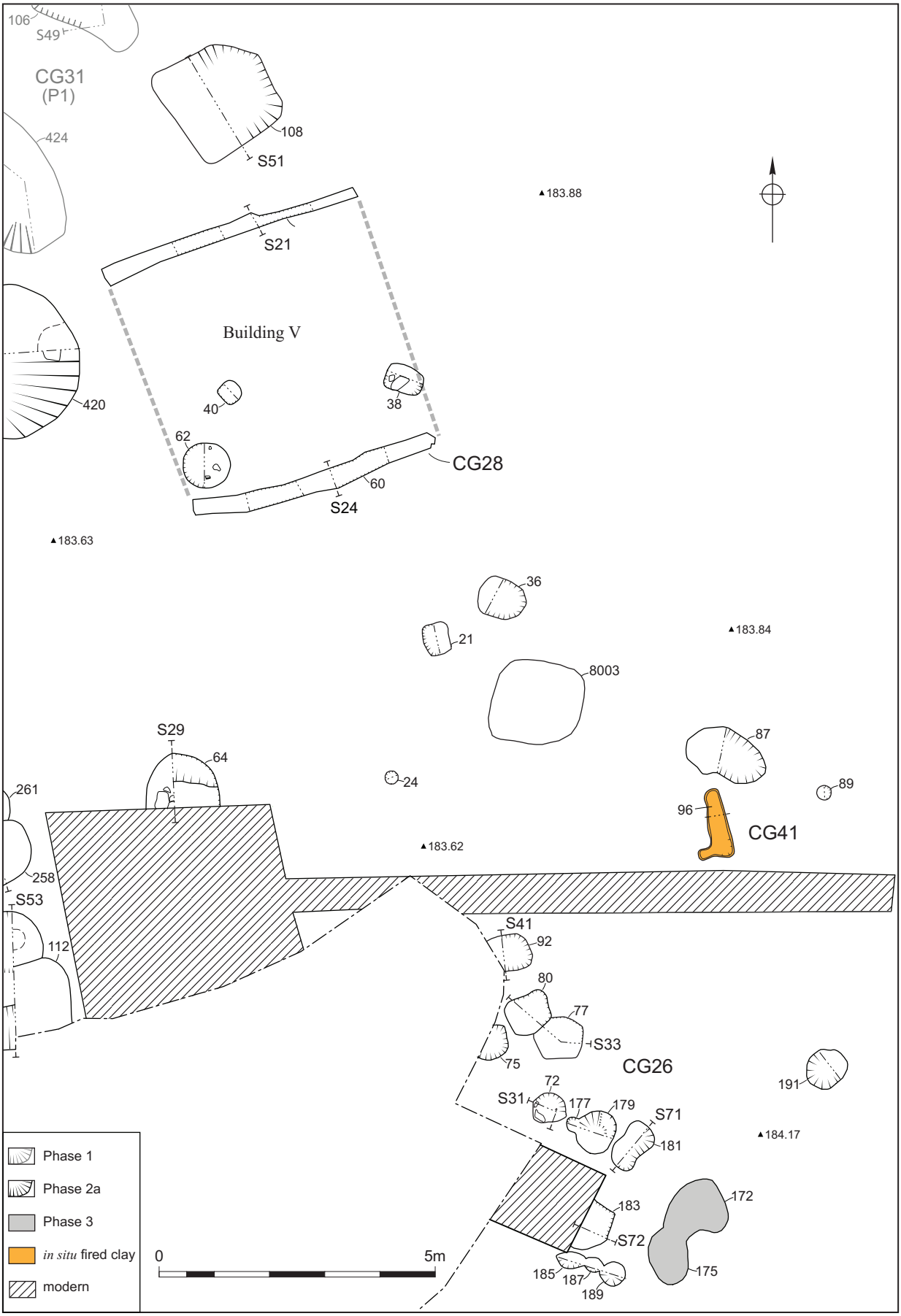
Plot 3.1 (Phase 2a-b) with earlier and later features shown

Figure 9

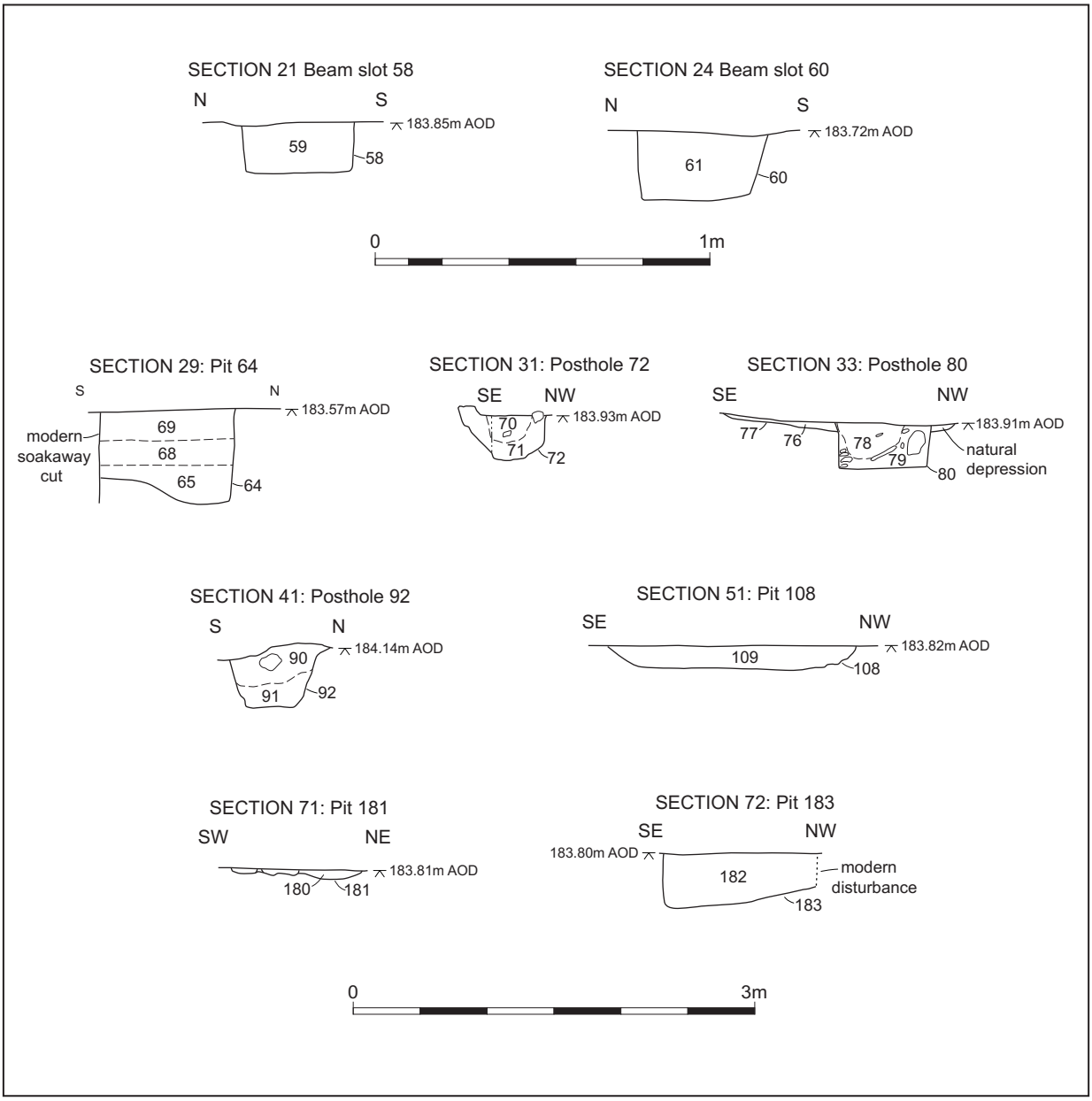


Plot 3.1 sections (Phase 2a)

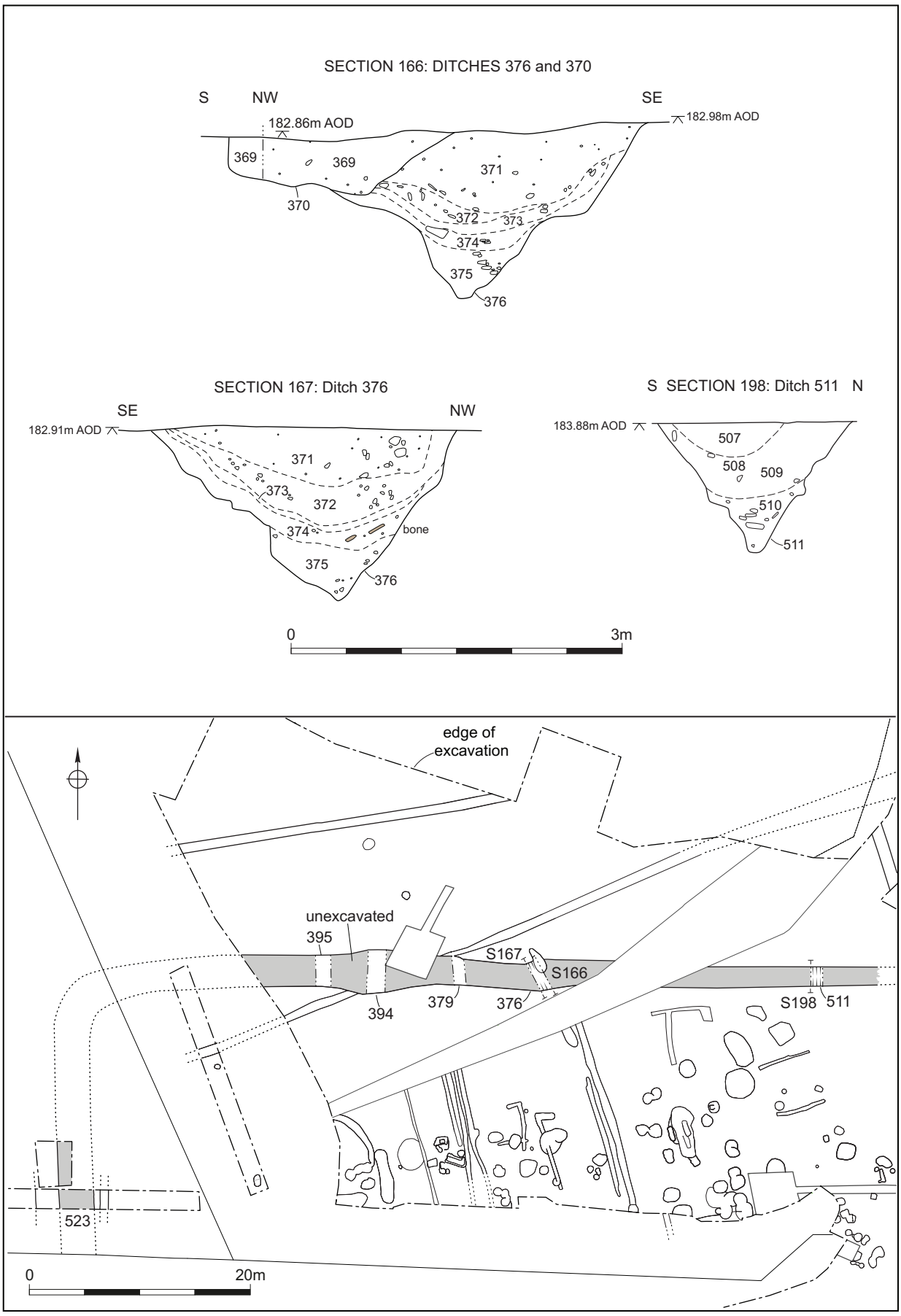
Figure 10



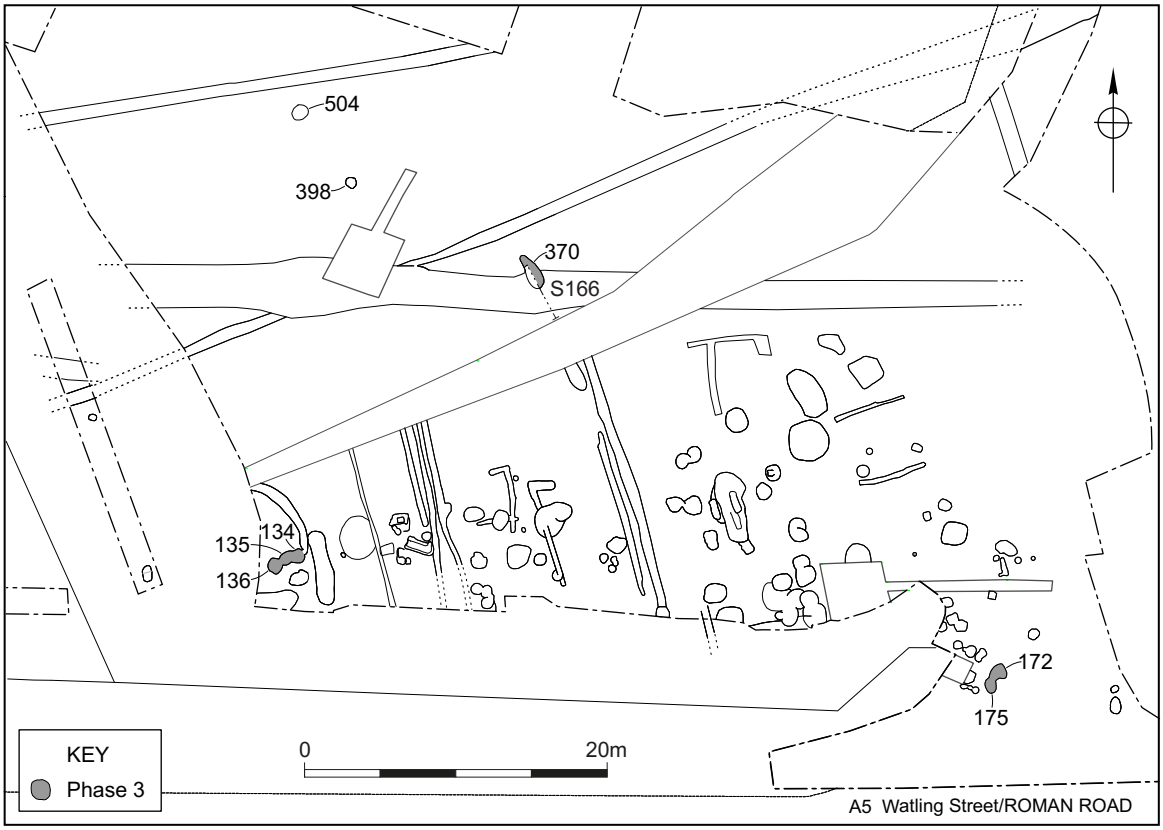
Plot 3.2 (Phase 2a) with earlier and later features shown *Figure 11*

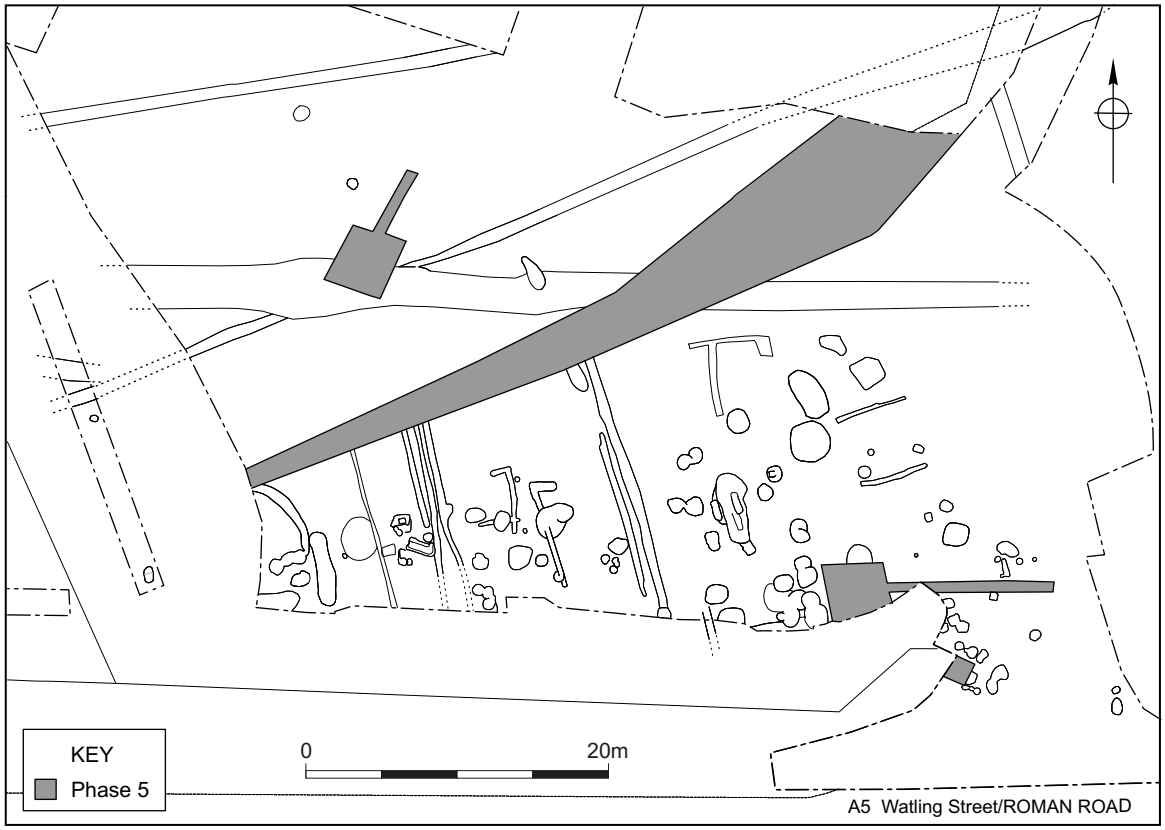


Plot 3.2 sections (Phase 2a) *Figure 12*

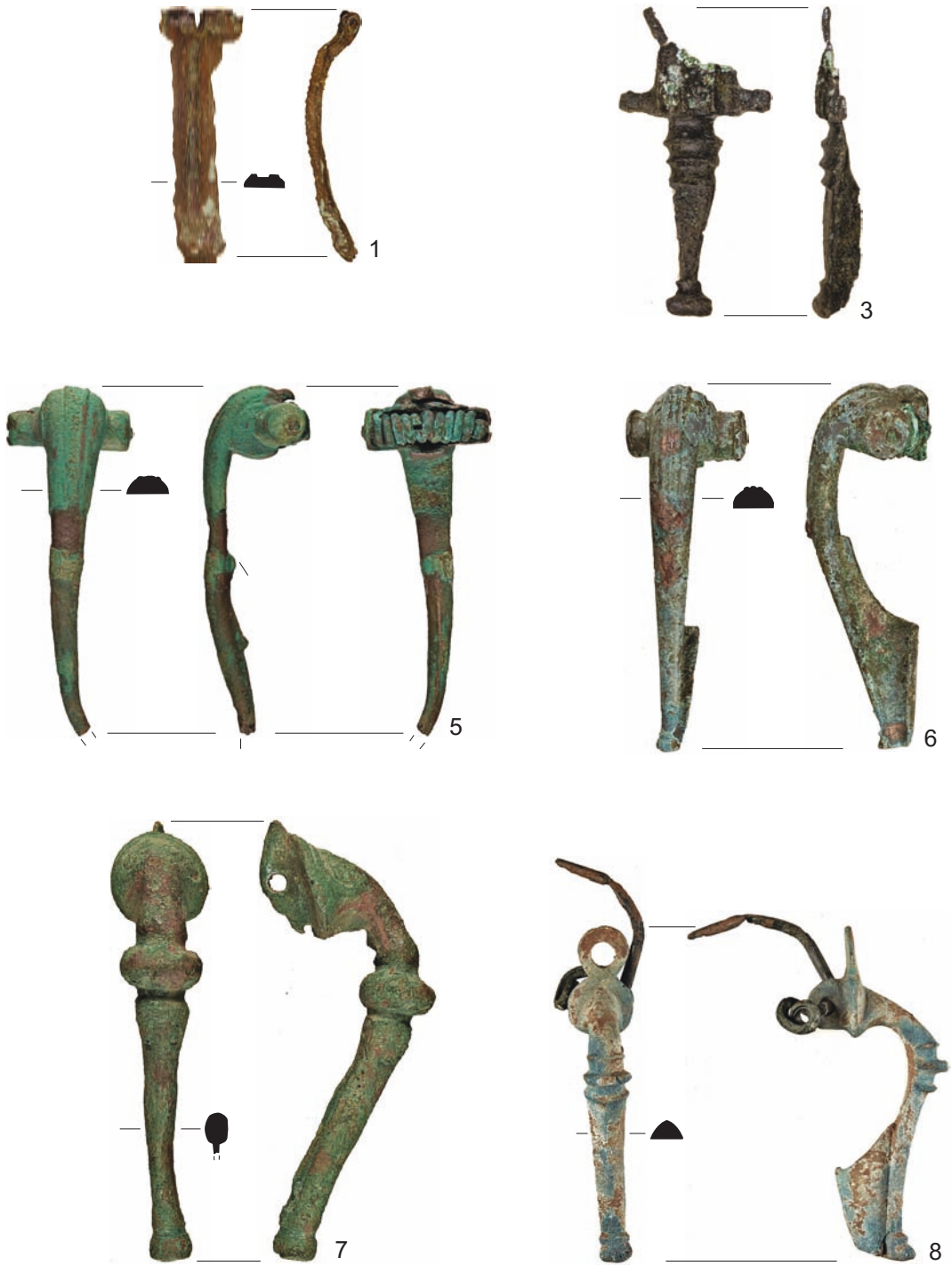


Phase 2b: ditch CG8 sections and plan *Figure 13*





Phases 3 and 5 features *Figure 14*



Small finds *Figure 15*

Small finds

Figure 16

Small finds

Figure 17

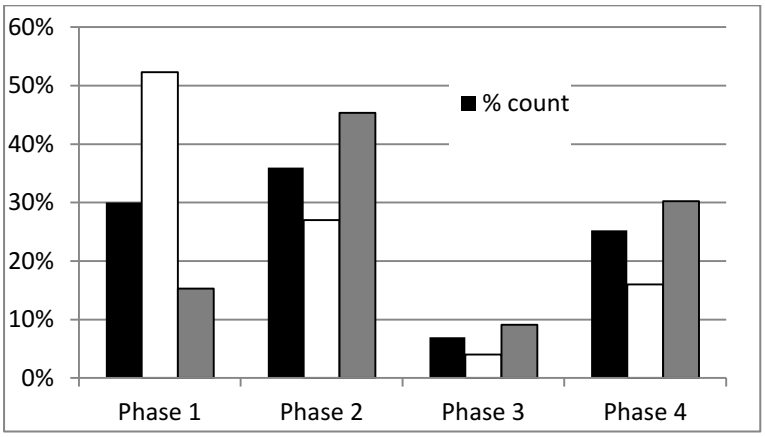


Figure 18: Roman pottery by phase, phases 1-4

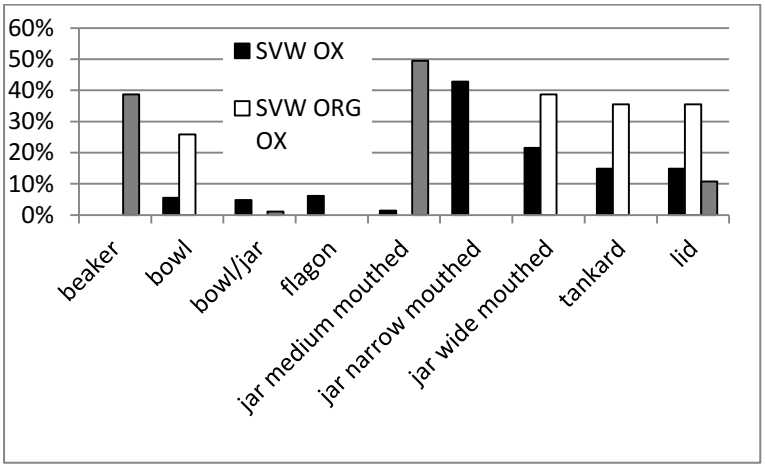


Figure 19: Severn Valley wares by form class, excluding uncertain forms (SVW OX Severn Valley ware, oxidised; SVW ORG OX Severn Valley ware, organic oxidised; SVW R Severn Valley ware reduced)

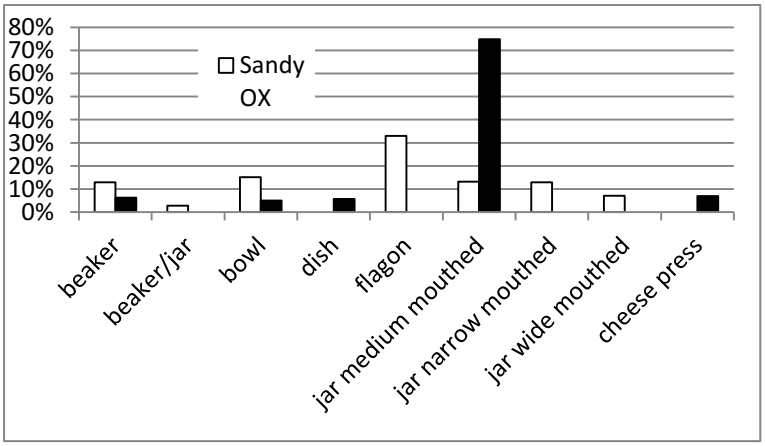


Figure 20: Sandy coarse wares by form class, excluding uncertain forms

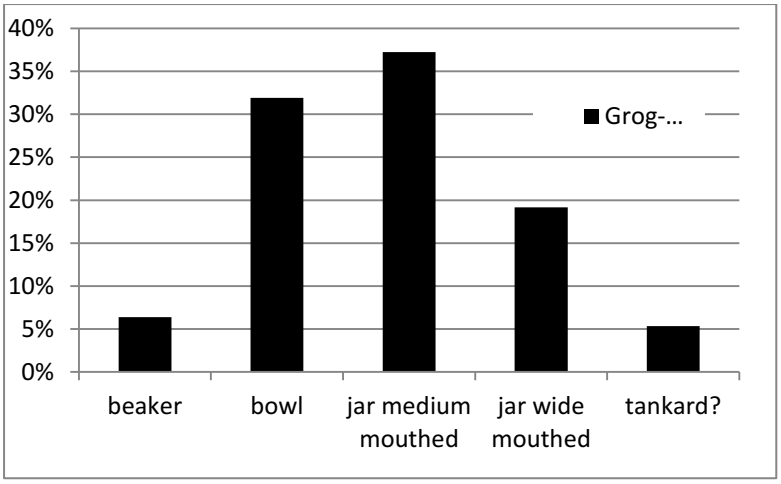


Figure 21: Grog-tempered wares by form class

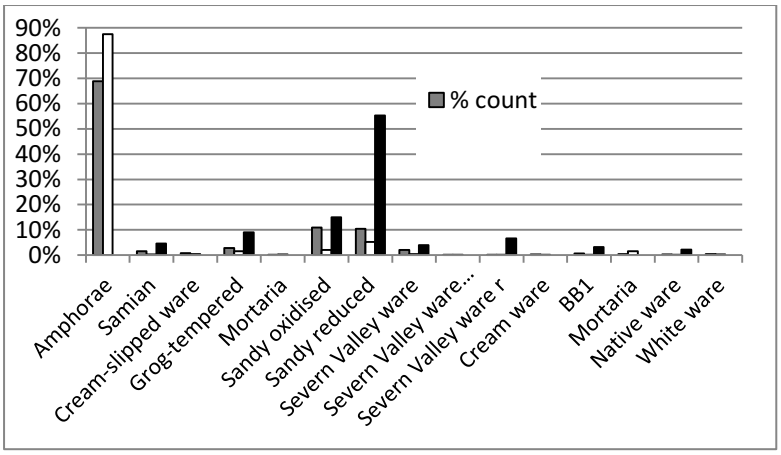


Figure 22: summary of Phase 1 Roman pottery by fabric class

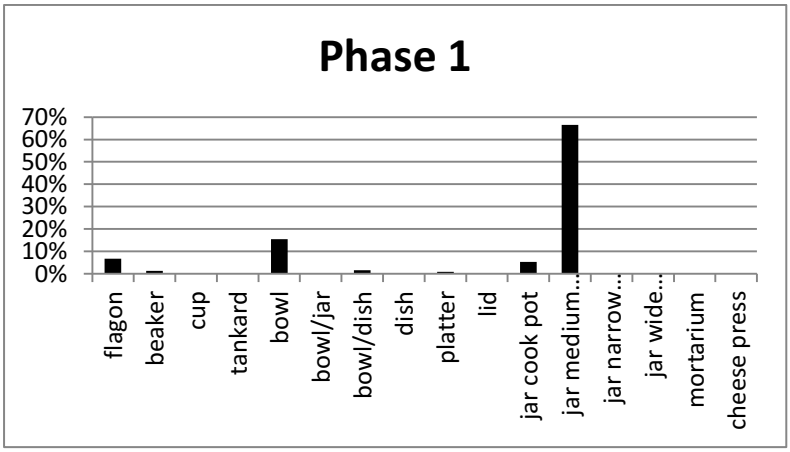
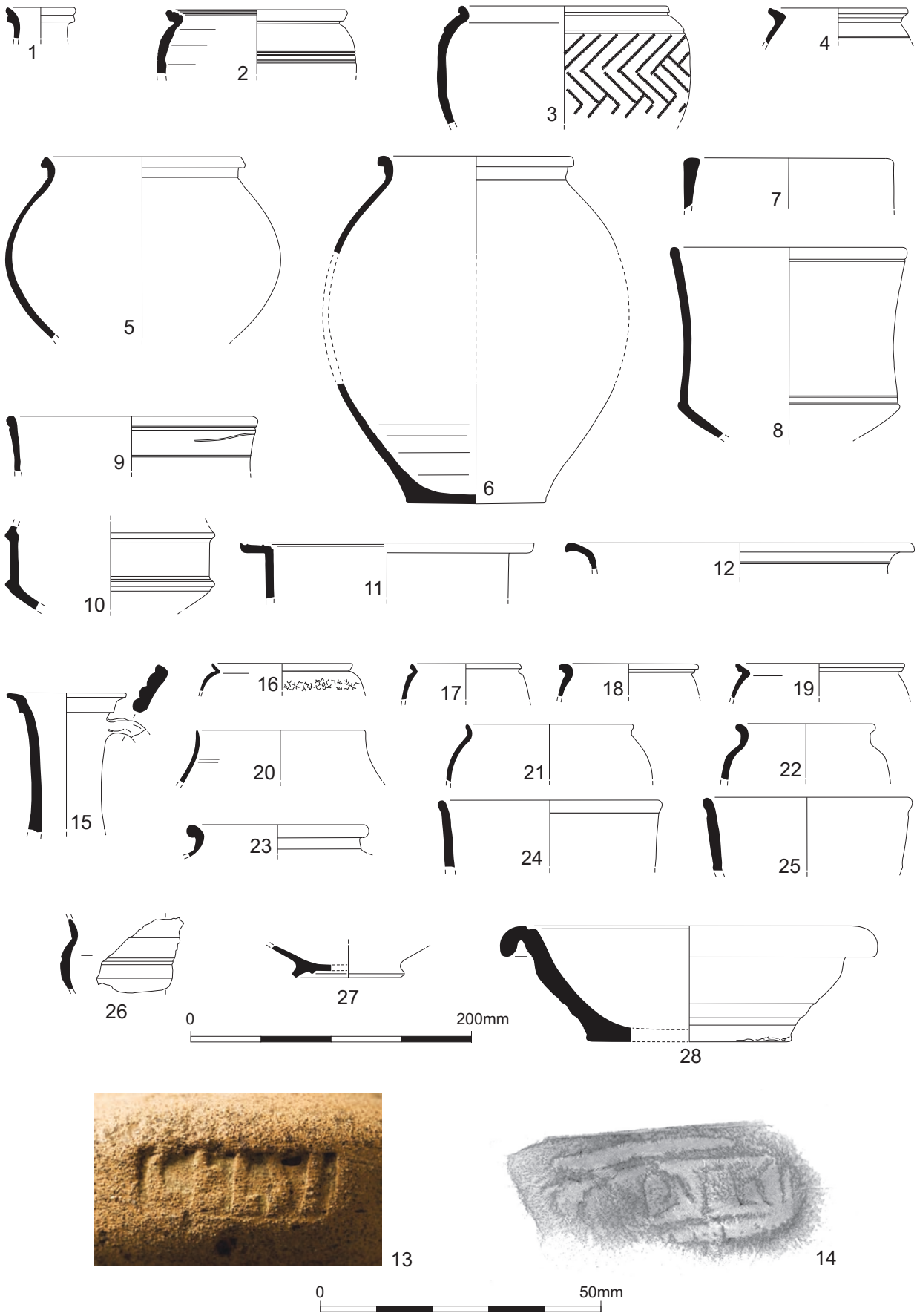


Figure 23: Phase 1 pottery, vessel classes by % rim EVE (excluding uncertain forms)



Roman pottery *Figure 24*

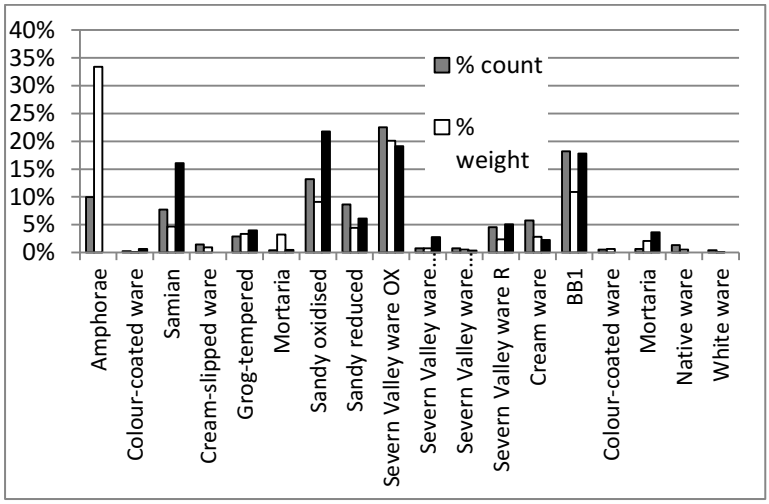


Figure 25: summary of Phase 2 Roman pottery by fabric class

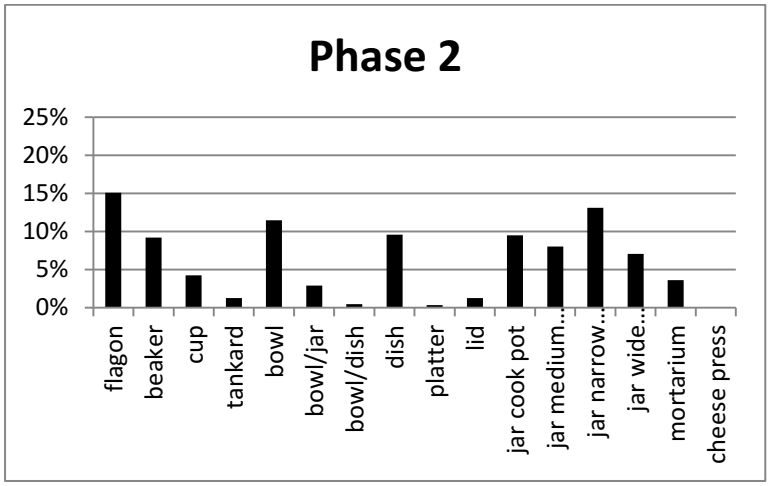
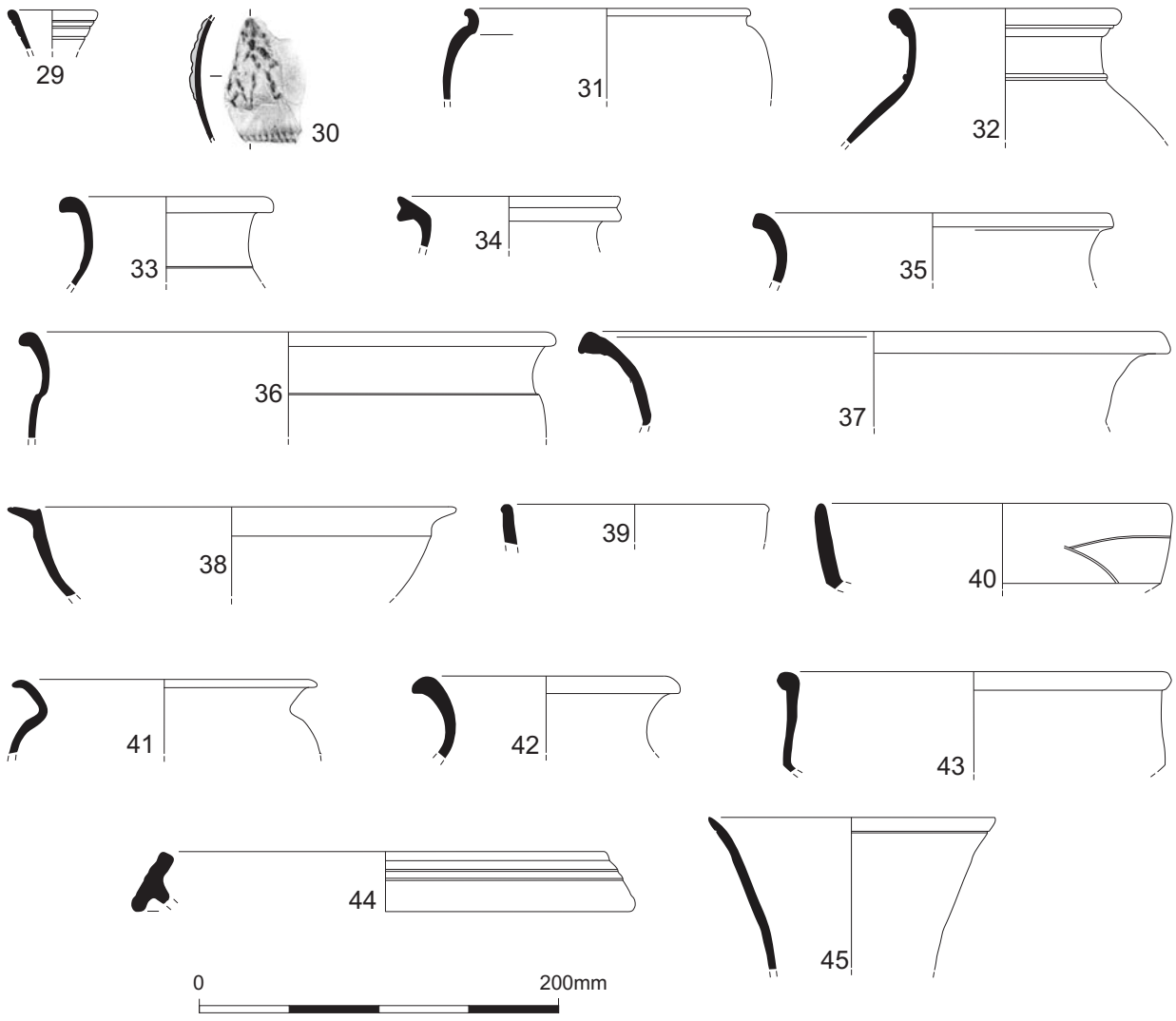


Figure 26: Phase 2 pottery, vessel classes by % rim EVE (excluding uncertain forms)



Roman pottery *Figure 27*

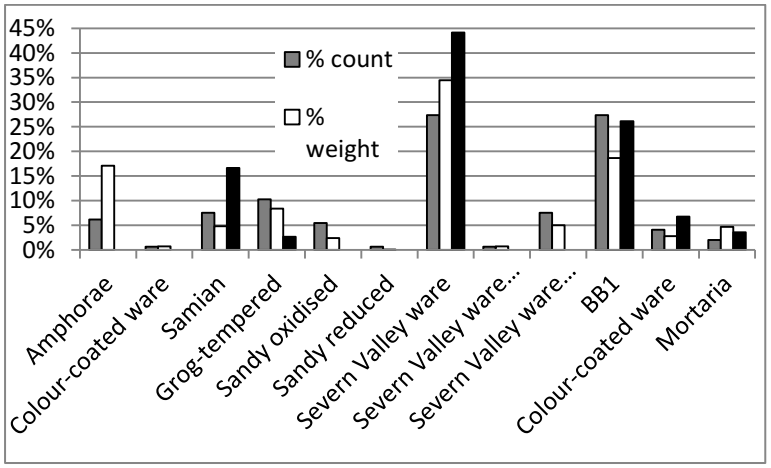


Figure 28: summary of Phase 3 Roman pottery by fabric class

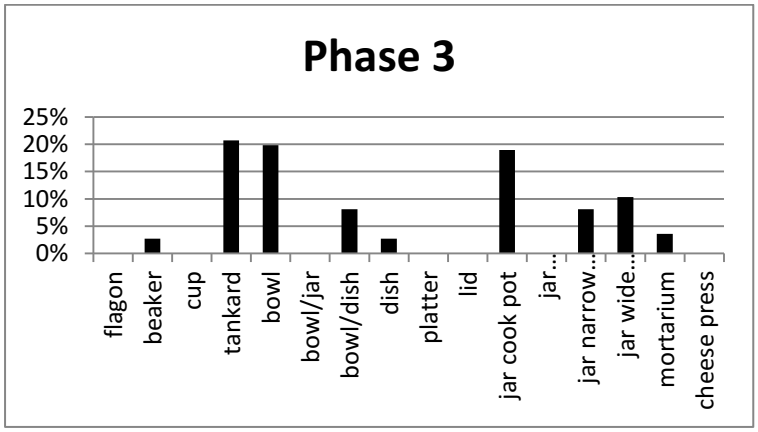


Figure 29: Phase 3 pottery, vessel classes by % rim EVE (excluding uncertain forms)

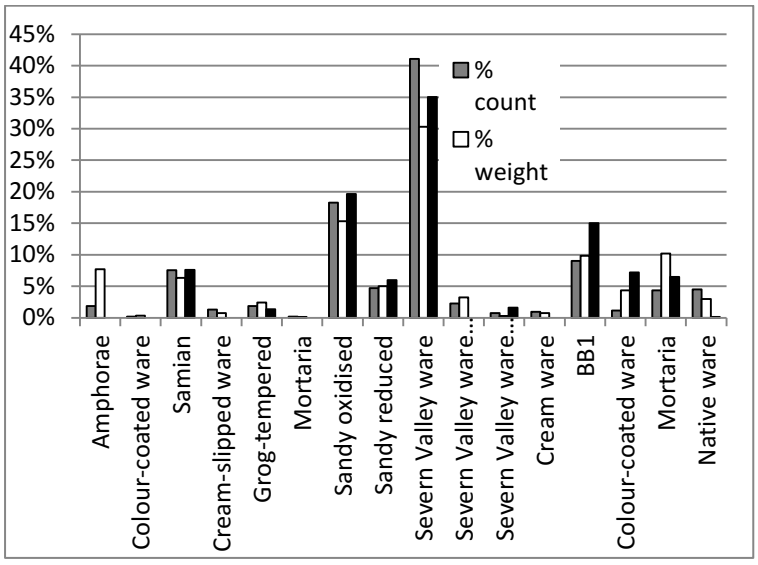


Figure 30: summary of Phase 4 Roman pottery by fabric class

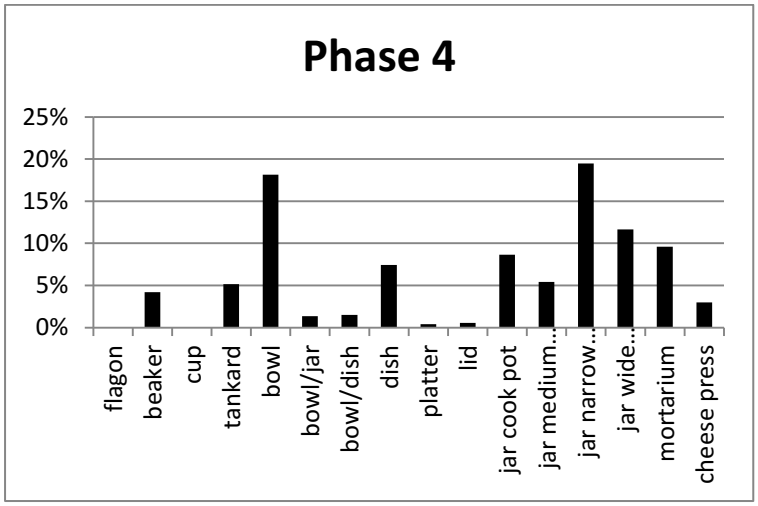
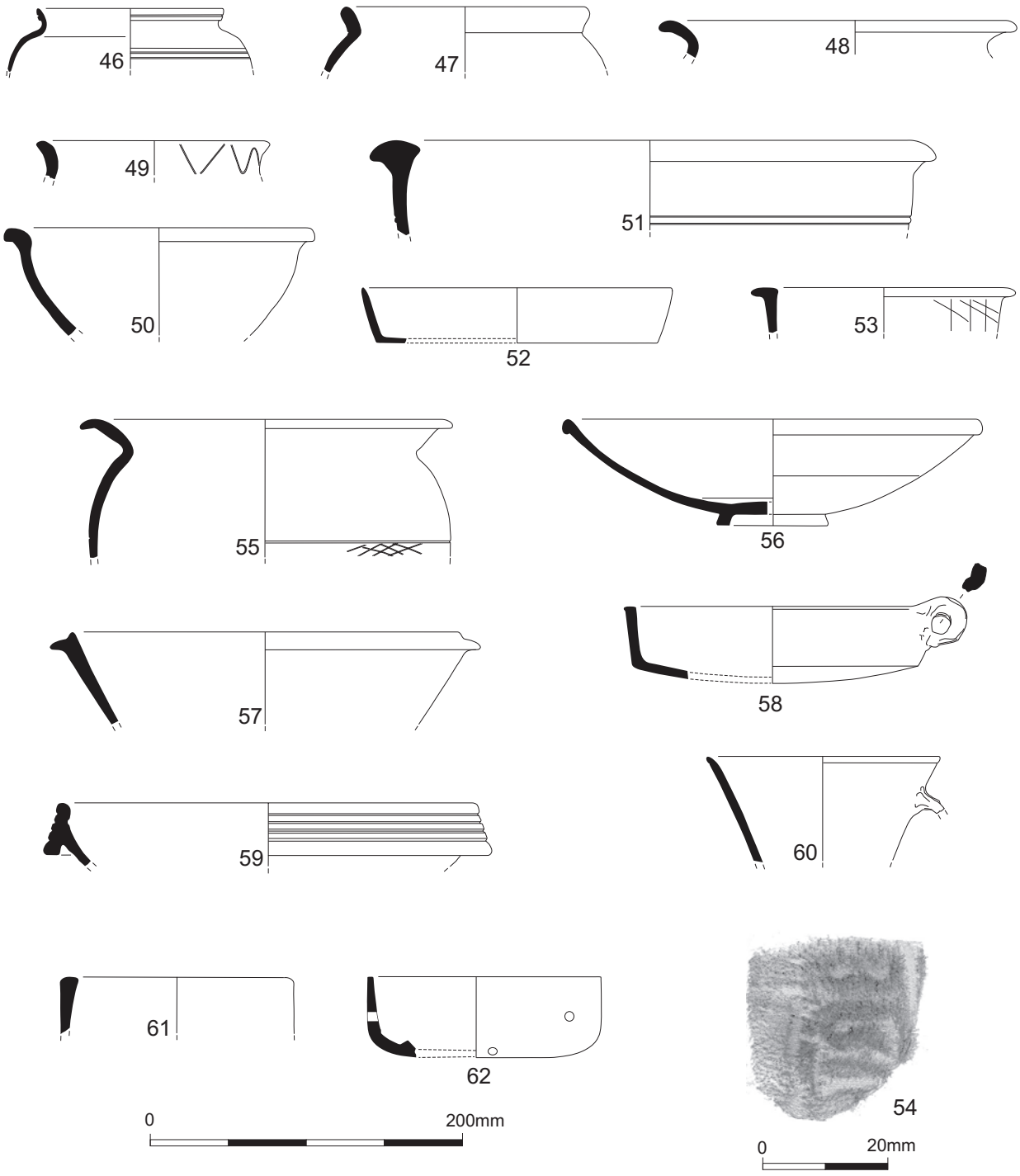


Figure 31: Phase 4 pottery, vessel classes by % rim EVE (excluding uncertain forms)



Roman pottery *Figure 32*

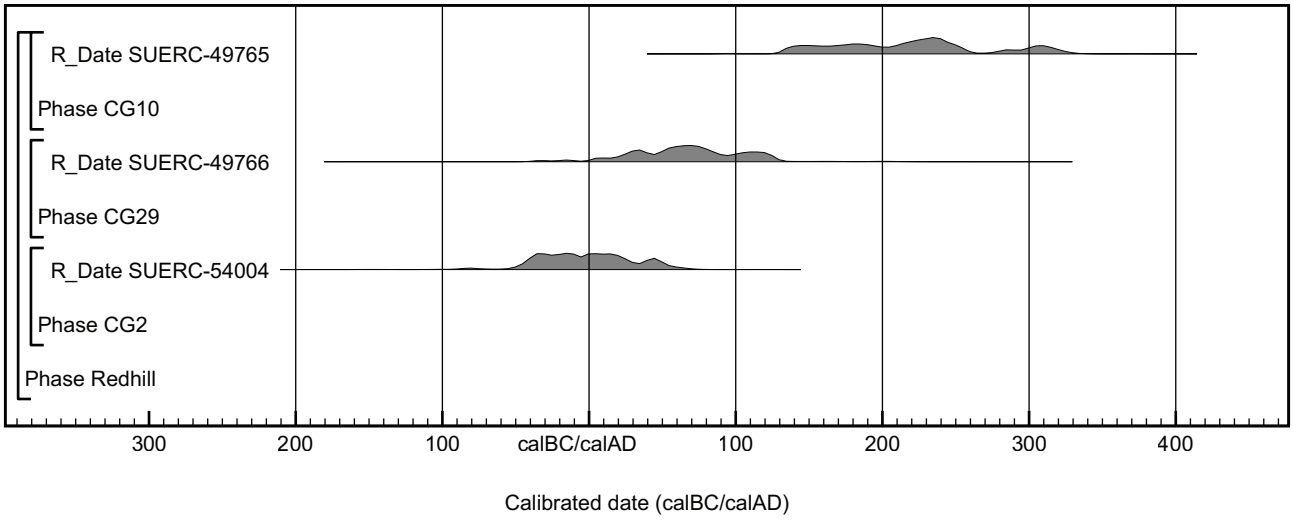


Figure 33

Probability distributions of Roman dates from Redhill. Each distribution represents the relative probability that an event occurred at a particular time. These distributions are the result of simple radiocarbon calibration (Stuiver and Reimer 1993).

Plates

Plate 1: Phase 1 ditch (506; CG1) facing north east, 1m scale

Plate 2: Phase 1 ditch (528; CG2) facing north, 1m scale

Plate 3: Phase 1 pit (67; CG3) Dressel 20 amphora still in situ*, facing south, 1m scale*

Plate 4: Phase 1 pit (67, CG3) fully excavated, facing south, 1m scale

Plate 5: Phase 2 oven CG18 in Plot 1, pre-excavation, facing south west, 1m scale

Plate 6: Phase 2 oven CG18 in Plot 1, facing east, 0.5m scales

Plate 7: Phase 2 oven CG18 in Plot 1,half-sectioned, facing south, 1m scale

Plate 8: Phase 2 oven CG16 in Plot 1, with Oven CG 18 behind, facing east, 1m scale

Plate 9: Phase 2 oven CG17 in Plot 1, pre-excavation, facing south, 1m scale

Plate 10: Phase 2 stone base (281) of oven CG17, facing south, 1m scale

Plate 11: Phase 2 pit (293; CG10) in Plot 1, facing east, 1m scale

Plate 12: Phase 2 pit (19; CG 10) in Plot 1, facing south, 1m scale

Plate 13: Phase 2 intercutting postholes (99, 101, 103 and 105) of Building I (CG20) in Plot 2, facing west, 0.5m scale

Plate 14: Phase 2 pit (152) of CG22 pit group in Plot 2, facing north east, 0.5m scale

Plate 15: Phase 2 postholes 275 and 277 of Building III (CG30) in Plot 3, facing east, 1m scale

Plate 16: Phase 2 postholes 331 and 333 of Building III (CG30) in Plot 3, facing north east, 1m scale

Plate 17: Phase 2 posthole 291 (CG30) of Building III in Plot 3, facing west, 0.5m scale

Plate 18: Phase 2 ovens scoop 367 (base of CG29 oven area sequence) within Building III in Plot 3, facing south, 1m scale

Plate 19: Phase 2 oven (363; part of CG29) in Building III, facing south east, 1m scale

Plate 20: Phase 2 ovens: 342 (foreground), 363 (middle) and 318 (background) of CG 29 in Building III, facing east, 1m scale

Plate 21: Phase 2 clay layer 329 above oven 318 of CG29 within Building III, facing south, 1m scale

Plate 22: Phase 2 pit 307 (part of CG31) in Plot 3.1, facing east, 1m scale

Plate 23: Phase 2 postholes of CG26 in Plot 3.2, facing south west, 1m scales

Plate 24: Phase 2 posthole 80 of CG26 in Plot 3.2, facing south west, 0.2m scale

Plate 25: Phase 2 beam slot Building V (CG28) in Plot 3.2, facing south west, 1m scales

Plate 26: Phase 2 oven base CG41 in Plot 3.2, facing north, 1m scale.

Plate 27: Phase 2b ditch 376 of CG8 with pit 370 to left, facing south-east, 1m scale

Plate 28: Phase 2b ditch 379 of CG8, facing south east, 1m scale

Plate 29: Phase 2b ditch 523 of CG8, facing north, 1m scale

Plate 30: Robbed stone wall foundation (391; CG42), facing north, 1m scale

Figure 31: Central Gaulish colour-coated handled jug sherd with figures of Aeneas and Anchises fleeing burning Troy. Scale in millemetres

Plate 32: Fired clay walling infill (332, CG30, P2) showing casts of internal wooden framing. Roundwood framing (left-right) and squared wooden framing (top to bottom, where scale located)

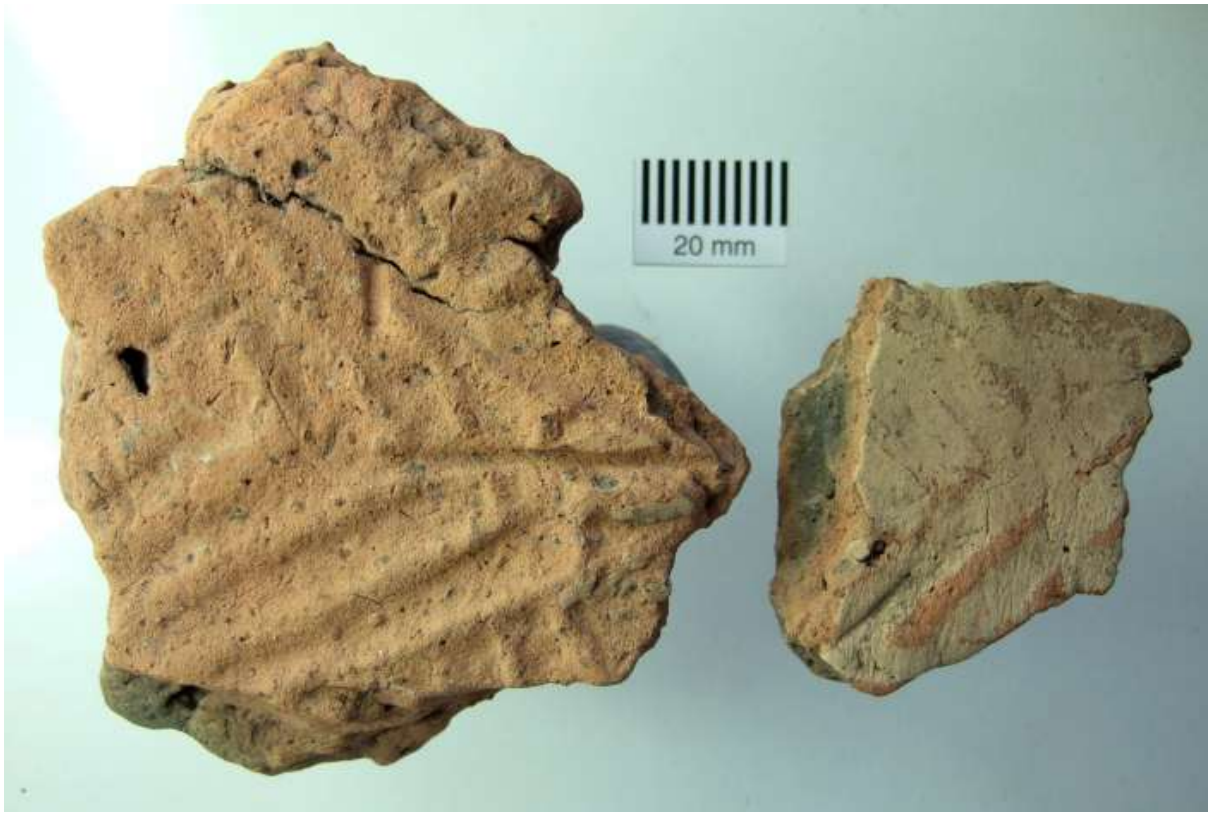


Plate 33: Fired clay walling infill (332, CG30, P2) with keyed surface (left) and keyed surface with over 'plastering' in place (right)

Plate 34: Top of quern bottom stone (110, CG30, P2). Centimetre scale

Plate 35: Quern upper and lower stones in combination

Appendix 1

CONTEXT GROUP DESCRIPTIONS

PHASE 1: 1st CENTURY

1. DITCH

North-east to south-west aligned ditch running for approximately 68.0m that was seen and excavated in 1973 and 2013 and includes cuts (377, 487, 396, 506, 2008, 5006, 11006). The 2013 cuts 487 and 506 had previously been excavated by Browne in 1973 (Ditch Vc). To the east the ditch turns to the north on a north-east to south-west alignment where it was investigated by Browne in 1973 (Ditch Vb) and is thought to have joined fort ditch III. The ditch had steep V-shaped profile and measured between 0.29–0.48m deep and 0.86–1.25m wide. It typically contained sterile greyish yellow, silty sand, but further to the east it contained frequent charcoal flecks, daub and pottery. Ditch cut 385 contained a slightly different profile, being broader with moderately steep, flat sides of approximately 40-55º. It had a flat base and measured 0.52m deep and 2.34m wide. The two sterile primary and secondary clay fills appear to have originated from the northern edge suggesting they had eroded from an associated internal bank or rampart. The variability of the ditch profile had been attributed by Browne to deliberate re-cutting, although no re-cuts were seen during the 2013 excavations. This ditch is cut by CG8 (Ditch VII).

2. DITCH

North to south aligned ditch cut 528 seen in the pipe trench to the west of the site. The ditch is almost V-shaped in profile with a concave base with a near-vertical western edge and a shallower, convex eastern edge at approximately 35º. The ditch measured 1.37m deep and 2.42m wide and had been re-cut once (context 541). The primary fills of ditch 528 were predominantly pinkish red sandy clays, probably originating from the erosion of the ditch edges or an associated bank. Above these was a band of charcoal and angular fire-cracked stone. The re-cut (541), although a more gradual profile with a concave base, retained its Punic profile and measured 0.90m deep and 2.42m wide. Unlike the original cut the fills were sterile consisting of mid-brownish orange sandy silts and clays. Based on the ditch profile and dating, it is thought to be of military origin, however its direction and shape outside of the pipe trench was not established.

3. ELONGATED PIT

North to south aligned elongated pit including cuts [67, 249, 253, 3004 and 3007]. The pit has an almost V-shaped profile but with a basal slot and flat base. It measured 0.87m deep, 1.32m wide and 4.92m long. It contained three fills, the lowest two being light yellowish brown silty sands with occasional charcoal flecks. The upper fill was a mid-brown sandy loam. In the upper fill towards the northern terminus was an upright near-complete amphora which had been set level by stones. This pit appears very similar to CG10, next to the southern terminus.

4. DITCH

Linear ditch running approximately east to west, mainly beneath the southern edge of excavation, including cuts 118 and 349. Its full dimensions and alignment could not be established, but it had a U-shaped profile and measured 0.38m deep and a minimum of 0.75m wide. The ditch was filled with mid-brownish yellow silty sand, and is thought to be associated with and partially truncated by Phase 1 pit digging in the same location (CG5).

5. PIT GROUP
This context group includes five intercutting pits, to the south of the excavation covering an area of 2.80m wide and 3.80m long, including cuts 339, 335, 337, and 339. This group truncates ditch CG3 and in turn truncated by a post-built building CG30. These pits were all sub-circular in plan with moderately steep concave sides and flat bases. They measured between 0.33-0.44m deep and 0.52-1.80m in diameter. The function of the pits is unclear as they do not appear large enough to have been quarry pits (except cut 339) and they did not contain large pottery assemblages indicative of rubbish pits.

PHASE 2: 2nd CENTURY

6. DITCH
Single ditch cut 2012 aligned east to west only seen during the evaluation in Trench 2. Had steep 70º flat sides and a flat base and was filled by yellowish brown silty sands. It measured 0.40m deep and 0.65m wide.

7. PIT GROUP
A group of four small pits [398, 504, 2007, and 2015] to the west and north-west of the excavation area. These appear to be outside the core settlement area and were sub-circular in plan, with shallow sides and concave bases. Their original function was not established. They measured between 0.13-0.14m deep and 0.65-1.07m in diameter.

8. ENCLOSURE DITCH
Large enclosure ditch, aligned east to west, probably turning north to south to the west of the main excavation area. Seen and excavated during the both the 1973 (Ditch VII) and 2013 excavations, includes cuts 394, 395, 376, 379 and 511 and probably cuts 514 and 523. Ditch slot 511, excavated during 2013, was a re-excavation of one of Browne's 1970s slots. The ditch had a steep V-shaped profile with a basal slots and flat base. It measured between 0.45m-1.50m deep and 0.60-4.26m wide. There was no evidence for an associated bank or any re-cutting. The primary fills were pinkish red sands and clays which were overlain by multiple fills of sterile brownish yellow silty sands and loams.

10. ELONGATED PIT
East to west aligned elongated pit (311) with a V-shaped profile and basal slot with a flat base, very similar to pit CG3.The original cut measured 1.20m deep, 1.54m wide and 3.40m long and contained four fills (315, 314, 313 and 308). These were mid to light brown sandy loams rich in charcoal and moderate sub-rounded stone. The upper fills of the pit had been re-cut twice (contexts 287 and 293) with each having a pinkish red clay lining added, between 0.08–0.29m thick. The fill of 283 was virtually indistinguishable from the overlying soil.

11. CURVILINEAR DITCH
Curvilinear ditch cut towards the west of the excavation area forming a semi-circle and continuing beneath the western baulk. Includes cuts 133, 200, 202 and 204 which had shallow concave sides and a concave bases. The ditch measured between 0.18–0.31m deep and 0.45–0.94m wide and contained sterile yellowish brown silty sand. If complete, the circle would have been approximately 8.9m in diameter.

12. PIT
The context group contains a large oval pit (44) towards the west of the excavation area and its recuts 51 and 53. The first pit was sub-circular in plan with moderate to steep concave sides gently breaking to a flat base. It measured 0.50m deep, 1.30m and 2.86m long and was filled with sterile mid-light brown silty sands. The later re-cuts were rectangular in plan with

near-vertical sides and concave bases. They measured between 0.89–0.61m deep and 1.31–1.51m in diameter. The fills contained demolition rubble (CG19) form the nearby ovens (CG16, 17 and 18) and, therefore, may be related to that activity.

13. BOUNDARY PLOT DITCH
One of six north–north east to south–south west aligned ditches, cut 55. This is thought to represent a boundary ditch between settlement or activity areas, very similar to CG14, 23, 24 and 25. This ditch measured 0.22m deep and 0.35m wide, with a U-shaped profile and filled by a mid-greyish brown silty loam. It cut pits 51 and 53 (CG12).

14. BOUNDARY PLOT DITCHES
A group of three north–north east to south–south west aligned ditches representing the reinstatement of a boundary plot, including cuts 29, 33 and 35. These were all similar in size and profile having moderate concave sides and flat bases between 0.10–0.24m deep and 0.40–0.43m wide. Cut 33 was truncated by oven CG18.

15. POSTHOLE GROUP
Group of six postholes around oven structures CG16, 17, 18, which include cuts 43, 295, 297, 299, 301 and 303. These postholes covered an area 2.61m wide and 4.21m long and were circular in plan with vertical sides and flat bases measuring between 0.10–0.48m deep and 0.30–0.61m in diameter. They were filled with charcoal rich dark brown sandy loams but no post-packing material or post-pipes were seen. No obvious structure could be recognised in plan but it is thought this group represents a small shelter above or windbreak around the ovens.

16. OVEN
One of three ovens bases in close proximity towards the west of the site. Only the bottom of the oven remains which consisted of a fired clay base (context 284) in a shallow elongated scoop aligned north–north west to south–south east and measured 0.05m deep, 0.44m wide, 1.20m long (context 283). At the northern end the clay lining of the oven base turned to the east, possibly forming a flu where there was a solitary flat sandstone slab (285) (0.30m x 0.16m) which may be the remains of its internal floor or stoking area. In the internal oven area a thin charcoal rich dark brown silty sand had collected 0.04m thick.

17. OVEN
One of three oven bases in close proximity towards the west of the site. It includes a shallow square cut (280) 0.08m deep, 1.10m wide and 1.20m long. This had been filled with a sandstone slab (0.05m thick, 0.34m wide and 0.44m long) and surrounded by medium angular sandstone fragments and medium rounded river pebbles (281). This had then been covered with a flat, 0.06m thick layer of pinkish red sand (context 282) that had become lightly fired. The oven had been covered by demolition layers CG19.

18. OVEN.
One of three ovens bases in close proximity towards the west of the site. Only the bottom of the oven remains which consisted of a fired clay lining (context 272) within a shallow elongated scoop (context 273) aligned north-west to south-east. The scoop measured 0.22m deep, 0.87m wide and 3.04m long. The fired clay lining had a flat base and along the edges appeared to be turned upwards to form the outer walls approximately 0.05m high. At the eastern end the lining appeared to turn towards the north, creating a 0.25m wide opening or flu. At the eastern end there was 0.40m wide entrance that opened onto a group of small flat sandstone slabs that may have been the remains of an internal floor to the oven or stoking

area (context 288). The internal area of the oven had become filled with a charcoal rich dark brown sandy soil and was sealed by demolition layers CG19.

19. OVEN DEMOLITION LAYERS
A number of small, thin spreads of oven material and charcoal over all three oven structures CG17, 18, 19, is thought to represent the remains of their demolition, an includes layers (20, 27, 271 and 254) that also extend in to the eastern side of pit [53] (CG12). These layers consisted of small angular sandstone rubble, rich charcoal soil spreads and patches of crushed fired clay material.

20. POSTHOLE BUILDING
Northern end of a post-built structure aligned north-north-west to south-south-east, probably abutting Watling Street. The building measured approximately 5.40m wide and a minimum of 4.21m long. The group contains a number of postholes and recuts/replacements suggesting a long period of use. This group includes posthole cuts [99, 101, 103, 105, 123, 125, 137 and 233]. These were circular in plan with vertical sides and flat or concave bases and measured between 0.55-1.60m in diameter and were up to 0.60m deep. Many contained sandstone post packing remains, though only one possible post-pipe was seen in cut [125], 124, that measured 0.60m in diameter and was 0.23m deep.

21. BEAM SLOT BUILDING
Beam slot building, square in plan, heavily truncated on the western edge, measuring 2.30m wide and 2.80m long. This was constructed of three beam slots overlapping in the corners, including cuts [145, 147, 154, 156, 159, 161, 163 and 165]. These beam slots were up to 0.21m deep and 0.41m wide and mostly contained sterile mid-yellowish brown silty sand, with concentrations of charcoal and fired clay/daub. To the east of the structure there are also two small postholes, cuts [170 and 198] that may be associated and acted as a support to the main structure. These were sub-circular in plan and measured between 0.28–0.32m in diameter and were up to 0.17m deep.

22. PIT GROUP
Small group of pits in the centre of the site to the rear of building CG20 and partially truncating beam slot building CG21. These may not all be contemporary but have been grouped based upon their location within the central plot area. This group includes cuts 127, 131, 152, 206 and 210. These pits are mostly sub-oval in plan and measured between 0.28–0.54m deep, 0.90–1.60m wide and 1.34–1.60m long. The majority of these pits are thought to be rubbish pits, one of which (cut 152) appeared to contain a humic primary fill that had been capped with natural pink clay. The size and shape of pit 210 suggests that it may be another quarry pit similar to cut 44 (CG12).

23. BOUNDARY PLOT DITCH
One of six north-north-east to south-south-west aligned ditches, including cuts 212, 236 and 238, thought to represent a boundary ditch between to settlement or activity areas, and very similar to CG13, 14, 24 and 25. This ditch, 0.30m deep and 0.38m wide, with a U-shaped profile was filled by a mid-yellowish brown silty loam.

24. BOUNDARY PLOT DITCH
One of six north-north-east to south-south-west aligned ditches, including cut 219, 221, 227 and 232. This is thought to represent a boundary ditch between settlement activity areas, very similar to CG13, 14, 23 and 25. This ditch contained a 2.90m wide entrance formed by two termini, cuts (227 and 232). This ditch measured between 0.18–0.38m deep and was 0.32–0.98m wide, with a U-shaped profile and filled by a mid-yellowish brown silty loam.

25. BOUNDARY PLOT DITCH
One of six north-north-east to south-south-west aligned ditches, including cuts 217, 223, 225, 229 and 2007. This is thought to represent a boundary ditch between to settlement or activity areas, very similar to CG13, 14, 23 and 24. This ditch is likely to have been dug to reinstate the boundary ditch CG24 while closing the entrance between the two plots. It measured between 0.14–0.25m deep and was 0.45–0.66m wide, with a U-shaped profile and filled by a mid-greyish brown silty loam.

26. POSTHOLE BUILDING
Posthole-built building to the east of the excavation area which includes cuts 72, 75, 77, 92, 177, 179, 181, 183, 185, 189 and 191. Not fully exposed, as most of the building ran beneath the southern baulk. The majority are rock cut postholes that appeared square in plan. These had near vertical sides and flat bases and in a number of cases contained sandstone post packing. Only two confirmed post-pipes were seen in this group (70 and 78) which measured 0.20m deep and 0.30m in diameter and 0.35m deep and 0.48m in diameter respectively.

27. PIT and POSTHOLE GROUP
Small cluster of pits, in the centre of the site, including cuts 319, 321, 232, 325 and 327. This group also included four isolated circular and heavily truncated posthole cuts (321, 323, 325 and 327) to the south side of a larger sub-oval pit (319). The postholes were circular in plan between 0.06m-0.16m deep and 0.26m-0.57m in diameter. The pit was 0.09m deep, 1.10m wide and 1.37m long with shallow concave sides and a flat base. The function of these features is unclear, but they have been grouped together based upon their proximity to each other.

28. BEAM SLOT BUILDING
Pair of parallel beam slots, cuts 58 and 60 forming a square building 4.60m long and 5.10m wide. The beam slots had vertical sides with flat bases and measured between 0.15m–0.21m deep and 0.35–0.37m wide. They had become filled with sterile yellowish brown silty sand. No walls were seen on either the west or the east side of the building.

29. OVENS
Group of four oven bases, which represents the rebuilding of an oven on the same location. No superstructures were identified, only the fired clay bases in a shallow scoop (367) 0.30m deep, 2.40m wide and 4.78m long. The initial oven appears to have been placed in a shallow square pit 0.10m deep and 0.50m wide (367). This contained frequent sandstone fragments and rounded river pebbles (411), similar to CG17. Over this was a layer of lightly fired pink clay up to 0.05m thick. The base of the larger depression was subsequently levelled with light reddish pink clay up to 0.08m thick. Two oval areas of this clay, up to 0.50m wide and 1.36m long had been fired and are thought to represent the bases of oven structures (342 and 363). To the northern end of oven 363 was a small spread of flat sandstone slabs (364) and to the south was a spread of crushed charcoal (416). These ovens were again overlain with demolition rubble (330) and pink clay (329) up to 0.12m thick prior to the construction of the final oven 318. This oven was again oval in plan and measured 0.54m wide and 1.46m long. After its abandonment the area was again sealed with a layer of pink clay (316).

30. POSTHOLE BUILDING
Posthole building aligned north-north-west to south-south-east 7.80m wide and was a minimum of 13.40m long. No floor surfaces were seen and ovens (CG 29) are located in the northern end of this structure. Sixteen postholes are associated with this building forming two parallel walls extending under the southern baulk. It appears that the building had been

repaired on various occasions. Original postholes include cuts 412, 358, 331, 115, 277 261, 291, 310, 343 and 417 and repairs include cuts 141, 361, 333, 112, 275 and 258. These were mostly sub-circular in plan with near vertical sides and flat bases. They measured between 0.37m-0.42m deep and between 1.22m-1.46m in diameter. Four of the original postholes (cuts 115, 261, 277 and 331) used fired daub material as packing with the associated post-pipes measuring approximately 0.30m in diameter. Other postholes 291 and 343 had used sandstone blocks as packing material.

31. PIT/POSTHOLE GROUP
Miscellaneous pits and isolated postholes across the eastern half of the site. Some remain undated but are thought to be of this phase and associated with the settlement activity seen. This group includes cuts: 38, 24, 21, 36, 40, 63, 64, 89, 87, 93, 106, 108, 265, 267, 307, 420, 424, 8003, 9005, and 9006. The function of these pits has not been established but they are likely to be rubbish pits. This was evident in pit 307, which contained numerous humic and charcoal rich tip lines, indicative of periodic infilling. This pit was circular in plan, with near-vertical sides and a flat base, and measured 0.74m deep and 1.71m in diameter.

32. POSTHOLE GROUP
Undated row of postholes in the pipe trench to the west of the main excavation area. These remain undated but may be defensive in nature and related to ditch CG2. Includes cuts [534, 532 and 530]. They are circular in plan with vertical sides and flat bases, and measure between 0.20–0.26m deep and 0.60–0.74m in diameter.

33. DITCHES
A group of north to south aligned ditches, cuts 519, 536, 538 and 540 seen in the pipe trench to the west of the excavation area. These all have shallow sloping concave sides and concave base, and are between 0.15–0.32m deep and between 0.50m–1.00m wide. They are filled by sterile yellowish brown sandy loams.

39. DITCH
North-east to south-west aligned ditch cut [502 and 13004] towards the north-west of the excavation area. The ditch was very truncated but appears to have a U-shaped profile and contained sterile yellowish brown silty sand. It measured 0.29m deep and 0.86m wide.

40. BEAM SLOT BUILDING
Beam slot building aligned north to south, measuring 3.35m wide and 5.50m long. Truncated on the south and west edges. The beam slots are up to 0.50m wide and contain a medium brown sandy loam. Recorded during 1973 excavations (Contexts 210, 211 and 212) but was not excavated.

41. OVEN BASE
This had been heavily truncated but consisted of a sub-oval fired clay spread (97) aligned north to south measuring 0.04m thick, 0.31m wide and 0.52m long. At the southern end the clay base appeared to turn towards the west, perhaps forming a flue. To the north west of the base was a more circular area of heat affected clay, approximately 0.60m in diameter. Towards the southern end of the oven base was a slight depression that contained mid-brownish orange sandy clay deposit, containing charcoal flecks (98).

42. FOUNDATION TRENCH
North-north-east to south-south-west aligned trench with vertical sides and a flat base, including cuts 391 and 10006. Thought to be a foundation cut for a sandstone wall that has

been robbed. No mortar was visible but lots of medium sandstone rubble was present. The trench measured 0.70m deep and 1.20m wide.

PHASE 3: 3rd -4th CENTURY

34. ISOLATED PITS
This phase only includes a small number of isolated pits that contain 3rd-4th century material. These include cuts 134, 135, 136, 172, 175, and 370. The majority are sub-circular in plan with gently sloping concave sides and concave bases, measuring between 0.17–0.23m deep and 0.87–1.05m in diameter. The majority contain sterile mid brown sandy loams.

PHASE 4: POST ROMAN

This phase is represented by a dark brown sandy loam soil up to 0.50m thick that had formed and survived over the majority of the excavation area, mainly to its south and south-west. Although the soil appeared uniform it was removed in three spits CG35, 36 and 37. Plough-marks beneath the soil, cutting 2nd century features suggest it had been cultivated in the post-Roman period, although it contained significant quantities of Roman pottery, coins and metalwork.

35. LOWER BURIED SOIL SPIT
Includes layers (16, 2003, 3003, 3008, 10005, 6002, 7004, and 11003).

36. MIDDLE BURIED SOIL SPIT
Includes layers (17, 15, 18).

37. UPPER BURIED SOIL SPIT
Includes layers (13, 2002, 3002, 10003, 7003, 11002).

Phase 5: MODERN

38. LANDSCAPING LAYERS AND MODERN TOPSOIL
This phase includes all the layers formed when the reservoir was constructed and the topsoil and turf matt that has formed throughout the site since. It included:

redeposited layers (14, 11, 2001, 6001, 10002, 16003, 13003, 7002, 7001, 11001 and 1202),
subsoils (12, 1001, 5001, 3001, 9001, 13001, 4001, 8001, 1201, 13001, 317 and 16002) and
topsoil (10, 12, 2, 1000, 1001, 2000, 6000, 5000, 5001, 3000, 3001, 10001, 9000, 9001, 13000, 13001, 4000, 4001, 6000, 8000, 8001, 1100, 1101, 1200, 1201, 13000, 13001, 317, 16001, 16002, 1, 512 and 196).

Appendix 2. Quantification of pottery fabrics

			Phase 1			Phase 2			Phase 3			Phase 4		
source	**class**	**fabric code**	**count**	**weight(g)**	**rim EVE**	**count**	**weight(g)**	**rim EVE**	**count**	**weight(g)**	**rim EVE**	**count**	**weight(g)**	**rim EVE**
Import	Amphorae	AMDR20	436	24466	0	42	4022	0	8	243	0	10	665	0
		AMDR2-4	6	36	0	2	74	0	0	0	0	0	0	0
		AMGAU4	0	0	0	29	722	0	0	0	0	0	0	0
		AMSPAIN	0	0	0	3	93	0	1	123	0	0	0	0
	Colour-coated ware	CGBS	0	0	0	1	11	0	0	0	0	1	31	0
		CGCC	0	0	0	0	0	0	1	15	0	0	0	0
		LYON	0	0	0	1	2	0.07	0	0	0	0	0	0
	Samian	MLEZ	0	0	0	1	2	0.04	0	0	0	0	0	0
		SAMCG	0	0	0	36	549	1.42	7	70	0.24	27	464	0.42
		SAMEG	1	9	6	1	4	0	3	26	0.13	2	17	0.08
		SAMLG	9	78	0.11	18	66	0.18	0	0	0	10	61	0.06
		SAMMV	0	0	0	3	68	0.14	1	8	0	1	7	0
Regional	Cream-slipped ware	O4	1	22	0	0	0	0	0	0	0	0	0	0
		O7	4	78	0	8	100	0	0	0	0	1	19	0
		O14	0	0	0	1	13	0	0	0	0	3	18	0
		O15	0	0	0	2	21	0	0	0	0	3	27	0
	Grog-tempered ware	GROG1	1	16	0.06	2	107	0	0	0	0	1	35	0
		GROG2	9	280	0.13	8	226	0.05	0	0	0	1	18	0
		GROG3	1	25	0	1	13	0.10	5	17.5	0	1	20	0
		GROG4	3	46	0	2	35	0.11	0	0	0	1	28	0.10
		GROG5	0	0	0	2	23	0	0	0	0	0	0	0
		GROG6	0	0	0	3	30	0.10	0	0	0	3	27	0
		GROG7	0	0	0	1	40	0.08	0	0	0	0	0	0
		GROG8	0	0	0	0	0	0	4	49	0	1	44	0
		GROG9	0	0	0	0	0	0	0	0	0	1	35	0
		GROG10	0	0	0	0	0	0	2	4	0	0	0	0
		GROG11	1	10	0.15	2	15	0	0	0	0	1	3	0
		GROG12	1	14	0	0	0	0	0	0	0	0	0	0
		GROG13	2	38	0	1	4	0	2	14	0.06	0	0	0
		GROG14	0	0	0	0	0	0	2	96	0	0	0	0
	Mortaria	MWWOCR	0	0	0	0	0	0	0	0	0	1	12	0
		MWWOF	0	0	0	2	435	0.05	0	0	0	0	0	0
		MWWR	1	79	0	0	0	0	0	0	0	0	0	0
		MWWWW	0	0	0	1	41	0	0	0	0	0	0	0
	Sandy oxidised	O1	50	489	0.51	49	586	1.55	4	23	0	39	354	0.59
		O2	14	48	0.05	20	137.5	0.45	2	12	0	41	708	0.86
		O5	6	57	0	14	351	0.41	0	0	0	12	240	0
		O8	0	0	0	18	260	0	2	17	0	5	23	0
	Sandy reduced	R1	6	131	0.26	1	7	0	0	0	0	0	0	0
		R2	45	1224	1.55	22	180	0.20	1	2	0	6	154	0.22

		R3	1	22	0	1	35	0	0	0	0	0	0	0
		R4	13	88	0.26	40	412	0.48	0	0	0	18	276	0.22
		R5	1	5	0	0	0	0	0	0	0	0	0	0
		R6	1	9	0	1	9	0	0	0	0	0	0	0
		R13	0	0	0	0	0	0	0	0	0	1	2	0
		R15	0	0	0	1	9	0	0	0	0	0	0	0
	Severn Valley ware	O6	7	84	0	154	2609.5	2.03	37	718	0.98	158	2109	2.21
		O11	6	27	0.15	11	100	0.09	3	20	0	32	283	0.28
		O13	0	0	0	7	240	0	0	0	0	28	230	0.10
	Severn Valley ware organic ox	O12	0	0	0	6	111	0.31	1	16	0	12	282	0
	Severn Valley ware organic reduced	R10	1	13	0	4	35	0.04	0	0	0	0	0	0
		R14	0	0	0	2	43	0	0	0	0	0	0	0
	Severn Valley ware reduced	R11	0	0	0	12	100	0.24	2	8	0	2	12	0.12
	Severn Valley ware reduced	R9	1	29	0.25	23	244	0.32	9	99.5	0	2	14	0
Regional/ traded	Cream ware	CREAM1	2	28	0	10	80	0.10	0	0	0	0	0	0
		CREAM2	0	0	0	4	17	0	0	0	0	1	1	0
		CREAM3	0	0	0	10	150.5	0	0	0	0	4	63	0
		CREAM4	0	0	0	17	145.5	0	0	0	0	0	0	0
		CREAM5	0	0	0	3	26	0.15	0	0	0	0	0	0
Traded	BB1	BB1	4	14	0.12	138	1576	1.77	40	400	0.58	48	853	1.11
		BB1 SW	0	0	0	1	25	0.20	0	0	0	0	0	0
	Colour-coated ware	NVCC1	0	0	0	2	10	0	0	0	0	1	4	0
		NVCC2	0	0	0	2	85	0	3	9	0	0	0	0
		OXFRCC	0	0	0	0	0	0	3	51	0.15	5	373	0.53
	Mortaria	MANCH	1	41	0	2	109	0.21	3	100	0.08	19	782	0.48
		MOVR	2	380	0	2	164	0.11	0	0	0	0	0	0
		MOXFRC	0	0	0	0	0	0	0	0	0	2	25	0
		MOXFW	0	0	0	1	35	0.08	0	0	0	2	77	0
	Native ware	MALVH	2	24	0.08	10	80	0	0	0	0	24	258	0.01
	White ware	VRW	3	91	0	0	0	0	0	0	0	0	0	0
		WHEG	0	0	0	3	4	0	0	0	0	0	0	0
total			642	28001	3.74	764	14692	11.08	146	2141	2.22	531	8654	7.39

Appendix 3. Assessment of charred plant remains

Context	Sample	Feature type	Fill of	Position of fill	Period	Phase	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
16	23	Buried soil			Roman	4	20	10	Yes	Yes
17	1	Layer			Roman	4	10	0	No	No
18	2	Layer			Roman	4	10	0	No	No
19	49	Oven	287	Other	Roman	2	40	0	No	No
27	3	Layer			Roman	2	40	10	Yes	Yes
28	4	Linear	29	Primary	Roman	2	40	0	No	No
30	5	Oven	278	Other	Roman	2	40	10	Yes	Yes
31	6	Oven	287	Secondary	Roman	2	40	10	Yes	Yes
32	7	Linear	33	Primary	Roman	2	30	0	No	No
34	8	Linear	35	Primary	Roman	2	40	10	Yes	Yes
39	9	Post Hole	38	Primary	Roman	2	10	0	No	No
41	10	Post Hole	40	Primary	Roman	2	10	0	No	No
45	11	Oven	273	Other	Roman	2	10	10	Yes	Yes
46	12	Oven	273	Other	Roman	2	40	10	Yes	Yes
47	15	Oven	273	Other	Roman	2	10	10	Yes	Yes
52	13	Pit	53	Primary	Roman	2	40	0	No	No
63	14	Pit	62	Primary	Roman	2	40	0	No	No
65	17	Pit	64	Primary	Roman	2	10	10	Yes	Yes
66	16	Burnt Clay			Roman	2	10	10	Yes	Yes
69	18	Pit	64	Other	Roman	2	10	0	No	No
73	19	Post Hole	75	Secondary	Roman	2	20	0	No	No
85	21	Linear			Roman	2	35	10	Yes	Yes
90	20	Post Hole	92	Secondary	Roman	2	30	0	No	No
97	22	Oven			Roman	2	30	0	No	No
110	24	Post Hole	112	Secondary	Roman	2	40	10	Yes	Yes
113	25	Post Hole	115	Secondary	Roman	2	30	10	Yes	Yes
116	26	Oven			Roman	2	40	0	No	No
120	28	Linear	103	Primary	Roman	2	20	0	No	No
128	27	Oven	127	Primary	Roman	2	40	0	No	No
130	29	Oven	131	Secondary	Roman	2	40	0	No	No
149	31	Pit	152	Other	Roman	2	30	10	Yes	Yes
151	32	Pit	152	Primary	Roman	2	30	10	Yes	Yes
157	33	Beam slot	159	Primary	Roman	2	10	0	No	No
190	30	Post Hole	191	Primary	Roman	2	40	10	Yes	Yes
192	34	Post Hole	193	Primary	Roman	2	40	0	No	No
211	38	Pit	210	Primary	Roman	2	40	10	Yes	Yes
220	35	Beam slot	221	Primary	Roman	2	40	0	No	No
222	36	Ditch	223	Primary	Roman	2	40	0	No	No
231	37	Ditch	232	Primary	Roman	2	40	0	No	No
257	40	Pit	258	Primary	Roman	2	40	10	Yes	Yes
269	41	VOID				2	40	0	No	No
271	39	Oven			Roman	2	30	10	Yes	Yes
272	45	Clay lining	273	Primary	Roman	2	2	0	No	No
272	46	Clay lining	273	Primary	Roman	2	2	0	No	No
276	42	Post Hole	277	Primary	Roman	2	40	10	Yes	Yes
286	44	Oven	279		Roman	2	10	10	Yes	Yes
289	43	Post Hole	291	Secondary	Roman	2	40	0	No	No
292	50	Oven	293	Primary	Roman	2	40	10	Yes	Yes

Context	Sample	Feature type	Fill of	Position of fill	Period	Phase	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
298	47	Post Hole	299	Primary	Roman	2	10	0	No	No
300	48	Post Hole	301	Primary	Roman	2	49	0	No	No
308	52	Well	311	Other	Roman	2	40	0	No	No
312	53	Well	311	Other	Roman	2	40	10	Yes	Yes
316	54	Layer			Roman	2	40	0	No	No
329	55	Layer			Roman	2	40	0	No	No
330	58	Layer	367		Roman	2	20	10	Yes	Yes
330	64	Layer	367		Roman	2	40	0	No	No
332	60	Post Hole	331	Primary	Roman	2	30	10	Yes	Yes
334	61	Post Hole	333	Primary	Roman	2	10	0	No	No
336	59	Pit	335	Primary	Roman	1	20	10	Yes	Yes
338	56	Pit	337	Secondary	Roman	1	40	10	Yes	Yes
340	57	Pit	339	Primary	Roman	1	40	10	Yes	Yes
348	62	Post Hole	347	Primary	Roman	1	10	0	No	No
353	63	Pit	307	Secondary	Roman	2	20	10	Yes	No
369	67	Ditch	370	Primary	Roman	3	30	0	No	No
371	68	Ditch	376	Other	Roman	3	40	0	No	No
389	65	Ditch	385	Other	Roman	1	10	10	Yes	Yes
397	66				Roman	2	30	0	No	No
404	69	Ditch	395	Other	Roman	3	40	10	Yes	Yes
416	70	Layer			Roman	2	10	10	No	Yes
426	71	Pit	424	Other	Roman	2	20	0	No	No
427	72	Pit	424	Other	Roman	2	20	0	No	No
2006	1		2007	Primary	Roman	2	20	10	Yes	Yes
7003	4	Layer			Roman	4	10	10	Yes	Yes
8004	2		8003	Primary	Roman	2	20	10	Yes	Yes
9009	3		9008	Primary	Roman	2	10	10	Yes	Yes

List of environmental samples

Latin name	Family	Common name	Habitat	30	45	271	286	292
Uncharred plant remains								
unidentified root fragments	unidentified						+++	
Charred plant remains								
Triticum dicoccum/spelta grain	Poaceae	emmer/spelt wheat	F			+		+
Hordeum vulgare grain (hulled)	Poaceae	barley	F					+
Cereal sp indet grain	Poaceae	cereal	F		+			
cf *Vicia* sp	Fabaceae	vetch	AB					+
Quercus robur/petraea wood	Fagaceae	oak	C	+				
Corylus avellana wood	Betulaceae	hazelnut	C	+				
Persicaria/Polygonum sp	Polygonaceae	knotgrass	AB		+			
Agrostemma githago	Caryophyllaceae	corn cockle	AB		+			
Chenopodium sp	Amaranthaceae	goosefoot	ABD		+			
Viburnum opulus wood	Caprifoliaceae	guelder rose	C			+		
Carex sp (3-sided) nutlets	Cyperaceae	sedge	CDE		+			

Plant remains from the ovens

Latin name	Family	Common name	Habitat	110	113	190	276	332
Uncharred plant remains								
Chenopodium album	Amaranthaceae	fat hen	AB	+				
unidentified root fragments	unidentified			+++		+++		
Charred plant remains								
Triticum spelta grain	Poaceae	spelt wheat	F		+		+	+
Triticum spelta glume base	Poaceae	spelt wheat	F				+	
Triticum dicoccum/spelta grain	Poaceae	emmer/spelt wheat	F		+	++	+	+/++
Triticum sp grain	Poaceae	wheat	F	+				
Hordeum vulgare grain (hulled)	Poaceae	barley	F			++	+	+/++
Cereal sp indet grain	Poaceae	cereal	F	+				
Avena sp grain	Poaceae	oat	AF			++	+	
cf *Avena* sp grain	Poaceae	oat	AF		+			
Vitis vinifera	Vitaceae	grape-vine	F				+	
Melilotus/Medicago sp	Fabaceae	melilot/medick	ABD				++	
Trifolium sp	Fabaceae	clover	ABD				+	
Urtica dioica	Urticaeae	common nettle	ABCD					+
Quercus robur/petraea wood	Fagaceae	oak	C				P	P
Corylus avellana shell fragment	Betulaceae	hazelnut	C		+			
Raphanus raphanistrum (pod fragments)	Brassicaceae	wild radish	ABG				+	
Rumex acetosella	Polygonaceae	sheep's sorrel	ABD			+		+
Rumex acetosa	Polygonaceae	common sorrel	ABD					+
Rumex sp	Polygonaceae	dock	ABCD		+		++	
Hyoscyamus niger	Solanaceae	henbane	AB			+		
Centaurea sp	Asteraceae	knapweed/cornflower	ABD				+	
Carex sp (3-sided) nutlets	Cyperaceae	sedge	CDE				+	
Bromus sp grain	Poaceae	brome grass	AF	+	+	+		++
Poaceae sp indet grain	Poaceae	grass	AF	+				
Poaceae sp indet grain (small)	Poaceae	grass	AF			+		
unidentified stem fragments	unidentified						+	
unidentified seed	unidentified					+	+	+
Non-oak wood							P	P

Plant remains from postholes

	Family	Common name	Habitat	65	149	151	211	257	336	338
Phase				2	2	2	2	2	1	1
Latin name										
Uncharred plant remains										
unidentified stem fragments	unidentified				++			+++		
unidentified root fragments	unidentified				+++		++	+++	+++	++/++
Charred plant remains										
Triticum spelta grain	Poaceae	spelt wheat	F							+
Triticum dicoccum/spelta grain	Poaceae	emmer/spelt wheat	F	+	+	+		+		
Triticum sp (free-threshing) grain	Poaceae	free-threshing wheat	F		+		+			
Hordeum vulgare grain (hulled)	Poaceae	barley	F	+			+			+
Cereal sp indet grain	Poaceae	cereal	F		+	+		+		
Urtica dioica	Urticaeae	common nettle	ABCD					+		
Corylus avellana shell fragment	Betulaceae	hazelnut	C			+				
Rumex acetosella	Polygonaceae	sheep's sorrel	ABD				+			
cf *Rumex acetosella*	Polygonaceae	sheep's sorrel	ABD					+		
Festuca/Lolium sp grain	Poaceae	fescue/rye-grass	ABD					+		
Bromus sp grain	Poaceae	brome grass	AF	+	+		+			
Poaceae sp indet grain	Poaceae	grass	AF	+	+			+		

Plant remains from pits

	Family	Common name	Habitat	16	34	66	85	308	330	404	416	7003
Phase				4	2	2	2	2	2	3	2	4
Latin name												
Uncharred plant remains												
Poaceae sp indet culm node	Poaceae	grasses	AF				+					
unidentified stem fragments	unidentified					+				+		
unidentified root fragments	unidentified						+++					

	Family	Common name	Habitat	16	34	66	85	308	330	404	416	7003
unidentified herbaceous fragments	unidentified									+		
Charred plant remains												
Triticum dicoccum/spelta grain	Poaceae	emmer/spelt wheat	F	+			+				+	
Triticum dicoccum/spelta glume base	Poaceae	emmer/spelt wheat	F			+						
Triticum sp grain	Poaceae	wheat	F	+	+							
Hordeum vulgare grain (hulled)	Poaceae	barley	F		+		+					
Cereal sp indet grain	Poaceae	cereal	F		+		+					
cf Cereal sp indet grain fragment	Poaceae	cereal	F									+
Quercus robur/petraea wood	Fagaceae	oak	C								+	
cf *Tilia* sp wood	Tiliaceae	lime	C									
Corylus avellana shell fragment	Betulaceae	hazelnut	C						+			
Viburnum opulus wood	Caprifoliaceae	guelder rose	C					+				
Eleocharis sp	Cyperaceae	spike-rush	E								+	
Carex sp (3-sided) nutlets	Cyperaceae	sedge	CDE								+	
Bromus sp grain	Poaceae	brome grass	AF								+	
cf *Bromus* sp grain	Poaceae	brome grass	AF								+	
Poaceae sp indet grain	Poaceae	grass	AF								+	

Plant remains from other features

Key:

Habitat	Quantity
A= cultivated ground	+ = 1 - 10
B= disturbed ground	++ = 11- 50
C= woodlands, hedgerows, scrub etc	+++ = 51 -100
D = grasslands, meadows and heathland	++++ = 101+
E = aquatic/wet habitats	P = present
F = cultivar	

Appendix 4 Radiocarbon dating

Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

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

RADIOCARBON DATING CERTIFICATE

18 December 2013

Laboratory Code	SUERC-49765 (GU32332)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	P3798 Redhill, Salop
Context Reference	30
Sample Reference	P3798 / 30 / 5
Material	Charcoal : Corylus avellana
$\delta^{13}C$ relative to VPDB	-26.9 ‰
Radiocarbon Age BP	1799 ± 27

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

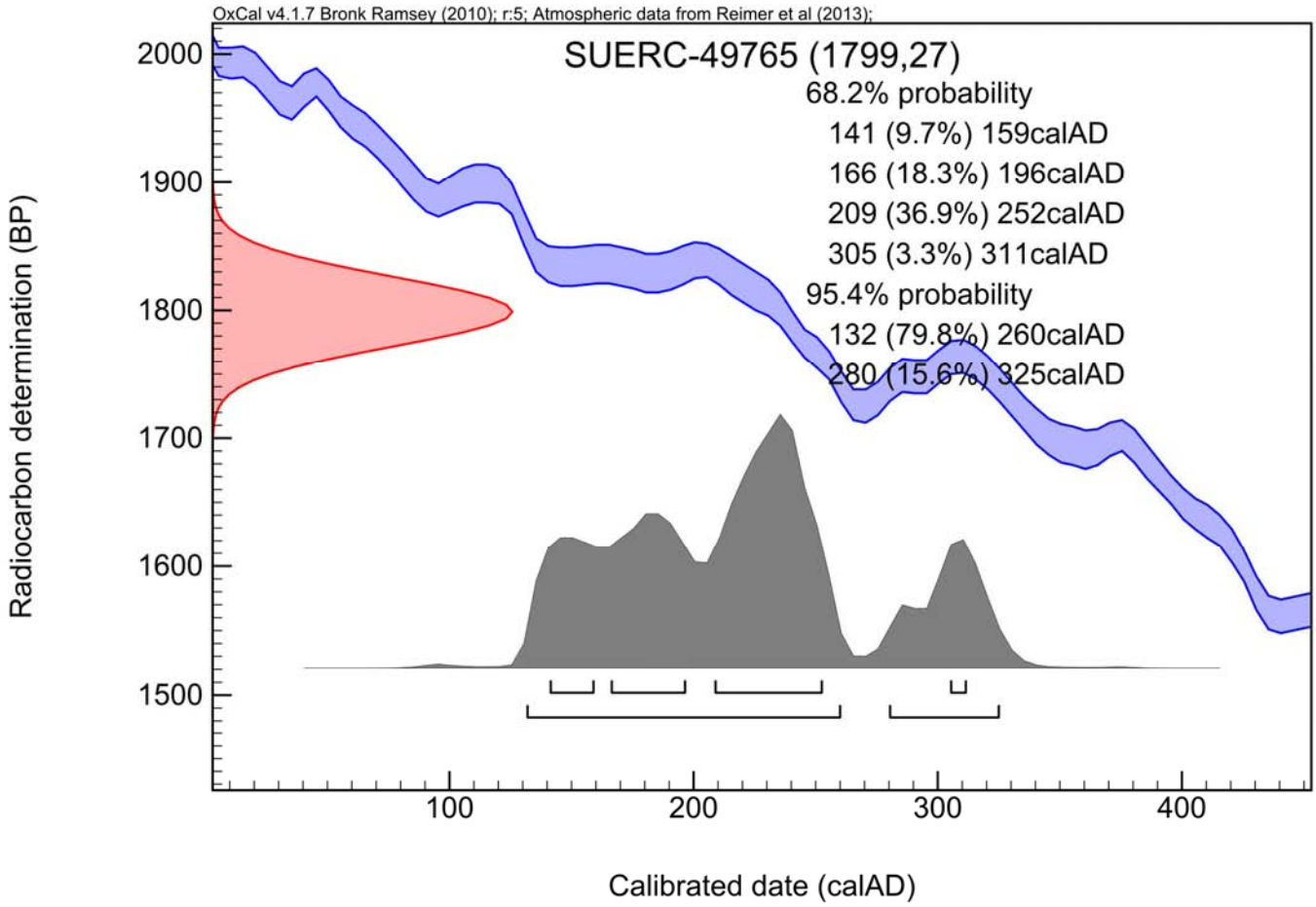
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

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

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

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

RADIOCARBON DATING CERTIFICATE

18 December 2013

Laboratory Code	SUERC-49766 (GU32333)
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	P3798 Redhill, Salop
Context Reference	416
Sample Reference	P3798 / 416 / 70
Material	Charcoal : Corylus avellana
$\delta^{13}C$ relative to VPDB	-25.3 ‰
Radiocarbon Age BP	1934 ± 32

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

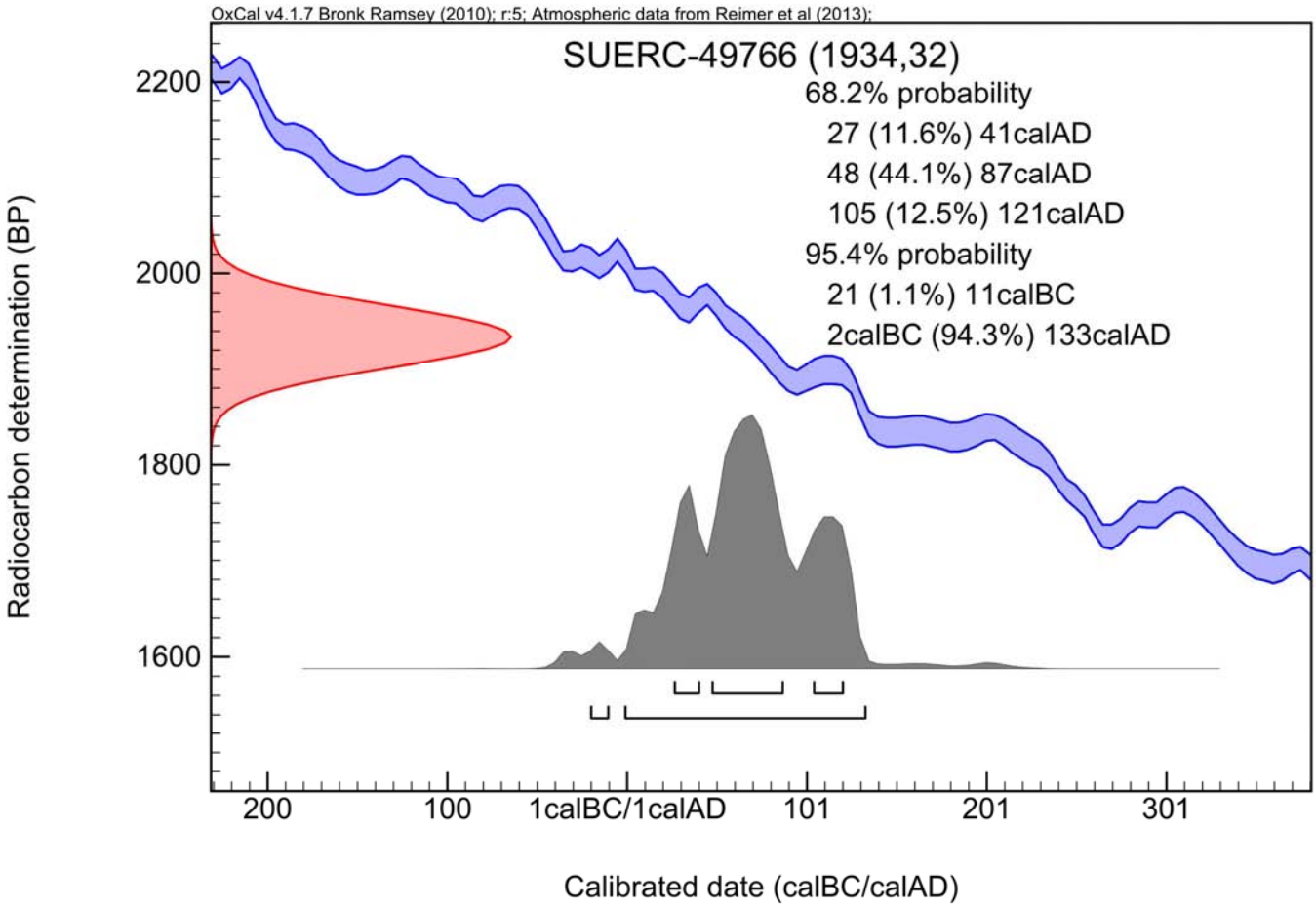
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

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

Conventional age and calibration age ranges calculated by :- Date :-

Checked and signed off by :- Date :-

Calibration Plot



Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

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

RADIOCARBON DATING CERTIFICATE

18 December 2013

Laboratory Code	GU32334
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	P4019 Hanbury Rd, Droitwich, Worcs
Context Reference	475
Sample Reference	WSM47458 / 475 / 2
Material	Seed : Rumex sp
Result	Failed: insufficient carbon.

N.B. Any questions directed to the Radiocarbon Laboratory should quote the GU coding given above.

The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Checked and signed off by :- Date :-

Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

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

RADIOCARBON DATING CERTIFICATE

18 December 2013

Laboratory Code	GU32335
Submitter	Nick Daffern Worcestershire Archaeology The Hive, Sawmill Walk The Butts, Worcester WR1 3PB
Site Reference	P4019 Hanbury Rd, Droitwich, Worcs
Context Reference	534
Sample Reference	WSM47458 / 534 / 8
Material	Seed : Rumex sp
Result	Failed: insufficient carbon.

N.B. Any questions directed to the Radiocarbon Laboratory should quote the GU coding given above.

The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Checked and signed off by :- Date :-

Scottish Universities Environmental Research Centre

Director: Professor R M Ellam

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

RADIOCARBON DATING CERTIFICATE

14 July 2014

Laboratory Code	SUERC-54004 (GU34351)
Submitter	Suzi Richer Worcestershire Archaeology The Hive, Sawmill Walk, The Butts, Worcester,, WR1 3PB
Site Reference	P3798 Redhill
Context Reference	526
Sample Reference	P3982/526/77
Material	Charcoal : Corylus
$\delta^{13}C$ relative to VPDB	-24.8 ‰
Radiocarbon Age BP	2003 ± 26

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

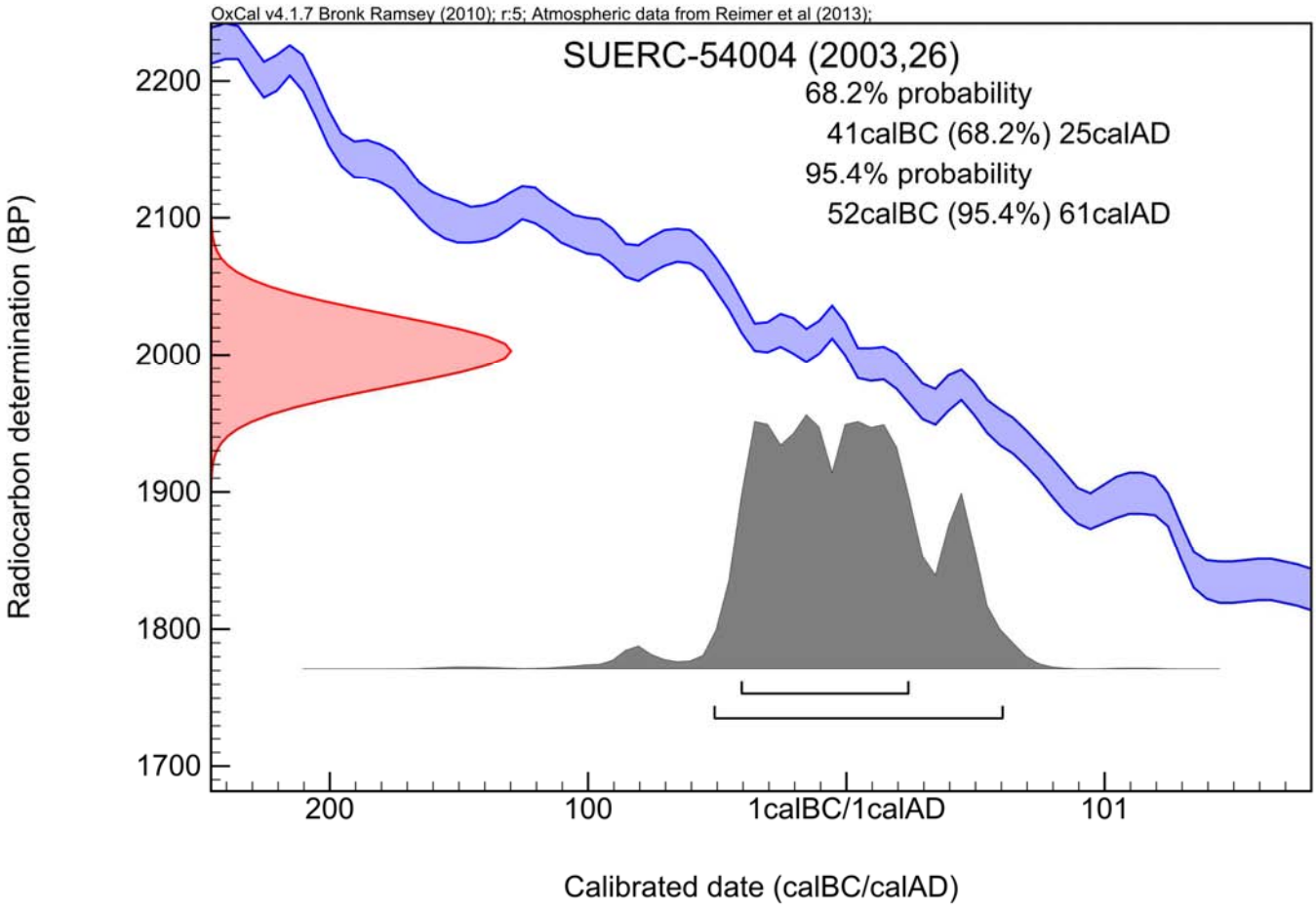
The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

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

Conventional age and calibration age ranges calculated by :- Date :- 14/07/2014

Checked and signed off by :- Date :- 14/07/2014

Calibration Plot



Appendix 5 Context *tpq* dating

Shaded dates = likely contamination

Phase	Context group	context	Context_type	Fill of	*Tpq* start	*Tpq* end
0	0	0			0	0
0	0	2	Layer			
1	1	378	Fill		43	410
1	1	385	Cut		0	0
1	1	410	Fill	396	150	250
1	1	505	Fill	506	308	324
1	1	2009	Fill	2008	120+	410
1	1	5005	Fill	5006	C1st	C1st?
1	1	11005	Fill	11006	mid C1st	100
1	2	524	Fill	541	C1st	C2nd
1	2	525	Fill	541	43	410
1	3	81	Fill	67	43	410
1	3	82	Fill	67	50	80
1	3	85	Fill		50	100
1	3	246	Fill	249	C1st	C1st
1	3	248	Fill	249	43	410
1	3	3005	Fill	3004	43	410
1	3	3006	Fill	3004	50	85
1	4	350	Fill	349	C1st	C1st
1	5	336	Fill	335	50-80	early C2nd?
1	5	338	Fill	337	mid c1st	early C2nd?
1	5	340	Fill	339	50/70	100
2	6	2013	Fill	2012	43	410
2	7	503	Fill	504	C1st	C2nd
2	7	2006	Fill	2007	late C2nd	0
2	8	373	Fill	376	140	C3rd?
2	8	375	Fill	376	-	-
2	8	382	Fill	379	50	90
2	8	383	Fill	379	-	-
2	8	384	Fill	379	160	200
2	8	399	Fill	394	late C2nd	early C3rd
2	8	400	Fill	394	223+	410
2	8	401	Fill	394	Post Medieval	-
2	8	402	Fill	394	C1st	early C2nd
2	8	404	Fill	395	160	250
2	8	407	Fill	395	43	410
2	8	507	Fill	508	late C3rd	C4th
2	8	509	Fill		223-5+	C3rd?
2	8	510	Fill	511	223-5+	C3rd?
2	8	515	Fill	514	mid C2nd	late C2nd

Phase	Context group	context	Context_type	Fill of	*Tpq* start	*Tpq* end
2	8	517	Fill	514	C1st	C2nd
2	8	520	Fill		C1st	C2nd
2	8	521	Fill	523	late C2nd	early C3rd
2	10	292	Fill	293	135	170
2	10	308	Fill	311	120+	300?
2	10	313	Fill	311	223+	410
2	11	139	Fill	133	C2nd	C2nd
2	11	205	Layer		50	85
2	12	48	Fill	44	43	410
2	12	52	Fill	53	late C2nd	mid C3rd
2	14	28	Fill	29	C1st	C2nd
2	14	32	Fill	33	43	410
2	14	34	Fill	35	43	410
2	18	45	Fill	273	-	-
2	18	47	Fill	273	43	410
2	19	27	Layer		120	190
2	19	271	Layer		C1st	C2nd
2	20	98	Fill	99	C1st	C2nd
2	20	120	Fill	103	43	410
2	20	121	Fill	105	120	410
2	20	122	Fill	123	43	410
2	20	124	Fill	125	120	190
2	20	126	Fill	125	43	410
2	20	138	Fill	137	43	410
2	21	197	Fill	198	50	100
2	22	130	Fill	131	43	410
2	22	132	Fill	131	C1st	C2nd
2	22	148	Fill	152	C1st	C2nd
2	22	149	Fill	152	43	410
2	22	151	Fill	152	mid C1st	mid C2nd
2	22	208	Fill	206	C1st	early C2nd
2	22	211	Fill	210	C1st	C1st
2	23	213	Fill	212	43	410
2	24	220	Fill	221	c1st	C1st
2	24	231	Fill	232	50	90/100
2	25	214	Fill	215	C2nd	C2nd
2	25	225	Cut		C1st	C2nd
2	25	6003	Fill	6004	43	410
2	26	70	Fill	72	43	410
2	26	76	Fill	77	120	200
2	26	78	Fill	80	C2nd	C2nd
2	26	90	Fill	92	43	410
2	26	178	Fill	179	-	-
2	26	180	Fill	181	C1st	C2nd
2	26	182	Fill	183	C1st	C2nd

Phase	Context group	context	Context_type	Fill of	*Tpq* start	*Tpq* end
2	26	188	Fill	189	-	-
2	26	190	Fill	191	-	-
2	27	322	Fill	321	-	-
2	27	327	Cut		223+	410
2	29	316	Layer		120+	120+
2	29	329	Layer		C2nd	C2nd
2	29	330	Fill	367	mid C2nd+	-
2	29	416	Layer		21 BC	133
2	30	110	Fill	112	C2nd	C3rd
2	30	111			?C1st	?C2nd
2	30	113	Fill	115	-	-
2	30	114			?C1st	?C2nd
2	30	257	Fill	258	C2nd	C2nd
2	30	259			100	200
2	30	261	Cut		120+	410
2	30	276	Fill	277	170	210
2	30	289	Fill	291	120	200
2	30	309	Fill	310	mid C1st	early C2nd
2	30	332	Fill	331	43	410
2	30	344	Fill	344	C1st	C1st
2	30	359	Fill	358	50	100
2	30	413	Fill	412	43	410
2	30	415	Fill	414	100	130
2	30	418	Fill	417	C1st	early C2nd
2	30	419	Fill	417	C1st	early C2nd
2	31	37	Fill	36	43	410
2	31	63	Fill	62	C1st	C2nd
2	31	65	Fill	64	C1st	C2nd
2	31	69	Fill	64	C1st	C2nd
2	31	86	Fill	87	C1st	C2nd
2	31	97	Layer		-	-
2	31	353	Fill	307	140	200
2	31	421	Fill	420	270	273
2	31	425	Fill	424	43	410
2	31	426	Fill	424	70	120
2	31	8004	Fill	8003	120	190
2	31	9003	Fill	9005	50	100
2	31	9009	Fill	9008	C1st	early C2nd
2	32	533	Fill	534	late c2nd	0
2	33	518	Fill	519	C1st	C2nd
2	33	535	Fill	536	C1st	C2nd
2	33	537	Fill	538	C1st	C2nd
2	33	539	Fill	540	C1st	C2nd
2	39	13003	Fill	13004	160	200
3	8	371	Fill	376	223	410

Phase	Context group	context	Context_type	Fill of	*Tpq* start	*Tpq* end
3	8	372	Fill	376	3rd late?	410
3	10	19	Fill	287	43	410
3	10	30	Fill	278	132	260
3	10	31	Fill	287	late C3rd	410
3	34	141	Fill	135	43	410
3	34	143	Fill	136	late C3rd	C4th
3	34	171	Fill	172	late C3rd	mid C4th
3	34	369	Fill	370	300	400
4	35	16	Layer		335	348
4	35	2003	Layer		43	410
4	35	7004	Layer		C1st	early C2nd
4	36	15	Layer		337	341
4	36	17	Layer		223	410
4	36	18	Layer		120	410
4	37	13	Layer		-	-
4	37	2002	Layer		170	210
4	37	3002	Layer		240+	250?
4	37	7003	Layer		Post Medieval	0
5	0	1	Layer		-	-
5	38	10	Layer		145	175
5	38	12	Layer		1714	1727
5	38	2001	Layer		43	410
5	38	3000	Layer		Post Medieval	0
5	38	8000	Layer		300	400
5	38	9001	Layer		200	400

Appendix 6 Archive inventory

P3798 main project (with P3765 evaluation data in parentheses)

The archive consists of:

418 (48)	Context records AS1
(14)	Trench record sheets
14 (2)	Field progress reports AS2
17(1)	Photographic records AS3
4	Black and white photographic films
709 (144)	Digital photographs
3 (1)	Drawing number catalogues AS4
210 (22)	Scale drawings
6	Context number catalogues AS5
5 (1)	Recorded finds records (AS13)
1	Sample number catalogues AS18
36 (4)	Sample records AS17
36 (4)	Flot records AS21
25	Standard boxes of finds
7 (1)	Plastic tubs of finds (metalwork/small finds)
1 (1)	Copy of this report (bound hard copy)
1	Matrix (CAD)

The project archive is intended to be placed at: Shropshire Museums Service.