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With contributions by
C. Antink, R. J. Brickstock, A. T. Croom, R. J. Cruse,
C. G. Cumberpatch, L. Dodd, E. M. Foulds, L. F. Gardiner, C. Pole,
A. Trentacoste, E. Wright and A. Zochowski

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Front cover: Drawing of a Roman altar recovered during the excavations at Saighton Camp. Back cover, top right: Drawing of a sherd from a Samian ware bowl (12, Dr. 37); decoration includes a seated stag in a double medallion within a panel, which sits above a panel with an eagle with its wings spread. Back cover, below: Cobbling 728 forming entranceway in eastern boundary ditch.

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Contents

List of Figures

List of Tables

Acknowledgements

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The work was accomplished under consultation initially with Mike Morris and latterly by Mark Leah, of Cheshire West and Chester Archaeology Planning Advisory Service. Thanks are given for their excellent advice and support throughout the project.

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Chapter 1

Introduction

Summary

Figure 1. Saighton Camp, Chester: site location

The former Saighton Camp (centred on NGR SJ 4290 6420) was built for training by the British Army just prior to the start of the Second World War. The camp was located on the plain to the west of the mid-Cheshire ridge, to the east of the River Dee and to the south of Huntington village, separated from the latter by the A55 (Figure 1). It remained in use by the military, in much reduced form, until the turn of the millennium. At its greatest extent in the early 1960s, it covered over 40 hectares, but demolition of redundant buildings started in the later years of that decade. Following withdrawal of the military, by 2005 the site was largely abandoned and the majority of the structures had been demolished.

The land is generally flat, lying at approximately 20m above Ordnance Datum, although there is evidence that local variations in the ground were levelled as part of construction of the camp, especially in its eastern portion.

The camp's redevelopment as housing started in that year and was undertaken in several phases by Commercial Estates Group, Taylor Wimpey, Bovis Homes, and Redrow. Northern Archaeological Associates Ltd (NAA) carried out the archaeological works for each phase and the subsequent post-excavation analysis. The archive resulting from this work has been deposited with the Grosvenor Museum, Chester.

The excavations revealed important and extensive Roman period remains located 3km from the Roman legionary fortress of Chester (Deva Victrix). Part of a high-status settlement of second- to fourth-century date, together with a regular field system laid out over more than 20 hectares, were encountered. The excavated settlement appears to be an ancillary area to a much larger site, the centre of which lies to the south and is believed to be a villa. This is the closest such site to Chester, and villas are notably rare in the region. The field system runs parallel with a modern road (Sandy Lane), suggesting the latter is a Roman route. The field system was probably laid out by the legion at Deva as part of the lands they controlled around the fortress.

Archaeological background: Roman Chester, Cheshire and beyond

By P.N. Wood

Saighton Camp lay 3km south-east of the legionary fortress of Deva Victrix at Chester (Figure 2), which was founded probably in AD74 or 75 as part of the Flavian advance into Wales and northern England. Although experiencing phases of less intensive occupation, it appears to have remained as a permanent military establishment, probably to the end of the Roman period. The extensive civilian settlement (canabae legionis) which soon grew up around the fortress also appears to have been occupied well into the fourth century (Mason 2012: 44–5, 50, 109–10, 227–8). The large military presence would have had a substantial impact not only in the immediate vicinity of the fortress, but also across a much wider area, and the spheres of influence of Deva and its legion (first Legio II Adutrix and after *c.* AD 90, Legio XX Valeria Victrix) can be detected as far away as Hadrian's Wall and the west coast of Wales. The legion had authority over a considerable number of auxiliary forts and their units, the extent of this command area denoted by evidence of legionary activity; stamped brick and tile, or inscriptions recording building work, have been found at many forts in north-west England and northern Wales (Mason 2012: 131–6). The legion itself established a major brick, tile and pottery works at Holt, 12km south of Chester, producing pottery from *c.* AD 85 until *c.* AD 130, with the production of building materials continuing into the third century (Grimes 1930: 48–52; Mason 2012: 158–62).

The Roman state – with Deva as its regional centre – also appears to have taken control over many natural resources, establishing or developing local industries (including agriculture) to exploit them in Cheshire, Lancashire and north-east Wales (Figure 2). This supported the needs of the legion at Deva and the other forts of the command area, which together would have been considerable and would probably have required additional imports from elsewhere in Britain and beyond (Carrington 2008: 20–7).

Stamped ingots deriving from north Wales show exploitation of the lead ores from that area, probably under the direct control of the provincial government, and production sites on the north Welsh coast have been identified at Prestatyn and Pentre (Mason 2012: 134–5, 162–3). The site at Pentre contained a large stone-built house of second century date. This had several phases of rebuilding, including hypocausts and a bath suite, and has been interpreted as the house of a civilian or military official in charge of the lead industry in the area (O'Leary and Davey 1976: 146–51).

Salt was of great importance to both the Roman state and the army in particular, not only for food preservation but also tanning and dyeing, and production centres exploiting Cheshire's salt-bearing rock have been identified at Middlewich, Nantwich and Northwich (Shotter 2005: 42–5). Most evidence has been found for the late first and the second centuries, with some later activity into the late third or early fourth centuries (Arrowsmith and Power 2012: 34–5). At Middlewich, the relationship between an apparently early fort and vicus, and the latter's development for salt manufacture is unclear, but both salt production and building activity appear to have been most

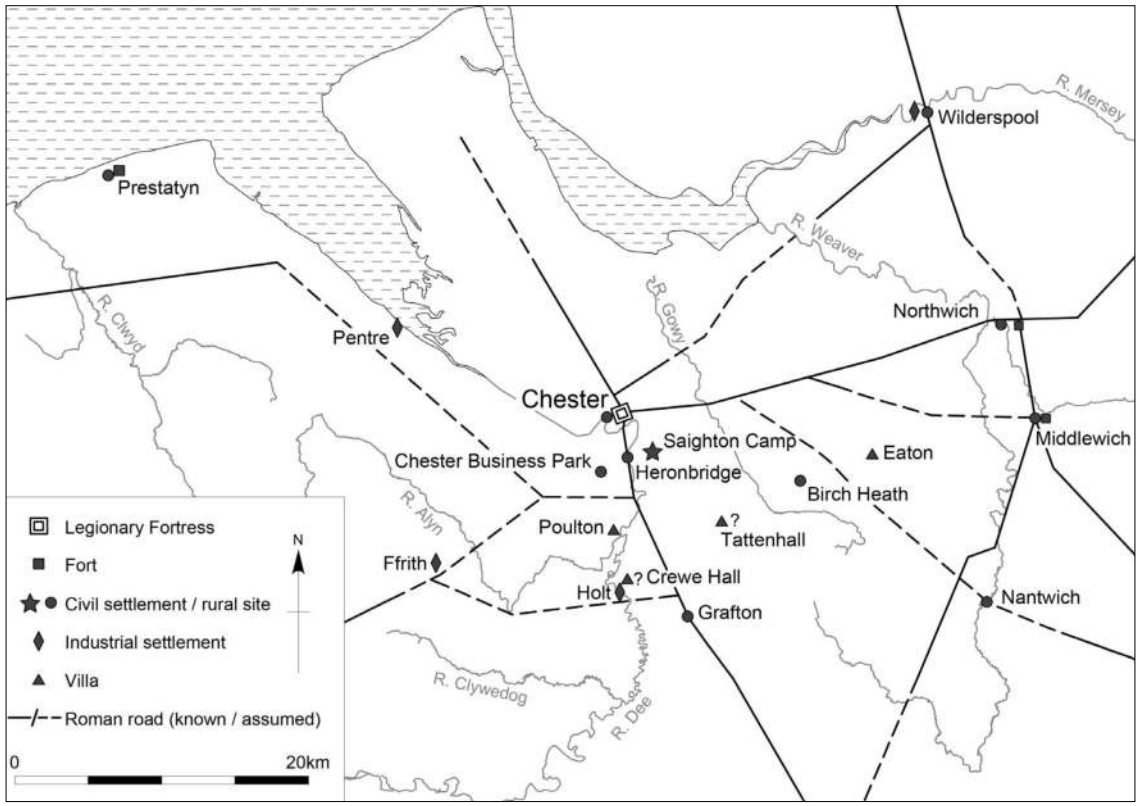

Figure 2. Roman period sites mentioned in the text (after Mason 2012)

intensive from the later first to the mid second centuries. Salt making was accompanied by pottery production, and the tanning and working of cattle hides has also been identified. Occupation later than this suggests that salt production occurred at many smaller sites rather than at Middlewich itself (Garner and Reid 2009: 77–80).

Further north, similar settlements were established along the main Roman route (King Street), which at least in their earliest stages seem geared to the needs of the military. The closest to Chester was Wilderspool, apparently established in the early AD70s, possibly as a military supply depot. Several phases of construction have been recognised in the main roadside settlement, and supply of the army appears to have been central to its function. Metalworking, principally ironwork, is well-documented, along with pottery and tile manufacture. A mansio or villa lay *c.* 300m to the north-east of the main area. Activity in the main settlement appears to have declined sharply after the AD320s, but the villa-like site continued to be occupied into the early fifth century or beyond (Rogers 2007: 23–51).

The supply of the dietary staples of the troops – cereals and meat, both on the hoof and preserved – was of primary importance to the provincial authorities. Calculations of the grain demands of the army and urban civilian population in the region suggest the need for many thousands of tonnes per annum (Carrington 2008: 18–30). The very large quantities of meat, of which cattle are still seen as the dominant species for supply to military sites, has led to the argument that the Cheshire Plain could have been developed for meat production, especially with the presence of the salt deposits (Philpott 2006: 69). Exactly what relationship Deva had with the salt, iron and other production settlements is unclear, but with reference to salt production, it has been speculated that the industry could have been run directly by a procurator, or perhaps leased to private individuals (Shotter 2005: 43).

In addition to its control and interests in the wider area, the garrison was likely to have had direct control of land around the fortress, known as the prata legionis ('meadows of the legion'). These are known from legionary fortresses elsewhere in the empire, and where indications of their size can be made, the borders may have been many kilometres from the fortress. This land was appropriated for a number of reasons, but arguably the most important (hence the name) was to provide grazing land for the legion's many hundreds of draught animals, mounts for cavalry and officers, and herds of livestock for fresh meat. Later references to lands controlled by a legion often use the term territorium and are associated with various officials for particular functions and duties (Mason 1988: 164–5, 174–5).

Outside the fortress and canabae, and in the more immediate area of Saighton Camp (approximately 1.5km west of Saighton Camp), a large nucleated roadside settlement lay at Heronbridge, on the west bank of the river Dee on the Roman road running south from Chester (Figure 2). This site, which stretched for nearly 1km along the road, appears to have been founded in the late first century and continued to be occupied into the fourth century. A rock-cut quay was created in the early second century, which was later adapted as part of a cemetery from which several stone funerary inscriptions were recovered (Mason 2012: 128–30, 156–8, 207–11, 229). Heronbridge's location only 2km or so south of the fortress and especially of the canabae is of note, but the presence of large settlements close to a legionary fortress occurs at many sites elsewhere within the Roman empire. Various theories for the origin of these settlements have been proposed, but it is argued that in the case of Chester, Heronbridge lay within the territory of the local tribe – the Cornovii – rather than the prata legionis. This in turn would mean that the in this instance the prata lay to the east of the river Dee (Mason 1988: 174–8).

The only certain known villa in Cheshire lay at Eaton-by-Tarporley, *c*. 14km east of the former camp (Figure 2). Here, a rectangular timber building of possible early second-century date was succeeded, probably in the late second century, by a stone corridor-house with projecting wings and a bath suite. During the late third or early fourth centuries, the structure was altered considerably, with slate as the main roofing material (Mason 1983: 67–72). Finds of wall plaster and of brick and tile suggest the presence of more high-status stone buildings at Tattenhall, Poulton and Crewe Hall near Holt (Nevell 2003: 13; Carrington 2012b: 385).

Relatively few other rural settlements have been excavated in the hinterland of Chester. Sites investigated in the wider area of Cheshire and Merseyside, suggest that the main form of settlement was enclosed farmsteads. Some continued from the late Iron Age but their number increased significantly in the late first and early second centuries. Two significant excavations of such sites have taken place close to Chester and Saighton Camp at Birch Heath and Chester Business Park (Figure 2).

At Birch Heath *c*. 11km south-east of Saighton Camp, the settlement appears to have been founded in the late first century, although the excavated area may initially have been used for agriculture. Three sub-circular structures, of probable second-century date, may not have been dwellings and were linked to irregular enclosures, suggesting a larger settlement nearby. Occupation continued until around the mid-third century, but another sub-circular structure used for metalworking appeared to be late sixth- to early eighth-century in date (Fairburn 2002: 104–9).

At Chester Business Park, south of the fortress and 4km south-west of Saighton Camp, several phases of Roman period field system and accompanying structures were found, together with a section of metalled road. The settlement appeared to have late Iron Age origins, but most of the evidence was of late first- or second-century date, with some later material suggesting occupation into the early fourth century. The excavated area was again thought to be peripheral to nearby settlement. The field system had a substantial ditch defining the northern extent of the site, interpreted as a boundary ditch to keep livestock out. Parallel ditches, rectilinear enclosures and

a possible stock enclosure containing a well and waterhole were also found, all of which suggested livestock management, and that the system was in use for over a century (Lightfoot and Martin 2004).

Prior to redevelopment of Saighton Camp, the only evidence for Roman period activity within the vicinity was a number of recorded coin findspots. A small bronze issue of Constantine II was recovered during the construction of Saighton Camp in 1938–9. A silver denarius of Lucius Verus and an illegible bronze issue were discovered on nearby Rowton Moor in 1889, and a sestertius of Vespasian and a denarius of Hadrian were recovered in association with an undiagnostic lead disc to the north-west of Huntington Hall (Northern Archaeological Associates 2005: 4–5).

Chapter 2

Results of the Excavations

Introduction

Archaeological investigation revealed the northern part of an extensive and complex Roman period settlement, divided into a number of enclosures. The contemporary field system, identified over an area in excess of 25 hectares, lay to the north and west of the settlement (Figure 3).

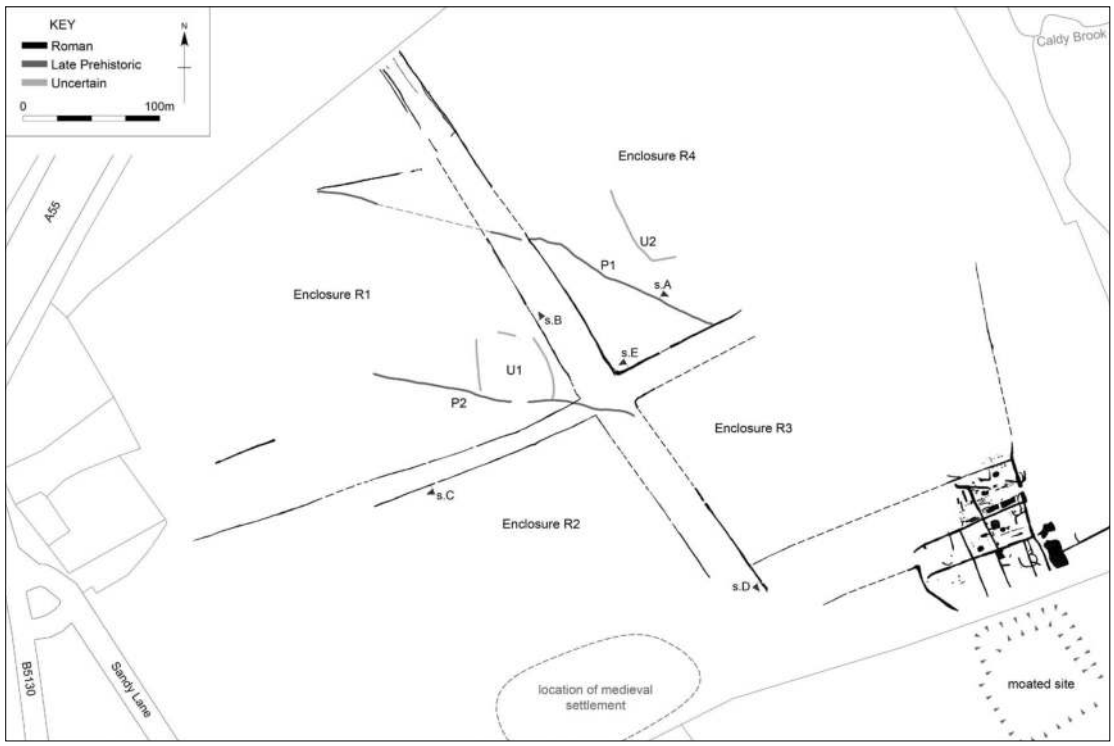

Figure 3. Roman and prehistoric remains

The excavation covered approximately half of the former Saighton Camp's full extent, excluding areas outside the current development boundary, wooded ground and grassed areas retained within and around the development, and areas where army activity had completely removed earlier ground surfaces. The resulting area of investigation was concentrated within the central and southern parts of the former camp.

The results have been divided into a prehistoric (Phase 1) and three Roman phases (2 to 4), with one Roman phase subdivided into two sub-phases (Phases 3A and 3B). Phase 1 relates to the field system area, while the three Roman phases apply to the settlement and the field system. This division reflects the varying use of the excavated part of the settlement, namely initial activity (Phase 2), establishment and use of the enclosure system (Phases 3A and 3B) and decline and abandonment of the enclosures (Phase 4). Although the Roman field system was extensive, little dating evidence was recovered and it was not possible to assign any of its main elements to any one of the phases identified in the settlement.

Field system

By P.N. Wood and C. Pole

Evidence of land division from a number of periods was encountered. This included part of a medieval settlement and associated boundaries (Teasdale *et al.* 2018) and post-medieval divisions, at least one of which predated the enclosure fields seen on early mapping of the area (Northern Archaeological Associates 2013: 15–16). The earliest remains comprised limited evidence of undated boundaries stratigraphically earlier than the Roman period field system. The Roman field system consisted of two trackways, aligned from north-west to south-east and north-east to south-west, which met at a crossroads (Figure 3). These formed the corners of four large enclosures (labelled R1-4), some with internal divisions. The largest (R1) enclosed an area of at least 8.4 hectares. At least part of the field system appears to have continued in use during the late medieval period and perhaps afterwards (see below).

Ground levelling during the construction and use of Saighton Camp had heavily truncated large parts of the Roman field system. In places the ditches survived as little more than soil marks. The extent of truncation was confirmed by ridge and furrow, which was clearly upstanding in some areas of the site on early post-war aerial photographs and therefore likely to have formerly been present in other areas. Although the bases of furrows were found on part of the Roman settlement in the south-east part of the excavation, elsewhere the only evidence was the remains of ceramic field drains installed in their bases. Given this level of truncation, many smaller subdivisions and other features of the field system must have been lost. Artefactual and palaeobotanical evidence, excluding occasional post-medieval finds, was largely absent. Some features have therefore been assigned to the Roman period based on their orientation with the ditches of the Roman field system.

Phase 1: Prehistoric ditches

The earliest phase of activity comprised two ditches (P1 and P2), on roughly parallel, west-north-west to east-south-east alignments (Figure 3). Although neither ditch contained any finds, they were cut by the Roman field system. Together with their completely different alignment, this suggest a prehistoric date for these features.

Ditches P1 and P2 were sinuous in plan, with the distance between them narrowing from approximately 116m to 84m from west to east. The ditches were of a similar depth (maximum 0.35m), although both survived in some areas as little more than soil marks. Both ditches had similar U-shaped profiles (Figure 4, section A), were up to 1.1m in width and contained a variety of clay-silt fills.

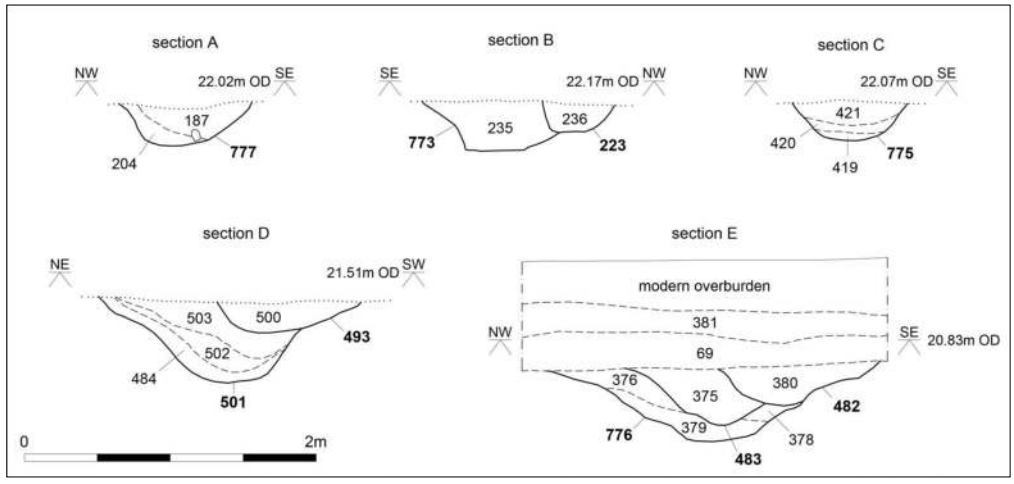

Figure 4. Roman and prehistoric field system sections

Phases 2 to 4: Roman field system

The trackways which defined the four enclosures produced no evidence of metalled surfaces. Occasional small rounded stones were found in the ditch fills, and given the truncated nature of the ditches themselves, it is assumed that any track metalling had been completely removed by later activity. The most extensive remains of the trackside ditches were found in the northern and western parts of the site, although even here the course of ditches could not be traced entirely and are in places inferred (Figure 3). No evidence for the trackside ditches was found in the eastern part of the site. Here, extensive disturbance had been caused by the presence of large, post-medieval marl pits and subsequent attempts in the twentieth century to fill them and stabilise the area for use as a parade ground.

Direct dating evidence from the trackway ditches was limited to a single fragment of samian ware of mid-second to third-century date, a trumpet brooch, two sherds of first- to second-century coarseware pottery and at least twelve fragments of brick and tile of Roman date. Another fragment of samian ware and a sherd of mortarium were also recovered from later buried soil layers.

In areas where both flanking ditches could be traced, the north-west to south-east track was *c.* 20–29m wide, and the south-west to north-east track *c.* 13.5–22m. The ditches varied considerably in size and in profile. They were up to 2m wide and 0.7m deep, but more typically 0.5–1.1m wide and 0.05–0.45m deep (Figure 4, sections B to E). Flat or U-shaped bases were common and most had two or three silty fills, suggesting they had been open for some time. Recuts of the ditches were seen in several areas. Both sides of the north-west to south-east track had been recut along the entire section north of the crossroads. At its northern end, although on a similar alignment, the recuts were slightly sinuous in plan and the successive ditches separated for a distance. In the area of the crossroads, one ditch had been recut twice (Figure 4, section E) and the earlier of the two recuts contained a near complete medieval pot of fourteenth- or fifteenth-century date. The vessel lay near the base of the cut and was thought to have rolled into the open ditch, although it was found upright (Northern Archaeological Associates 2013: 9). Presuming it was not in an otherwise unrecognised pit, this evidence suggests that at least parts of the trackway may have remained in use into the post-medieval period. Supporting this premise, occasional fragments of medieval pottery were also recovered elsewhere in the upper fills of the trackside ditches and a medieval ditch ran parallel with part of the north-west to south-east track.

The western enclosure (R1) created by the trackways would have encompassed an area of at least 8.4 hectares (presuming it was roughly rectangular) and its defining ditches can be traced for the largest distance (up to 300m). Two possible sub-divisions of the enclosure were noted, based on their generally parallel alignment to the southern ditch. They were relatively large, measuring up to 1.7m wide and 0.65m deep, but could only be traced for comparatively short distances (up to *c.* 50m).

The observed part of the southern enclosure (R2) was much smaller area than the western enclosure, extending to at least 3.0 hectares. No likely Roman period features were identified within it, although the remains of the medieval settlement were located at the southern corner of the development area.

Relatively little of the trackside ditches survived for the eastern enclosure (R3), which extended to at least 1.7 hectares. The Roman settlement lay in this part of the site, and the northern boundary ditch of the settlement appeared to continue as a subdivision of this enclosure. Three more ditches at the edge of the settlement also continued beyond it to the south-west, north and north-east. Although lying at a slight angle to the closest trackway elements, the ditches showed that the settlement was connected to the wider field system. The position of the northern ditch, as a continuation of the settlement's north-east corner, indicated that the trackway probably continued

east of the surviving remains and suggested that the eastern enclosure originally extended to *c* .6.3 hectares (Figure 3).

Only *c*. 3.3 hectares of the interior of the northern enclosure (R4) was observed, but the northern trackside ditch here could be traced for some 290m in length. No internal features of likely Roman date were identified (but see below).

Undated small enclosures

Three sides of a possible smaller enclosure were recorded within the area encompassed by the Roman Enclosure R1 (Figure 3, U1), with a posthole located within a possible entrance to the north-east. The ditches had been heavily truncated, measuring between 0.2m and 0.7m in width and up to 0.21m in depth. No finds were recovered from any of these features. Given the features' location in the corner of the larger Roman enclosure but proximity to prehistoric ditch P2, they could represent a small enclosure of either period.

Another possible enclosure, represented by a curvilinear ditch (U2), was located within Enclosure D and shared a roughly similar alignment. The ditch was heavily truncated and no finds were recovered from its fill.

Excavated settlement

By P.N. Wood

The excavated remains totalled *c*. 0.6 hectares in area, but it was clear that only part of the wider Roman settlement was uncovered (Figure 5). The north, west and east sides of the settlement were found, linked with elements of the field system, but the enclosures continued for an unknown distance to the south, in the area of the later moated site. The majority of the ditches in this area followed a rough grid pattern defining rectangular enclosures. The enclosure ditches varied considerably in size, but were generally 1–2m in width and 1m or less deep. Most of the larger ditches had two or three separate grey or brownish grey clay-silt fills.

A wide range of artefacts were recovered from the settlement, and several categories, such as wheel-thrown pottery and the stone and ceramic building materials, were found in significant quantities. This abundance contrasts with the recovery of only a single late third-century coin (from ditch 891, context 895) and few personal items/accessories such as a bow brooch (RF2), which was unstratified. This was despite regular metal detecting of unexcavated features and spoil. Other materials, such as animal bone and charred plant remains, were only recovered in low quantities due at least in part to acidic soil conditions resulting in poor preservation.

The degree of later truncation of Roman period features was in places severe. Later agricultural practices had resulted in an absence of floor surfaces within structures. However, the main disturbance to the remains was from demolition of the army camp buildings in the later twentieth century and burial on site of large quantities of building materials (Figure 5). Loss of several important ditch intersections meant that it was therefore difficulty to establish the development of the enclosure system. A further complication in interpreting the development of the settlement lay with the pottery, the main datable class of artefact. While some tightly dated groups of pottery were recovered, such as the Holt products (*c*. AD85–130) much of the material was local or regional, probably from the areas on the Cheshire Plain, and dated broadly to the second and third centuries. There also appeared to be a considerable proportion of residual material in later features. An additional complication was that few of the structures or other features either cut or had been

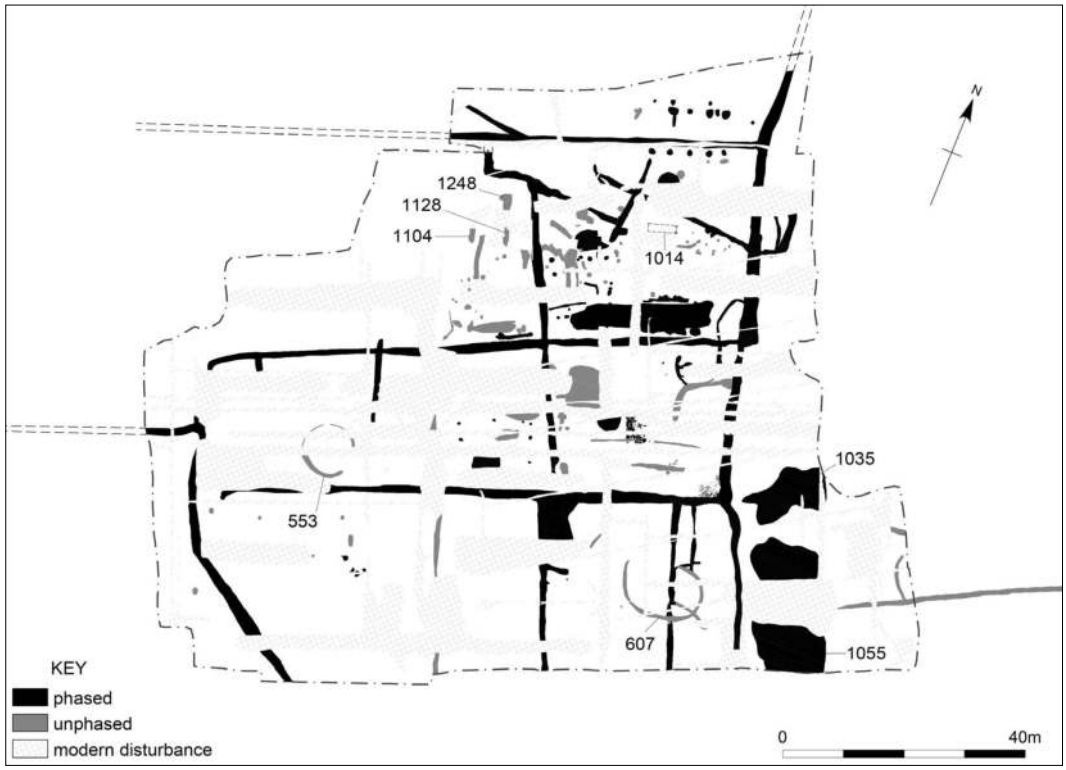

Figure 5. Roman settlement, all features and modern disturbances

cut by the enclosure ditches. As a result of these factors, many Roman features either remained undated or could be only tentatively associated with a particular phase of activity.

Phase 1: Prehistoric

The earliest evidence for occupation in the settlement area comprised two ring gullies representing possible roundhouses. One of these contained three fragments of wheel-thrown Roman pottery, together with a small quantity of hand-made pottery. This evidence presumably belonged to the Roman period, but continuing Iron Age traditions.

Phase 2: Primary occupation, early to mid-second century AD

The earliest clearly Roman activity in the settlement was represented by a collection of features which for reasons of stratigraphic relationships or artefact dating, do not correspond to the later phases of activity when the rectangular enclosures were in use. These features were spread across the majority of the excavated area and included four possible structures. A number of the features were orientated at significant angles to the later enclosures, but some suggest that one or two elements of the later system may have been laid out at this stage (Figure 6).

Near the northern edge of the settlement lay three ditches (1063, 1207 and 1321), running parallel to one another roughly east to west, not following the alignment of the later enclosures. The eastern end of 1207 turned to the north (as 1268) at the point where the later settlement boundary ran through. This section was then redefined on a slightly different angle. A northern return of ditch 1063 was cut by 1207. With the exception of 1063, which was only 0.15m deep, the ditches were between 1m and 1.3m wide and 0.4m to 0.5m deep with one or two fills (Figure 7, section F). The small quantity of pottery recovered from them included a jug made at Holt and a fragment of East Gaulish samian from ditch 1063, and small quantities of ceramic roof tile were recovered

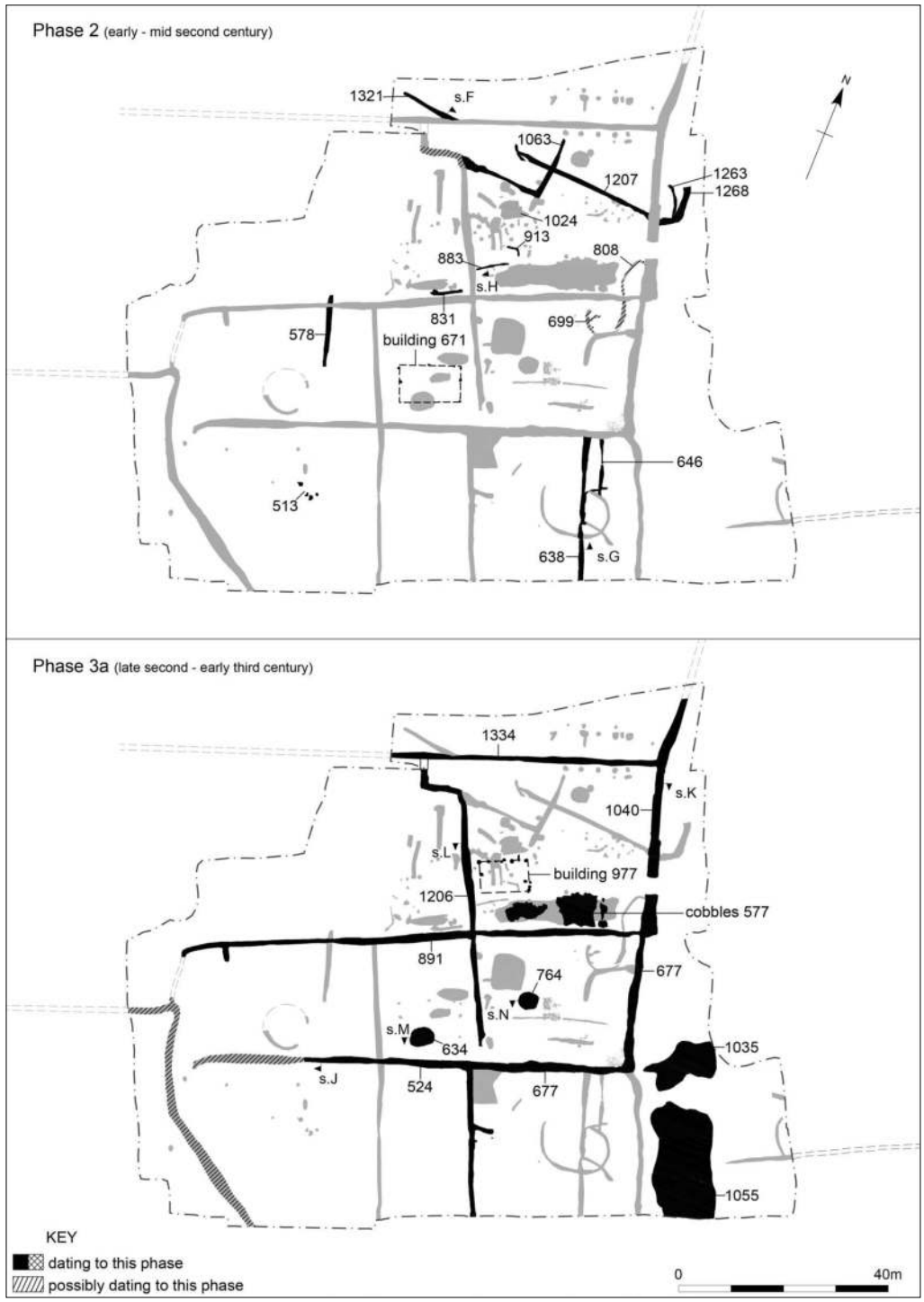

Figure 6. Phases 2 and 3A plans

from ditches 1207, 1268 and 1321. A piece of slate roof tile and a sherd of third-century mortarium were considered to be intrusive. The parallel nature and distance between the east to west aligned sections of ditches 1063, 1207 and 1321 suggested that they initially formed a short length of trackway.

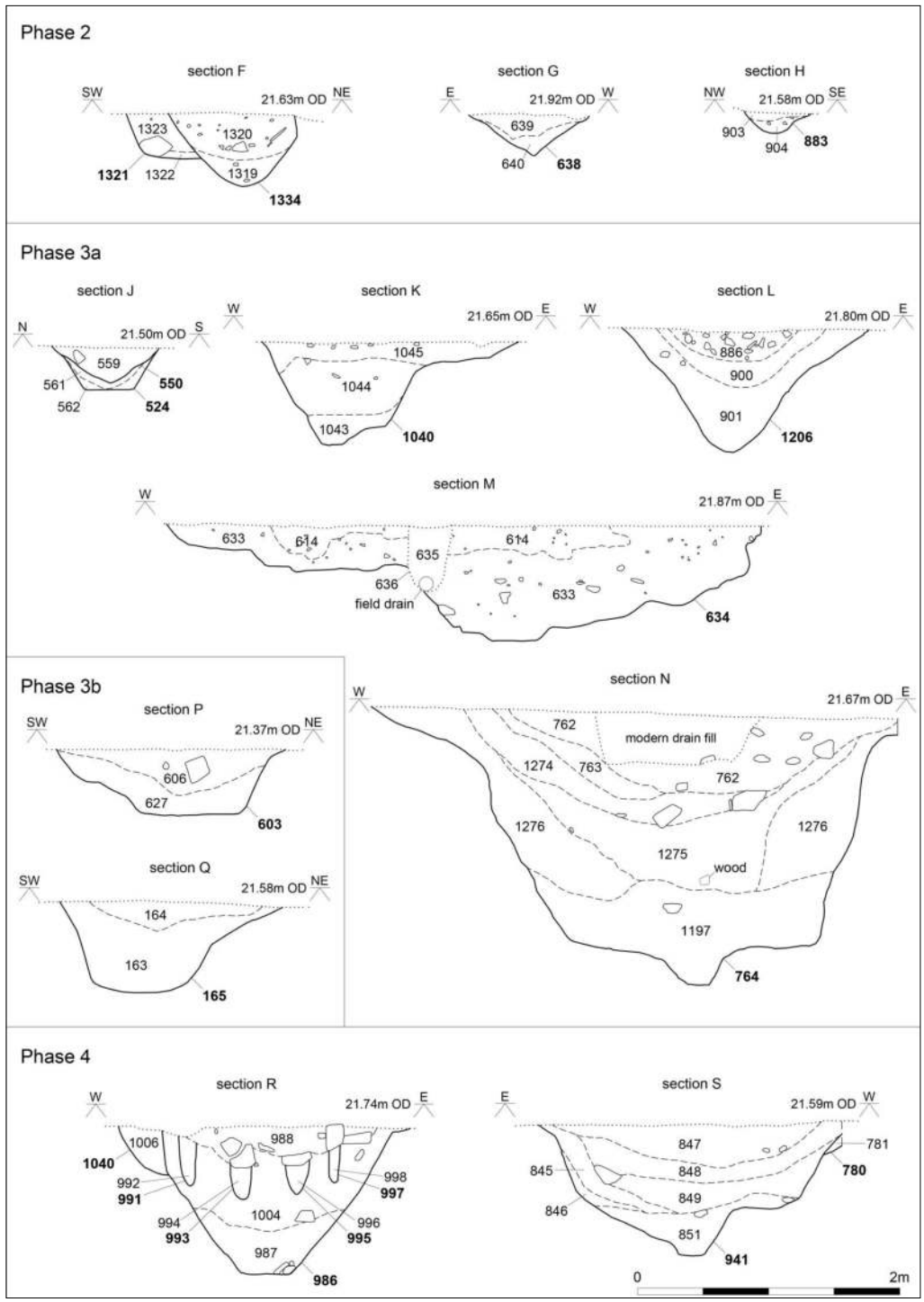

Figure 7. Feature sections

Some 12m to the south of this possible trackway were two short lengths of gully (883 and 831). They were typically 0.45m wide and 0.15m deep. Although in an area of extensive later disturbance, their relative positions indicate they may have formed eaves-drip gullies around a small sub-rectangular building (Figures 6 and 7, section H, 8 J and 9 section BJ). Extensive later truncation had removed any evidence for the building itself. A lead weight (RF39) for use with a large steelyard was recovered

from gully 913 (Figure 36), and gully 883 contained several fragments of table wares for dining, including part of a 'motto' beaker from Gaul (no. 172).

Another probable rectangular building (671) was located in the centre of the excavated area. Although itself undated, it was cut by a Phase 3A pit. The structure was represented by seven postholes (Figures 6, 8 D and 9, section BD) defining the northern, eastern and part of the western sides of the structure and suggesting it had been *c.* 11m long and *c.* 6.5m wide. The postholes varied in size (0.3m to 0.5m diameter) and the two postholes in the north-east corner (591 and 600) were almost twice as deep (0.4m) as the others, suggesting different levels of later localised truncation. The surviving evidence suggested that the building was supported by posts set at regular or semi-regular intervals. It may have had additional structural elements; however, the surviving remains indicated that it may have been an open-sided storage building, with a light-weight roof, such as wooden shingles (Perring 2002: 87–90, 120–1).

The remaining features dated to this first phase of Roman activity which possibly related to structures lay close to the eastern edge of the settlement. Despite extensive disturbance, what appeared to be an S-shaped gully (excavated as 699 and 808) lay to the south of the later entrance into the settlement (Figure 6, 8 A and 9, section BA). The feature was 0.4m wide and survived to a maximum depth of 0.25m. A small quantity of Roman pottery recovered from the gully could not be dated closely. Two large pieces of imbrex roof tile were also recovered from among a small dump of stones in one of the excavated segments. Much of the area defined by the surviving arcs of gully had been removed by later features or modern intrusions. However, it is possible that they represented drip gullies around two roundhouses, either joining or terminating adjacent to one another.

Two parallel linear features (638 and 646), running from north-west to south-east, were stratigraphically earlier than the later enclosure system and possibly dated from this phase (Figure 6 and 7, section G). Both terminated at their northern ends on the line of one of the enclosure ditches. The larger of the two ditches (638) contained a small quantity of coarseware pottery of limited dating potential, while a piece of roofing slate might have been introduced by one of the modern features cutting the feature. Ditches 638 and 646 lay close to the later eastern boundary of the settlement and ran on a similar alignment, as did ditch 578 further to the west. It therefore seems likely that some form of this eastern boundary was already in place at this early stage, but was subsequently removed by the later enclosure system.

Phase 3A: Establishment of the enclosure system, mid-second to mid-third centuries AD

The enclosure system, which represented the main evidence for the Roman settlement, appears to have been created largely as a single act (Figure 6). Where ditch intersections survived, the ditches curved rather than cutting one another. However, the enclosure may have referenced some earlier features. As noted above, at least part of the eastern boundary may have already been present in some form in Phase 2 (early to mid-second century), and it was noted that ditch 1206 forming part of the enclosure system incorporated a distinct 'kink' where it followed the orientation of a Phase 2 ditch (1053).

Although few of the new ditches contained closely datable finds, it seems that the enclosure system was laid out in the middle of the second century and, although modified, continued in use until some point in the fourth century. Due to later truncation it is unclear if the ditches had associated banks, fences or hedgelines.

The northern and eastern limits of the enclosure system were clearly defined (Figures 3 and 6). While no direct link could be made, ditch 1334 aligned with the Roman field system to the west (Figure 3). The western side of the enclosure system, which did not follow the general orientation

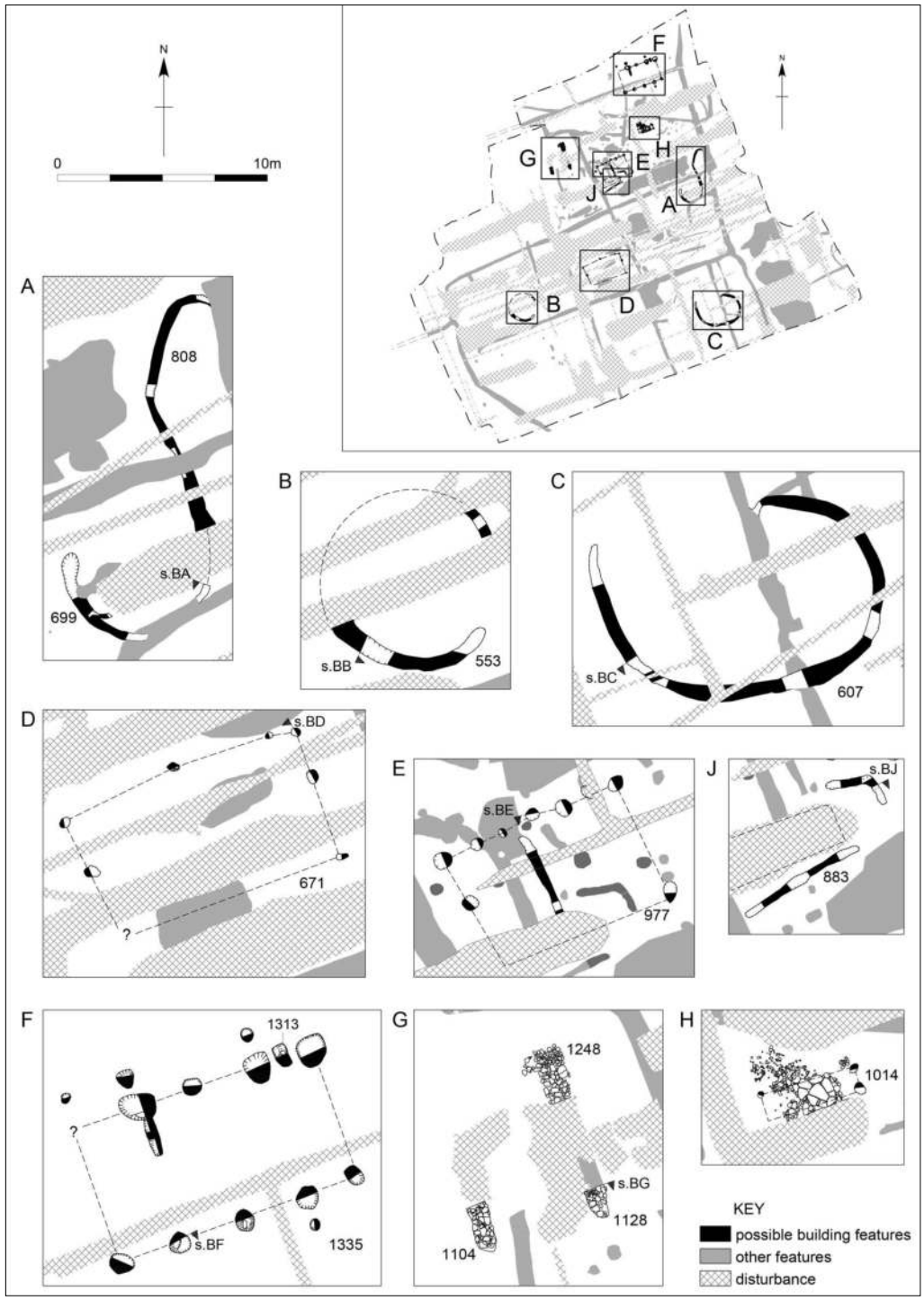

Figure 8. Excavated structures

of the enclosures, was dated to the subsequent sub-phase 3B. It is possible that this ditch followed (and had obliterated) a boundary of second-century date, but the western edge of the enclosures may have remained open at this stage. A more certain entrance into the enclosures from outside lay within the northern part of the eastern boundary. The original size of this entrance is unknown as a result of redefinition in the fourth century (see below).

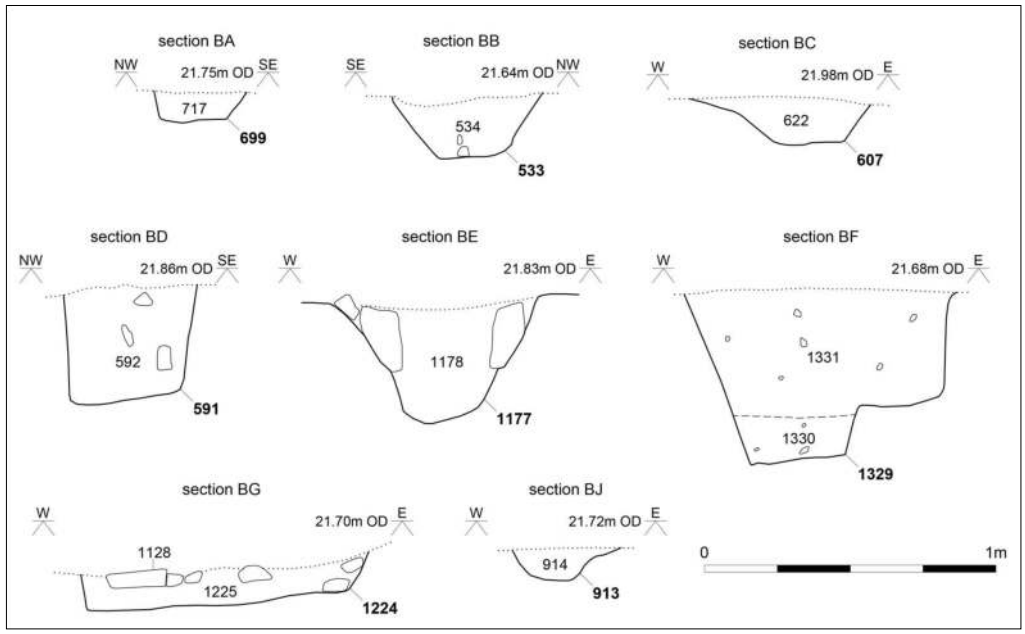

Figure 9. Excavated buildings, sections

The southern part of the eastern boundary also appears to have been open at this time. The area to the east contained two extensive (one over 20m in size) but shallow (0.2–0.3m) areas of silty material (1035 and 1055) in natural hollows, and both deposits contained a small quantity of Roman period finds, including pottery of second- to third-century date (Figure 3). These deposits are thought to represent areas of permanently wet ground, unsuitable for agriculture or other uses and possibly forming the eastern boundary of the settlement when the enclosures are laid out.

The individual enclosure ditches ranged in size, from 1m to 2.5m in width and surviving to depths of between 0.5m and 1m. The eastern boundary (677 and 1040) was however more consistent in size over its course (*c.* 1.3m wide and *c.* 0.8m deep). The ditches also showed a range of profiles, although the eastern boundary and its return to the south-west (524) had a distinctive flat base (Figure 7, sections J, K and L, and 10).

Where dateable, the small quantities of pottery from the ditches was from the mid-second to mid-third century. However, the pottery recovered from the upper fill of ditch 1334, which formed the northern settlement boundary, produced a collection of pottery which included fragments of amphorae from North Africa and Campania in southern Italy, along with two black-burnished dishes (see no. 307). An unusually strong military character was noted for this group, which appeared to date to the late second century or the early third century. The material also included eight fragments of a possible lamp chimney (Figure 22). Small quantities of oak charcoal, some vitrified, were also recovered from this feature (from 1299 and 1320), along with a limestone roof tile.

Ditch 1206 at the western side of the enclosures also contained Roman pottery, but included a fragment of hand-made pottery. The primary fill of this feature included several fragments of imbrex, a disc quern fragment (RF53) and horse equipment in the form of a snaffle bit with jointed mouth-piece (RFs 63 and 64, Figure 36).

Figure 10. Enclosure ditch 524, showing building stone and slate in upper fill of recut 550

Ditch 1040, the northern part of the eastern boundary, produced small quantities of pottery of mid-second to mid-third century date. Pieces of tegula roof tile, slate and box flue tile, together with a fragment of a first- or second-century glass bottle and a pottery gaming piece (RF48), were recovered from its upper fills. To the south of the entrance in this eastern boundary, ditch 677 turned to the south-west and continued as 524. This part of the ditch contained a group of pottery datable to the late second century (*c.* AD170–200), including bowls/dishes of East Gaulish samian, a thin-walled bowl produced at Holt (no. 57) and a black-burnished jar/cooking-pot (no. 60).

A possible post-built structure (977) could be assigned to the initial use of the enclosures since it shared a similar alignment and cannot have been contemporary with the Phase 2 structure 883/913. The rectangular building lay in the northern enclosure adjacent to ditch 1206 (Figure 8 E and 9 section BE). The north-western wall line comprised six posts (935, 937, 940, 1022, 1101 and 1171), and there was a probable internal partition trench (1161). The postholes of the north-west wall averaged 0.6m in diameter, 0.45m deep and generally had a redeposited clay fill often with packing stones, with a shallow upper silt, probably introduced when the posts had been removed. The small quantity of pottery from the postholes can be dated to the second or third centuries. The possible internal partition trench survived to a depth of only 0.1m. The presence of many other posts and gullies in this area makes reconstruction of the building problematic. The line of the presumed south-eastern wall was lost due to modern disturbances, although one further posthole (966) of similar size to the others lay on the projected line of the south-west end wall. From the available evidence, a size of *c.* 9m by *c.* 4.5m is suggested for the structure, although no indication of its function survived.

A shallow pit or possibly a spread lying in a natural hollow (1024) was located near to the north wall of building 977. At *c.* 5m in diameter but only 0.1m deep, if artificial its function is unclear, but it was used at least in part as a place to dump refuse. It contained a quantity of oak hazel and heather charcoal, along with two charred buds of unidentified plant species. A possible tripod candlestick (RF61) was recovered from this deposit (Figure 36); these are often found on sanctuaries or military sites, and generally third or fourth century in date. Ceramics from this feature were dated to the first half of the third century and included a jar probably produced at Holt and a black-burnished ware cooking pot, together with a coarseware vessel with a graffito on it, depicting an animal (Figure 31).

A large, cobbled area (577) lay within the northern enclosure along its south-east side and survived over an area of *c.* 19m by *c.* 6m. It had been cut in several places by modern disturbances but appeared to have originally formed a single surface. It was covered by a possible midden deposit (576) which, although dated to Phase 4 and described under that phase below, contained a substantial proportion of earlier pottery and may have begun to accumulate as early as Phase 3A.

A water-gathering pit or shallow well (764) lay within the enclosure to the south. The pit was *c.* 4m in diameter and *c.* 2.1m deep (Figure 7, section N). The primary fill (1197) comprised redeposited pink clay containing pockets of dark organic silt, from which waterlogged remains of several plant species were recovered including goosefoot, bindweed and sedge (see Gardiner, below). Three charred emmer wheat glumes were also found along with four fragments of ceramic roof tile (imbrex). The character of this lower fill suggested deliberate backfilling. The upper fills were a mix of yellow or grey clays and silty deposits, suggesting further episodes of backfilling interspersed with phase of more natural silting. Datable finds were limited to one of the upper fills (763). This contained the remains of two samian bowls, a coarseware bowl, and a black-burnished dish produced in South Yorkshire. Other finds included a hub or nave-lining (RF34) from a wheel and a shard of bottle glass (RF28), together with eight fragments from a possible lamp chimney (Figure 22) of probable second-century date.

The final feature attributed to this sub-phase was a large pit (634). This had probably originally been oval, but it had been truncated to the north and south, the remaining part measuring 4.8m long and up to 0.85m deep. Apart from its size, the pit was unusual due to its very irregular profile, with a number of small undulations and 'steps' in the sides (Figure 11). The main sandy clay fill appeared to represent deliberate backfilling. The feature might represent an abandoned attempt to create a waterhole, given the irregular, unfinished appearance of its sides and base (Figure 7, section M). The upper silty fill contained an almost complete flagon (no. 325) manufactured at Holt (Figure 27).

Phase 3B: Adaptation of the enclosure system, mid- to late third century AD

The southern part of the enclosure system was partly recut and extended in this time (Figure 12). Only limited activity can be firmly linked to this period in the central and northern parts of the excavated area. It is therefore possible that the enclosures in these areas had gone out of use and the pottery evidence suggests that the northernmost ditch (1334) had largely filled by the later third century. However, the enclosure ditches were used to deposit building materials at some point in the fourth century, and the eastern boundary ditch was certainly maintained in some form throughout that period. Given this, and the number of undatable features which lay inside the enclosures, it seems likely that the boundaries were still in use, perhaps defined by hedges, although their ditches were not being maintained.

The southerly of the main east-west enclosure ditches (524) was re-cut (550) along most of its length, including its branch to the south-east. The ditch re-cut was in general shallower (up to

Figure 11. Clay extraction pit 634, showing uneven base and extensive modern disturbances to north and south

0.5m deep) than the original boundary, with an irregular or V-shaped profile (Figure 7, section J). Pottery from the ditch included some residual material but the assemblage probably dated to the first half of the third century, and had a noticeably military character (e.g. samian and black-burnished wares). Five domed hobnails were also recovered, along with a glass bead (RF11) and part of a lead dish (RF1) (Figure 36).

The south-eastern corner of the enclosure system, which previously appears to have been open, was defined with a new ditch (675), forming a new enclosure with an entrance between the north-western end of the new boundary and the north-eastern end of ditch 550 (Figure 12). At the western boundary of the settlement another ditch (603) was dug (or possibly re-dug, see above), forming a more irregular enclosure. Ditch 603 was up to 1.8m wide, 0.5m deep, and produced pottery of late third to fourth century date from its primary fill (627; Figure 7, section P). Although badly truncated, this ditch appeared to turn to the west, beyond which its course could be traced by an isolated element located within the wider Roman field system (Figure 3).

Phase 4: Decline and abandonment of the enclosures, late third to fourth centuries AD

The final phase of activity identified within the excavated portion of the settlement indicates that there was considerable contraction and abandonment not only of this part of the site but also of the presumed focus of the settlement to the south. The ditches of the enclosure system had silted up, certainly by the end of this phase and possibly earlier, including those elements re-dug or extended in the mid to late third century (Phase 3B). It is possible that any associated hedges were maintained during at least some of this phase, but it is clear that the system of ditches was abandoned. The ditches must have remained as shallow earthworks until the end of this phase,

Figure 12. Phases 3B and 4 plans

however, as they were used for the disposal of a large quantity of building materials from one or more demolished structures (see below).

The eastern boundary of the settlement was maintained.

The entranceway into the settlement was redefined by substantial but relatively short lengths (*c.* 8m) of flanking ditch (941 and 986, Figures 12, 13 and 14). Each was in excess of 2m wide, and over 1m deep. The northern ditch (986) contained two main fills, but four posts had been driven into the upper fill once the feature had largely silted up (Figure 7, section R). The southern ditch (941) had a more complex sequence of silt fills, and incorporated a distinctive flat step along its west side (Figure 7 section S and 14). A set of copper alloy tweezers (RF43) were recovered (Figure 36), and fragments of ceramic, slate and stone roofing tiles came from the fills of both ditches. Parts of the lower hind limbs of a juvenile sheep or goat had been discarded in the primary fill of the southern ditch 941. Closely datable pottery was limited to late first- and early second- century material (e.g. Wilderspool red-slipped ware and Central Gaulish samian). The two ditches were however stratigraphically the latest features in the boundary sequence and this illustrates the problem in dating many of the features, due to the lack of tightly datable ceramics and incorporation of residual material. Given this factor, these substantial features could only be dated to some point in the fourth century.

The presence of these flanking ditches shows that the eastern boundary to the settlement was still significant and must have been defined elsewhere in some way, perhaps by a fence or hedge. Despite their large size, the short length of the ditches flanking the main entranceway suggests that they were not excavated for defence, drainage or stock control. Their unnecessarily large size may imply that the entranceway had taken on some form of display or ceremonial function. While this would accord with the abandonment of the agricultural enclosures, it is not clear why such a visible statement was needed at the north-eastern edge of the Roman settlement. The other nearby features dated to this phase, which include building 1335, do not appear particularly high status or significant and their function was unclear (see below).

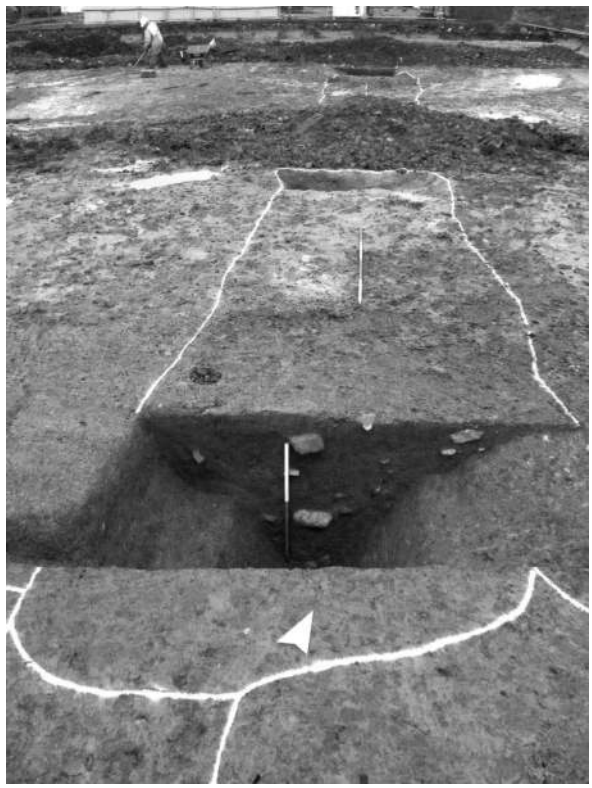

Figure 13. Entranceway ditches 941 (foreground) and 986, both marked with white paint

Another part of the boundary further to the south was also modified, the upper part of a *c.* 2.5m section of the filled-in ditch having been dug out and filled with rounded stones (728). This was presumably in order to create a crossing over the ditch and presumably indicates another entrance (Figure 15).

As noted above, dressed stone was encountered in the upper fills of the enclosure ditches at many locations in the excavated settlement, often accompanied by other building materials such as slate, ceramic and stone roof tiles, or brick fragments. Both individual stones and concentrations of rubble were recorded (Figure 16). In some places, the stone and other building material lay in a distinct brown silty upper fill. In other instances the materials were seen to lie in the top of sometimes quite deep ditch fills. The rubble suggests the demolition of one or

Figure 14. Southern terminus of ditch 941, showing distinctive profile

more buildings with stone walls (or at least stone footings) while the presence of flue tiles, some sooted, implies the existence of a hypocaust room. No building foundations or other evidence was found within the excavated site to account for the volume of this material, especially the building stone. The building materials were also spread over such a large area (almost all the ditches have at least some dressed stone within them), that it seems to represent a phase of deliberate site clearance presumably from the unexcavated area to the south.

One of the concentrations of rubble, found in ditch 597 near the western corner of the excavated area, contained a significant collection of carved stonework, all found within *c.* 3m of one another and presumably dumped along with the building material. The most unusual object was the lower part of a statue, comprising the legs and feet of a human figure, with possibly part of the fingers of one hand in another small fragment (RF23). The main part (legs and feet) was broken and badly weathered at the top (Figure 32). The statue could represent one of a number of figures, including the gods Mercury, Apollo, the hero Hercules or a genius (spirit). With the statue were two miniature altars, one complete, the other surviving as two fragments (RF14, Figure 33 and RFs 15 and 16, Figure 34). The complete example was 0.33m high and had no visible inscription, although the sides were decorated with a triangular-bladed sacrificial knife and a probable patera possibly with a bird-headed handle. Although heavily weathered, it was likely either to have been left blank or possibly had a painted inscription. Both the statue and altars are of second- or third-century date. The final piece of carved stone was a hypocaust pila, 0.71m high, fashioned from a single piece of stone (RF6, Figure 35). The stone had been altered, with a rectangular recess 0.06m deep carved into one end (presumably its upper surface). The secondary use of this is unclear, while it could have served as a statue base the piece was roughly finished and had no traces of plaster to hide this.

Figure 15. Cobbling 728 forming entranceway in eastern boundary ditch

Figure 16. Example of building stone deposited in the top of enclosure ditches

Little dating evidence was found to establish when the demolition and deposition of the building material occurred; however, late fourth-century material including grog-tempered pottery was found during an earlier evaluation in the shallow, uppermost fill of Phase 3B ditch 675 close to a concentration of building rubble (Northern Archaeological Associates 2008a: Figure 7, section Q). Pottery of late third- to late fourth-century date was also found in the upper fill (621) of the western boundary ditch 603 alongside a quantity of building stone.

The only certain building dated to Phase 4 lay at the northern edge of the settlement (Figure 8 F and 9, section BF). Structure 1335 had been constructed over the infilled northern ditch of the enclosure system (1334). Rectangular in form, it consisted of four pairs of post pits, with an additional fifth post at the south-western corner; however, no trace of a north-west corner could be detected. The post pits averaged 1.3m in diameter and 0.35m deep. Four

smaller postholes (averaging 0.6m wide and 0.15m deep), seemed to form the remains of outer rows, 1.25m to 1.5m beyond the main posts and presumably represented the remains of outer, non-load-bearing walls. Including these, the structure will have had overall dimensions of *c.* 12m by *c.* 9.75m. Several of the main post pits showed evidence for removal of the posts, usually in the form of secondary silty deposits which comprised the majority of the fills (Figure 9, section BF). A short internal gully (1295) suggested at least a partial subdivision of the structure into two areas, but no hearth or other internal features survived so the building's function remained uncertain. However, hammerscale was recovered from the upper fill 1331 of a single posthole (1329), which could tentatively indicate a function as a smithy. Pottery recovered from the same posthole, while mostly earlier wares, included five small fragments of a black-burnished ware dish of late fourth-century date (no. 314), giving a suggested *terminus post quem* for demolition of the building.

What appears to have been a water collecting pit or shallow well (1069), lay approximately 4m south of the building (Figures 12 and 17). This substantial feature, 3.5m in diameter and 1.65m in depth, had a step part way down its eastern side, probably for better access. It appeared to have been deliberately backfilled, and contained a substantial quantity of pottery. Although ceramic material from as early as the mid-second century was found, the secondary fill (1077) contained pottery datable to the first half of the fourth century including two black-burnished ware bowls (nos. 211 and 213). An upper fill (1071) contained material from the same vessels, together with examples of ceramic, stone and slate roof tiles. This upper fill was also one of the few deposits on the site where charcoal was recovered, including examples of oak, hazel and heather.

The largest single assemblage of pottery, and indeed of several other materials, was recovered from an extensive (*c.* 23m by c. 6m) dark spread of soil 576, which overlay the Phase 3A cobbled surface 577 near the eastern entranceway. This material contained 563 sherds (12.5kg) of pottery, including residual material such as central and eastern Gaulish samian wares and Holt-produced mortaria. However, fourth-century pottery was present, including Argonne colour-coated ware (no. 289). There was a notable lack of tableware vessels among the material.

A large proportion of the recorded finds were also recovered from context 576; none were closely datable and they have a date range from the late first to fourth century. The material included fragments from glass bottles for the transport and storage of liquids (RFs 4b, 31, and 35/46), while iron items included a complete hook (RF8), a hook/fitting (RF32), and a short knife with an antler handle (RF47 and 55; Figure 36). A fragment of thick cast lead sheet (RF9) and a lead plug were also recovered. The iron items could have been used in domestic and/or agricultural contexts. The presence of the cut pieces of lead suggests that it was being worked on the site. A considerable quantity of roofing materials was also recovered, mostly ceramic tiles (43 fragments totalling 4.1kg), but with occasional stone and slate fragments also present. Two pieces of box flue tile were also found, one of which was sooted. The largest assemblage of animal bone from the site also came from this deposit. Cattle accounted for over half the identifiable pieces, but equid bones (probably horse) and unworked deer antler, were also present.

Given the range of materials, this deposit, which was 0.2m at its thickest, was probably the remains of a domestic midden, presumably flattened and spread by later ploughing. As noted above, the midden and underlying cobbling here and elsewhere seem to have survived due to being in slight depressions in the natural clay. The inclusion of a significant amount of building materials also suggests that it was still in use when the stone building or buildings were demolished.

A much smaller (*c.* 4.5m by *c.* 4m) but similar deposit lay *c.* 30m to the south (642). Pottery from this spread again suggested a date of deposition from the late third- to mid-fourth centuries, and it contained more examples of ceramic roof tile and box flue tile were recovered (Figure 22, 1229). The distance between the two middens suggests that they represented two distinct stockpiles of waste, perhaps intended for spreading on nearby fields.

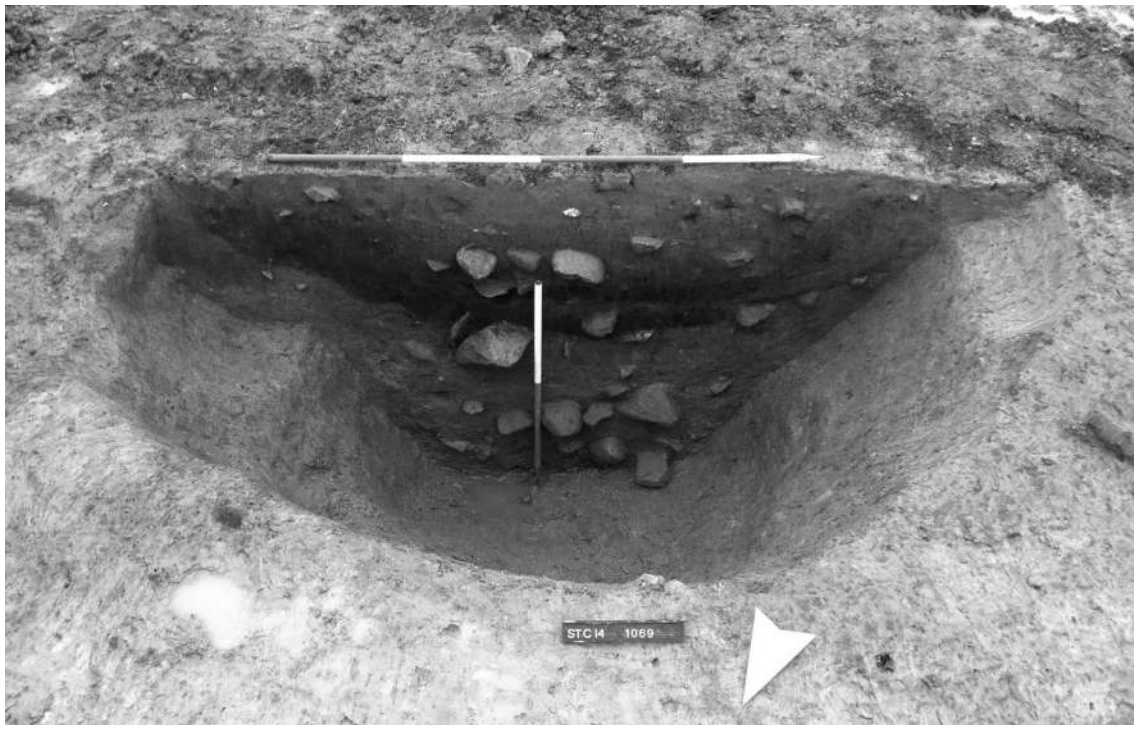

Figure 17. Water-collecting pit 1069

Unphased features

Many features could not be assigned a specific phase, due to lack of closely datable pottery or stratigraphic relationships (Figure 5). Unfortunately, these features included four of the probable structures.

Ring gully 553 lay towards the south-west side of the settlement (Figures 5 and 8 B and 9, section BB). It enclosed an area *c.* 7.4m in diameter, with an entrance gap facing east. The structure is assumed to have been circular, as only parts of the gully's arc could be traced. Modern disturbances could not account for this absence, and where it could be traced, the gully itself measured up to 1m in width and 0.35m deep (Figure 9, BB). Either the structure comprised two or more short lengths of gully with significant gaps between, or part had been deliberately backfilled with clean clay, making recognition impossible in the dry conditions in which it was excavated. No finds were recovered.

The other probable roundhouse (607) lay near the south-eastern limit of the excavation (Figures 5, 8 C and 9, section BC). While it has not been assigned to a phase, it cut the Phase 2 gullies 638 and 646, and therefore dated to either Phase 3 or 4 (mid-second century onwards). Three fragments of Roman period coarseware were the only finds. The gully was oval in shape, enclosing an area *c.* 12.1m east-west and *c.* 9.1m north-south, with a wide entrance (*c.* 6.5m) facing north. No internal features were found. While this structure could have been constructed at any point from the mid-second century, it was positioned reasonably centrally within one of the enclosures created by re-digging of part of the enclosures in Phase 3B.

Three short lengths of linear stone-packed foundation (1104, 1128 and 1248) were also found near the north-western edge of the settlement (Figures 8 G, 9 section BG and 18). Separated by a zone of twentieth-century disturbance, 1128 and 1248 may represent a single feature, *c.* 8m in length, or two shorter features. The foundations survived to lengths of between 1.45m and 2.45m (all had been truncated at one end). The cuts were 0.95m to 1.2m wide and were 0.2m deep, filled with angular pieces of sandstone. No finds were recovered from these features. Although 1104 and 1128/1248 shared the

same alignment, they did not seem to form foundations for a single, rectangular building, as they comprised discrete rectangular cuts, with no evidence of any similar features linking them. Rather, they seem to represent the discrete foundations for two or three platforms, supporting stone or substantial timber constructions of uncertain purpose.

The final structure (1014) survived as an area of paving comprising large slabs (up to 0.75m). There were further cobbles to the north-west, and the paving was flanked by four small postholes (1007, 1016, 1221 and 1223), two on each side (Figures 8 H and 19). Only a small quantity of undiagnostic pottery was recovered from the upper fill (1008) of posthole 1007. From their size (0.2–0.3m in diameter and 0.15m deep), the roof the postholes supported may not have been substantial, and there may or may not have been side walls. The structure was truncated to both north and south by modern disturbances. There were no signs of heating on the slabs or ground beneath to suggest it was the base of a hearth.

A final undated feature is of note. A hearth (1313) lay in line with the northern wall of building 1335 (Figures 8 F and 20). It was rectangular in shape, *c.* 1.2m by *c.* 0.7m in size, and 0.2m deep. Three flat stones lay in its northern end, all showing signs of being heated. (Figure 20). Part of a Nene Valley colour-coated beaker was found in the hearth. This fine ware vessel is dated to between *c.* AD 150 and *c.* 410. The hearth also produced one of the few notable collections of charred plant remains. Oak, hazel and heather charcoal were identified, all of which was vitrified. Barley, emmer wheat and other abraded cereal grains were also present and their poor condition like the charcoal indicates exposure to high heat. It is unclear whether the cereals were introduced accidentally or whether the hearth was used for processing grain, for example parching. Unusually high temperature in a hearth is often interpreted as something more than a small domestic hearth, suggesting its use for metalworking. Hammerscale was recovered from a posthole at the other end of building 1335, but was not found in the hearth or any of the nearby postholes. Given the wide date range for the recovered pottery, the hearth could predate or even postdate building 1335, although its location close to two posts of that building makes it less likely to have been contemporary.

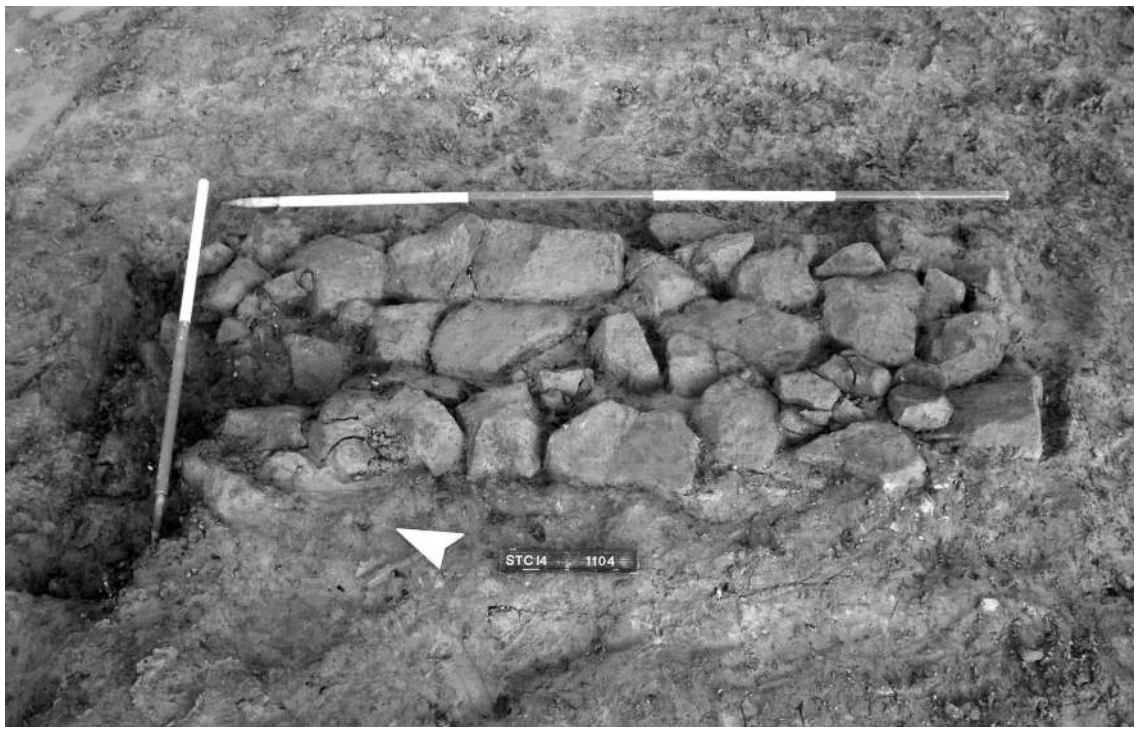

Figure 18. Sandstone foundations 1104, truncated at left side

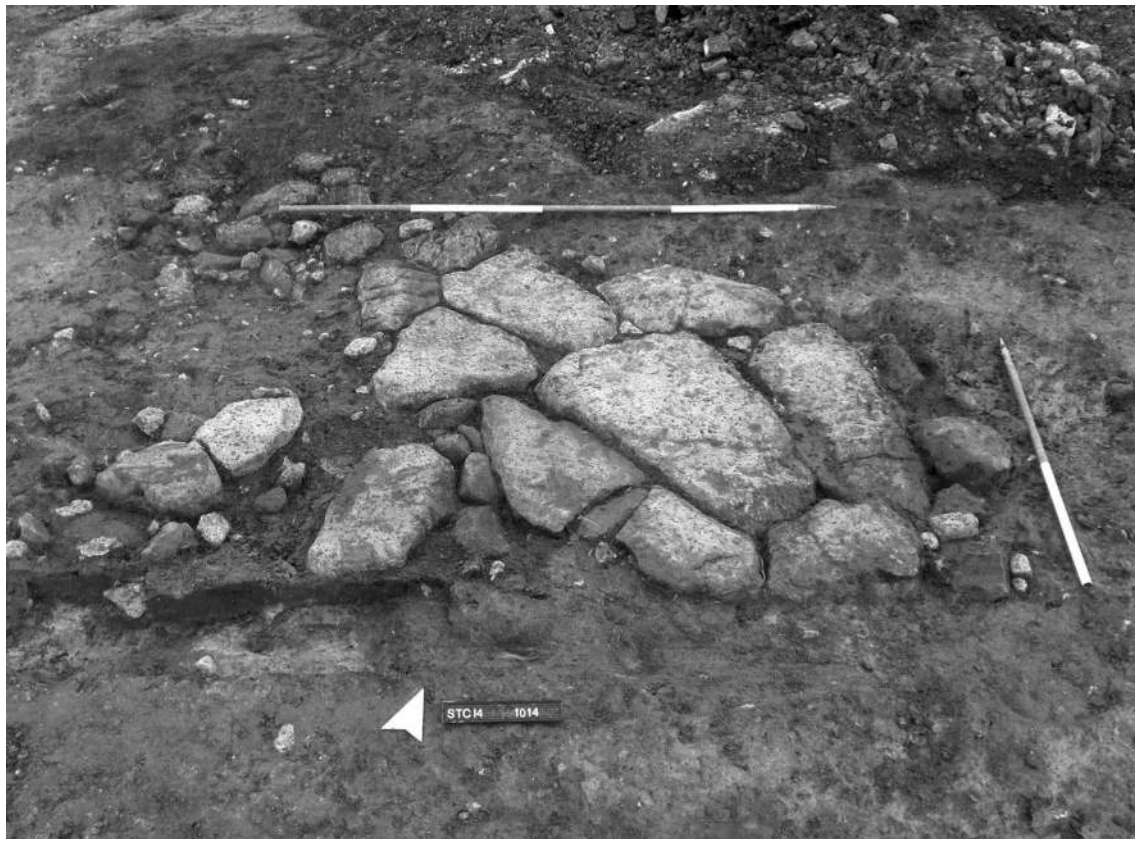

Figure 19. Paving 1014, probable structure

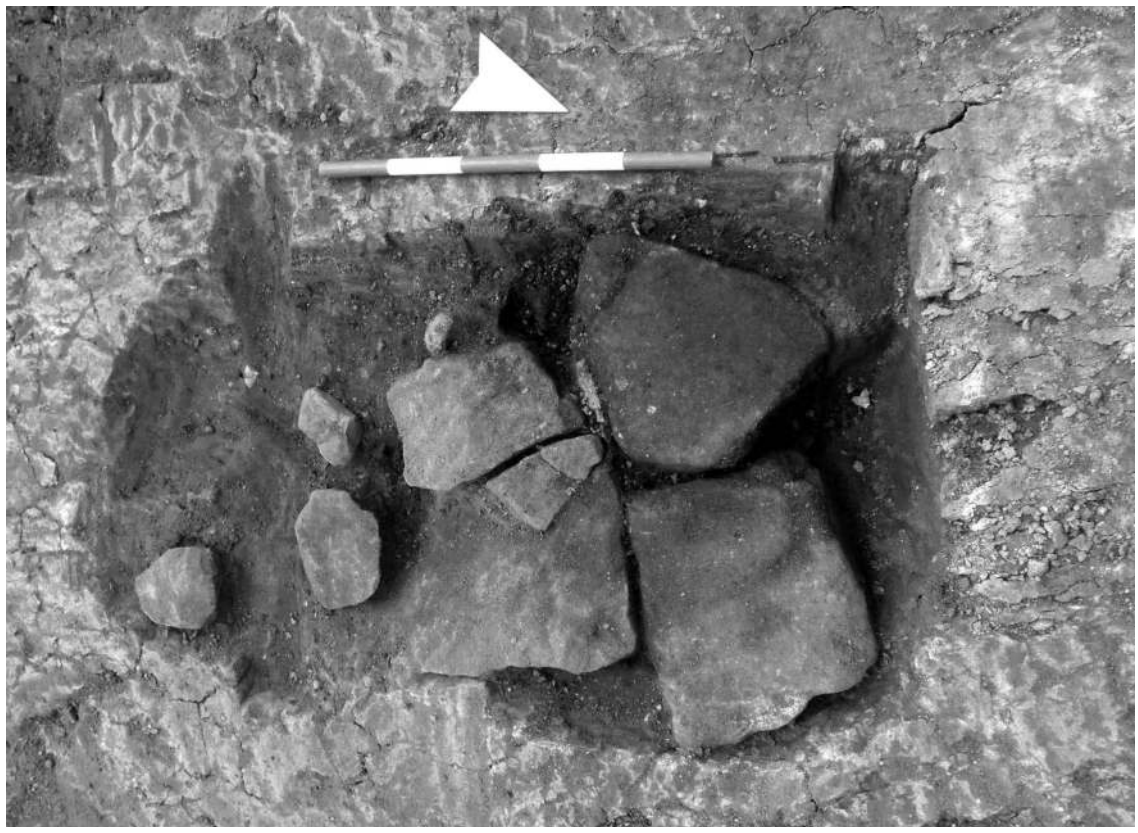

Figure 20. Hearth 1313, with heat-affected stones

Chapter 3

Finds and Environmental Remains

Note: Full versions of technical reports for finds and environmental remains have been deposited with the Grosvenor Museum, Chester. Alternatively, these will be available upon request from Northern Archaeological Associates.

Building materials

By C. Antink and D.G. Griffiths

Introduction

A total of 316 fragments (32.5kg) of Roman period building material were recovered from excavations at Saighton Camp from secure stratified deposits. This included 25,446 fragments (25kg) of ceramic building material (CBM), predominantly tile and brick, and 62 fragments (7.1kg) of slate and stone roof tiles (Table 1). The material was examined following the Minimum Standards for Recovery, Curation, Analysis, and Publication for Ceramic Building Material (Archaeological Ceramic Building Materials Group 2002).

	Box Flue		Brick		Imbrex		Tegula	
	Quant.	Weight	Quant.	Weight	Quant.	Weight	Quant.	Weight
Phase 2					7	959	1	54
Phase 3A	4	237	1	103	31	4694	10	4442
Phase 3B	4	2477	1	241	3	202	3	339
Phase 4	11	1231	1	197	16	1445	13	2542
Total	19	3945	3	541	57	7300	27	7377

	Ceramic Tile		Slat/Stone Tile		Chimney		Total	
	Quant.	Weight	Quant.	Weight	Quant.	Weight	Quant.	Weight
Phase 2	1	321	2	231			11	1565
Phase 3A	1	111	13	2974	8	233	68	12794
Phase 3B	16	255					27	3514
Phase 4	2	99	47	3928			90	9442
Total	20	786	62	7133	8	233	196	27315

Table 1. Building materials by type (count/weight (g)) from secure stratified deposits

Results

Ceramic building material

The majority of the building materials recovered were ceramic (Table 1), with items produced in at least five different fabrics (see below), but there were also sandstone and slate roof tiles present. Given that none of the items were stamped, their place of production is uncertain. Possibilities include the legionary fortress depot at Holt (Grimes 1930), based on their fabric composition, or

the tiles kilns at Tarbock, Merseyside (Swan and Philpott 2000). However, none of the items were stamped, so it was quite possible that some may have been produced elsewhere. While it was only possible to classify most fragments broadly as CBM, it was clear that tegulae and imbrices dominated the overall assemblage. However, there were a number of box-flue tiles (and possible box-flue tiles) present in contexts 576 and 642, at least one of which shows sooting on the inner surface. The very low quantity of brick fragments, numbering only three with a total weight of 541g, was notable. This tentatively hints that at least some of the structures at Saighton Camp had walls of stone, timber or wattle and daub, but that they were roofed with tiles of ceramic, slate, and stone.

Box-flue tiles would have facilitated hot air to circulate through a structure as part of a central heating system, a feature normally associated with bath houses or high-status dwellings. However, the small number of CBM recovered suggests that had such a structure existed here, it must have been substantially robbed out. Many fragments have impressions of combed keying with a range of tool types (4-, 6-, 7-, and 10-tooth tools, e.g. Figure 22). Some fragments have impressions of grass/plants, most likely unintentional as the items were laid out as part of the drying process prior to firing in a kiln.

The fabric series established for the CBM is provided here to permit comparison with other sites:

Fabric 1	Red-buff orange, soft. Common, angular fine quartz and black specks; occasional coarse rounded red pellets and chalk.
Fabric 2	Red-orange, medium soft. Frequent angular fine quartz; occasional angular fine black flecks; occasional angular ?white flecks.
Fabric 3	Orange-red, soft to hard. Sparse, fine subangular quartz; sparse fine founded black flecks; frequent white lenses; occasional black lenses; sparse coarse rounded chalk; sparse coarse ?Fe pellets.
Fabric 3a	Orange-red. Replaces white lenses with red; soft (example from context 641).
Fabric 4	Red-dark red, very hard. Abundant subangular quartz; occasional angular black flecks; sparse subangular red pellets; abundant black lenses.
Fabric 5	Red, medium-soft. Sparse fine angular quartz; sparse fie rounded black flecks; occasional coarse rounded red pellets; occasional coarse rounded chalk; occasional white lenses.

Chimney

Seven fragments (Figure 22), which form part of a lamp chimney were found in context 1320 (the fill of ditch 1318/1334 to the north of the site) and one fragment (which joins with the others) was found in context 1229 (the fill of ditch 1206), also to the north but separate from 1318/1334); the joining fragments indicate that these ditches were possibly both open at the same time.

The chimney is multi-levelled with two extant tiers, broken at the top. It has at least three triangular legs and multiple triangular vents cut into both tiers. Cut sub-pyramidal projections form a decorative flange between the two levels. The object is roughly finished and was likely to have been produced at Holt, as the fabric is similar to pottery produced there but very coarse, with large red sandstone inclusions.

As discussed by Timby (1991: 25), 'lamp chimneys' are little understood and relatively uncommon, although the corpus of evidence both in Britain and on the continent has been much expanded in recent years. Lowther (1976: 37) notes that as they are often manufactured from the same fabric as tiles, this may have resulted in heavily fragmented examples being misidentified which may account somewhat for their apparent paucity in the archaeological record. Lowther

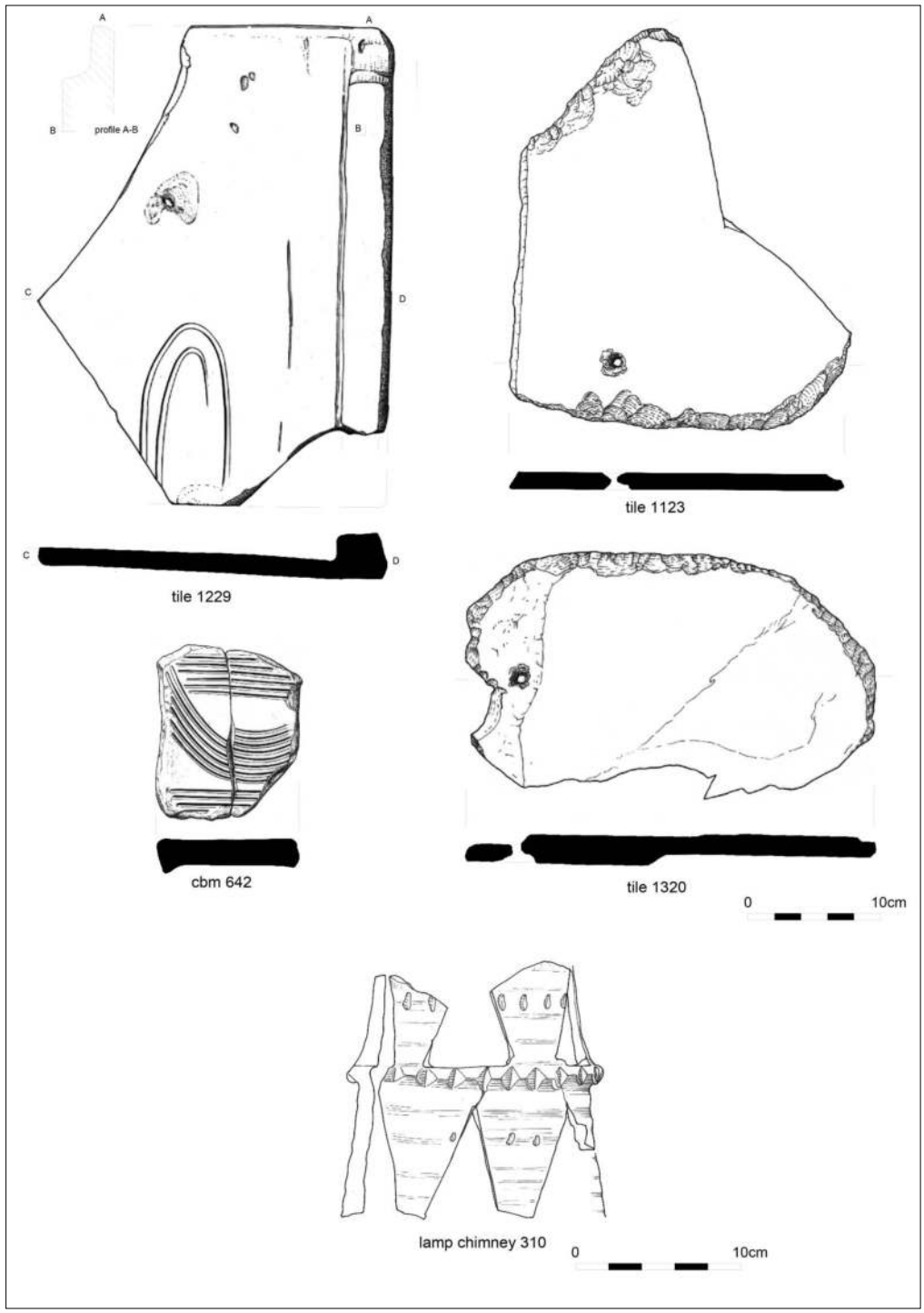

Figure 22. Ceramic building materials, and limestone and slate roof tiles

(1976) and Timby (1991: 25) discuss various possible uses ranging from ritual or votive, such as covers for incense burners or lamps and candles, to items of roof furniture as chimney pots or finials. Lowther concluded that lamp chimneys were either functioning chimneys/ventilators to exhaust hot gases from buildings or kilns, or, in the case of closed examples, ornamental finials. At York, although uncommon, they were noted to always occur alongside hypocaust flue tiles (McComish 2012: 148–9), lending credence to the theory that they were used as part of a venting

system. A recent reassessment by Dyczek (2015) confirms that the majority of chimneys from both Britain and the continent have been found in association with furnaces and/or roofing material, adding more weight to the theory that the majority were functional elements of heating or ventilation systems.

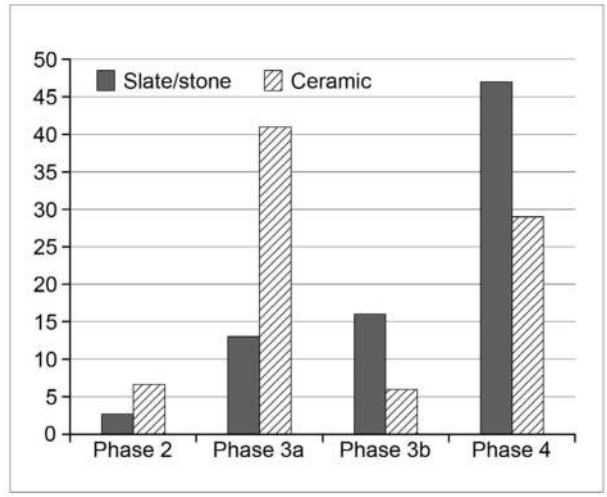

Figure 21. Quantities of ceramic and slate roof tiles by Phase

Chimneys have been recovered from a variety of sites and in Britain are generally dated to the second and third century, although they occur on the continent slightly earlier. Heke (2018) discusses five chimney fragments which appear to be associated with the legionary bath house at Chester and notes two from the bath house at Prestatyn, whilst Parsons (1971) records one from the Roman bath house at Bedens Field Kent. Chimneys have been found at a number of villa sites including Ashstead, Surrey (Lowther 1976); New Ash Green, Kent (Walsh 1971) and from towns including Silchester (Lowther 1976), London (Betts 2008: 164) and, as previously mentioned, York (McComish 2012). Lowther (1976: 35) lists three examples found associated with temple structures at Chelmsford, Godmanchester and Verulamium, however, Dyczek (2015: 138) notes that of the total now known, only a small number derive from sites of a religious character.

The chimney from Saighton Camp bears resemblance to one found association with a pottery kiln at Berkeley Street, Gloucester. The item is described as a complicated structure but without a fine finish as there were numerous trimming marks and irregularities (Timby 1991: 24–5). The Saighton Camp chimney shows a similar fairy 'rough' finish. A similar chimney was also recovered from second-century deposits at Site 27, Roman Middlewich; this example had four sections with thumb-print/pie-crust 'flanges' between each, and, unlike the Saighton Camp chimney, the apertures were rounded at the top (Garner and Reid 2009: 55–6, ill.iii.7). The Middlewich example was open at the base so was most likely a chimney pot on a ceramic roofed building and was interpreted as evidence of a high-status dwelling.

Given the presence of relatively large quantities of ceramic building material at Saighton, there was certainly at least one roofed building, and the fact that numerous fragments were found in both deposits (1229 and 1320) alongside those of the lamp chimney, it is not unfeasible to suggest the presence a relatively high-status structure close by, perhaps a villa or bath house.

Slate roof tiles

A total of 41 fragments of slate roof tiles were recovered from 18 contexts. None of the fragments seem to have edges or corners that could provide estimates of tile size. The fragment from context 1320 (Figure 22) shows evidence of a peg holes, which would have been used to secure the tiles to the timber framework of the timber roof.

Limestone/sandstone roof tiles

A total of 21 fragments of (probable) stone roof tiles were recovered from 12 secure stratified contexts. The majority are limestone, with just three examples that may be micaceous sandstone. At least four of the limestone examples have corners or edges (contexts 576 and 1071), however, none are sufficiently complete to indicate tile size. That from context 1123 has a peg hole (Figure 22).

Discussion

This assemblage of Roman period building material was recovered from secure stratified archaeological deposits dating from the first to fourth centuries AD. The presence of ceramic, slate, and stone roofing apparatus implies a certain degree of wealth and investment (also indicated by large quantities of dressed stone recovered from the upper levels of many features). The presence of a chimney and box-flue tiles unquestionably indicated either a bath-house or some other form of high-status structure (e.g. a villa), and the site provides evidence of a heated building or bathhouse close by; the stone hypocaust pillar (RF6) from ditch 891, context 573, supports this. A wide range of items were present, providing firm evidence for a tile roofed structure nearby. However, at what remove from the site this building stood is unknown. There was so little material among the assemblage, with bricks being particularly scare, that it could not constitute a whole roof or wall and instead it may have been used on the site secondarily, as rubble or hardcore.

The large collection of slate and sandstone roof tiles recovered from the site are of particular interest. Mason (2012: 219) comments that by the fourth century AD in the fortress the use of ceramic roofing tiles gave way to that of hexagonal slate and sandstone flags, and as seen in Figure 21 there seems to have been a chronological progression at Saighton, especially marked in Phase 4. This change in materials was also evident in hypocaust pilae at Chester (Mason 2012). Betts (1985: 125) noted a similar change in the roofing of the buildings to the rear of No 18 Blossom Street, York, and suggests that this change may not have been due to limited availability of ceramic products, but may have been because it was perceived to have been a superior roof covering. At Eaton-by-Tarporley, the only excavated villa site in Cheshire, slate and stone tiles were used for roofing possibly as early as the second century, with slate becoming the dominant material by the late third or early fourth century (Mason 1983: 67, 72).

Hand-made pottery

By C.G. Cumberpatch

Introduction

The assemblage of hand-made and unidentified pottery consisted of 26 sherds of pottery weighing 0.323kg representing a maximum of 18 vessels (Table 2). Two of the vessels (Contexts 513 and 976) may not have been hand-made and these are discussed separately below. The bulk of the assemblage derives from contexts that are unphased, with the exception of context 513 from phase 2 and 604 from phase 3B.

Late prehistoric pottery is rare in Cheshire (Brennand 2006: 7–22) and few close parallels to the material discussed here were identified during the preparation of this report. The material from Beeston Castle is referred to briefly below but, as noted by Hodgson and Brennand (2006: 56), at the regional level 'too few examples of Middle and Late Iron Age have been identified to recognise broad patterns of form and fabric'. This is consistent with the situation in the Peak District and southern Yorkshire and it seems clear that a large part of northern England was essentially aceramic throughout the Iron Age with pottery use only common in eastern Yorkshire. It may be that the distinct geographical zoning of the region has hindered a full appreciation of its cultural homogeneity (Cumberpatch *et al.* 2005).

Fabrics

For the reasons noted above, it was not possible to relate the pottery to a known regional type series or fabric series. Although both of the fabric types identified at Beeston Castle as being

Context	RF No.	Type	No.	Wt.	ENV	Diam. (mm)	EVE %	Part	Form	Decor.	Date
505	49	HM-O1	5	68	1	20	19	Rim	Everted rim jar	Smoothed int & ext	LPRIA - Roman
513	51	See text	1	54	1	N/A	N/A	Base	Beaker?	U/dec	Roman?
573	154	HM-O1	2	2	1	N/A	N/A	BS	Hollow	U/dec	LPRIA - Roman
575	132	HM-O1	5	17	5	N/A	N/A	BS	Hollow	U/dec	LPRIA - Roman
576	297	HM-O2	1	12	1	N/A	N/A	Base	Hollow	U/dec	LPRIA - Roman
604	75	HM-O1	1	12	1	21	7	Rim	Everted rim jar	U/dec	LPRIA - Roman
604	75	HM-O1	1	5	1	U/ID	U/ID	Rim	Everted rim jar	U/dec	LPRIA - Roman
886	138	HM-Q2	1	24	1	N/A	N/A	BS	Hollow	U/dec	LPRIA – Roman
912	171	HM-O1	1	36	1	N/A	N/A	BS	Hollow	U/dec	LPRIA – Roman
929	174	HM-O1	1	18	1	N/A	N/A	BS	Hollow	U/dec	LPRIA – Roman
976	181	See text	3	46	1	N/A	N/A	Base	Hollow	Poss white slip int	Roman?
1138	229	HM-Q1	4	29	3	17	5	Rim	Clubbed-rim jar	Burnished ext	LPRIA – Roman

Table 2. The hand-made pottery

of later prehistoric date (fabrics 19 and 26) were tempered with organic material (Royle and Woodward 1993: 63–78; Nevell 1994), it was not possible to relate these closely to the assemblage from Saighton Camp as the original report was unavailable. The following type series may or may not have wider relevance. Further research and excavation will be necessary to assess the extent to which the sherds described here are part of a local pottery industry.

HM-O1 - Hand-made organic tempered fabric 1

A soft fabric with dull orange margins and a pale grey core with common vesicles on the internal and external surfaces and in the cross-section. Some of the internal vesicles are lined with a reddish, presumably iron-rich, deposit which most probably accumulated after burial. The size and shape of the vesicles is consistent with pieces of chopped straw, grass or chaff and there is no sign of shell or calcite. In addition, there are sparse, well-sorted rounded and sub-rounded grains of white quartz and occasional soft dark red iron-rich inclusions.

The sherds from contexts 912 (bag 171) and 929 (bag 174), both in this fabric, were very similar and could be from the same vessel although they do not join.

HM-O2 - Hand-made organic tempered fabric 2

As HM-O1 but reduced to dark grey throughout.

HM-Q1 - Hand-made quartz tempered fabric 1

A hard, black reduced fabric containing abundant angular white and translucent quartz from 0.2mm to 2mm giving a fine but rough surface except where burnished.

HM-Q2 - Hand-made quartz tempered fabric 2

A pale-grey fabric with dark grey margins and a thin dull orange band between the core and the outer surfaces. It contains sparse to moderate sub-rounded quartz up to 0.8mm (occasionally over 1mm) and soft rounded grey rock fragments up to 2mm.

Vessel forms

The absence of a body of comparable material means that there is no conventional chrono-typology with which to compare the assemblage from Saighton Camp. Four vessels were identifiable to form and they are shown in Figure 23 and the vessels are described briefly below. The following catalogue gives additional detail below.

RF 75 One of two similar sherds, the other heavily abraded; a wide everted rim with a sub-angular profile. HM-01, Context 604, Phase 3B. Figure 23.

RF 49 A curved everted rim with a very distinctive rounded clubbed profile and smoothed but vesicular surfaces. This may be an organic-tempered Severn Valley ware jar of 2nd to early/mid-3rd century date. It compares closely to a vessel at Wroxeter (Timby 2000: figure. 4.56, no. JN4.14). HM-01, Context 505, unphased. Figure 23.

RF 229 The rim of a globular vessel with a thick, rounded, clubbed rim and no neck; burnished externally. HM-Q1, Context 1138, unphased. Figure 23.

RF 51 The base of a small beaker with a very narrow base and the body sitting on a short pedestal. It is not certain that this vessel is hand-made as there is a clear cone inside the base and the body shows stress-lines that might be the result of throwing. The shape is also unusual and may be a copy of a finer Romano-British form. The fabric was fine in texture with sparse fine quartz and possible non-crystalline inclusions. It varied in colour from dull orange to dark grey although the variation was irregular. Context 513, Phase 2. Figure 23.

In addition to the illustrated vessels, two others are worthy of particular note. The flat base from context 886 was distinguished by its fabric, HM-Q2 (described above), and by its thickness. Shallow grooves indicated the inner surface while the underside was flat. The base from context 976 was closer in appearance to a Romano-British vessel than it was to anything from the pre-Roman Iron Age although the method of manufacture was not clear. The pale orange fabric was very fine with sparse quartz grains up to 0.1mm and very rare rounded grains up to 1mm. The internal surface appeared to be coated with a thin pale buff slip although the outside was plain.

Discussion

The small quantity of hand-made pottery described in this report is of considerable interest by virtue of its rarity within the wider region and also because identifiable (if partial) vessel forms were represented by the rim sherds. At present, it is impossible to provide definite dates for the sherds or to identify their source. A local origin is possible but the general scarcity of later prehistoric pottery raises the question of how and why such relatively well made and finished pottery should occur in an otherwise largely aceramic region. The sherds could be regional imports or could indicate the presence of individuals from outside the area who brought with them knowledge and the ability needed to make pots from local raw materials. A similar suggestion has been made in the case of small quantities of pottery in East Yorkshire which bear decorative motifs more common in the Midlands (Cumberpatch 2016: 169) although further research is required before this can be established as a definite explanation. In the meantime, the assemblage is one of considerable regional significance.

The Romano-British pottery

By D.G. Griffiths, with contributions by L. Dodd

Introduction

A total of 2621 sherds (48.0kgs) of Romano-British pottery, representing 32.26 estimated vessel equivalents (based on rim percentage), were recovered from stratified deposits during the excavations (Table 3); 2222 sherds (41.4kg) were from four phases of Roman period activity; 399 sherds (6.7kg) were from unphased deposits.

Phase	Amphorae	Samian	Fine	Mortaria	Coarse	Hand-made	Totals
2	46/4005	13/76	5/40	20/968	247/2009	1/53	332/7151
3A	10/869	22/256	1/31	35/1384	421/4783	8/20	497/7343
3B	6/970	8/92	4/18	19/1194	389/3656	0/0	426/5930
4	51/7162	36/641	6/25	67/3721	807/9398	0/0	967/20947
U/P	39/2616	19/247	0/0	35/1326	303/2424	3/78	399/6691
Totals	152/15622	98/1312	16/114	176/8593	2167/22270	12/151	2621/48062

Table 3. Roman and 'native' handmade (see Cumberpatch, above) pottery by phase/ware class (sherd count/weight (g))

This report presents the results of the analysis of the Romano-British pottery, examined according to the guidelines published by the Study Group for Roman Pottery for basic archiving (Darling 2004). All of the pottery was identified to basic ware class, with production centres identified, alongside broad date-ranges for their manufacture, where possible. A full catalogue is provided below with an illustration of at least one example of each vessel type (Figures 23 to 31).

Methodology

All pottery was first assessed visually (by eye) and sorted into broad ware classes (amphorae, samian, fine wares, mortaria, and coarseware pottery) on the basis of colour, hardness, fracture, and inclusion composition, as outlined in Tomber and Dore (1998: 6–8). Pottery from each ware class was quantified by count, weight, and estimated vessel equivalents based on rim percentage (EVEs), with totals presented for each phase of activity (Table 4). International imports, nationally distributed wares, and local products, where identified, are discussed in Section 3, below. Much of the pottery was heavily abraded but generally in good condition, with an average sherd weight of 13.1g (excluding amphorae) which suggests that some of the pottery sherds may have been subject to long term weathering and/or trampling prior to their final deposition.

Detailed fabric analysis was undertaken using a low power microscope at ×20 magnification and full descriptions are provided below. This analysis has enabled further refinement of many of the

Ware class	Count	Weight	EVEs
Amphorae	5.8	32.5	2.2
Samian	3.7	2.7	9.7
Fine wares	0.8	0.4	0.9
Mortaria	6.8	17.9	23.3
Black-burnished wares	14.7	9.6	20.5
Oxidised wares	62.9	32.8	38.3
Reduced wares	3.9	3.3	3.7
Hand-made	1.4	0.8	1.4
Totals	100	100	100

Table 4. Relative proportions (%) of wares by count, weight and estimated vessel equivalents (EVEs)

coarseware fabrics and identified local/regional products within the assemblage, especially a range of oxidised wares most likely produced at the legionary works depot at Holt.

Pottery supply

Amphorae

The majority (123 sherds) were produced in southern Spain, with six sherds each from vessels of North African and Italian origins, and seventeen of indeterminate origin. The sherds of Spanish amphora were all from vessels of Dressel 20 form, produced in the Roman province of Baetica (BAT AM1 and 2, Tomber and Dore 1998: 84–5), and were used to transport olive oil from the region to Saighton between the first and third centuries AD.

Samian

Form	Phase	2	3A	3B	4	U/P	Total
Dish	Curle 23A	0	0	0	0.175	0	0.175
Dish Curle 23B	0	0	0	0	0.175	0	0.175
Bowl	Dr. 18/18R	0	0	0	0	0.2	0.2
Bowl	Dr. 18/31R	0	0	0	0.035	0	0.035
Bowl	Dr. 30 (E)	0	0	0	0	0	0
Bowl	Dr. 31	0	0	0	0.1	0	0.1
Bowl	Dr. 31R	0	0.1	0.065	0.31	0.08	0.555
Bowl	Dr. 37	0	0	0	0	0	0
Bowl	Dr. 38	0	0	0	0.3	0	0.3
Bowl	Dr. 44	0	0	0	0.065	0	0.065
Bowl	O&P, LV, 13; Curle 23v	0	0.075	0	0	0	0.075
Unident.	Unident.	0.05	0.175	0.05	1.08	0.095	1.45
Total		0.05	0.35	0.115	2.24	0.375	3.13

Table 5. The samian vessels by phase (by EVEs)

All the samian was produced in Central and Eastern Gaul. Sherds of vessels manufactured at the major production centres in Les Martres-de-Veyre, Heiligenberg, and Rheinzabern are present.

Other fine wares

The majority of these fine wares were produced in Britain, in the Lower Nene Valley during the second to fourth centuries AD. There are four body sherds with black slip, at least one of which is likely to be Central Gaulish Black Slipped ware of late second- to early third-century date, There is a possibility that it is Argonne Colour-coated ware produced east of Rheims, northern France, sometime in the fourth century AD, however, this ware is usually confined to the south of England (Context 576). Other fine ware sherds of note were two of New Forest Red-slipped ware, produced in Hampshire during the third and fourth centuries AD.

Coarsewares

A total of 2167 sherds, weighing 22.3kg of utilitarian coarsewares was recovered, forming by far the greatest component of the pottery assemblage at 81.5% by sherd count (45.7% by weight). As a relative proportion, based on rim percentages (EVEs), coarsewares form 87.1% of the overall assemblage. The coarseware group includes black-burnished wares, oxidised wares (including white wares), and reduced wares. Oxidised wares formed 62.9% by sherd count (32.8% by weight) and 38.3% by EVEs. Reduced wares formed 3.9% by sherd count (3.3% by weight) and 3.7 by EVEs.

Black-burnished wares formed 14.7% of the overall assemblage by sherd count (9.6% by weight), and 20.5% by EVEs. The majority of the black-burnished wares were from Dorset but there are three sherds which may have been produced at Rossington Bridge (South Yorkshire) and a single sherd of unknown origin. A possible tazza (no. 203) was recovered from context 1048 (unphased).

While Holt products have been identified in relatively large quantities, it was difficult to identify relative proportions of Holt, local/regional wares and 'other' coarsewares because some of the oxidised and reduced wares which have not been firmly identified to a known production centre but may well have been produced locally or regionally. Therefore, many of the vessels, and in particular the wide-mouthed jars, referred to as Severn Valley ware products, may well have been made at unknown local kiln sites within the North West.

Site chronology, function and status

Phase 2 – early to mid-second century AD

The earliest Romano-British pottery groups were recovered from two ditches 1053 and 1063 and gully 883 in the north-west part of the settlement area. A BB1 jar, and jug produced at Holt, were present in the fill of 1053, and dates to AD 120 at the earliest (around the time that Dorset BB1 products were distributed in the north (Leary 2009: 25). In the fill of ditch 1053 was a small sherd of East Gaulish samian ware, dating between AD 120 and 260, the remains of three flagons, most likely locally produced, were also found. A Mancetter-Hartshill hammer-headed mortarium (no. 152), dating to AD 250–350, was also found and is considered to be intrusive.

The pottery recovered from gully 883 included a BB1 dish and two reduced ware bowls. In addition, a fine 'motto' beaker produced in Gaul was present. The chronology for this group suggests early to mid-second century activity. The group are all vessels for dining, with the fine ware beaker being of relatively high status.

While drinking vessels only formed 2.7% of the assemblage during this phase, this is the highest relative proportion for all of the phases. The quantities for flagons (for serving drinks) were also the highest at 52.8%. The relative proportions of pottery for the serving and consuming of drink, much of which would have been alcoholic (e.g. wine and beer), were high in this phase. Mortaria formed 22.2% (66% (by count) from Mancetter-Hartshill, the remainder produced at Holt) and jars 10.9% (30% produced in the Cheshire Plain) which hint at a military relationship between the inhabitants of Saighton Camp and most likely the legionary production centre at Holt and legionary fortress at Chester.

Phase 3A – early/mid-second to mid-third century AD

The majority of the pottery assemblage from this phase of activity, much of which was concentrated to the central area of the excavations. Much of the pottery from the ditches seems to have been deposited over a long period of time, but mostly dates between the middle of the second, to the middle of the third century AD. The drinking vessels present form a very low relative proportion (1.2%), while flagons reduced to 30.4%. However, dishes/bowls and jars increased dramatically to 26.2% and 22.6% respectively. The proportion of mortaria was broadly similar to Phase 2, at 19.6%.

The pottery recovered from ditch 1334 to the north of the site included fragments of amphorae from North Africa and Campania, in southern Italy. Fragments of two Mancetter-Hartshill mortaria (e.g. no. 305) were also recovered, along with two black-burnished dishes (e.g. no. 307). The Italian amphora would have brought wine to the site; the North African vessel would have transported olive oil.

A range of vessels for presenting food and drink (a beaker, cup, four bowl/dishes) along with a collection of jars for storage and cooking, were recovered from ditch 1040 to the north. The remains of two mortaria (one from Holt, the other produced at Mancetter-Hartshill, sometime after the middle of the second century AD) were also recovered, along with three sherds of samian ware (eastern and central Gaulish products from a cup and two bowls), and a Lower Nene Valley colour-coated beaker.

Three vessels were found associated with structure (977) in the north-west corner of the site. Two of the vessels were most likely local products (a possible reduced ware jar and an oxidised ware lid (no. 182), possibly Severn Valley ware), while the black-burnished cooking-pot was imported from Dorset. The pottery assemblage found associated with this building does not provide any firm evidence for its function.

Excavation of ditch 524, located in the south west of the site, recovered a tightly dated group of pottery (*c.* AD 170–200) which includes three bowls/dishes (see no. 57), a black-burnished cooking-pot (no. 60) and a large coarseware vessel of indeterminate form.

A collection of pottery found in one of the upper fills of pit/well 764 may be related to with whatever activity was taking place close by and associated with the group of stakeholes identified (800). Combined, the group includes the remains of five bowl/dishes (two samian bowls, a reduced ware bowl (no. 103)), and a black-burnished dish produced at the South Yorkshire kilns at Rossington Bridge. A relatively large collection of mortaria were found associated with these two features, all of which were imported to Saighton; one from relatively close by (Wilderspool, Cheshire (no. 111), four from Mancetter-Hartshill in Warwickshire, and two from the Wroxeter region (Shropshire). The remainder of the pottery assemblage comprised three jars (nos. 106 and107 produced at Holt, and a Cheshire Plain oxidised ware) and two Holt oxidised ware flagons (nos. 120 and 122).

Phase 3B – early/mid- to late third century AD

Parts of the enclosure system were re-dug in this phase and much of the pottery comes from the fills of these features. The remains of four vessels were recovered from ditch 1063, located in the north west of the site. Two oxidised ware vessels were produced at Holt (no. 239, a mortarium, and a deep dish). A black-burnished dish, dating between AD 260 and 320, was recovered, along with a Holt oxidised ware flagon.

A shallow pit 1024 was located close to building 977, and some of the finds from its fill may derive from activity associated with this structure. The remains of four vessels were recovered from the fill of pit 1024; these are a black-burnished ware jar, two oxidised ware jars (possibly regional, i.e. Cheshire Plain products of second-century date (see no. 192) and a Wilderspool jar also of second-century date (no. 190). Much of the material in this group was residual (e.g. the Wilderspool or other local products), and only the black-burnished ware jar (no. 189) providing a reliable date, between the mid–late third century. This group of pottery broadly dates to the mid to late third century with residual second-century material. Along with this group of material a body sherd from an oxidised ware (possibly from the Cheshire Plain) vessel, possibly a jar, was recovered which bore an inscribed image of an animal. The graffito was incised prior to the firing of the pot.

In the southern part of the site, an assemblage of pottery dating to the early third century AD, was recovered from ditch 550. The remains of two samian ware bowls (Central and Eastern Gaulish) were recovered, along with two Holt mortaria (no. 59) and two Mancetter-Hartshill products (one parchment ware, and no. 35, white ware). Five jars, all of which were most likely cooking-pots, were recovered, three of which are black-burnished ware vessels and two probable local products, one a jar of probable Cheshire Plain or Severn Valley ware of second-century date.

A relatively small group of pottery was recovered from the ditch 603 located in the south-west part of the settlement area. Two black-burnished ware cooking-pots (nos. 128 and 133) were recovered, along with a wide-mouthed Severn Valley ware pot (no. 76), a Mancetter-Hartshill mortarium, two dishes/bowls (nos. 129 and 153, the former produced at Holt), and two sherds from a Holt oxidised ware flagon or jug (no. 50). This group dates broadly to the late third century AD, again with residual second-century material.

During this phase there were no cups or beakers were present and the proportion of dishes/bowls was reduced substantially to 8.0%. Flagons also reduced significantly to 17.3% while mortaria also reduce to 14.2%. This being so, jars, for storage and cooking increased to 60.6%. This change in the relative proportions during this phase could reflect changes in pottery supply to the site, and possible changes in practices of eating and drinking, and may also infer changes in site function.

Phase 4 – late third to fourth centuries AD

Only a single vessel, a black-burnished ware flanged dish dating to between the late third and early fourth century (see Gillam 1976: no. 72) was recovered associated with building 1335, located at the north-eastern extent of the site and occupied during the late third or fourth century AD. Pit/well 1069 was located close by, from which a large quantity of pottery was recovered, the sherds deriving from fills 1071, 1077 and 1090. They included the residual remains of a black-burnished bowl (nos. 211) dating to from the late third to early fourth century AD (see Gillam 1976: no. 46). Two black-burnished cooking-pots dating to the early fourth century (see Gillam 1976: no. 14) were present (see no. 214, with possibly a third Severn Valley ware jar dating broadly to the second to fourth centuries (no. 225) used for cooking as there was evidence of sooting. At least three mortaria were present, two Mancetter-Hartshill products and one from Holt. Also recovered were the remains of three Severn Valley ware wide-mouthed jars (nos. 208, 218 and 223), used either for storage or food preparation and dating to the third or fourth century.

The largest pottery group (563 sherds weighing 12.5kg) within the whole assemblage was recovered from a large layer/spread (576) over cobbles 577, in the north-eastern part of the settlement area. However, much of the deposit consisted of clearly residual material. A single fragment of a Campanian wine amphora (no. 25) was recovered. At least four different forms of dishes/bowls were recovered, the majority of which were black-burnished wares (nos. 69, 70, 71, 290, 292, 293), and generally of third-century date, with most produced in Dorset, with no. 294 being of uncertain origin). A large collection of jars were present in this group including two black-burnished ware cooking-pots.

A rim and neck sherd from a samian flagon (AD 120–260) was recovered.

A large collection of mortaria were present, including residual vessels produced at Holt (nos. 37, 275, 276 and 277), some other possibly local products (no. 274, but the majority were produced in the Mancetter-Hartshill region (nos. 42, 43, 44, 279 and 281).

A range of storage jars were recovered, most residual, however, black-burnished ware jar no. 300 dates from the mid-third century AD, with a possible oxidised Severn Valley ware (no. 263) also possibly of similar date.

A large group of wide-mouthed coarseware vessels were recovered, most of which were Holt and other local products (and possibly Wilderspool), and residual. However, an oxidised ware vessel (no. 65) was in a Severn Valley form dating between the late second and late third century. A single cup with a pinched base (no. 321) was also found, along with a small ceramic greyware crucible (no. 72).

While much of the material from this group was produced over a very long period (from the second century AD onwards) and was probably redeposited from other areas of the site.

Two ditches 941 and 986 located in the north-eastern corner of the settlement area were possibly two components of a linear ditch/enclosure separated by an entranceway between (see Figure 12). The remains of two residual vessels in HOL OX, a bowl/dish and a mortarium (no. 205) and a jar (no. 185) in Severn Valley ware and of late third- to fourth-century date were recovered from the northern side of the entranceway (ditch 986). To the south, ditch 941, the remains of two jars were found, one Severn Valley ware (no. 174) and one black-burnished ware vessel produced in Dorset. A small Spanish amphora sherd was also recovered and was residual.

Ditch 675 was located in the south-east corner of the settlement area and a range of vessels dating from the early second century to the middle of the fourth century AD were recovered. The majority of the products were of local origin and mostly residual. A small Mancetter-Hartshill mortarium rim sherd may date as late as the middle of the fourth century AD, but the local oxidised ware jar (no. 87) in a Severn Valley form dates from the late third- to fourth century AD (Webster 1976: 29).

The midden deposit 642 overlaying cobbles 643 dates broadly from the end of the third to the middle of the fourth century AD, based on dating from a locally produced oxidised ware wide-mouthed pot (late third- to fourth century), in a Severn Valley form (Webster 1976: no. 28) and black-burnished ware jar (no. 81, late third century, Gillam 1976: no.10).

During the final phase of activity at Saighton the nature (functionally) of the pottery assemblage changes again, with the relative proportions of flagons and jars similar to those in Phase 3A. Dishes/ bowls formed 20.0% and mortaria formed 29.0%; a dramatic increase in both classes from Phase 3A. The relative proportion of jars reduced significantly from 63.1% to 27.0%, however, this may be skewed by high fragmentation and/or residuality of 2nd century material in Phase 3A onwards.

Discussion

The relatively high proportions of pottery for consuming drink between the mid-first and mid-second centuries AD suggest a military influence at the site. The change appears to coincide to the presence of buildings/occupation within the site during phases 3a/3b–4, reflecting settlement as opposed to the stock enclosures of phase 2. It seems there was an increase in rural activity during this time which relates to the growth of Deva. During the late second to early third century AD there seems to have been a change in site function, based on the pottery assemblage, with a greater proportion of dishes/bowls for serving and presenting food and jars for storage/cooking.

By the mid- to late third century the differences of the pottery assemblage were even more pronounced. There were no drinking vessels and dishes/bowls formed less than 10% of the assemblage. The proportion of flagons reduces even further to 17.3%, and also mortaria to 14.2%. Storage/cooking jars increase dramatically to over 60%. This greater proportion of jars compared to dishes/ bowls (tablewares) corresponds with the general trend on rural sites from the second century onwards (Evans 2001, 28).

In the fourth century there are again greater proportions of dishes/bowls, flagons, and mortaria with the quantity of jars reducing significantly to 27.0%. It must be noted that the broad date ranges of material recovered from ditch deposits suggests that refuse was regularly dumped in these open features over long periods of time, perhaps centuries. The absence of vessels typical of late Roman pottery assemblages in the region such as shell tempered ware is notable and suggests that occupation ceased before the late fourth century.

Pottery: functional analysis

Phase	Cup/Beaker	Bowl/Dish	Jar	Moretaria	Flagon	Lid	Total (%)
2	2.5	10.8	10.4	21.2	50.5	4.6	100.0
3A	1.3	25.7	27.3	22.5	22.8	0.4	100.0
3B	0.0	2.3	69.8	13.1	14.8	0.0	100.0
4	4.5	7.0	32.0	37.5	19.0	0.0	100.0
U/P	10.2	18.8	33.9	22.7	6.8	7.6	100.0

Table 6. Relative proportions (%) of vessel function by phase (by EVEs)

Transport amphorae

While there were at least some amphora sherds present in all phases of activity (Table 3) it is unwise to suggest that the vessels from which they derived arrived at the site during these phases. Only 46 sherds (all Dressel 20) were present in Phase 2, which were produced in Roman province of Baetica (southern Spain) and would have been used to transport olive oil to Britain. Only 6 sherds were present in Phase 3A and all were Spanish Dressel 20s. In Phase 3B two sherds of Spanish amphorae were present, along with four sherds from an Italian vessel (Campanian Black sand) which was most likely used to transport wine to the province.

In the fourth century AD deposits, 43 sherds of Spanish and two sherds of Italian amphorae were present. There were also five body sherds from a North African vessel(s), which would have also been used to transport olive oil. All sherds from Phase 4 were relatively small and well worn, suggesting that they were most likely transported to the site much earlier than the fourth century.

While the quantities of transport amphorae were few, it does highlight the extensive trade networks with north-west Britain and the wider Roman Empire.

Storage and cooking vessels

Of the seventy-one jar rim sherds, twenty-six were black-burnished wares and many of these were what Gillam (1976: 61) identifies as cooking pots. However, jars were multi-functional vessels and may be used for storage as well as for cooking. Indeed, the large number of wide-mouthed jars of Severn Valley types dating from the second to fourth century (see Webster 1976) may well have served as storage or preparation vessels. Although generally forms typical of the Severn Valley tradition, these vessels may well have been produced within the North West. At Wilderspool wide-mouthed vessels are not well represented on the known kiln site (Hartley and Webster 1973) and it seems likely that they are a product of a different (but still local) kiln, probably of slightly later date than those actually excavated (see Webster 1992: 124). While the presence of sooting/blackening on the outside of vessels may be considered a good indication that the vessel used for cooking, it does not always survive in the archaeological record.

Food preparation – mortaria

A large proportion of mortaria was probably produced at Holt (23%) but the majority (62%) were manufactured in the Mancetter-Hartshill and Wroxeter regions of Warwickshire (Table 7). The remainder of the oxidised and reduced ware mortaria were probably local/regional products produced somewhere on the Cheshire Plain. Following the decline of pottery production at Holt by *c.* AD 130, the supply of mortaria was replaced by products from Wilderspool during the 2nd century and, especially, Mancetter-Hartshill from the late second century. The potters at

Mancetter-Hartshill were highly successful between the second and fourth centuries, with their products being widely distributed throughout Britain (Hartley 1973).

Origin	%	No. sherds	Weight
Wilderspool	1	1	82
Holt	23	19	1532
Mancetter-Hartshill	62	79	4106
Wroxeter	5	3	385
Unknown (oxidised/ reduced wares)	9	21	622
Total	100	123	7150

Table 7. Relative proportions (%) of mortaria and their origins (by EVEs)

Serving and presenting food and drink

The proportions of vessels associated with serving (flagons) and consuming drink (cups, beakers) reduce quite significantly over time (Table 4), with drinking vessels forming 2.7% and 1.2% in Phases 2 and 3A respectively, and large quantities of flagons (52.8% and 30.4%). By Phases 3B and 4 drinking vessels have almost disappeared (only a single body sherd of a beaker in Phase 4), with the relative proportion of flagons also reducing dramatically to 17.3% and 21.0% respectively). An almost complete single-handled cylindrical-bodied flagon was found in context 614 (Phase 3A). While flagons of this type were not particularly uncommon, the small size is worthy of note. The vessel was most likely produced at Holt, and two similar examples were noted by Grimes (1930: 157, no 119 and 158, no. 123; figure. 68, 220). It is notable that in spite of the presence of some Wilderspool products, there are none of the globular beakers produced there present in this assemblage. Similarly, there are none of the tankards characteristic of the Severn Valley industry during the second to fourth centuries in spite of the presence of many Severn Valley ware jars. Perhaps other materials were used for beverage consumption – wood, horn, or leather for example – that have not survived within the archaeological record.

There are no clear chronological patterns for the proportions for bowls and dishes (Table 4) however, the relatively low proportion of 8% in Phase 3B alongside the dramatic increase in jars to 60.6% may be significant.

The majority of the samian ware was produced during the second and possibly into the early third. The largest component derives from Phase 4 (most of which from a single deposit, context 576) and unphased deposits (Table 6), with only few examples present in the earlier phases. Only unidentified vessels were present in Phase 2, dishes/bowls formed 79% of the samian assemblage in Phase 3A (with cups forming the other 21%), 100% in Phase 3B, and 55% in Phase 4. Flagons formed 45% in Phase 4, but it should be noted this was a single rim fragment.

There was no southern Gaulish material, which is no surprise given the dating of the site; all samian products were produced in eastern and central Gaul.

Phase	Count	Weight	EVEs
2	3	14	5
3A	9	140	35
3B	4	67	11.5
4	17	596	224
U/P	10	176	37.5
Totals	43	993	313

Table 8. Quantities of samian ware by phase

Unphased

While the excavators were able to assign many of the identified features/deposits to particular phases some, which were certainly 'Roman' in date, were difficult to 'fit' into the sequence; approximately 15% of the pottery assemblage was recovered from these deposits.

Special items

Graffito

A body sherd (no. 318) from a coarseware vessel, possibly a jar, was recovered from context 1024 which has an incised image of an animal (unknown species) formed prior to the firing of the vessel (Figure 31). The sherd was found in a large shallow pit (1024) association with building 977 (see above).

Cup containing residue

A small hand-made cup was found in context 576 (Figure 31), with residue of what was burned still adhering to the inside of the bowl. Unfortunately, within the confines of the project, in was not possible to characterise this material.

Repaired pots

At least seven vessels in the assemblage had been repaired for continued use, three of which still had part of their lead clasps attached (e.g. no. 60, Figure. 26). Five are samian wares of various forms, one is a black-burnished cooking-pot (no. 60), and one a mortarium (no. 151). All come from the later phases of the site (two from Phase 3A, four from Phase 4, and one unphased). Repairs could indicate that these were favourite vessels (including heirlooms), or could have been undertaken because replacements were unavailable, either due to a lack of supply or a shortage of funds for new acquisitions.

Vessel for metalworking

A very small crucible base (no. 72) was found in context 576. The vessel still has the remains of its final contents adhered to the inner surface. The high iron content visible in the residue suggests metalworking, even though the very small vessel size would have only produced small quantities. However, as noted about, many pots were repaired using lead clasps so perhaps only small quantities of lead (alloy) were required for this and this metalworking was taking place on a very small scale, most likely at a household level. As noted by Alex Croom below, small scale metal working, mainly lead, was certainly taking place at Saighton.

Romano-British pottery catalogue

Where possible, common fabric codes will be references according to their entry in the National Roman Fabric Reference Collection (Tomber and Dore 1998); all other codes are those assigned by the author. Common samian forms are referred to in the catalogue entries and are not illustrated. A single decorated sherd was recovered (no. 12) and illustrated (Figure 23). At the first instance, featured vessels (those with diagnostic characteristics) were each assigned a unique number for identification; these are used in the catalogue below and for illustrations. The catalogue entries are not sequential but are broadly ordered according the type (e.g. amphorae, samian wares etc.).

Fabric inclusions: A – abundant; C – common; S – sparse; VS – very sparse

Fabric series

Amphorae

BAT AMI	Baetican (Early) amphorae I (Tomber and Dore 1998: 84).
BAT AM2	Baetican (Late) amphorae 2 (Tomber and Dore 1998: 85).
CAM AM1	Campanian (Black sand) amphorae I (Tomber and Dore 1998: 88).
NAF AMI	North African (Lime-rich) amphorae I (Tomber and Dore 1998: 101).

Samian

CHF SA	Chémery-Faulquemont samian (Tomber and Dore 1998: 36).
HGB SA	Heiligenberg samian (Tomber and Dore 1998: 37).
LMV SA	Les Martres-de-Veyre samian (Tomber and Dore 1998: 30).
RHZ SA	Rheinzabern samian (Tomber and Dore 1998: 39).
TRI SA	Trier samian (Tomber and Dore 1998: 41).

Fine wares

CNG BS	Central Gaulish Black-slipped ware (Tomber and Dore 1998: 50)
COL CC	Colchester Colour-coated ware (Tomber and Dore 1998: 132).
LNV CC	Lower Nene Valley Colour-coated ware (Tomber and Dore 1998: 118).
LNV WH	Lower Nene Valley White ware (Tomber and Dore 1998: 119).
NFO RS2	New Forest (Fine) Red-slipped ware 2 (Tomber and Dore 1998: 144).

Coarsewares

Black-burnished wares

SOW BB1	South-West Black-burnished ware 1 (Tomber and Dore 1998: 129)
DOR BB1	South-East Dorset Black-burnished ware 1 (Tomber and Dore 1998: 127).
TBB1 1	Black-burnished ware Type 1. Dark grey with narrow dark brown margins; hard, rough, irregular fracture; abundant well-sorted angular and fine and medium inclusions. Inclusions: a: quartz, a: brown iron-rich, c: lime (0.5mm), s: mica (silver). Munsell: 5Y 3/1 very dark grey.

TBB1 2	Black-burnished ware Type 2. Dark orange brown with dark brown margins; hard, rough, irregular fracture; abundant well-sorted rounded and subrounded medium inclusions. Inclusions: a: quartz, c: black iron-rich, c: red clay pellets, vs: mica (silver).

Oxidised wares

HOL WS	Holt White-slipped ware (Tomber and Dore 1998: 208).
HOL OX	Holt Oxidised ware (Tomber and Dore 1998: 207).
WIL OX	Wilderspool Oxidised ware (Tomber and Dore 1998: 84).
WIL WS	Wilderspool White-slipped ware (Tomber and Dore 1998: 123).
WIL RS	Wilderspool Red-slipped ware (Tomber and Dore 1998: 122).
WRX OX	Wroxeter Oxidised ware (Tomber and Dore 1998: 178).
SVW OX 2	Orange-brown with pale grey core; hard, smooth, smooth fracture; abundant well-sorted rounded fine inclusions. Inclusions: a: quartz, s: red-orange, s: mica (silver and gold). Munsell: 5YR 5/6 yellowish red. (Tomber and Dore 1998: 149).
CWOX1–15	Probably local/unattributed oxidised wares.
CWRD1–7	Probably local/unattributed reduced wares.

White wares

COL WH	Colchester White ware (Tomber and Dore 1998: 133).
MAH PA	Mancetter-Hartshill Parchment ware (Tomber and Dore 1998: 188).
MAH WH	Mancetter-Hartshill White ware (Tomber and Dore 1998: 189).
OXF WH	Oxfordshire White ware (Tomber and Dore 1998: 174).
WRX WH	Wroxeter White ware (Tomber and Dore 1998: 179).

Catalogue of illustrated vessels

(NB catalogue numbers refer to individual vessels/sherds)

Amphorae

25	Dressel 2-4 derivative, with ovoid handle and part of body. Peacock and Williams (1986: 87–8 - for fabric); Arthur and Williams (1992) for third-century derivative. AD 43–100. Fabric: CAM AM I. Context 576, Phase 4, Figure 23.
302	Dressel 20 rim (triangular) and neck sherds. AD 43–200. Fabric: BAT AM1. Context 1090, Phase 4, Figure 23.

Samian

12	Bowl, Dr. 37; decoration includes a seated stag in a double medallion within a panel, which sits above a panel with an eagle with its wings spread. Evidence of repair with voids for metal clamp of either lead or iron. AD 100–120. Fabric: LMV SA. Context 576, Phase 4. Figure 23.

Other fine wares

188 Castor box lid with dark brown slip. See Howe *et al.* (1980: 24), late second to early fourth century, probably late as it exhibits smoother grooves. Fabric: LNV WH. Context 989, Phase 4. Figure 23.

309 Beaker with everted rim and body sherds; red-brown to orange slip. AD 150–410. Fabric: LNV CC. Context 1314, Unphased. Figure 23.

Mortaria

35 Rim with slightly inverted and beaded inner-, and slightly hooked dorsal; plain flat base; concentric grooves to lower portion of inner surface. Predominantly fine-grained black and dark red trituration grits. Second century. Fabric: MAH WH. Context 565, Phase 3B. Figure 24.

37 Beaded rim with flat base; milky and grey trituration grits. Includes no. 273. AD 90–130. Residual. Fabric: HOL OX. Context 576, Phase 4. Figure 24.

42 Vertical, slightly inverted inner-lip and horizontal flange. LN1646. AD 180–230. Fabric: MAH WH. Count: 1, Wt. 58g, RD 260mm, RE 12.5%. Context 576, Phase 4. Figure 24.

43 Large, thick, almost rectangular rim sherd. AD 100–350. Fabric: MAH WH. Count: 1, Wt. 122g, RD 240mm, RE 5%. Context 576, Phase 4. Figure 24.

48 Beaded rim with broad horizontal flange level with bead, with downturned distal end; milky monocrystalline quartz trituration grits and abundant gold and silver mica to surface. AD 90–130. Residual. Fabric: HOL OX. Context 985, Phase 3A. Figure 24.

59 Hooked flange and narrow bead which sits below inner-rim. AD 90–130. Residual. Fabric: HOL OX. Context 565, Phase 3B. Figure 24.

82 Thin body (*c.* 6–8mm) and broad horizontal flange, downturned at distal end. AD 90–130. Fabric: HOL OX. Context 642, Phase 4. Figure 24.

99 Broad, sub-round bead with deep groove to flange; downturned flange with multiple shallow grooves to outer-half. Same form as no. 40. LN1639v. AD 170–250. Fabric: MAH WH. Context 698, Phase 2. Figure 24.

111 Beaded rim and narrow slightly downturned flange with second bead at distal end. AD 100–180. Fabric: WIL OX. Context 747, Phase 3A. Figure 24.

116 High vertical beaded rim, narrow flange with shallow bead to distal end. Quartz, pink and orange-brown trituration grits. AD 100–170. Fabric: WRX WH. Context 747, Phase 3A. Figure 24.

140 Wall-sided with slightly inward-sloping rim. LN1740d. AD 300–400? Fabric: MAH WH. Context 1013, Unphased. Figure 26.

141 Beaded rim and slightly downturned flange. AD 100–350. Fabric: MAH WH. Context 1013, Unphased. Figure 25.

143 Beaded rim and downturned flange; remains of orange/red parchment decoration. Possibly the same vessel as no. 144. LN1641b. AD 160–230. Fabric: MAH WH. Context 1065, Phase 3A. Figure 25.

146 Hammerhead with six grooves to slightly concave flange. LN1697. AD 200–260? Fabric: MAH WH. Context 1077, Phase 4. Figure 26.

151 Beaded rim and downturned flange; evidence of a drilled repair hole to body sherd. AD 100–170. Fabric: OXF WH. Context 1148, Unphased. Figure 25.

152 Hammerhead with five grooves to flange, thumb impression to lower-edge of flange; base fragments with large grits; possibly some brown/orange parchment decoration and grits are densely packed. LN1726v. AD 250–350. Fabric: MAH WH. Context 1176, Phase 2. Figure 26.

205 Beaded rim, downturned flange with bead to distal end. AD 90–130. Residual. Fabric: HOL OX. Context 1068, Phase 4. Figure 25.

219 Beaded rim which sits below horizontal flange with downturned distal end. Some trituration grits to flange surface. Fabric: HOL OX. Residual. Context 1077, Phase 4. Figure 25.

222 Beaded rim with horizontal flange with bead at distal end; partial spout. *c.* AD100–180. Fabric: WIL OX. Context 1087, Unphased. Figure 25.

228 Hammerhead flange. AD 190–350. Fabric: MAH WH. Count: 3, Wt. 26g. RE 1%. Context 1127, Phase 3A. Figure 26.

239 High beaded rim, horizontal with sharply downturned distal end. Milky trituration grits. AD 90–130. Fabric: HOL OX. Context 1198, Phase 3B. Figure 25.

274 Beaded, hooked-rim fragment. Fabric: CWOX1. Context 576, Phase 4. Figure 26.

275 Mortarium with high concave bead, narrow horizontal flange with downturned distal end. AD 90–130. Residual. Fabric: HOL OX. Context 576, Phase 4. Figure 25.

276 Mortarium with horizontal and plain flange, slightly downturned; flat lip/rim with groove immediately below. AD 90–130. Residual. Fabric: HOL OX. Context 576, Phase 4. Figure 25.

277 Mortarium with lid-seat to inner-lip, horizontal flange with groove close to downturned distal end. Pale cream slip to surface (heavily abraded). Probably same vessel as no. 278. AD 90–130. Residual. Fabric: HOL WS. Context 576, Phase 4. Figure 25.

280 Mortarium with sub-triangular beaded rim, sloping flange with bead to distal end. Fabric: MAH WH. Context 576, Phase 4. Figure 25.

281 Mortarium with beaded rim and broad hooked flange. Large trituration grits. AD 130–180. Fabric: MAH WH. Context 576, Phase 4. Figure 25.

305 Hammerhead with plain flange slightly upturned to distal end; heavy sooting. AD 180–230? Fabric: MAH WH. Context 1303, Phase 3A. Figure 26.

Coarsewares

52 Flagon neck fragment with pinched rim. AD 100–200. Fabric: SOW BB1. Context 514, Phase 2. Figure 27.

55 Jar/cooking-pot with everted rim and cross-hatched incised decoration to the middle of the body. Gillam (1976) no.7. Early to mid-third century. Fabric: DOR BB1. Context 525, Phase 3B. Figure 28.

60 Jar/cooking-pot with everted, down-turned rim. Heavy burning and surface is patchy white to pale grey with large inclusions visible. A lead repair clasp is still present within the pot. Gillam (1976) nos. 4/6. Late second to early third century. Fabric: DOR BB1. Context 583, Phase 3A. Figure 28.

69 Bowl with horizontal rim with shallow groove. Gillam (1976) no. 42. Late second to early third century. Fabric: SOW BB1. Context 576, Phase 4. Figure 26.

70 Dish with plain rim. Gillam (1976) no. 79. Early third century. Fabric: SOW BB1. Context 576, Phase 4. Figure 26.

71 Dish with plain rim. Gillam (1976) no. 79. Early third century. Fabric: SOW BB1. Context 576, Phase 4. Figure 26.

81 Jar/cooking-pot with everted, down-turned rim. Gillam (1976) no. 10. Late third century. Fabric: SOW BB1. Context 642, Phase 4. Figure 28.

104 Dish with beaded rim with groove below. Includes no. 130. Gillam (1976) nos. 68/69. Mid-second century. Fabric: ROS BB1. Context 747, Phase 3A. Figure 26.

128 Jar/cooking-pot with everted down-turned rim. Gillam (1976) no. 11. Late third to early fourth century. Fabric: DOR BB1. Context 621, Phase 3B. Figure 28.

133 Jar/cooking-pot with everted rim; heavily abraded with some burnished remaining. Evidence of burning through patches of pale grey and white to outer surface. Gillam (1976) no. 10. Late third century. Fabric: SOW BB1. Context 627, Phase 3B. Figure 28.

180 Jar/cooking-pot, full profile; dense cross-hatching, c. 10mm, between two plain bands. Evidence of burning to base. Gillam (1976) nos. 8/10. Mid- to late third century. Fabric: SOW BB1. Context 973, Phase 3A. Figure 28.

194 Bowl. Gillam (1976) no. 59. Mid-second century. Fabric: DOR BB1. Context 1039, Unphased. Figure 26.

199 Jar with everted rim. Gillam (1976) no. 2. Mid-second century. Fabric: DOR BB1. Context 1065, Phase 3A. Figure 29.

211 Flanged bowl. Joining sherds between contexts 1071 and 1077. Gillam (1976) nos. 46/47. Late third to early fourth century. Fabric: DOR BB1. Phase 4. Figure 26.

213 Base from a DOR BB 1 dish/bowl with loop decoration. Late second to third century. Joining sherds between context 1071 and 1077. Fabric: DOR BB1. Phase 4.

214 Jar/cooking-pot with flared, everted rim, almost horizontal, and cross-hatched decoration to lower 2/3 of body. Some large red and red/brown inclusions. Joining sherds between context 1077 and 1079. Gillam (1976) no. 10. Late third century. Fabric: SOW BB1. Phase 2, Figure 29.

245 Jar with short everted rim. Gillam (1976) no. 31. Mid-second century. Fabric: TBB1 2. Context 1261, Phase 2. Figure 28.

290 Bowl with flat rim, groove to inner-lip, and faint incised arched decoration to outer-surface. Gillam (1976) nos. 42/43. Late second to early/mid-third century. Fabric: DOR BB1. Context 576, Phase 4. Figure 26.

292 Dish with plain rim. Gillam (1976) no. 78. Late second to third century. Fabric: DOR BB1. Context 576, Phase 4. Figure 26.

293 Dish with beaded rim. Gillam (1976) no. 72. Early third century. Fabric: SOW BB1. Context 576, Phase 4. Figure 27.

294 Dish with plain rim. AD 190–340. Fabric: DOR BB1. Context 576, Phase 4. Figure 27.

307 Dish with plain rim and flat base. Gillam (1976) no. 80. Mid- to late third century. Fabric: DOR BB1. Context 1303, Phase 3A. Figure 27.

311 Dish with plain rim and flat base. Gillam (1976) no. 80. Mid- to late third century. Fabric: DOR BB1v. Context 1320, Phase 3A. Figure 27.

50 Flagon/jug with triangular everted rim with pale cream slip. AD 90–130. Fabric: HOL OX. Context 509, Phase 3B. Figure 27.

53 Flagon rim. Fabric: CWOX2. Context 525, Phase 3B. Figure 27.

57 Shallow thin-walled bowl with hooked rim. AD 90–130. Fabric: WILL OX or SVW OX 2. Context 545, Phase 3A. Figure 26.

65 Wide-mouthed jar. Severn Valley ware (SVW OX 2) Webster (1976) no. 26. Late second to late third century. Context 576, Phase 4. Figure 29.

66 Wide-mouthed with thick beaded rim. AD 90–130. Severn Valley ware (SVW OX 2) No exact parallel in Webster (1976). Probably late second to fourth century. Context 576, Phase 4. Figure 29.

76 Large, wide-mouthed pot with everted triangular rim and lid seat. Severn Valley ware (SVW OX 2) Webster (1976) no. 24. Late second to late third century. Fabric: CWOX1. Context 604, Phase 3B. Figure 29.

87 Severn Valley ware jar rim and body sherds. Fabric: SVW OX2. Webster (1976) no. 29. Late third to fourth century. Context 676, Phase 4. Figure 16.

88 Large, narrow-necked jar with thick beaded rim. AD 90–130. Fabric: HOL OX. Residual. Context 676, Phase 4. Figure 28.

89 Wide-mouthed Severn Valley ware vessel with clubbed rim. Fabric: SVW OX2. No close parallel in Webster (1976). Probably late second to third/fourth century. Context 676, Phase 4. Figure 29.

95 Flagon rim. AD 90–130. Fabric: HOL OX. Context 679, Phase 3A. Figure 27.

101 Thin-walled beaker; rim with deep groove/lid-seat. AD 90–130. Fabric: CWOX4. Context 700, Phase 2. Figure 26.

102 Cup/beaker with everted, almost horizontal rim. AD 90–130. Fabric: HOL OX. Context 700, Phase 2. Figure 26.

106 Collared jar with everted rim. Local or Severn Valley ware, but not Holt. 2nd century+ Context 747, Phase 3A. Figure 28.

120 Flagon with flared and hooked rim, white slip to surface; evidence of handle (missing) immediately below rim. Not in Grimes (1930), not a Holt form. Cf. Webster (1992) no. 191. Second century. Context 763, Phase 3A. Figure 27.

121 Dish with plain rim and vertical wall; white slipped. AD 90–130. Fabric: HOL OX. Residual. Context 763, Phase 3A. Figure 26.

122 Flagon with slightly everted neck and horizontal rim; some evidence of white slip. Fabric: CWOX1. Possibly Holt. Cf. Grimes (1930) no. 126. AD 90–130. Context 763, Phase 3A. Figure 27.

125 Pitcher neck with flared rim; evidence of self-coloured slip to surface. Fabric: CWOX1. Context 748, Phase 3B. Figure 27.

129 Dish/bowl with beaded rim. AD 90–130. Fabric: HOL OX. Residual. Context 621, Phase 3B. Figure 28.

131 Bowl/lid? rim with slightly raised lip. AD 90–130. Fabric: HOL OX. Context 569, Phase 2. Figure 28.

136 Jar rim and body sherd. Fabric: CWOX4. Context 859, Unphased. Figure 28.

139 Handle (rounded) and body sherd. Fabric: CWOX4. Context 886, Unphased. Figure 28.

153 Carinated bowl with reeded rim, two grooves with ridge between. Typical of Holt/local forms of late first to second century date; common in Chester Grimes (1930) no. 87. AD 90–130. Fabric: CWOX7. Context 509, Phase 3B. Figure 26.

155 Lid rim. AD 90–130. Fabric: HOL OX. Context 756, Unphased. Figure 28.

159 Wide-mouthed vessel; flared beaded rim with lid-seat. AD 90–130. Fabric: SVW OX2. No exact parallel in Webster (1976) but similar to no. 26. Probably late second to late third century. Context 794, Phase 4. Figure 29.

162 Wide-mouthed jar rim. Probably local or Severn Valley ware. Cf. Webster (1992) no. 621. Late second to third century? Context 802, Unphased. Figure 29.

170 Dish with slightly downturned rim. Fabric: CWOX4. Context 906, Unphased. Figure 26.

174 Wide-mouthed vessel with square rim. AD 90–130. Fabric: HOL OX. Grimes (1930) no. 70. Context 950, Phase 4. Figure 29.

182 Lid. Fabric: CWOX8. Context 979, Phase 3A. Figure 28.

185 Wide-mouthed jar with hooked and down-turned rim. Severn Valley ware. Webster (1976) no. 27 or 32. Late third – mid-/late fourth century. Fabric: SVW OX2. Context 988, Phase 4. Figure 29.

190 Jar with everted triangular rim. Cf. Hartley and Webster 1973: no. 11. Second century. Fabric: WIL OX. Context 1024, Phase 3A. Figure 27.

192 Jar neck and everted rim. Fabric: WIL OX. Cf. Webster (1992) no. 128. Second century. Context 1024, Phase 3A. Figure 28.

195 Lid, double-ridges to outer-surface and evidence of two air-holes; probably for a large cooking-pot. Pale brown outer-surface, reduced core. Fabric: CWOX10. Context 1039, Unphased. Figure 28.

196 Narrow-necked jar with horizontal rim and lid-seat. AD 90–130. Fabric: HOL OX. Context 1065, Phase 3A. Figure 28.

198 Wide-mouthed vessel with flared neck and everted triangular rim. Mid second to late third century. Severn Valley ware. Fabric: SVW OX2. Context 1065, Phase 3A. Figure 30.

204 Bowl rim and body sherd. Fabric: CWOX1. Context 1066, Phase 3A. Figure 26.

207 Narrow-necked jar with everted rim. Fabric: CWOX1. Context 1055, Unphased. Figure 28.

208 Wide-mouthed vessel. Severn Valley ware. Fabric: SVW OX2. Context 1071, Phase 4. Figure 30.

209 Flagon with flared and everted rim. Fabric: CWOX1. Context 1071, Phase 4. Figure 27.

218 Wide-mouthed jar with shallow lid-seat, and white-slip. Severn Valley ware. Webster (1976) no. 28. Late third to fourth century. Fabric: SVW OX2. Context 1077, Phase 4. Figure 30.

223 Wide-mouthed vessel with pale cream slip. Severn Valley ware. Fabric: SVW OX2. No exact parallel in Webster (1976). Late second to late third century. Context 1090, Phase 4. Figure 30.

225 Jar rim and body with pale slip; some sooting. Probably Severn Valley ware. Fabric: CWOX1. Second to fourth century. Context 1090, Phase 4. Figure 28.

226 Large pitcher body and neck sherds with cream slip. Fabric: CWOX8. Context 1090, Phase 4. Figure 27.

230 Large wide-mouthed jar rim with flared body. Severn Valley ware. No exact parallel in Webster (1976). Late second to third/fourth century. Cf. Evans *et al.* (2000) no. JLS6 for close parallel from the Newland Hopfields Severn Valley ware production site. Fabric: SVW OX2. Context 1148, Unphased. Figure 30.

231 Flagon rim. Fabric: CWOX8v. Context 1148, Unphased. Figure 27.

232 Thin-walled carinated bowl with beaded rim and twin-grooves to inner-surface (near rim). Fabric: CWOX8. Context 1148, Unphased. Figure 26.

233 Wide-mouthed jar with flared rim with inverted lip and lid-seat. Very crude. Similar to no. 218. Fabric: CWOX4v. Context 1176, Phase 2. Figure 30.

234 Flagon neck with triangular rim. Fabric: CWOX6. Context 1176, Phase 2. Figure 27.

235 Flagon rim. AD 90–130. Fabric: HOL OX. Context 1176, Phase 2. Figure 27.

236 Jar rim with triangular (grooved and rouletted) outer-rim. Fabric: WIL OX or SVW OX? Cf. Hartley and Webster (1973) no. 14. Second century. Context 1176, Phase 2. Figure 27.

242 Jar with beaded rim, groove to centre of outer-rim with incised rouletted decoration below. Webster (1976) no. 13. Third to fourth century Fabric: SVW OX. Context 1199, Phase 3B. Figure 27.

246 Flagon rim. AD 90–130. Fabric: HOL OX. Context 1261, Phase 2. Figure 27.

253 Large flagon/pitcher rim with broad handle emerging from rim; lid-seat; rectangular lug close to handle on rim; two sherds from base with raised foot-ring. Possibly from the same vessel. AD 90–130. Fabric: HOL OX 1. Residual. Context 576, Phase 4. Figure 27.

254 Jar rim. Fabric: CWOX 1. Context 576, Phase 4. Figure 27.

255 Flagon/pitcher rim everted rounded rim and pale self-coloured slip. Fabric: CWOX7. Context 576, Phase 4. Figure 27.

256 Wide-mouthed jar with thick beaded rim. Severn Valley ware. Webster (1976) no. 22. Second to third century. Fabric: SVW OX. Context 576, Phase 4. Figure 30.

257 Jar with everted rim; sooting on rim. AD 90–130. Fabric: HOL OX. Context 576, Phase 4. Figure 29.

258 Closed-form jar with inverted rim (at right angle) with bead outer-lip, possibly a colander. Cf. Webster (1976) no. 58. Second to third century. Fabric: CWOX1. Context 576, Phase 4. Figure 30.

259 Wide-mouthed vessel with internal lid-seat. AD 90–130. Fabric: HOL OX. Residual. Context 576, Phase 4. Figure 30.

260 Flagon with reeded rim, flared shoulder. Fabric: CWOX6. Context 576, Phase 4. Figure 27.

261 Bowl with plain rim and step to upper- outer-body. Form not in Grimes (1930). AD 90–130. Fabric: HOL OX. Residual. Context 576, Phase 4. Figure 26.

262 Pitcher with hooked-rim; cream slip to outer-surface and partially to the inside close to the rim. Fabric: CWOX 1. Count: 1, Wt. 25g, RD 140mm, RE 13.5%. Context 576, Phase 4. Figure 27.

263 Small jar with flat beaded rim. Fabric: CWOX3. Count: 1, Wt. 8g, RD 140mm, RE 11%. Context 576, Phase 4. Figure 28.

264 Jar with pulley rim. Webster (1976) no. 11. Third–fourth century. Fabric: CWOX7. Context 576, Phase 4. Figure 27.

267 Flanged vessel with pie-crust type decoration to flange, wavy-line incised decoration to body sherd. No sherds join but they most likely belong to the same vessel. Fabric: CWOX4. Context 576, Phase 4. Figure 27.

269 Pitcher with everted rim and lid-seat, and pale slip. Fabric: CWOX1. Count: 1, Wt. 38g, RD 172mm, RE 20%. Context 576, Phase 4. Figure 27.

270 Wide-mouthed vessel with everted rim. AD 90–130. Fabric: SVW OX1. Webster (1976) no. 26. Late second to late third century. Context 576, Phase 4. Figure 29.

271 Large wide-mouthed vessel with double-groove to inner-rim. A Severn Valley form. Webster (1976) no. 21. Mid- to late second century. Fabric: SVW OX. Context 576, Phase 4. Figure 30.

272 Wide-mouthed vessel with hooked and down-turned rim. Variant of Webster (1976) nos. 32/33. Fourth century. Fabric: CWOX7. Context 576, Phase 4. Figure 30.

315 Closed-mouthed jar. Fabric: CWOX15. Context 1044, Phase 3A. Figure 28.

325 Cylindrical single-handled flagon with raised foot-ring and flared rim; almost complete, no. 119, Holt (Grimes (1930) no. 119). AD 90–130. Fabric: HOL OX. Context 614, Phase 3A. Figure 27.

103 Dish with vertical walls. Gillam (1976) no. 34. Early to mid-second century Fabric: DOR BB1. Context 747, Phase 3A. Figure 26.

126 Jar/cooking-pot with everted rim; heavily abraded with some burnished remaining; evidence of burning through patches of pale grey and white to outer surface. Gillam (1976) no. 10. Late third century. Fabric: DOR BB1. Context 525, Phase 3B. Figure 28.

137 Bowl with plain rim and hooked flange; possible white-slipped to outer-surface. Holt form. Grimes (1930) no. 161. AD 90–130. Fabric: CWRD3. Context 884, Phase 2. Figure 26.

168 Imitation samian form 27 cup. Holt. Grimes (1930) no. 166. AD 90–130+. Fabric: CWRD3. Context 903, Phase 2. Figure 26.

173 Jar with everted and down-turned rim. Fabric: CWRD4. Context 922, Unphased. Figure 28.

298 Pitcher/jug spout fragment. Similar to Gillam Type 61. Second century. Fabric: CWRD1. Count: 1, Wt. 19g. Context 576, Phase 4. Figure 27.

300 Jar/cooking-pot, some evidence of burnishing but heavily burnt with pale grey and white patches to surface. Gillam (1976) no. 9. Mid-third century. Fabric: DOR BB1. Context 576, Phase 4. Figure 29.

203 ?Tazza rim and body sherds; everted rim with applied pie-crust around outer edge. Fabric: CWOX4. Context 1048, Unphased. Figure 31.

321 Hand-made cup with pinched base and beaded rim; evidence of lime or chalk residue or lining on inner surface. Possibly a crucible but doesn't seem to have been heated to high temperatures post manufacture? AD 90–130. Fabric: HOL OX. Residual. Context 576, Phase 4. Figure 31.

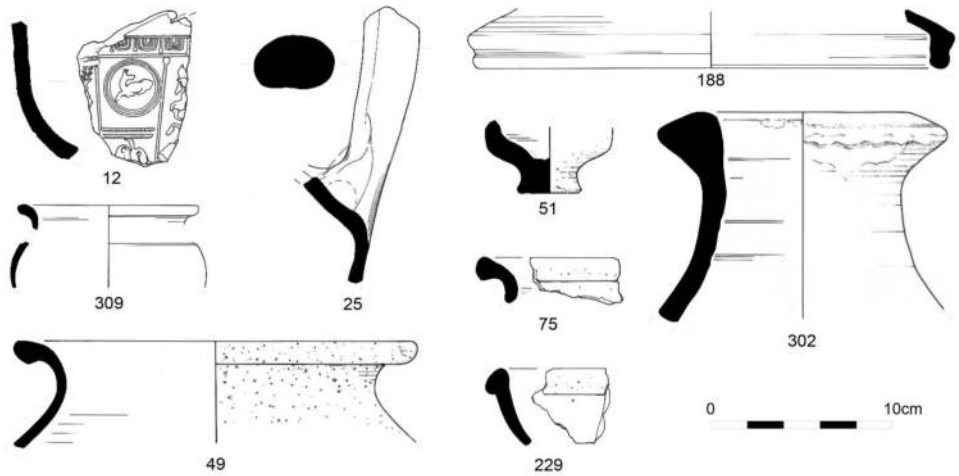

Figure 23. Hand-made and Roman pottery

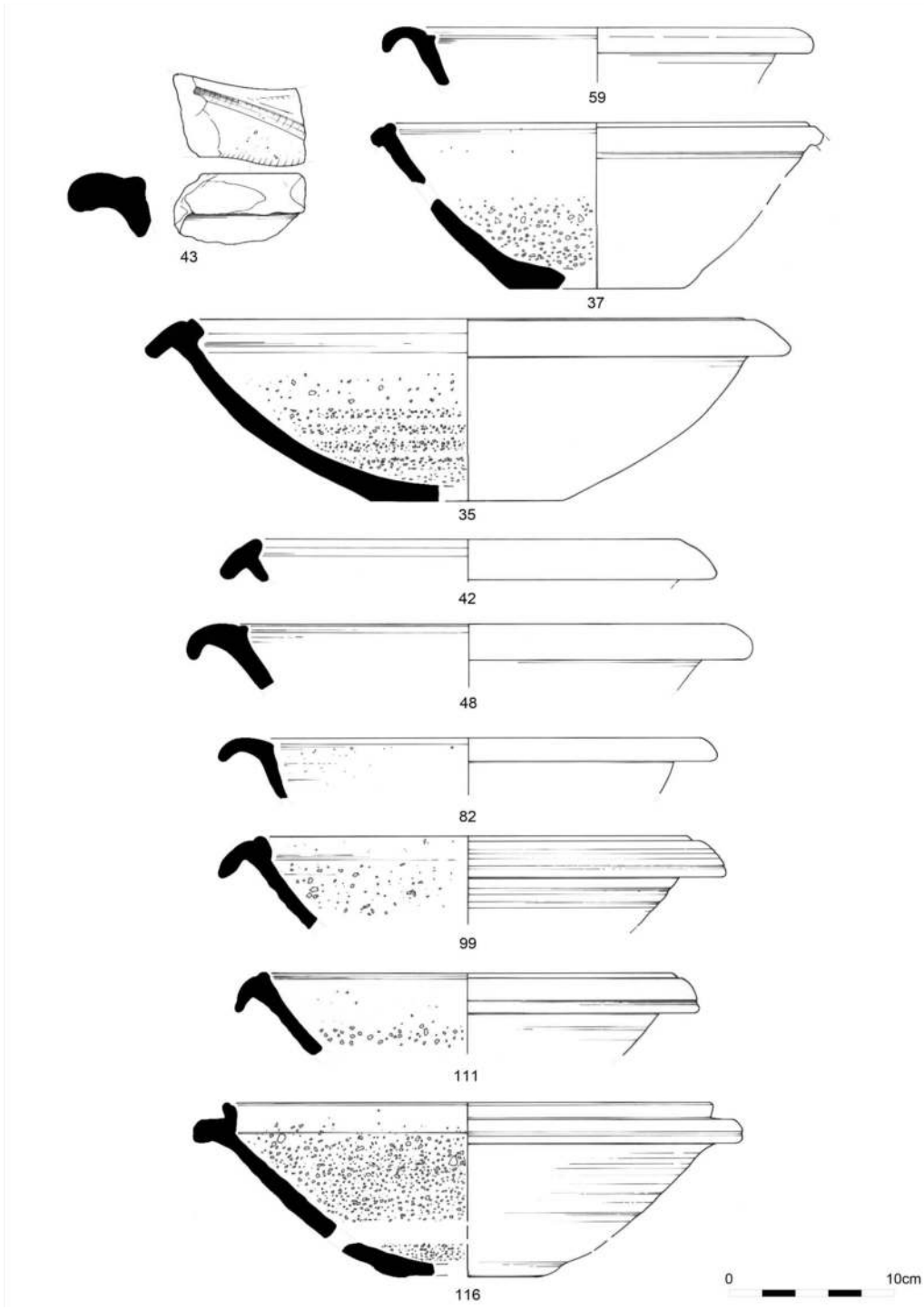

Figure 24. Roman pottery

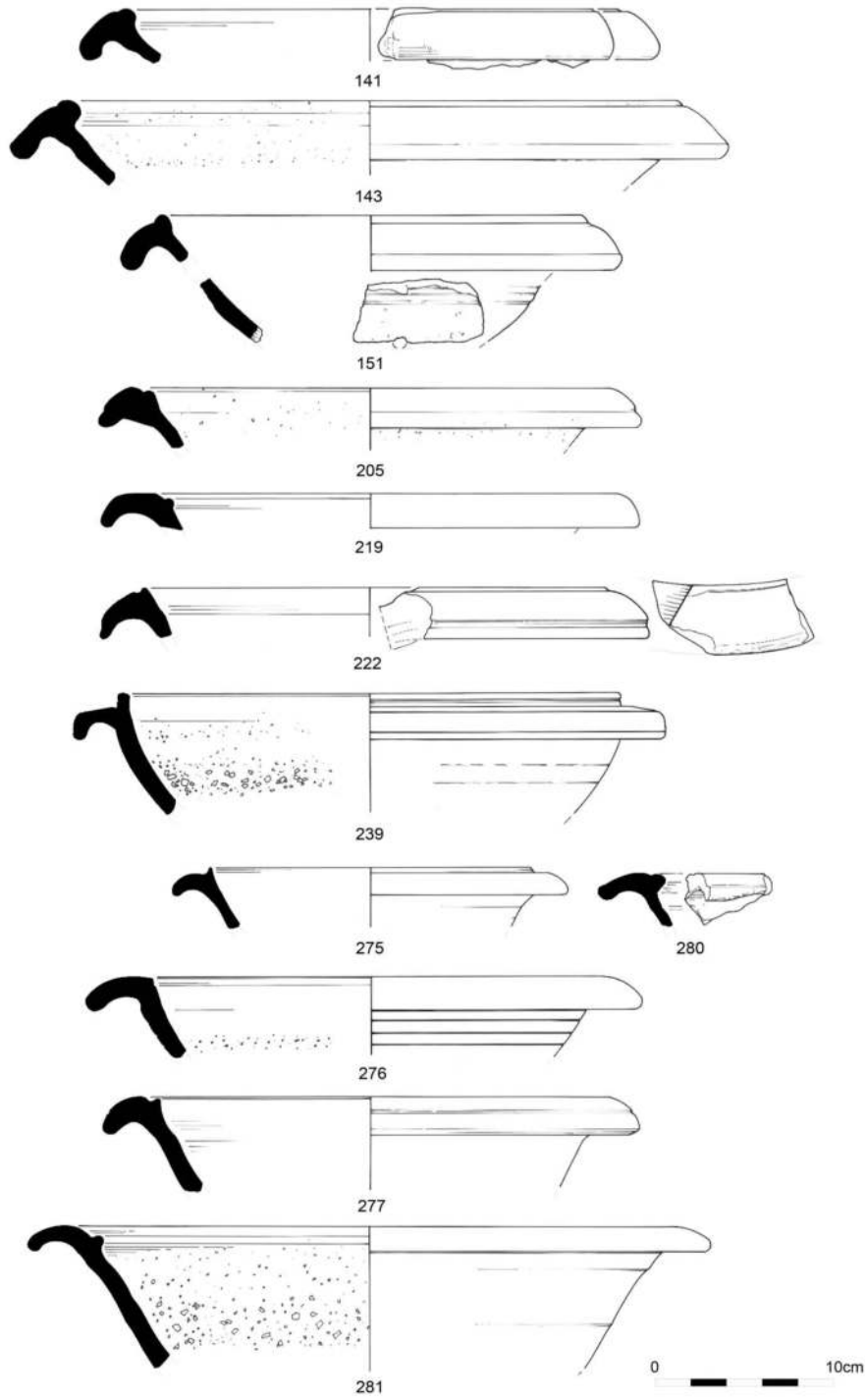

Figure 25. Roman pottery

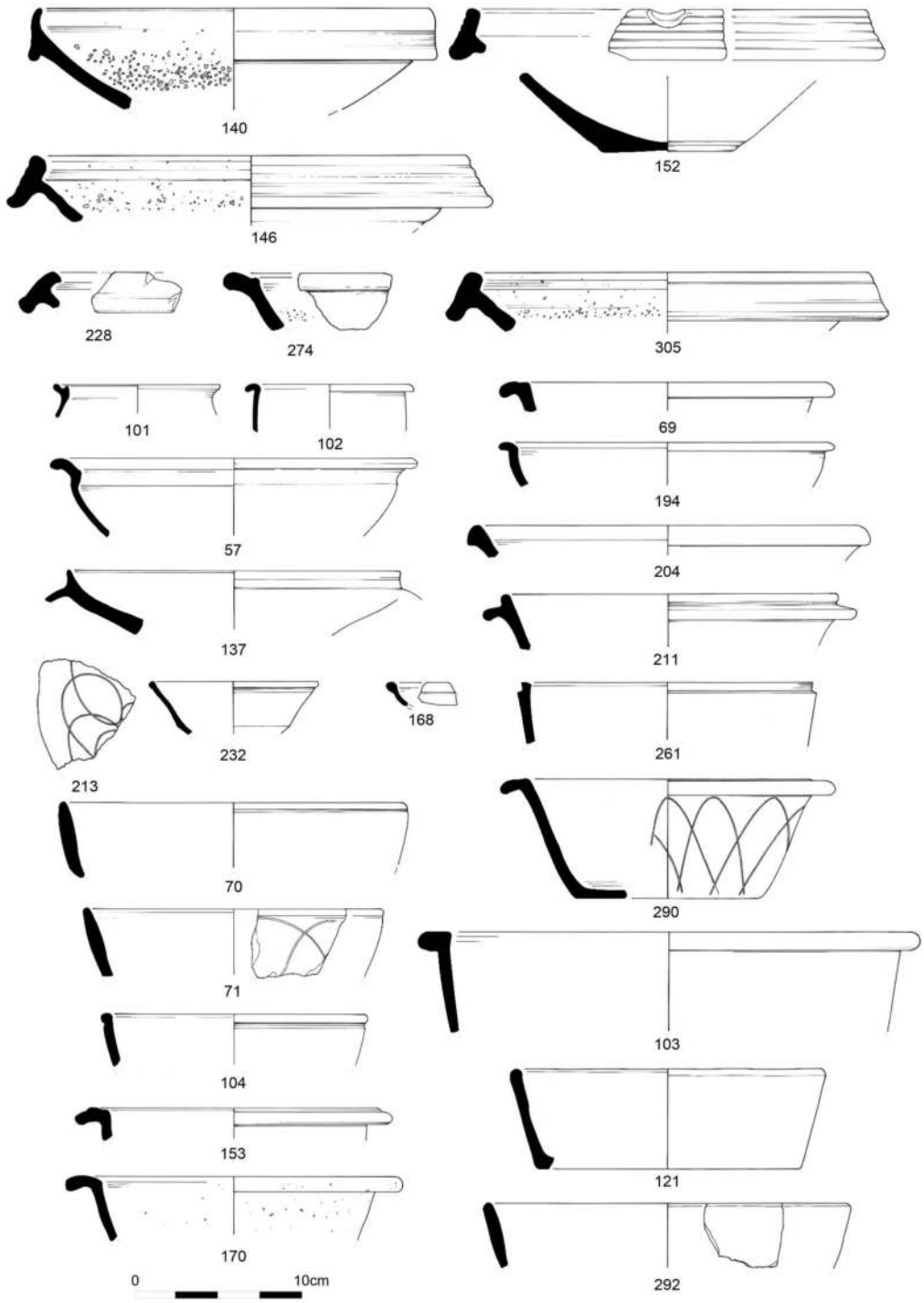

Figure 26. Roman pottery

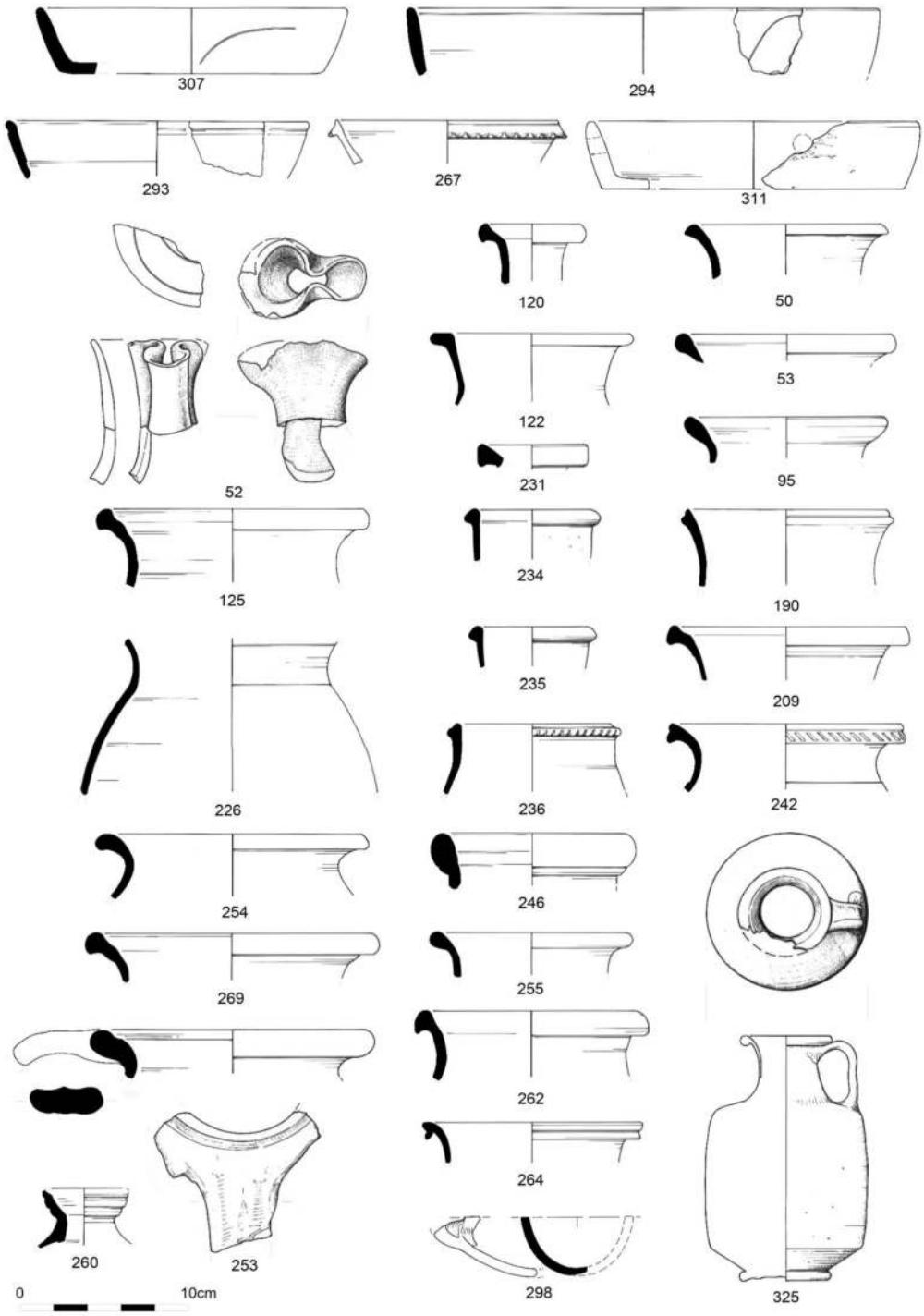

Figure 27. Roman pottery

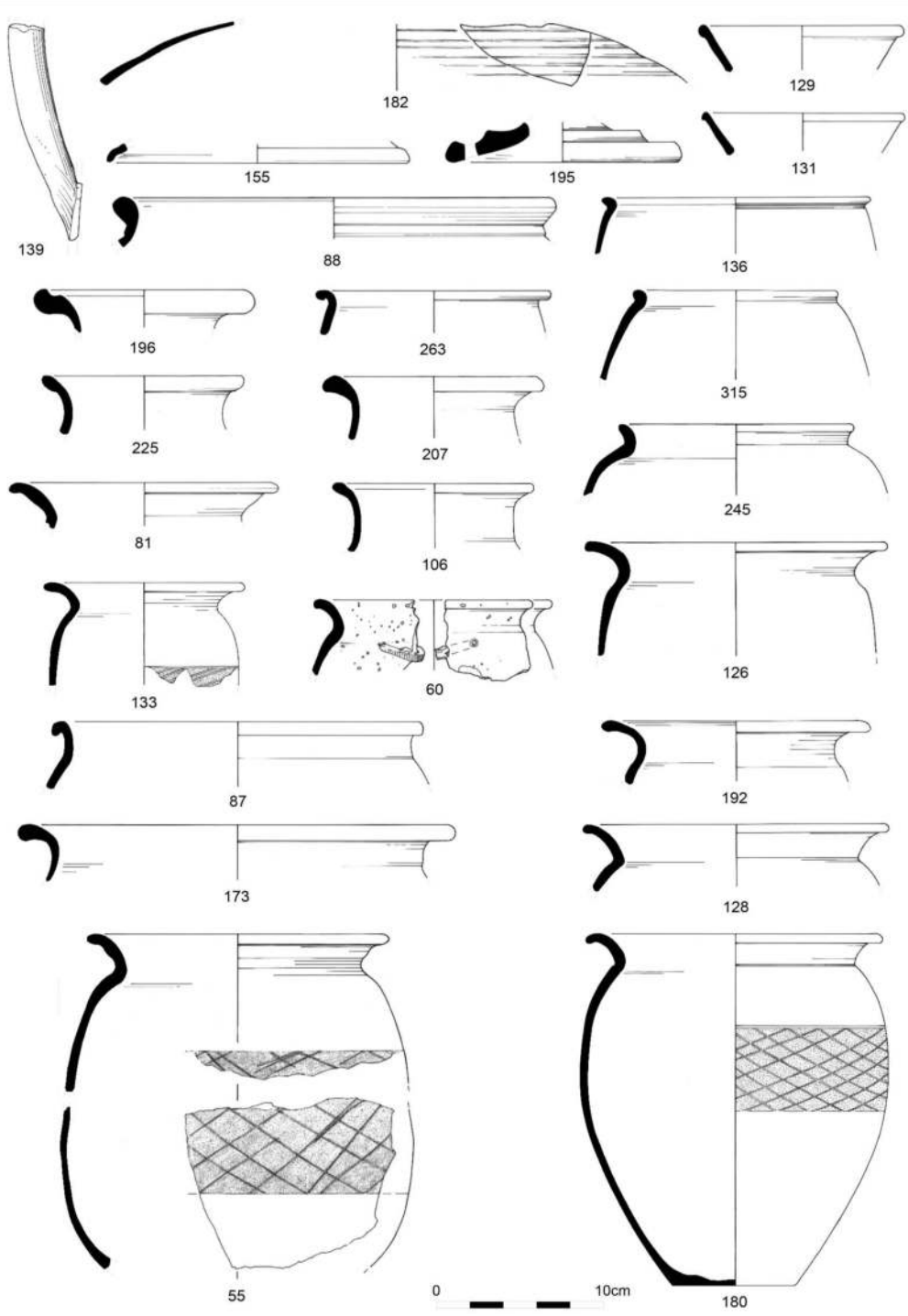

Figure 28. Roman pottery

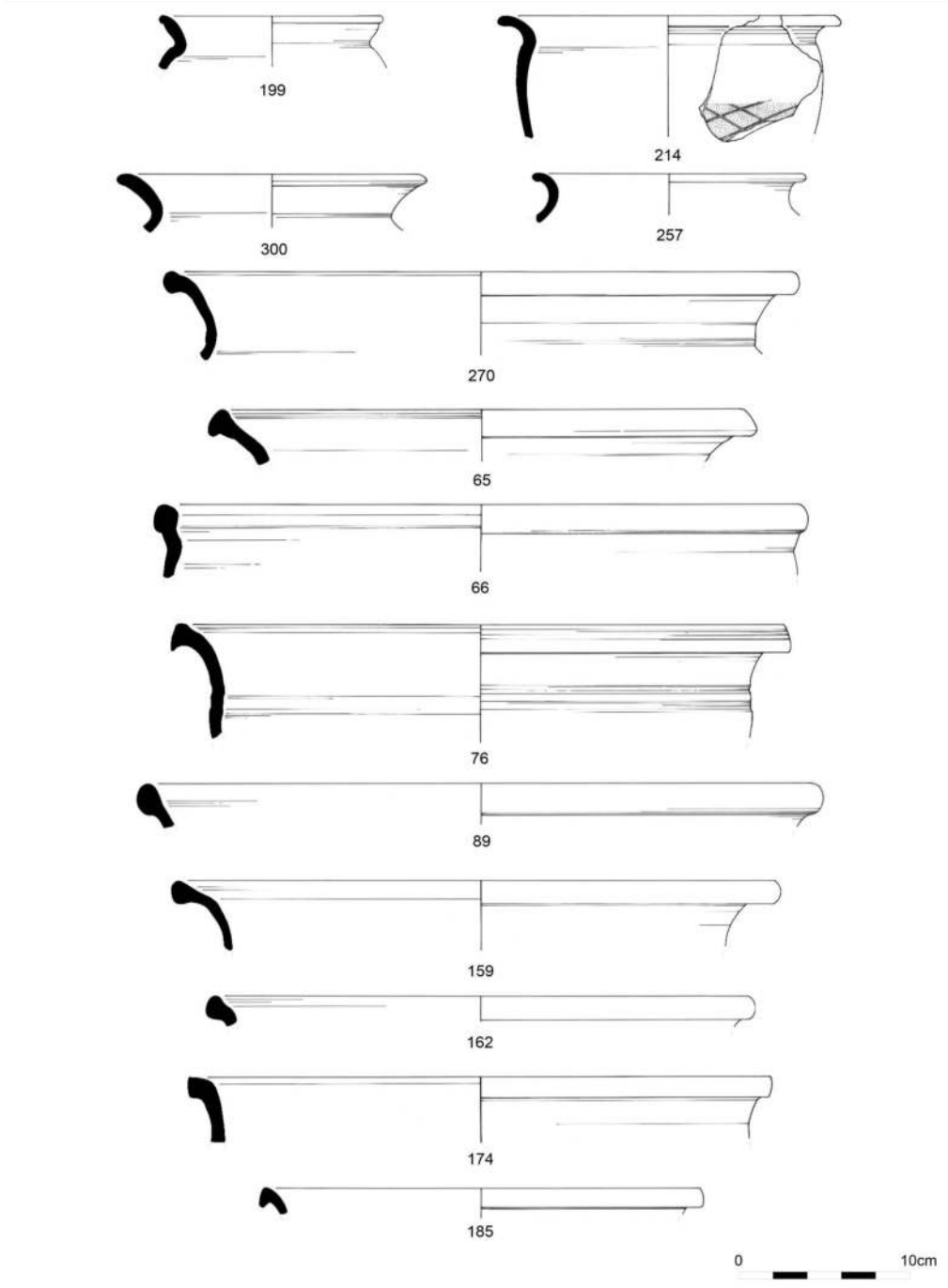

Figure 29. Roman pottery

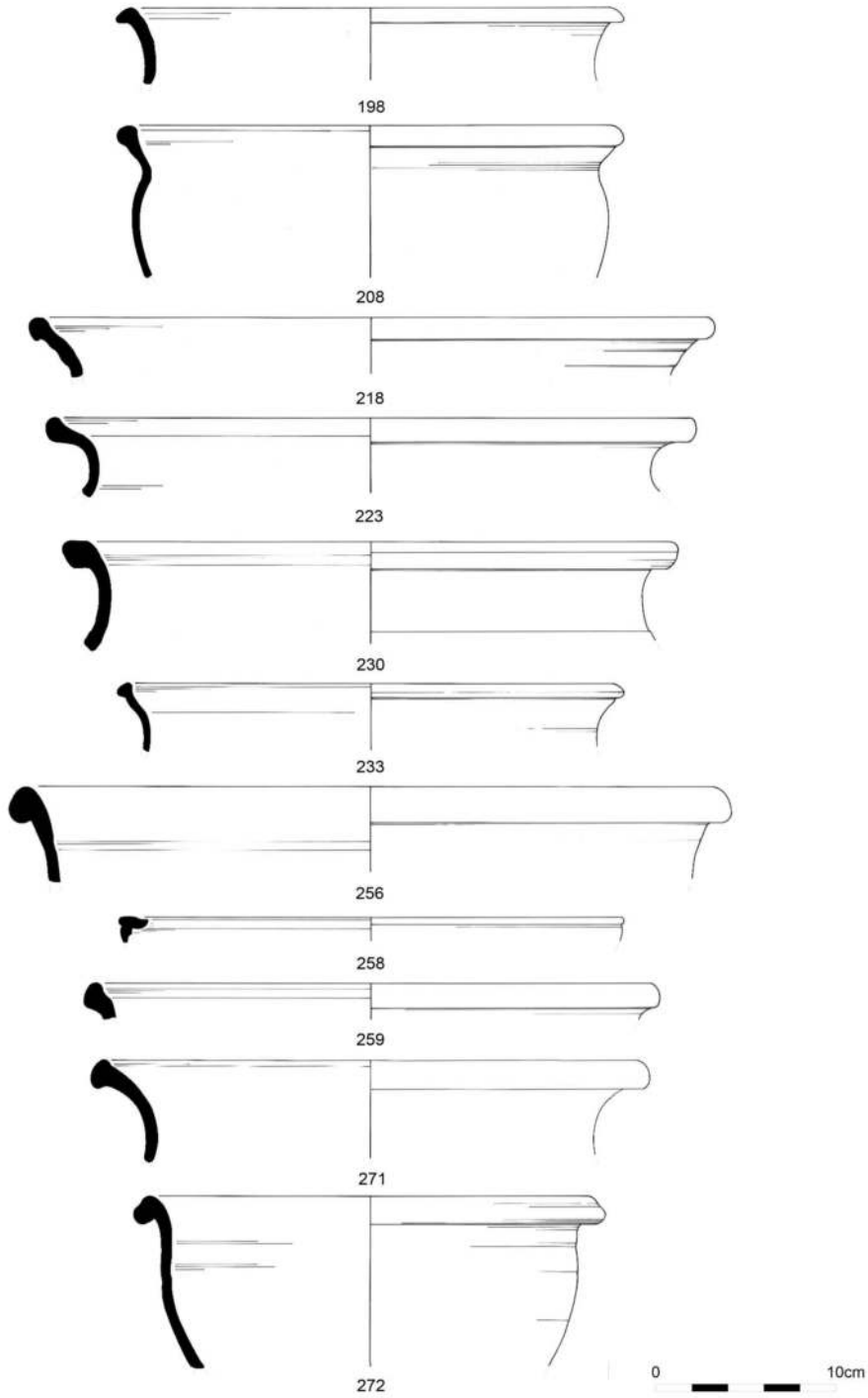

Figure 30. Roman pottery

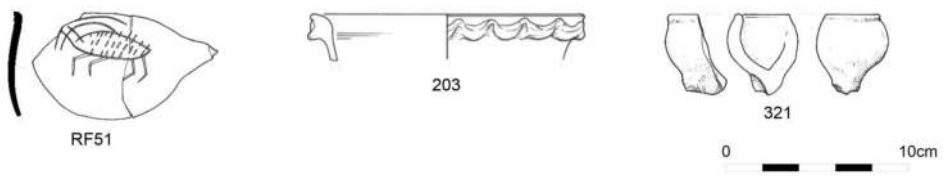

Figure 31. Other ceramics

The small finds

The stonework

By A.T. Croom (lithology by T. Morse)

All stonework is in a red fine to medium-grained sandstone fine-grained red sandstone with occasional large pebble inclusions. It is possible that the items were quarried from the pebble beds in and around Chester (Earp and Taylor 1986: 16–17; Henig 2004: xiv). However, Earp and Taylor (1986: 86) also suggest the pebble beds quarried by the Romans at Saighton as a possible source. All four items came from ditch 597, context 573, with the exception of the possible fingers (see No. 1, below). Note: the abbreviation CSIR refers to the *Corpus Signorum Imperii Romani* series of volumes (see Coulston and Phillips 1988; Henig 2004; Phillips 1977 and Rinaldi Tufi 1983).

The statue

Statue (Figure 32)

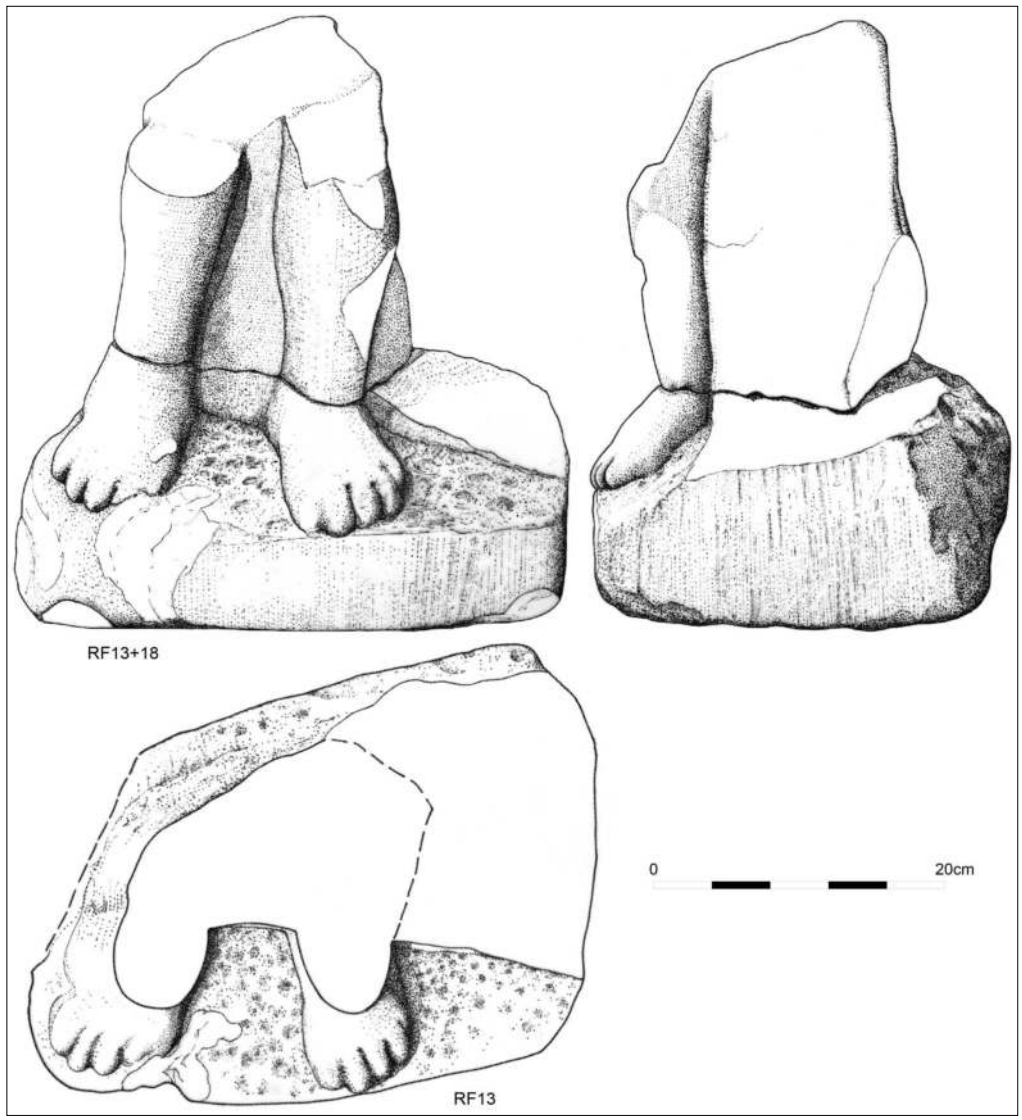

Figure 32. Statue, RF13 and 18

The statue depicts a standing figure against a flat vertical face, with a projecting, sloping ledge at the base. The figure is cut three-quarters in the round, with well-shaped calves and bare feet. The pose is unusual in that the weight rests on the left leg, with the right leg slightly bent, when typically it would be the other way round, but there is another local example of this on a relief of Attis from White Friars in Chester (CSIR I.9, no. 16). The front of the base and the right-hand side are smoothly worked, and possibly part of the left-hand side, although this is badly damaged. Incomplete fragment in two pieces. The lower surface is roughly worked with diagonal tool marks. Dimensions H: 410mm, W: 370mm, B: 280mm. RFs13 and 18. RF23, a small stone fragment of the same lithology, possibly represents fingers from the same statue (context 788).

Other examples of this form of sculpture, of a figure standing on a ledge against a vertical wall include Mercury, Hercules, a genius, and an unidentified figure (CSIR I.1, no. 205; CSIR I.6, nos. 21, 31, 480; CSIR I.3, no. 111). In all these cases, the base is rectangular in shape, with a straight edge of the ledge, but in the Saighton Camp example the ledge is angled, widening from 70mm deep at the right-hand side to 120mm deep at the front to allow room for the feet, and possibly tapering again to the left-hand side, although this side is badly damaged. A number of different deities and figures are shown with bare feet such as Apollo, Mercury, Hercules, and occasionally also genii, but not enough remains to suggest a firm identification for this piece. Second or third century in date.

The altars

The altars are likely to be second- or third-century in date. While uninscribed altars might have had text written on them in paint, it is possible they were deliberately left plain. It has been suggested that while inscribed altars were often given as the result of a specific vow, the uninscribed ones might have been donated as a more generalised offering (Esmonde Cleary 2008: 109).

Other examples of miniature altars from the region include one uninscribed and one incomplete example from Chester (Grosvenor Museum, acc. nos CHEGM 1996 6 186 2 and 1999 6 173; see Mason 1980: 60) and one dedicated to the genius of a century at Broughton (RIB 447, Collingwood and Wright 1965). Another has been found at the civilian settlement at Heronbridge, 2km outside of the fortress (Wright 1942: 110). Out of 123 miniature altars in Britain 82% are associated with military establishments and their associated settlements, with few found in purely civilian or religious sites (pers. comm., A Croom).

Miniature altar RF14 (Figure 33)

A complete, if battered uninscribed altar, with the front face on the shorter side of the rectangle. The top has a shallow (5mm deep) rectangular depression for the focus, with no evidence for burning. The balusters flank a triangular pediment; their ends may have been slightly recessed and decorated with a roundel, but the stone is worn and battered. There is a half-round moulding at the bottom of the capital on the front, but this becomes no more than a groove on the sides. The face of the shaft is defined by a groove, but there is no trace of an inscription. The left-hand side of the shaft has a triangular-bladed sacrificial knife and the right hand a probable patera with a possible bird-headed handle (as on an altar from Chester CSIR I.9, no.6), although the carving is badly damaged on its right-hand side and it could possibly be a spouted jug. The back is uncarved, with pecked tool marks all over; the lower surface of the base is damaged and the altar does not sit straight. There are slight traces of burning on one face of the capital and on the base. Dimensions H: 330mm, W: (capital) 150mm (shaft) 110mm, B: 150mm. RF14.

Although some effort has been made on the capital and the sacrificial implements on the side, the altar itself is slightly lop-sided. The capital projects from the shaft by 20mm on the side with

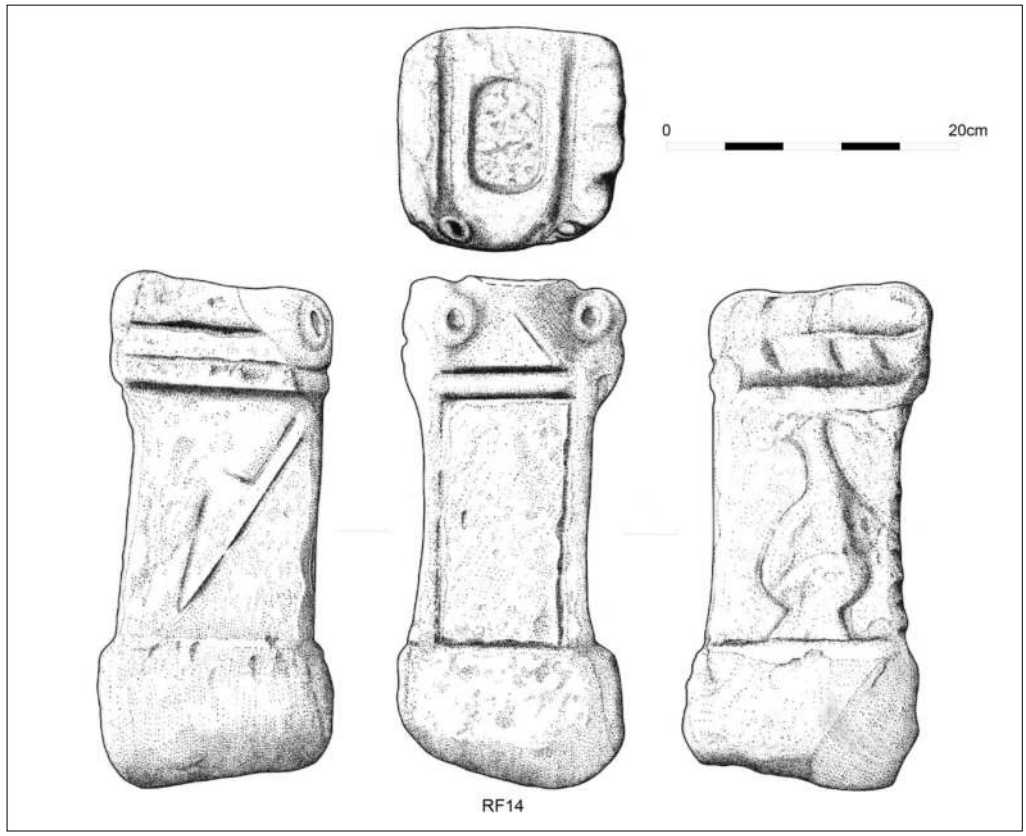

Figure 33. Altar, RF14

the patera against 10mm for the side with the knife, and the base projects 30mm from the shaft on the patera side, compared to 10mm on the other side.

Miniature altar RFs15–16 (Figure 34)

Two battered fragments from an altar, with no surviving evidence for an inscription. Although the two pieces do not join, the use of the same style of moulding on both suggests they are parts of the same altar. The base is more complete. The moulding consists of two rounded mouldings above a semi-circular groove at the junction with the shaft. On one face the moulding is well-cut, with the lower moulding larger than the upper, but on the others the two mouldings become equal size and separated by a groove. On one face the width of the moulding tapers by 5mm between the two ends. The lower surface is damaged so the stone does not sit straight. Dimensions H: 310mm, W: (capital) 160mm (shaft) 140mm, B: 150mm. RFs15 and 16.

The fragment from the capital has lost one side (the face or back) entirely. The moulding is better cut on the wide face. The surviving baluster has a groove along its length. There are possible traces of a rectangular recessed focus on the top surface, but it is badly damaged.

Architectural stonework

Hypocaust pillar (Figure 35)

Incomplete pillar, with one face entirely removed relatively recently. The shaft is covered in deep peck marks and diagonal tooling, while the base and capital are worked with slightly more care. The top is incomplete but has the remains of a rectangular(?) recess cut into it (60mm

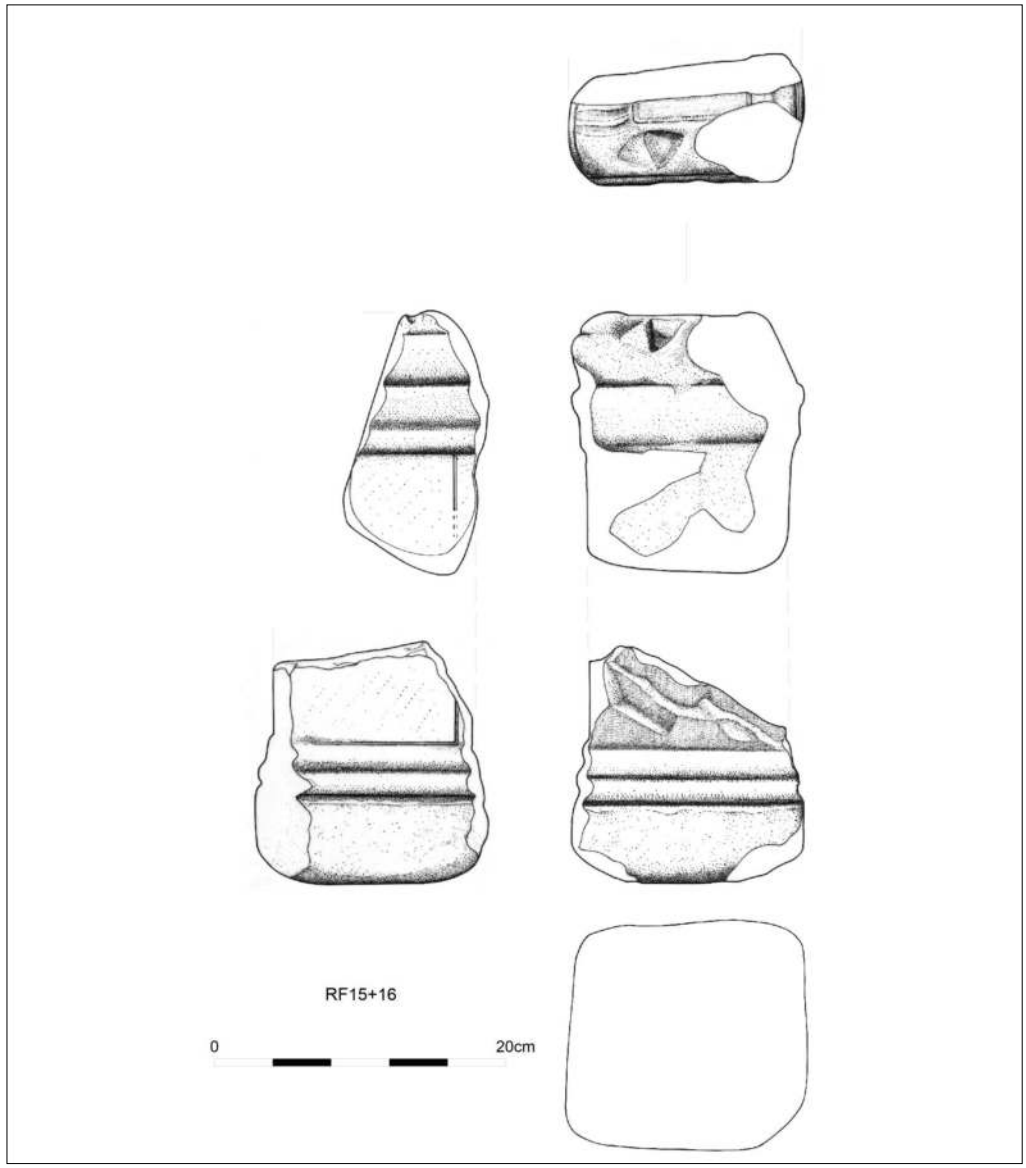

Figure 34. Altar, RF15 and 16

deep). Tool marks are visible on the surfaces of the recess, but are better worked than the other surfaces. Dimensions H: 710mm, W: (base) 400mm, B: 280mm+. RF6.

This was originally a hypocaust pillar from a bath-house, which has been later reworked and a socket cut into the top surface. This secondary function is unclear; re-use as a statue base seems unlikely given the rough finish to the shaft (a layer of gesso would not disguise the deep peck marks, and there was no trace of a thicker plaster layer).

Monolithic stone hypocaust pillars were used during the fourth century refurbishments of the main fortress baths at Chester, the baths south of the Elliptical Building, and in the praetorium bath-suite (Mason 2001: 139, 197; 2005: 69, 78). Less well-worked pillars were also used in fourth century modifications in the only known villa in the region, at Eaton-by-Tarporley (Mason 2001: 197; Philpott 2006: figure. 3.18), so it is possible the Saighton Camp example came from

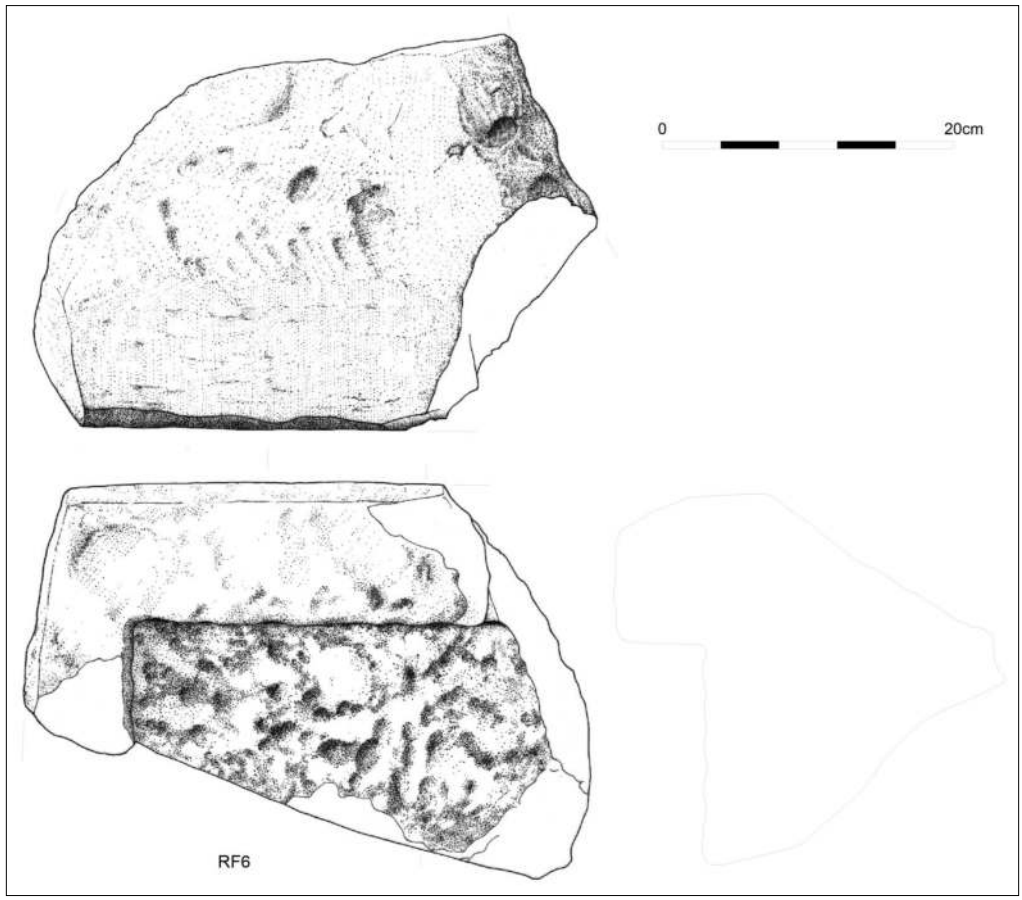

Figure 35. Hypocaust pillar

an unknown villa site nearby, but the similarities with examples from Chester suggests it was brought from there for re-use (Mason 2005: Ill. 78–9, 81). The Chester pillars vary in size even in one building so that while in the caldarium of the main baths the average height was 900mm and the base and capital *c.*300mm square, in the sudatoria the pillars had an average height of 840mm and the width and depth of the bases ranged from 230 to 310mm (Mason 2005: 73, 78, 79). None exactly match the dimensions of the Saighton Camp example, but there were a number of bath-houses in and round the fortress, and it may have come from one of the other buildings (Mason 2005: Ill 111).

Discussion

The relief, altars and hypocaust pillar were found in a ditch that contained a quantity of building stones. It is possible that the hypocaust pillar came from Chester but more likely much closer, and that the other pieces of stonework were collected at the same time for re-use as building material; the small size of the altars in particular made them perfect building stone. Stone hypocaust pillars were first used at Chester in the fourth century, and there were further modifications to some of the baths in the late fourth century (Mason 2001: 197), making it probable this piece was deposited sometime after the late fourth century. It was likely that the source of the building stone was the pebble beds of the Permo-Triassic strata which consist of medium to coarse-grained reddish brown, cross-bedded sandstone.

The vessel glass

Jug

RF41 Sherd in blue-green glass. Body has two horizontal lines of unmarvered trail, and part of a rod handle. Likely to be from a globular jug of a type in use in the later fourth century (Price and Cottam 1998: figure. 74). Pit 923, context 922. Figure 36.

Bottle

Sherds from prismatic bottles, probably mostly square, in blue-green glass.

RF4b Handle, possibly from a bottle, with broad ribs rather than reeding (cf. Price and Cottam 1998: figure. 201). Ditch 503, context 526. RF4b.

RF31 Base with moulded central 'X' within square border. Midden deposit over cobbles 577, context 576. RF31. Figure 36.

RF30a Base, small part of a corner, with small section of moulded decoration. Midden deposit (?) over cobbles 577, context 576.

Body sherds (not illustrated)

RF4a Ditch 503, Context 526.

RFs 35 & 46 Midden deposit (?) over cobbles 577, context 576.

RF49 Gully 731, context 732.

RF28 Pit/well 764, context 763.

RF29 Ditch 699, context 797.

RF37 Post-hole 870, context 872.

RF45 Ditch 1040, context 1045.

There were 19 sherds of Roman glass, almost all of which came from bottles dating to the first or second century. There were three possible bottle fragments badly affected by fire (ditch 864, context 739), and a single sherd from a fourth-century jug.

Copper alloy objects

RF2 Small brooch fragment, in poor condition, of the upper bow and spring case of a Polden Hill brooch with the bow humped forward over the crossbar (type b: Bayley and Butcher 2004: 252). Late first to early second century. Dimensions L: 24mm, W: 16mm. Unstratified, context 501.

RF43 Complete straight-armed tweezers which have been bent almost at right-angles. Dimensions L: 63mm, W: 3mm, B: 1.5mm. Re-cut terminal of ditch 986, context 988. Figure 36.

No RF Two small studs with a rounded central boss. One is recessed round the boss, and possibly originally held enamel or niello while the other appears to have a solid surface. They are in poor condition, perhaps affected by heat, but one seems to have a large disc-headed shank and the remains of the material to which it was attached. If these are indeed fungiform studs then they would have been used on leather, and are likely to be harness decoration or military belt fittings. Dimensions Diam: 9mm, L: 6mm. Post-hole 861, context 863.

Iron objects

As is usual on a Roman site most of the iron assemblage was made up of nails. There are 77 nail fragments, with a minimum of 38 examples.

No RF Five domed hobnails. Dimension Diam: 8mm. Ditch 524, context 525.

RF55 Incomplete knife with 50mm long tang, set in line with the back of the blade. Dimensions: L: 90mm, W: 30mm, B: 3mm. Midden deposit (?) over cobbles 577, context 576.

RF61 Candlestick? (A socket c.60mm long with an incomplete square-sectioned shank. This could possibly be a socketed tool of some type, but could equally be a candlestick, either with a shank set at right-angles for driving into a wall, or just possibly a tripod candlestick (cf. Eckardt 2002: figure. 118, no. 1020; figure. 119, nos 1113, 946). Tripod examples are found on sanctuaries and military sites, while spike candlesticks appear to be more common in domestic settings (Eckardt 2002: 254). They are generally third- or fourth- century in date. Dimensions L 110mm, W(socket): 30mm, W(shank): 8mm. Spread layer, context 1024. Figure 36.

RF8 U-shaped (wall?) hook with flattened, pointed shank for driving into a wall (Manning 1985: type A). Dimensions L: 80mm, B: 5mm. Midden deposit (?) over cobbles 577, context 576.

No RF Incomplete hook with a sub-square cross-section. This could be the end of a bucket handle, but not enough survives for certain identification. Dimensions L 80mm, W(overall): 38mm, B: 10mm. Midden deposit? over cobbles 577, context 576.

RF32 Hook or fitting. Robust rectangular plate with a T-shaped hole and an incomplete curved arm. Use unknown. Dimensions: L: 70mm, W: 45mm, W(shank): 12mm. Midden deposit (?) over cobbles 577, context 576.

RFs63 and 64 Snaffle bit with jointed mouth-piece of square cross-section which expand into tubes to hold the loop cheek-pieces; one incomplete loop survives. This is the most common type of snaffle bit in the Roman period (Manning 1985: 66). Dimensions: Loop Diam: 57mm, B: 6mm; bit link L: 75mm, B: 7mm). Ditch 1103, context 1127. Figure 36.

RF34 Hub or nave-lining from a wheel; it is unclear whether this was originally split or flanged (cf. Manning 1985: H35-8). Dimensions: Diam: *c.* 120mm, H: 50mm, B: 7mm. Pit/well 764, context 762.

Lead objects

RF39 Complete conical weight with remains of an iron attachment loop. Its size indicates it was used with a large steelyard. Dimensions Diam: 47mm, L: 60mm. Weight: 601g. Gully 913, context 914. Figure 36.

RF1 Roughly circular dish beaten out of thin a lead sheet. Compare with dishes of a similar size (although with slightly concave bases) from Caerleon (Evans 1992: 176, nos 3, 5; Evans 2000: figure. 103, no. 13), where they are described as possible open lamps or lamp-fillers. The curved base and the lack of any sign of burning suggest the Saighton Camp example had some other use, probably in a workshop rather than domestic setting. Dimensions Diam: *c.*70mm, Diam: 17mm, TH: 2mm. Ditch 650, context 114. RF1. Figure 36.

RF7 Possible dish? Small fragment of lead sheet, thickened along one edge, probably from a cast dish. A cut mark along one edge shows it was cut up for re-use. Dimensions (B(max): 4mm (min): 1.5mm. Ditch 550, context 525.

RF69 Small pierced disc with deliberately pitted surfaces. Some of the indentations are triangular in shape. Dimensions Diam: 29mm, D(hole): 7mm, B: 3mm). Posthole of structure 1335, context 1311.

No RF Roughly oval plug for patching a hole in a pottery vessel or similar. Dimensions L: 25mm, W: 18mm, B: 9mm. Midden deposit (?) over cobbles 577, context 576.

RF9 Section of a thick cast sheet of lead with rough lower surface, probably produced as a roughly circular ingot. It has two straight cut edges and notches where further cut marks have been started. Dimensions L: 68mm, W: 41mm, B: 9mm. Midden deposit over cobbles 577, context 576.

No RF Incomplete thin, beaten sheet. Dimension B: 2mm. Ditch 550.

RF68 Folded sheet, cut along one edge. Dimension B: 2mm. Fill 1284 of Posthole in possible fence, 1283.

No RF Molten waste. Ditch 699, context 797. RF25; ditch 885, context 900. RF57; ditch 941, context 948. RF52; pit 978, context 979. RF58; ditch 1207, context 1209. RF59; pit 1251, context 1253. RF66; Midden deposit (?) over cobbles 577, context 576. No RF number. One rectangular strip (RF58) and six irregular pieces of solidified runnels and pools of lead. The rectangular piece (RF58) has a roughly triangular cross-section, and may have been intentionally cast in that shape; the others often have straight lines on the lower surface, but these probably only reflect marks on the surface where the molten lead solidified.

Ceramic object

RF48 Disc oval counter cut from an eastern Gaulish samian vessel (HGB SA, Tomber and Dore 1998: 37). The small size suggests a use as a counter for board games. Date: AD 120 to 260). Dimensions L: 16mm, W: 14mm, B: 9mm. Ditch 1040=1302, context 1065. Figure 36.

Discussion

The brooch fragment and the glass bottle fragments indicate some occupation of the site in the late first or early second century. The bottles were used to transport and store liquids. While there were relatively few tablewares in this period, they did form the highest relative proportion of any phase (Table 4). Most of the artefacts cannot be closely dated, but the re-used hypocaust pillar, the fragment of glass jug and the possible candlestick suggest occupation in the fourth century.

The molten lead waste could either come from structural fittings melting during the burning of a structure, or from the deliberate melting of scrap for re-working. The presence of the cut pieces of lead (RFs 14, 17, 19), along with hammerscale (see Gardiner, below) and the small ceramic crucible (no. 72) show some metalworking was certainly taking place on the site, but most likely on a small scale.

Metalworking debris

By L.F. Gardiner

The majority of the magnetic matter recovered from the scanning of the fine fraction residues with a magnet was considered natural geology. Only one sample yielded hammerscale (1331 AA- fill of posthole 1329). No further analysis was undertaken.

Glass bead

By E.M. Foulds

The glass bead is a segmented type with three segments and is very typical of the Roman period. In this case, the segments are very regular and clear. Margaret Guido (1978) first defined this type as ‘small segmented beads’, which she differentiated from similarly segmented beads, but made with gold or silver foil. Non-metallic segmented beads are found in a range of colours and are found from the first century AD onwards (Swift 2003) and on into the Late Roman period of the third and fourth centuries AD (Guido 1978).

It is clear from the literature, however, that there are several different styles of segmented beads. This differentiation goes beyond the two types identified by Guido (1978) (metallic and non-metallic segmented beads). At one extreme, there are segmented beads with very regular and very clear segments (as with the Saighton Camp III example), but at the other end of the spectrum, there are beads that only give the illusion of being segmented, either by coiling a molten glass thread around a mandrel, or by only lightly crimping the glass on the mandrel giving a rippled effect.

Unfortunately, at present there is little distinction or recognition of the differences between types of segmented beads in the literature and whether the types reflect strong dating patterns. It is possible, given that the only crimped beads appearing at the Late Romano-British cemetery at Lankhills (Booth *et al.* 2010) are the lightly crimped types, that the neatly formed and regular segmented beads (including the Saighton Camp example), are earlier in date than the coiled or rippled examples. Similar poorly segmented beads were found during the Piercebridge excavations (Cool and Mason 2008) in features from the second century AD onwards. While this is only

Figure 36. Small finds

speculation on the date of the Saighton Camp bead, close dating of Roman period bead types is an area of research that is desperately needed.

A single bead from a ditch unfortunately gives little insight into how it was used. Beads of this type may have been strung together to form necklaces or bracelets. Glass beads are not uncommon from Roman period sites, so it is not clear as to whether they were used specifically by high status individuals. However, when they are found in burial contexts, they are associated with female burials where gender can be identified (Swift 2003: 35).

RF11 Green triple segmented glass bead. Dimensions L: 10.2mm, Diam: 3.1mm, perforation Diam appx: 1.0mm. Ditch 631, context 632, Phase 3A. Figure 36.

Antler knife handle

By E.M. Foulds

This tool handle was made from a piece of deer antler. Crummy identified three different methods for attaching an iron tool to bone/antler handles and RF47 was an example of the simplest type (1983: 107). The tang of the tool would have been inserted into the handle, which would then be packed with wood shavings to keep it in place. Similar examples have been found at Cataractonium (Bell and Thompson 2002: 196 cat no. 39), Colchester (Crummy 1983: 107 cat no. 2916) and at Castleford (Greep 1998: 277). Although RF47 was plain, decorated examples are known (e.g. at Castleford: Greep 1998: 277 cat. no. 143). Handles, such as this one, are a common find and they are found in contexts spanning the Roman period (Crummy 1983, 107; Greep 1998: 277).

RF47 Tapered curved antler tine containing remains of iron tang from a tool. L: 74mm. Maximum Diam: 21mm. Midden deposit (?) over cobbles 577, context 576. RF47.

Roman coin

By R.J. Brickstock

A single coin was recovered during excavation at Saighton Camp in 2014.

RF42 The Roman coin represented a radiate copy, probably of Claudius II, and therefore of AD 268–270 or later; it showed considerable circulation wear. Ditch 891, Context 895.

Querns

By R.J. Cruse (lithology by T Morse)

Analysis

The excavations at Saighton Camp produced a modest assemblage of seven quern fragments, whose total weight was 9.2 kg. Examination shows that they were all disc hand querns which came from four or five upper stones and from two lower stones. Their reconstructed measurements are given in Table 9.

The dimensions of the upper stones were unusually uniform, with typical diameters of around 400–450mm and upper surfaces parallel to their lower, grinding surfaces. Their thin, rim thicknesses (30–40mm) suggest that most were well used, prior to disposal. The two lower stone

No.	RF No.	Context	Upper/ Lower	Diam. mm	Rim Ht. mm	Centre Ht. mm	F-P Min Diam. mm	Survival %	Est. Intact Wt. kg	Comments
1	53	1127	U	c. 400	35	-	-	10	10	Well-used
2	24	777	U	c. 425	30	35	50–60	15–20	10	Well-used
3	5	501	U?	c. 425	40	-	-	8	14	-
4	12	643	U	c. 440	35	-	-	8	12	Part of No. 2?
5	27	747	U	c. 450	38	-	-	8	15	Well-used
6	19	643	L	>320	<40	>62	<30	7	15	Hand quern?
7	20	642	L	>400	<45	>53	c. 50	15	16	Hand-quern?

Table 9. Quern summary

fragments lacked any rim, but are likely to have been of comparable diameters to the upper stones. None of the grinding surfaces were enhanced by grooving into 'harps'.

Lithology

As with the stone work discussed by Croom (above), the quern stones were a red fine to medium-grained sandstone, most likely sourced from the pebble beds of the Permo-Triassic strata (in Chester and/or Saighton) which consists of medium to coarse-grained reddish brown, cross-bedded sandstone.

Fragmentation

The fracture faces of the querns were quite sharp, with little evidence of the abrasion normally found on residual material. The fragmentation pattern is unusual, with no piece being larger than 20% (Table 10). This consistent pattern contrasts with the wider size-range found for similar disc querns from the unenclosed Late Roman civil settlement at Wattle Syke, W. Yorks (Cruse and Heslop, 2013: tables 25 and 26).

Site	0–9%	10–24%	25–49%	50–100%	Sample size
Saighton III	4	3	-	-	7
Wattle Syke	3	11	4	2	20

Table 10. Extent of fragmentation of disc querns of diameter 350–449mm

Dating

The Saighton querns have few chronological indicators. The raised rim around the hopper of quern No 2 may be informative. Buckley and Major (1998: 246) noted that Curwen (1937: figs 15–18) considered that such disc querns with projecting rims were later in date than the flat-topped group. However, (Wright 2002: 271) argues that "the presence or absence of a collar (at either rim or central) does not appear to be chronologically significant (Welfare 1985: 159)". However, a comparable collection of disc hand querns from Wattle Syke came from late Roman or later contexts (Cruse and Heslop 2013: 176), which could support a similar Later Roman date for the Saighton querns.

Site function

To assess the likely function of the site, the following observations can be offered:

- Disc querns are typically found in urban or military settlements, in sites along the Roman road system and in elite rural residences, such as villas.
- The absence of any excavated saddle or beehive querns could well be significant, as they are commonly found on 'native' sites, usually located at some distance from the Roman road system.
- Likewise, the absence of any imported lava querns, which are exceedingly common on earlier Roman military sites, argues against the site having early military connections. However, the indications are less clear post-AD 250, when the importation of lava querns is suspected to have been much more limited.

Thus, the inhabitants certainly used 'Roman' grinding technology (which may be unsurprising as Saighton is only 3km from the legionary base at Chester), but one has more difficulty in recognising whether their users were 'military' or 'civilian'. One can address this question from several viewpoints:

- It was probably unlikely that the users were serving or retired legionary soldiers from Chester fort, as the expected preponderance of lava querns was not found. However, post AD 300 one is restricted by the absence of any published data on the grinding equipment used by the comitatenses in the field armies.
- Data does exist on the querns used in northern Britain by the auxiliary forces in the earlier Roman period and by the limitanei after *c.* AD 300. Table 11 summarises dated querns excavated from military contexts on Hadrian's Wall (Carlisle, Birdoswald, Vindolanda and Arbeia) and from excavated Dere Street forts (Doncaster, Castleford and Catterick), confirming that disc querns made from local stones dominate later Roman period.

Date	Beehives	Lava disc <525mm diam	Non-lava disc <525mm diam	Millstone >525mm diam	Sample size
70–250 AD	25%	31%	42%	2%	52
250 – 400+ AD	4%	21%	68%	7%	53

Table 11. Percentages of quern types from dated auxiliary contexts in northern Britain

The identification of 'civilian' quern assemblages in north-west Britain is hampered by the paucity of published sites. Table 12 compares the number of Saighton Camp querns with those reported from other Late Iron Age/Romano-British excavations in the north-west of England, sampling both non-military and military sites. This suggests that non-military sites in the north-west have far smaller quern assemblages than their counterparts in West Yorkshire and that disc querns were the commonest quern type in use at most of the local military sites.

Discussion

The Saighton Camp querns are a uniform collection of disc querns, suggesting that their users had a comparatively 'Romanised' lifestyle, with no need for the saddle and beehives querns of the indigenous inhabitants. Chronologically, such querns would be comfortable in the later Roman period. The site location, the limited number of querns found and the absence of any of the other quern types typically found on military sites, all suggest civilian users, albeit heavily influenced by the nearby presence of the local power centre at Chester. It is clear that in a region with comparatively little evidence of regular civil quern usage, the Saighton Camp assemblage is regionally distinctive and numerically significant.

Site	Grid Ref.	Saddle quern	Beehive	Disc <524mm	Millstone >525mm	Total
Saighton	SJ 43.64	-	-	6	-	6
Non-military sites						
Mellor	SJ 83.89	2	3	4?	-	5 (poss 9)
Lathom	SD 46.10	-	2	-	-	2
Red Moss, Horwich	SD 63.10	1?	-	1	-	1 (poss 2)
Irby	SJ 25.83	1	'Several	Querns'		3+
Oversley Farm, Styal	SJ 81.83	2	-	-	-	2
Military-linked sites						
Walton-le-Dale	SD 56.28	-	-	6+	-	6+
Nantwich	SJ 64.52	-	-	9	-	9
Manchester fort	SJ 61.86	-	8	12	1	21
Warrington	SJ 61.86	-	1	40	6	47
W. Yorks. 'Civil' sites						
Dalton Parlours	SE 40.44	2	39	31	7	79
Wattle Syke	SE 40.46	4	38	41	17	100

Table 12. Comparable quern sites in Lancashire and West Yorkshire

Catalogue

Upper stones

No 1 Disc Hand Quern: 10% rim fragment; the irregular upper surface is either roughly finished or (more likely) damaged by post-use fragmentation; edge is slightly curved, inclined inwards. Grinding surface (hereafter G/S) worn smooth and flat. Dimensions: Diam: 400mm, Rim H: 35mm; Weight 1.04 kg (estimated intact 10 kg). YQS 6563. Context 1127. RF53.

No 2 Collared Disc Hand Quern: 15–20% fragment; broken radially; upper surface; peck dressed, flat, parallel to lower surface; slightly oval, raised collar (*c.* 20mm wide, 8mm high) around hopper. Very limited evidence of the central perforation; apparently a circular feed-pipe (D: *c.* 50–60mm), with a >40mm wide, curved inset (D: *c.* 80–110mm). As it lacks the horizontal ledge of a rynd-slot, this could suggest a 'figure-of-eight' central perforation. G/S is concave (20mm), well-worn flat, initially peck-dressed. Dimensions D: 400–450mm, Rim H: 30mm, Collar H: 35mm; Hopper width oval 80–100mm, depth 35mm; Feed-pipe D: 50–60mm; Weight 1.65 kg (estimated intact 10 kg). YQS 6561. Context 777. RF24.

No 3 Disc Hand Quern: 8% rim fragment: Inner area of upper surface has spalled off; the outer area has a smooth, flat surface, with slight radial markings; edge is gently rounded, with a 'hour-glass' insert cut into it (max. 30mm wide, 12mm deep (suggestive of a fixture-point for a circumferential drive-band). G/S is pecked flat. Dimensions D: 400–450mm, Rim H: 40mm. Weight 1.12 kg (est. intact 14 kg). YQS 6557. Context 501. RF5.

No 4 Disc Hand Quern: 8% rim fragment; upper surface smoothly finished; edge is vertical, with a rounded top. G/S has its outer 35mm worn smooth, with the inner area peck-dressed, slightly concave. Similar to No 2: potentially part of the same quern. Dimensions D: 430–450mm, Rim H: 35mm. Weight 1.0 kg (estimated intact 12 kg). YQS 6558. Context 643. RF12.

No 5 Disc Hand Quern: *c.* 8% rim fragment: upper surface neatly pecked, abraded smooth; edge is straight and inclined inwards. G/S is peck-dressed, well-worn flat and assumed to be slightly concave. Dimensions D: 450mm, Rim H: 38mm. Weight 1.25 kg (estimated intact 15 kg). YQS 6562. Context 747. RF27.

Lower stones

No 6 Probable Disc Hand Quern: *c.* 7% central fragment, with upper part of central 'eye' removed. G/S neatly pecked and convex; base more coarsely pecked, inner area soot-covered; the slope of the convexity and the minimum diameter of the 'eye' suggests an overall D: of 400–500mm (i.e. a hand quern). Dimensions D: >320mm, Rim H: <40mm, Central H: >62mm, Central perforation, min. D: <30mm, base D: *c.* 60mm. Weight 1.1 kg (estimated intact 15 kg). YQS 6559. Context 643. RF19.

No 7 Probable Hand Quern: 10–15% central fragment with modern (?) damage to the upper part of the 'eye's rim. G/S is peck-dressed and gently convex; base is pick-dressed and flat and roughly level. Dimensions D: >400mm, Rim H: <45mm, Central H: >53mm, 'hour-glass' shaped Central perforation, min. D: *c.* 50mm, base D: 90mm. Weight 2.0kg (estimated intact 16kg). Context 642. RF20.

Animal bone

By A. Trentacoste, A. Zochowski and E. Wright

Introduction

The animal remains were recovered during two phases of archaeological fieldwork conducted during May–December 2014 and July 2015 respectively. The assemblage from the first phase was the larger of the two. It consisted of 113 identifiable hand collected specimens and was studied by Angela Trentacoste (University of Oxford). The second phase of excavation produced an assemblage consisting of 21 hand collected specimens and this was studied by Alistair Zochowski (Northern Archaeological Associates). The smaller assemblage served to confirm the patterns seen in the material from the earlier phase of excavation and so the analysis presented here is primarily that of material from these earlier excavations. Faunal remains were recovered from Phases 2; 3A; 3B; and 4. All of the remains from the second phase of excavation were from phase 3A. Few specimens were from undated contexts, and so this material has not been presented here.

Materials and methods

Animal bones were recovered during excavation by hand, and bulk samples subject to systematic sieving. The samples were processed with 500 micron retention and flotation meshes. The dried residues from the retention mesh were sieved to 4mm. Both studies recorded all identifiable specimens, but additionally Trentacoste also recorded diagnostic zones. Diagnostic zones are a pre-defined set of skeletal parts, defined as 'countable', which are then used in the quantification of species and body parts. Zones followed those laid out in Bertini Vacca (2012). Identifications were assisted by reference skeletons and various manuals (Sisson 1930; Schmid 1972; Barone 1976; Hillson 1999). Tooth wear stages follow Grant (1982) for cattle and pig and Payne (1973; 1985) for sheep/goat. Mandible wear stages were estimated using the same references. Fusion stages were based on Silver (1969).

Species presence and abundance was quantified through number of identified specimens (NISP), and in the case of Trentacoste additionally through diagnostic bone counts. Other numeric analyses only include specimens with diagnostic zones. Additional remains are considered in the text, but not used quantitatively. Skeletal element abundance was quantified through the minimum number

of animal units (MAU) following Binford (1984). MAU is also used in quantification of minimum number estimates for taxon abundance.

For the larger assemblage bone surface preservation was assessed on an ordinal scale between 0 and 5, with 0 representing total degradation and 5, excellent preservation. The presence of tooth fragments/splinters identifiable to taxon level was noted by context, but these were not quantified as they would artificially inflate species counts. Specimens from both assemblages were examined for evidence of gnawing, burning, and butchery.

Preservation

An assessment of bone preservation was conducted on the larger assemblage. The assemblage was generally rather poorly preserved, with about half of the bones in a poor state of preservation (0 to 2) and nearly all remaining specimens classified as average (3) (Table 13). Organic degradation was further evidenced by the large number of tooth enamel fragments. Nine bones were gnawed, illustrating some level of exposure of the material to carnivores, most likely dogs. Five of the gnawed bones derived from layer 576. Three calcined bones were identified in three separate contexts. Numerous specimens that joined were identified in context 959 AA. Potential joins were also noted in contexts 576 and 749.

Preservation	Description	Number of specimens	%
0	Totally degraded	4	6%
1	Very bad	5	7%
2	Bad	26	36%
3	Average	33	46%
4	Good	4	6%
5	Excellent	0	0%
Total		72	

Table 13. Bone surface preservation for animal bone from the earlier phase of excavation (includes hand-collected and sieved material)

Results

Both assemblages were dominated by the remains of common livestock (cattle, sheep/goat, pig) (Tables 14 and 15), although two red deer specimens were identified, in addition to a specimen identified as dog/fox. A fragment of a human femur was also recovered from 1043 (ditch fill).The second, smaller assemblage (Table 15) supports the pattern seen in the earlier larger assemblage and as a result the remainder of the analysis presented here concentrates only on the larger assemblage recorded by Trentacoste.

Most faunal material was recovered from Phase 4 (late third to fourth centuries AD), followed by Phase 3A (mid-second to mid-third century AD). Relative species frequencies are similar across all phases, with the exception of equids which become more common through time. Samples are small, however, and so a degree of interpretive caution must be applied to this pattern. Due to the small sample size, material from all phases was combined for the more detailed analysis presented below.

The relative frequencies of domestic livestock calculated from diagnostic zone counts and the NISP were very similar (Table 15). These quantification methods illustrate an assemblage dominated by cattle remains (*c.* 80%), with fewer sheep/goat (*c.* 15%), and single-digit representation of pigs (*c.* 6%). Sieved material (Figure 37 and Table 1416) contradicts this picture, suggesting a far greater importance of sheep/goat (*c.* 75%) compared to cattle (20%). The relative proportion of pigs in the

Phase	2		3A		3B		4		Total	
TAXA	Zones	NISP	Zones	NISP	Zones	NISP	Zones	NISP	Zones	NISP
Cattle	1	1	20	24	5	5	36	40	62	70
Sheep/ goat	0	0	0	0	1	1	8	8	9	9
Sheep	0	0	0	0	1	1	1	1	2	2
Pig	1	1	2	4	0	0	2	2	5	7
Equid	0	0	0	0	2	2	11	12	13	14
Red Deer	0	0	0	0	0	0	2	2	2	2
Deer/ Cattle	0	0	0	0	0	0	1	4	1	4
Red Deer/ Fallow Deer	0	0	0	0	0	0	3	3	3	3
Large mammal	0	0	0	0	0	0	1	4	1	4
Human	0	0	1	1	0	0	0	0	1	1
TOTAL	2	2	23	29	9	9	64	73	98	113

Table 14. Diagnostic zone counts and the number of identified specimens (NISP) by phase for the hand collected assemblage from Saighton Camp, from the first phase of excavation – recorded by Angela Trentacoste

Phase	3A	3A	Total
TAXA	NISP (hand collected)	NISP (sieved)	Total NISP
Cattle	10	14	24
Sheep/goat	2	0	2
Horse/deer	8	0	8
Dog/Fox	1	0	1
Total	21	14	35

Table 15. Number of identified specimens (NISP) for the smaller assemblage from Saighton Camp, from the second phase of excavation – recorded by Alistair Zochowski

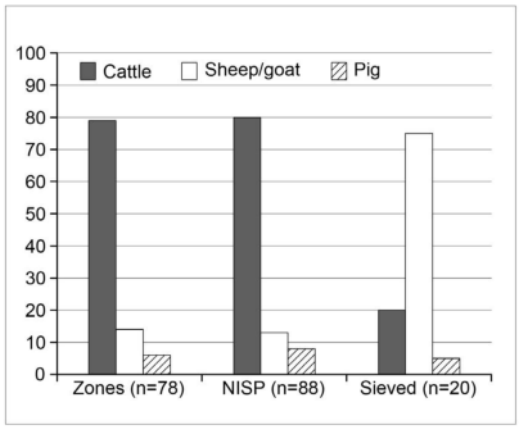

Figure 37. Relative frequencies of livestock from hand-collected and sieved material

sieved sample is low and in agreement with the hand-collected material (5%). This pattern is common on many archaeological sites in the England, since hand collection biases against small specimens (see Maltby 2015). However, many joining sheep/goat bones were noted in the sieved material (959 AA – ditch fill). This context seems to have contained articulating parts of two juvenile sheep/goat lower hindlimbs. No modifications were noted on these bones. When the MAU is considered, cattle is again the primary taxon in the hand-collected sample; the species are evenly represented by MAU in the small sieved sample (see Tables 17 and 18).

TAXA	Phase 2	3A	4	Total NISP	%
Catlle	0	1	3	4	20%
Sheep/goat	0	0	15	15	75%
Pig	1	0	0	1	5%
Total	1	1	18	20	100%

Table 16. Number of identified specimens in sieved samples from the earlier phase of excavation

	Cattle		Sheep/goat		Pig	
	MNE	MAU	MNE	MAU	MNE	MAU
Cranium (zygomaticus)	2	1				
Scapula	2	1				
Humerus	4	**2**	1	**1**	1	**1**
Radius	1	1				
Pelvis	1	1				
Tibia	1	1	1	**1**		
Astragalus	2	1				
Calcaneum	1	1			1	**1**
Metacarpal	3	**2**	1	**1**		
Metatarsal	2	1				
Metapodial	1	1	1	**1**		
Phalanx I	2	1				
Lower teeth						
Incisor 1	1	1				
Incisor 2	1	1				
Incisor 3	1	1				
Deciduous premolar 4	1	1				
Premolar 2	1	1				
Premolar 4	1	1				
Premolar	2	1				
Molar 1	2	1			1	**1**
Molar 2	2	1			1	**1**
Molar 3	3	1	1	**1**	2	**1**
Molar 1/2	4	1	3	**1**		
Molar 1+2	8	**2**	3	**1**		
Molar	4	1				
Upper teeth						
Premolar 2	1	1				
Premolar 4	1	1				
Premolar	4	1				
Molar 1	2	1				
Molar 2	2	1				
Molar 3	3	**2**				
Molar 1/2	7	**2**				
Molar 1+2	11	**3**				
Molar	1	1				

Table 17. Body part distribution from hand-collected material, from the earlier excavation (max MAU highlighted in bold)

	Cattle		Sheep/goat		Pig	
	MNE	MAU	MNE	MAU	MNE	MAU
Metatarsal			2	**1**		
Metapodial	1	**1**				
Phalanx 1			4	**1**		
Phalanx 2	1	**1**	4	**1**		
Phalanx 3			4	**1**		
Lower teeth						
Molar	1	**1**				
Upper teeth						
Deciduous premolar 3			1	**1**		
Deciduous premolar 4			1	**1**		
Molar 1			1	**1**		
Molar 1/2					1	**1**
Molar 1+2			1	**1**	1	**1**

Table 18. Body part distribution from sieved material, from the earlier excavation (max MAU highlighted in bold)

Cattle

Cattle were the most common taxon identified at Saighton. Cattle body part distribution is evenly represented across the skeleton (Table 17). Sieved samples contained only a few small elements (Table 18). Cattle are best represented by teeth, particularly the first and second molar. The abundance of cattle teeth is further evidenced by the large number of tooth enamel fragments. Indeed, thirteen contexts in addition to those with quantifiable cattle remains contained degraded enamel fragments/splinters. All quantifiable post-cranial (Tables 19 and 20) and mandibular

Cattle	Fused/ fusing	Unfused	**Sheep/goat**	Fused/fusing	Unfused	**Pig**	Fused/ fusing	Unfused
Early								
			Humerus (d)	1	0			
Middle								
Hunerus (d)	3	0	Metacarpal (d)	1	0	Calcaneum (p)	0	1
Metacarpal (d)	1	0	Femur (d)	1	0			
Tibia (d)	1	0						
Phalanx 1 (p)	1	0						
Pelvis	2	0						
Late								
Radius (d)	1	0						

Table 19. Fusion data from the hand-collected assemblage, from the earlier phase of excavation. "d"=distal, "p"=proximal

Taxon	Element	Stage	Fused/fusing	Unfused
Cattle	Phalanx 2	Middle	1	0
Sheep/goat	Metatarsal	Middle/late	0	2
Sheep/goat	Phalanx 1	Middle	0	4
Sheep/goat	Phalanx 2	Middle	0	4

Table 20. Fusion data from the sieved assemblage from the earlier phase of excavation

	Cattle	Sheep/goat	Pig
Adult	2	1	3
Notes: Payne mandible stage E. All in early adulthood (Grant stage a)			

Table 21. Mandible ages for hand-collected material from excavation Phase III(1);
(no mandible age data was present in the sieved sample)

(Table 21) cattle remains were identified as adults. One additional deciduous fourth premolar may derive from a juvenile animal or young adult. Two cattle bones displayed butchery modifications.

Sheep/goat

After cattle, sheep/goat was the most abundant taxon identified in the Saighton assemblage. Two specimens were identified as sheep and none as goat. As previously mentioned, the sieved assemblage suggests a greater importance of sheep/goat than the hand-collected assemblage. While minimum number estimates suggest that sheep/goat may have been the more abundant form of livestock, cattle, as much larger animals, would have contributed far more to the meat that was consumed. Limited information was available on the distribution of sheep/goat body parts, but no portion appears significantly underrepresented (see Tables 17 and 18). Age data for sheep/goat (see Tables 19, 20, and 21) represents a greater range of ages than for cattle. The sieved sample from context 959 AA (ditch fill), contained two articulating juvenile sheep/goat lower hindlimbs (specifically the metatarsal and phalanges). These joining elements may suggest a special deposit, or at least a feature that was not significantly disturbed after its deposition. One sheep humerus had a cut mark.

Pigs

Pigs were the least abundant form of livestock according to each of the quantification systems utilised. The few pig elements recovered do not allow for reconstruction of body part distribution (see Tables 17 and 18). The limited information available suggests that the slaughter of pigs focused on juvenile and young adult animals.

Equids

Fourteen equid remains were identified in the hand-collected assemblage; thirteen of these remains had diagnostic zones. This represents nearly 20% of diagnostic zone counts – a markedly high proportion of equid remains, which probably derive from horses (rather than donkey, mule or hinny). Three contexts (576, 749, 1076) contained multiple equid bones, some of which may have joined in the past. Equids are represented by a range of skeletal elements: teeth, tarsals and lower limb bones, as well as parts of the radius, femur, and humerus. All equid bones with fusion data were fused or fusing, indicating a majority of adult animals. Likewise, all recorded teeth were from adult animals.

Deer

Two specimens were identified as red deer – an astragalus and a metacarpal. A further three antler fragments were classified as red deer/fallow deer. These most likely also derive from red deer, for while the Romans did introduce fallow deer to Britain, their numbers and distribution were extremely limited (Madgwick *et al.* 2013). All of the antler fragments were worked. One was shaped into a handle (see above).

Human

One fragment from a proximal human femur (fused) was recovered from 1043 (ditch fill). Human remains are not uncommon in animal bone assemblages. This specimen may be re-contextualised from an earlier burial.

Discussion

As at most Roman sites, the assemblage is primarily composed of the major domesticates: cattle, sheep, goat, pig, and equids. At Saighton, cattle dominate the assemblage overall, with few sheep/goat and even fewer pigs. However, sheep/goat is the primary taxon in the sieved sample. This discrepancy relates to preferential recovery of larger animal remains. Additionally, it is influenced by the articulating sheep/goat bones in sieved samples. In the past, sheep/goat may have been the more abundant form of livestock, but cattle would have furnished a greater quantity of meat.

Britain experienced an increase in the frequency of cattle during the Roman period (Albarella and Pirnie 2007), with particular emphasis on cattle consumption in towns (Maltby 2015). Rural sites tended to have higher sheep/goat frequencies (Grant 1989; King 1978; 1984; 1999; Maltby 2015), although this pattern was subject to substantial variability both inter and intra-regionally (Grant 2004; Maltby 2015). In this context the low proportion of sheep/goat illustrated in NISP and zone counts is interesting. Some villa sites also have high proportions of cattle, and some have produced evidence of specialised cattle processing (Maltby 2007). As a rural site, we might expect Saighton to have a higher proportion of sheep. However, depositional and taphonomic processes may have favoured the survival of cattle remains. More delicate specimens may have been lost to degradation. Furthermore, the relatively elevated quantity of equid bones suggests that the site served as a place of disposal for large animals; smaller, more manageable carcasses may have been deposited closer to houses.

Roman horses generally lived into maturity and were exploited for riding and as pack animals, and the equid remains from Saighton fit with this view. Horses tend to be more common on suburban sites (Maltby 2015), although the reason for this has yet to be established.

Beef consumption in the Roman period tended to focus on adult, but not elderly cattle, which aligns with the limited age data from Saighton. Cattle at the site would have been used for traction before their slaughter for meat. There is a high level of variability in sheep/goat mortality patterns across Roman Britain, suggesting mixed economies tailored to different locations. The range of sheep/goat ages at Saighton supports a similar strategy. Pigs had a relatively minor part in the food economy. Pigs would have solely provided meat, a role evidenced by their slaughter in early in adulthood. Like other Roman sites, wild animals make a minimal contribution to the Saighton assemblage. Red deer are one of the most common wild species found on Roman sites, and the presence of post-cranial deer bones suggests that they were hunted at Saighton. The few worked antler fragments suggest some local craft production, which included the use of saws.

There are relatively few high-resolution datasets from the local area which can be used to contextualise the animal bone assemblage from Saighton. Roman Chester provides the most comprehensive local assemblages which can be used for comparison. These assemblages tend also

to be dominated by cattle remains, but pig is often the second most common species rather than sheep/goat (Ward 2012). The higher proportions of pig in Chester are likely to reflect the military and urban nature of these sites, and this is in line with broader patterns seen across Britain (King 1984; 1999). Equid remains are also present in higher proportions at Saighton than in assemblages from Chester, and this is unsurprising as they tend to be rarer at urban sites.

Conclusion

The Saighton assemblage provides new information from a region underrepresented in the zooarchaeological literature. This study has produced a range of new data on animal management at Saighton, but an assemblage of this size is most useful for assessing the relative importance of different taxa. Limited evidence was available for culling strategy, animal size, and sex distinction, but where present this information does not contradict wider trends. However, even this small study raises new questions on the management and disposal of animals. The relatively elevated proportions of cattle and equids at Saighton are of particular interest.

Palaeobotanical and charcoal assessment

By L.F. Gardiner

Introduction and methodology

A total of 40 bulk environmental samples (491kgs/427l), from both stages of the excavation combined, were processed in accordance with Campbell *et al.* (2011) (Table 22). The samples were processed with 500 micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). The flots were sorted using a stereo microscope (up to x45 magnification) to retrieve any plant macrofossils and charcoal.

The plant remains and charcoal were identified to species as far as possible (see Table 23), using Cappers *et al.* (2006), Cappers and Bekker (2013), Cappers and Neef (2012), Hather (2000), Jacomet (2006), and Schoch *et al.* (2004) and the NAA reference collection. Nomenclature for plant taxa followed Stace (2010) and cereals followed Cappers and Neef (2012).

Results

Thirty-two samples taken during initial excavations at Saighton Camp were selected for processing in order to identify the potential for the recovery of environmental evidence, to inform any further sample processing. A total of 303kg/250l of sediment was processed at this stage.

Almost all contained small quantities of charcoal with larger (>10g) assemblages coming from 606 AA (fill of ditch 603), 1024 AA (layer), and 1071 AA (fill of pit/well 1069). These three contained wood charcoal identified as oak (*Quercus* sp.), hazel (*Corylus avellana*), and heather (*Calluna vulgaris*). Few other archaeobotanical remains were found.

There was a dearth of charred plant remains with a single bread wheat (*Triticum aestivum* ssp. *aestivum*) grain from a sample (909 AA) from fill of a hearth, a single heath grass (*Danthonia decumbens*) fruit, charred buds (indet.) from sample (1024 AA) from a layer, and a sample (1071 AA) from fill of pit/well 1069, with emmer (*Triticum turgidum* ssp. *dicoccon*) glumes (n=3) from sample 1197 AC, fill of pit/well 764.

The two samples from 1197 yielded uncharred plant remains: pale persicaria (*Persicaria lapathifolia*), black-bindweed (*Fallopia convolvulus*), goosefoot (*Chenopodium* sp.), and sedges (*Carex* sp.). The

C	SC	Description
583	AA	Fill of ditch 524
606	AA	Fill of ditch 603
614	AA	Fill of pit 634
627	AA	Fill of ditch 603
633	AA	Fill of pit 634
748	AA	Fill of ditch 675
749	AA	Fill of ditch 675
886	AA	Fill of ditch 885
900	AA	Fill of ditch 885
901	AA	Fill of ditch 885
909	AA	Fill of hearth 898
959	AA	Fill of ditch 941
987	AA	Fill of ditch 986
988	AA	Fill of ditch 986
1004	AA	Fill of ditch 986
1024	AA	Layer
1043	AA	Fill of ditch 1040
1044	AA	Fill of ditch 1040
1045	AA	Fill of ditch 1040
1071	AA	Fill of pit/well 1069
1077	AA	Fill of pit 1069
1090	AA	Fill of pit 1069
1197	AB	Fill of pit/well 764
1197	AC	Fill of pit/well 764
565	AA	Fill of ditch 550
818	AA	Fill of pit/well 764
616	AA	Fill of ditch 615
617	AA	Fill of ditch 615
618	AA	Fill of ditch 615
657	AA	Fill of pit 656
658	AA	Fill of pit 656
985	AA	Fill of ditch 984
1288	AA	Fill of posthole 1286
1299	AA	Fill of posthole 1297
1301	AA	Fill of posthole 1300
1314	AA	Fill of hearth 1313
1320	AA	Fill of ditch 1318
1323	AA	Fill of ditch 1321
1331	AA	Fill of posthole 1329
1333	AA	Fill of posthole 1332

Table 22. Contexts from which samples were processed. Key: C=context, SC= sample code

remainder of the flot consisted of plant and leaf detritus, with no rootlets or earthworm capsules visible.

Sample 565 AA (fill of ditch 550) contained charred emmer grains along with a glume base fragment, with oak charcoal also observed. The paucity of charred plant remains from this area, and that a glume base was observed, suggested that the remainder of the sediments may contain more charred plant remains.

The charred plant remains from 818 AA (fill of pit/well 764) were few (n=4), with single counts of possible wheat (cf. *Triticum* sp.), possible pea (cf. *Pisum sativa*) and possible lentil (cf. *Lens culinaris*). Charcoal recovered from this sample included oak, heather and willow/poplar (*Salix* sp./*Populus* sp.).

Three samples from ditch 615 were selected in order to identify any potential changes in activities producing environmental remains over the period of infilling. The primary fill (616 AA) yielded no charred plant remains or charcoal. Samples 617 AA and 618 AA from the secondary and tertiary fills respectively each yielded 1g of charcoal that could only be identified as Rosaceae.

Two samples from pit 656 were processed; the lower fill (657 AA) yielded single grains of barley (*Hordeum* sp.) and wheat. They were too abraded for identification to sub-species. Oak charcoal was identified (7g), however the fragments were very friable and vitrified. Oak charcoal (17g) was also recovered from the upper fill (658 AA); however, no charred plant remains were observed.

Sample (985 AA) from ditch 984 yielded no charred plant remains or charcoal despite have a small amount of comminuted charcoal in its flot that was too small for identification purposes.

Samples taken during further excavation at Saighton Camp (8 samples)

Eight bulk environmental samples taken during subsequent archaeological works at Saighton Camp totalling 74kg/71l of sediment were processed. Charcoal fragments were observed in all of the samples, however, only two samples

(1299 AA-fill of posthole 1297 and 1314 AA- fill of hearth 1313) yielded over 10g (16g from 1299 AA and 22g from 1314AA). Species observed were laminated fragments of oak from 1299 AA and oak, hazel, and heather, albeit vitrified, from 1314 AA. Species from the other samples included oak, heather, hazel, and Rosaceae. A point to note is that vitrified fragments were observed in 1288 AA (fill of posthole 1286), 1314 AA, and 1320 AA (fill of ditch 1318).

Discussion

A total of 41 charred plant remains were identified from excavations at Saighton Camp. These originated from seven of the 40 samples that were processed. The greatest yield was observed from the fill of hearth 1313, with 27 charred plant remains and the second greatest quantity (by weight) of charcoal. The vitrification of the charcoal and the abraded appearance of the grain suggested it had been subject to a high heat. This could also be applied to the majority of the other charred plant remains, especially where oak charcoal was observed. The majority of the charcoal may have been deposited by aeolian means as most fragments were abraded and very small.

The presence of glumes in palaeobotanical assemblages might have afforded a discussion on crop processing activities; however, the quantities of glumes and charred grain were so small that even a tentative interpretation may be unreliable. This assemblage bore similarities to those recovered during previous excavations in the area (Northern Archaeological Associates 2006; 2007; 2008b).

The uncharred plant remains from the samples 1197 AB and AC were thought to be contemporary with the ditch. The lack of any rootlets and earthworm capsules, which often suggest bioturbation and likely modernity, supported this theory. However, the assemblages are small, and the species recorded can be associated with a range of environments, including open, wasteland and cultivated ground, so do not provide any information of likely past environmental conditions.

C	SC	R?	Wt flot (g)	CPR	AMS?	Wt char	*Quercus* sp.	*Corylus avellana*	*Calluna vulgaris*	Rosaceae	*Salix/populus*	Indet.	Charcoal id	Components	EWC	Other
From initial excavation: initial processing																
583	AA	yes	<0.1	-	No	5g						yes	too friable	Very fine rootlets 100%	-	
606	AA	yes	0.5	-	Yes	23g	yes	yes	yes					Very fine rootlets 98%: sand 2%	-	
614	AA	yes	0.1	-	Possible	3g	yes							Very fine rootlets 100%	-	
627	AA	yes	0.3	-	No	3g	yes							Very fine rootlets 100%	-	
633	AA	yes	<0.1	-	No									Very fine rootlets 100%	-	
748	AA	yes	0.7	-	No									Sand 10%: very fine rootlets 80%: comminuted charcoal 10%	-	
749	AA	yes	0.3	-	Possible	2g	yes							Plant detritus and very fine rootlets 95%: comminuted charcoal 5%	-	
886	AA	yes	0.1	-	Possible	3g	yes							Very fine rootlets 100%	-	
900	AA	yes	0.7	-	Possible	1g	yes							Very fine rootlets 79%: plant detritus 20%: comminuted charcoal 1%	-	
901	AA	yes	0.6	-	Possible	9g	yes							Very fine rootlets 99%: comminuted charcoal 1%	-	
909	AA	yes	<0.1	*Triticum aestivum* ssp. *aestivum* (1)	No	3g	yes							Very fine rootlets 100%	-	
959	AA	yes	0.6	-	No									Plant stem fragments 98%: comminuted charcoal 1%: uncharred *Rubus* sp. 1%	-	

Table 23. Palaeobotanical data.
Key: C= context, SC= sample code, R?= any fine fractions remaining?, Wt flot (g)= weight (g) of flot, CPR= charred plant remains, AMS?= anything suitable for radiocarbon AMS dating?, Wt char= weight(g) of charcoal, Indet.= indeterminate, EWC= earthworm capsule

C	SC	R?	Wt flot (g)	CPR	AMS?	Wt char	*Quercus* sp.	*Corylus avellana*	*Calluna vulgaris*	Rosaceae	*Salix/populus*	Indet.	Charcoal id	Components	EWC	Other
987	AA	yes	0.8	-	Possible	1g	yes		yes					Sand 95%: comminuted charcoal 5%	-	
988	AA	yes	<0.1	-	No									Very fine rootlets 98%: comminuted charcoal 1%: uncharred *Chenopodium* sp. 1%	-	
1004	AA	yes	<0.1	*Danthonia decumbens* (1)	No	4g							too friable for identification	Sand 10%: very fine rootlets 90%	-	
1024	AA	yes	<0.1	Charred buds (2)	Yes	11g	yes	yes	yes					Very fine rootlets 95%: buds 5%	-	
1043	AA	yes	<0.1	-	No	1g	yes							Sand 50%: comminuted charcoal 50%	-	
1045	AA	yes	<0.1	-	Possible	1g			yes					Very fine rootlets 100%	-	
1071	AA	yes	<0.1	Charred buds (3)	Yes	11g	yes	yes	yes					Very fine rootlets 50%: comminuted charcoal 50%	-	
1077	AA	yes	<0.1	-	No	1g			yes					Very fine rootlets 100%	-	
1090	AA	yes	<0.1	-	No	2g					yes			Very fine rootlets 100%	-	
1197	AB	yes	9.4	-	No	2g	yes							Plant detritus 95%: uncharred plant remains 5% (cf. *Persicaria lapathifolia*, *Fallopia convolvulus*, and *Chenopodium* sp., bi. *Carex* sp.)	-	
1197	AC	yes	9.4	Glumes (cf. *Triticum turgidum* ssp. *dicoccon*) (3)	Yes	2g		yes						As 1197 AB	-	

Table 23 *cont*. Palaeobotanical data.
Key: C= context, SC= sample code, R?= any fine fractions remaining?, Wt flot (g)= weight (g) of flot, CPR= charred plant remains, AMS?= anything suitable for radiocarbon AMS dating?, Wt char= weight(g) of charcoal, Indet.= indeterminate, EWC= earthworm capsule

C	SC	R?	Wt flot (g)	CPR	AMS?	Wt char	*Quercus* sp.	*Corylus avellana*	*Calluna vulgaris*	Rosaceae	*Salix/populus*	Indet.	Charcoal id	Components	EWC	Other
From initial excavation's recommendations: further processed (i.e. sample fully processed)																
565	AA	yes	0.4	*Triticum turgidum* ssp. *dicoccon* (2), emmer glume (1)	Yes	4g	yes							Very fine rootlets 70%: comminuted charcoal 30%	-	
565	AA	yes	0.4	-	Yes	11g	yes							Comminuted charcoal 5%: very fine rootlets 95%	-	
818	AA	yes	<0.1	cf. *Tritcum* sp. (2), cf. *Pisum sativa* (1), cf, *Lens culinaris* (1)	Yes	1g	yes		yes					Plant detritus 95%: CPR 4%: charred twigs 1%	-	
818	AA	yes	0.2	-	Yes	6g	yes				yes			Very fine rootlets 80%: sand 15%: comminuted charcoal 5%	-	
From initial excavation: selected for part processing during second assessment stage																
616	AA	yes	0.2	-	No									Very fine rootlets 100%	-	
617	AA	yes	<0.1	-	No	1g				yes				Very fine rootlets 100%	-	
618	AA	yes	0.3	-	Yes	1g				yes				Very fine rootlets 100%	-	
657	AA	yes	0.2	*Hordeum* sp. (naked) (1), *Triticum* sp.(1)	No	7g	yes						very friable and vitrified	Comminuted charcoal 5%: very fine rootlets 95%	-	
658	AA	yes	0.2	-	No	17g	yes						very friable and vitrified	Very fine rootlets 100%	-	
985	AA	yes	0.3	-	No									Comminuted charcoal 5%: very fine rootlets 95%	-	

Table 23 *cont*. Palaeobotanical data.
Key: C= context, SC= sample code, R?= any fine fractions remaining?, Wt flot (g)= weight (g) of flot, CPR= charred plant remains, AMS?= anything suitable for radiocarbon AMS dating?, Wt char= weight(g) of charcoal, Indet.= indeterminate, EWC= earthworm capsule

C	SC	R?	Wt flot (g)	CPR	AMS?	Wt char	*Quercus* sp.	*Corylus avellana*	*Calluna vulgaris*	Rosaceae	*Salix/populus*	Indet.	Charcoal id	Components	EWC	Other
From second stage of excavation: all part-processed																
1288	AA	yes	0.4	-	No	3g			yes				vitrified	Very fine rootlets 95%: comminuted charcoal 5%	-	
1299	AA	yes	<0.1	-	No	16g	yes						laminated fragments	Comminuted charcoal 80%: very fine rootlets 20%	-	
1301	AA	yes	<0.1	-	No	6g	yes							Comminuted charcoal 20%: very fine rootlets 80%	1	
1314	AA	yes	1.4	*Hordeum* sp. (15), cf. *Triticum turgidum* ssp. *dicoccon* (3), indet. Cerealia (9)	Yes	22g	yes	yes	yes				vitrified	Comminuted charcoal 20%: very fine rootlets 80%	2	
1320	AA	yes	0.2	-	No	8g	yes						vitrified	Stone 5%: comminuted charcoal 5%: very fine rootlets 90%	-	
1323	AA	yes	0.2	-	No	1g		yes						Comminuted charcoal 5%: very fine rootlets 95%	-	
1331	AA	yes	1.2	-	Yes	3g	yes			yes				Sand 10%: comminuted charcoal 5%: very fine rootlets 85%	-	Ladybird, coke? 6
1333	AA	yes	<0.1	-	No	<1g						yes		Very fine rootlets 95%: comminuted charcoal 5%	-	0

Table 23 *cont*. Palaeobotanical data.
Key: C= context, SC= sample code, R?= any fine fractions remaining?, Wt flot (g)= weight (g) of flot, CPR= charred plant remains, AMS?= anything suitable for radiocarbon AMS dating?, Wt char= weight(g) of charcoal, Indet.= indeterminate, EWC= earthworm capsule

Chapter 4

Discussion

By P.N. Wood

The excavated evidence

The settlement uncovered at Saighton Camp appears to be the northern portion of a large, well organised, rural Roman site, linked to an agricultural hinterland. The arrangement of enclosures and buildings, and their relationship with the trackways of the field system do not indicate a roadside settlement of the type seen at Heronbridge, nor does it appear to have been a variation of the enclosed farmstead observed in the region.

The settlement clearly continued to the south beyond the excavated area and may well have included more enclosures. The combination of excavated features suggested that the area was peripheral, perhaps an agricultural or 'service area', to a potentially far larger, settlement. The evidence suggests a largely unenclosed area in the period of initial use. The subsequent enclosures may have had accompanying banks, fences or hedges, all evidence for which has been lost. Some of the excavated structures appeared to be ancillary or agricultural in nature, although others might represent domestic dwellings. The possible exception to this was the sections of stone foundations (1104, 1128 and 1248). The enclosures, some of which had wide (3–5m) entrances, would seem ideal as stock pens, located between the centre of the settlement and the wider field system. However, their use as arable plots should not be dismissed and the relatively large ditches, useful for keeping in or excluding stock, would also have served well for draining this flat, clay land.

The excavated area was, however, also used as a dumping ground for a far wider and more impressive range of building materials and other objects, and there was a lack of convincing evidence in the excavation for the high status structure or structures from which the stone and ceramic building materials derived. The nature of later disturbances does not explain the complete absence of all evidence of such buildings. It is possible that the building stone together with the statue, altars and pila were all brought to the site from another settlement. However, this does not account for the range and quantity of other materials present, unless such items as roof slates were also being collected and transported some distance to be deposited here. Based on the current evidence, it seems most likely that the area to the south contained the centre of the Roman settlement, and included the remains of one or more structures constructed with dressed stone and probably including a hypocaust heating system. The excavated settlement and field system lie north of a belt of woodland running along the southern edge of the former army camp, beyond which lies the moated site, itself possibly constructed deliberately on the site of, or continuing, an earlier area of occupation.

If this scenario is correct, then much – and perhaps most – of recovered pottery and other artefacts may have derived not from use of excavated part of the settlement, but from its presumed focus to the south. If the majority of the recovered material is indeed in secondary deposits, this may explain some of the contrasts which can be seen between the artefact types. The stone and ceramic building materials, with the other carved stonework, point to a high-status rural settlement such as a villa or possibly a temple. The substantial pottery assemblage shows parallels initially with military sites, and later to villa or nucleated settlements, and throughout showed a preference for Romanised dining habits. This contrasted with the metalwork, which comprised a small collection of mainly agricultural items, two personal items and a single coin. While certain classes of artefact

such as coins are rare on rural sites (Carrington 2008: 23), other contrasts could be accounted for, at least in part, if refuse reaching the excavated area came from specific areas or activities to the south and incorporated only domestic rubbish (of which much of the bone has since decayed and been lost).

Chronology

Issues of residuality and the undiagnostic nature of much of the pottery resulted in broad date ranges for many deposits. There appeared to be a considerable quantity of residual material in later features; compounding this, much could have been introduced as rubbish derived from the suggested centre of the settlement to the south, where it could also have been residual.

Despite these problems with dating, initial activity on the site seems to have occurred in the early second century, probably the 120s AD. Only a few items of pottery could have been earlier (i.e. late first/early second century) and later material was usually found alongside these. It is possible that an undated ring gully 553 represents activity earlier than this date, but the hand-made ceramics and the other three potential roundhouses can be dated to the Roman period by associated finds. Dating evidence from the wider field system is so limited that it can be only be stated as most probably Roman, but re-cutting (in antiquity) of some elements indicates it was in use for a considerable time after this.

The fortress at Chester shows clear signs of a low level of occupation in the AD 120s, in part due to detachments of the legion being stationed to the north for the construction of Hadrian's Wall. This time saw great activity at the military-linked sites such as Wilderspool and Nantwich however, and there are indications of changes in rural settlement and an increase in cereal production at this time (Carrington 2008: 18–30). At the Birch Heath site, the settlement appears to have been founded in the late first century with structures in use in the second century, possibly indicating expansion of the settlement at this time (Fairburn 2002: 104–9). Although the Chester Business Park excavations revealed late Iron Age origins, the settlement appears to have expanded in the late first or early second century with the establishment of a field system, thought to be for stock control (Lightfoot and Martin 2004: 42–4). Occupation at Saighton Camp appears to be a little later but the evidence from the limited number of sites close to Chester suggests a genuine expansion in the late first to mid-second centuries. Evidence from around York suggests that in the mid- to late second century, the environs of the other legionary fortress in the north of the province began to be enclosed, which again may reflect intensification in land use (Ottaway 2011: 371). There is debate as to how much the land directly controlled by a legion (prata) could feed the garrison (Carrington 2012b: 390–8), but expansion of existing settlements and establishment of new sites around the northern fortresses would fit with the Roman army's need for far greater agricultural surpluses.

The collection of stone and ceramic building materials from Saighton Camp was all derived from secondary contexts. By analogy with other regional sites where these materials were used, some limited speculation can be made. Both ceramic and stone roofing tiles were recovered in some quantities, the latter including limestone and slate, and the different materials suggest that they derived from more than one phase of building. The quantities of building stone cannot be easily accounted for, and so it seems likely that it, along with at least some and perhaps all of the roofing materials, derived from beyond the excavated area. Slate appears to have become the main roofing material in Chester in the fourth century (Mason 2012: 219). It was also the roofing material in the final phase at the villa at Eaton-by-Tarporley, dated to the late third or early fourth century. This provides the most likely date for the use of this material at Saighton Camp, and most was recovered from fourth-century contexts. However, slate was also associated with the earliest phase of the

villa at Eaton, dating possibly to the early second century (Mason 1983: 67, 72), and hence its use at Saighton Camp could therefore also have started earlier.

Both the settlement area and wider field system at Saighton appear to have been occupied into the later fourth century and possibly beyond. From the limited evidence, the last building in the excavated area (1335) was probably dismantled in the late fourth century, or after. In one ditch the dumped rubble was associated with pottery of late third to fourth century date, and the stone (together with the statue, altars and pila) may have been deposited at the same time as the timber building was taken down, and might represent abandonment of the whole of this part of the settlement. Both Birch Heath and the Chester Business Park site were shorter-lived (the former especially so), but the villa at Eaton-by-Tarporley was still occupied in the late fourth century and possibly beyond (Mason 1983: 72). Although there are so few excavated rural sites around Chester, this similarity with Eaton may be significant when discussing the function of the settlement (below).

Site functions, economy and place in the fortress' hinterland

The excavated area is thought to have been principally agricultural in function and can be linked to the wider field system. The recovered metalwork, including wall hooks, part of a cart hub and evidence for small scale recycling of lead, was all typical of domestic or agricultural settings. Although the enclosures could have functioned for corralling stock from the wider field system, it is uncertain from the surviving evidence whether arable or livestock constituted the predominant agricultural regime. It is tempting to link their possible use as paddocks, and the elevated proportion of horse remains, with the legion's need for riding and pack animals. Horses were not usually used as food, and hence the evidence might be a genuine reflection of one of the roles of the community, similar to the Roman settlement at Healam Bridge in North Yorkshire where breeding of horses and mules has been suggested to have formed a significant part of the economy (Ambrey *et al.* 2017: 136).

The limited evidence indicates burning of oak and hazel, probably gathered locally, although it is unclear whether these were large or small timbers and what sort of woodland management if any was being carried out. Heather may have been brought to the site from a considerable distance, possibly as packing around other materials. It was recovered from a number of both Phase 3 and 4 features, suggesting a long-term economic link with one or more areas of heathland or moorland. A little cereal was recovered including emmer and bread wheat, as were fragments of quern stones, but as noted above, the principal agricultural regime remains unclear. The main meat animal appears to have been cattle. Rural sites often have higher occurrence of sheep/goat, although the dominance of cattle has been noted at some villa sites. As noted above, there was a noticeably high occurrence of horse, but horses were principally used as riding or pack animals, rather than food.

The pottery assemblage shows that at least some of the occupants of the site were using a range of vessels indicative of Roman styles of food preparation and dining. The profile of the assemblage shows distinct parallels initially with military sites in the early second century, changing towards a more villa or urban character by the end of that century. The presence of Holt-produced wares has often been seen as an indicator of military or government-controlled sites. However, their occurrence in the canabae and at the civil settlement at Heronbridge shows that this is not always the case. It seems that these products were also circulating in the immediate vicinity of the fortress to a range of groups, as they were also identified at the rural settlement at Chester Business Park (Mason 1988: 176; Lightfoot and Martin 2004: appendix D). The querns recovered from the site again show a preference for Roman styles of food preparation, although the absence of lava querns points away from direct military contribution to this material. A small assemblage of hand-made pottery was also recovered from the settlement. The region was largely aceramic in

the later Iron Age and the material from Saighton Camp included two vessels which may be copies of wheel-thrown Roman wares. If the hand-made ceramics do not indicate an Iron Age phase for the settlement, their presence on a Roman site so close to Chester is of significance. They may have been imported from further south with other, unidentified goods. They might, however, indicate the presence on the settlement of incomers to the site, with the necessary knowledge and need to make these vessels (see above).

The building materials and religious objects, especially those of stone, indicate further adoption of Roman ways of construction and worship. They indicate a relatively high status and show that the presumed centre of the settlement contained one or more buildings with stone walls or footings, with a hypocaust room. A shrine or tomb is also suggested. The evidence indicates that the excavated part of the settlement might represent the northern portion of a villa-type site.

The building rubble comprised a number of materials, which may indicate more than one phase of structure. They did not include any tesserae or provably ancient concrete, suggesting more modest flooring may have been used in the demolished structures. The main room of a multi-room winged villa at Abermagwr in west Wales had a clay floor, probably timber upper walls and a slate roof (Chapman 2011: 320–1).

It is presumed that most or all villas or 'Romanised Farms' exploited their immediate rural landscapes, although for a number of reasons this has often not been proved (Willis 2013: 187). The only excavated villa in Cheshire at Eaton-by-Tarporley, lies in the middle of the village, and so its environs cannot be examined easily (Mason 1982: 49). However, other suspected villas or Romanised Farms have been identified at Poulton, Tattenhall, and at Crewe Hall near Holt. (Figure 2; Nevell 2003: 13; Carrington 2012b: 385).

One instance where the land around villa buildings has been examined in detail is at Ingleby Barwick, near Stockton-on-Tees. The subject of another large-scale housing development, a series of rectangular enclosures lay to the north and west of stone-founded buildings. The enclosures extended over an area in excess of 200m by 200m and were linked to longer boundaries extending beyond the site, suggesting a wider field system, as at Saighton Camp. The villa buildings included a winged corridor house (unexcavated), a small bath house and other circular and rectangular structures of early to mid-second century construction, with occupation continuing until at least the early fifth century (Carne and Armstrong 2013: 32–47, 169–76).

Eaton-by-Tarporley and the suspected villa sites around Chester do not lie as close to the Roman fortress as Saighton Camp, and the lack of villa sites in the near hinterland has been explained as a result of direct use by the legion, as part of the prata (Mason 1988: 179). A similar absence of villas has been noted around the fortress at York, although a second-century hypocausted building and the foundations of a tower have recently been found on a rural site at Heslington, 3.5km south-east of York (Roskams 1999: 58; Neal and Roskams 2013: 7–14). The prata of Chester is thought to have lain mainly east and north of the river Dee, perhaps as far as the river Gowy or the edge of the Cheshire Plain, together with some or all of the Wirral (Mason 1988: 178–9). Such an arrangement of lands, of several hundred square kilometres, would leave Eaton-by-Tarporley and Poulton beyond the limits of the prata, with Tattenhall and Crewe Hall at its edge (Figure 2). The same is not true for the structures identified at Saighton Camp, which would have lain squarely within the area controlled by the legion. The presence of a villa so close to the fortress could be due to one of a number of reasons.

The villa-like building at Pentra is thought to have been the residence of an official overseeing the local lead industry (O'Leary and Davey 1977: 146–51). A villa building at Droitwich in Worcestershire has similarly been interpreted as a possible official residence, in this case for the salt industry (Shotter 2005: 43). Saighton Camp lies a considerable distance from the salt-bearing deposits.

The Cheshire Plain has been seen as a prime location both for cattle rearing for the army and for the legion's need for transport animals (Jones and Mattingly 1990: 232; Mason 2012: 127). The provision of a villa for an official to organise the rearing of stock on part of the prata is a possibility, notwithstanding Saighton Camp's proximity to Chester itself and the absence of legionary-stamped tiles amongst the ceramic building material assemblage (which were found at Pentra).

There are significant gaps in our knowledge of how the legions ran their lands at a local level, and analogies have often been drawn from other fortress sites in sometimes distant provinces, presuming central policy often took precedence over local considerations. It seems to be accepted that the canabae around each fortress lay within the prata, with some level of self-government. Settlers may have been allowed an area of land to live in up to one leuga (*c.* 2.22km) from the fortress, including beyond the main urban settlements, but may have been able only to rent land there (Mason 1988: 165; Carrington 2012b: 344). Wide-scale survey around the fortress of Novae on the lower Danube (founded in the mid-first century AD) showed two distinct patterns of settlement within and outside a one leuga radius of the fortress. Within one leuga, smallholdings of 5–30 hectares were identified, while outside were larger estates, averaging *c.* 150 hectares. A second urban settlement, distinct from the 'true' canabae, lay just outside the one leuga limit, but most probably still within the wider prata - presuming Novae too controlled an extensive territory. The small estates close to the fortress were seen as the result of rapid settlement of this land after the granting of municipal status to the canabae, in the early third century, so removing previous restrictions noted above. The larger estates beyond were seen as developing earlier, some owned or occupied by veterans (Conrad 2006: 321–4). The settlement at Saighton Camp lies beyond a one leuga limit, and if we can legitimately transfer some or all of this model to Chester, it suggests that the development of complex sites was possible relatively close to the fortress but still within its prata.

The willingness to invest in the building of a villa, even one of modest size and decoration, suggests at the least a long-term lease, if not ownership of the land, together of course with the necessary financial and other resources to do so. If the presumed villa was not built as a residence for an official, it seems most likely to have been developed from the home of a legionary veteran or a civilian – whether of local origin or an incomer.

Retiring legionaries could be granted land in lieu of money, and three coloniae were established for retired soldiers in Britain in the late first century (Colchester, Lincoln and Gloucester) centred on former fortresses (Millet 1990: 85–91). A fourth, York, was granted colonia and provincial capital status in the early third century, but this seems to have concerned the former canabae with the fortress remaining as the base for the legion (Ottaway 2011: 117–9). Two legionary veterans from Chester are named on tombstones, at Colchester and Gloucester, and there are likely to have been more. Veterans from the Deva garrison were however commemorated in some number in the cemeteries around Chester itself, and it is assumed that many and perhaps most would have settled within the canabae. The absence of any evidence of legionary veterans in the countryside around Chester – within the prata or not – may be due to the lack of finds of inscribed tombstones outside the fortress and canabae (Carrington 2012b: 346–61). Some of those recorded on the surviving tombstones may have lived in the countryside but wished to be interred alongside their former comrades. The presence of what appears to be a villa within the prata might be the best evidence for such a rural veteran family.

Another alternative, suggested above, is that the settlement was owned and developed by non-veteran civilians. The legion owned and controlled the prata, but it is unclear whether they displaced any of the previous occupants. Mass expulsions seem unlikely for an area which would be required to quickly supply at least some of the food needed by the legion and perhaps other garrisons. The necessity to accommodate and probably breed transport animals again points to a continuously settled landscape. The need to expand agricultural production for the army has been

linked at both Chester and York with the appearance in the early second century of new settlements and a more enclosed landscape. At Chester, the 'progressive farmers' of this expansion are seen as potentially including both locals and civilian settlers from elsewhere in the empire (Carrington 2008: 22). One such successful family may have wished to imitate the forms of living and worship seen in the fortress and canabae (and indeed at Eaton-by-Tarporley or the other suspected villas). The hand-made pottery might be evidence of incomers at the start of the settlement, perhaps even the new tenants or owners. Equally it could represent incoming slaves, sub-tenants or employees.

Roman field system and landscape continuity

The redevelopment of Saighton Camp has given an almost unique chance to investigate an area of over 20 hectares in the hinterland of Deva, and has allowed the examination of the immediate agricultural landscape around the settlement. This landscape was divided on a large scale. The trackways continued to the north and west beyond the limits of the former camp, and probably also to the east and south.

The Roman field system was remarkable both in its extent, but also in the regularity of its layout. It contained a number of elements, but by far the longest and most impressive were the parallel ditches forming the two track or roadways, running close to the four ordinal directions (Figure 3). These also formed significant land divisions or enclosures with further, often more fragmentary ditches running from them in several places, creating subdivisions of more uncertain regularity. The subsequent truncation of these features is likely to have removed a significant number of these smaller elements. The trackways and enclosures demonstrated continuing influence of the Roman landscape, seemingly into the late medieval period and potentially beyond.

Of the two trackways, that which ran from north-west to south-east could be traced for the furthest distance and ran quite straight. Its alignment was almost parallel to that of Sandy Lane as it runs past the site to the south-west (Figure 8). If travelling south, Sandy Lane, the continuation of Chester Road (the B5130), is the most westerly route out of Chester which does not cross the river Dee, and this route may follow the line of a Roman road. Although the northernmost part is sinuous where it runs on low-lying land close to the river, from the point where it reaches the high ground south of the Caldy Brook, the route takes a notably straight course, running south-east for some 1.5km. At that point, Sandy Lane deviates to the east, eventually reaching Saighton village. The straight route continues however, as field boundaries for another 1.4km, although becoming more sinuous as its course is altered slightly, seemingly by a number of ridge and furrow headlands. In Boughton to the north of Saighton Camp, the presence of Roman period cremation burials beside Stocks Lane and Bachelor's Lane imply the presence of just such a Roman route east of the Dee, diverging from the known roads which head east (Figure 38; Robinson and Carrington 1976: 22–3). Early maps show that these lanes – apparently short droveways – formed a track leading towards the Caldy Brook and suggest continuity of this route into recent times (Carrington 2012b: 377). If the line of the putative Roman route in Boughton is projected south using the two southernmost burials, it meets Sandy Lane/Chester Road at approximately the point where the latter route begins its straight course (Figure 38). The far (southern) edge of the Caldy Brook valley may therefore have been deemed a suitable topographic point to alter the course of the road. Another possibility is that the excavated north-west to south-east trackway was the continuation of the Roman route in Boughton (Carrington 2012a: 304). Given that Sandy Lane can be traced as a straight route for nearly 3km, it is argued here that it represents the likely line of the proposed Roman road, and the north-west to south-east trackway was a lesser, probably agricultural track, but oriented from it.

It is apparent that the orientation of the settlement's enclosures does not match the alignment of the south-eastern trackway element, but lies at a slight angle. It is closer in orientation to the north-eastern element, but this may not have continued straight and they are quite some distance

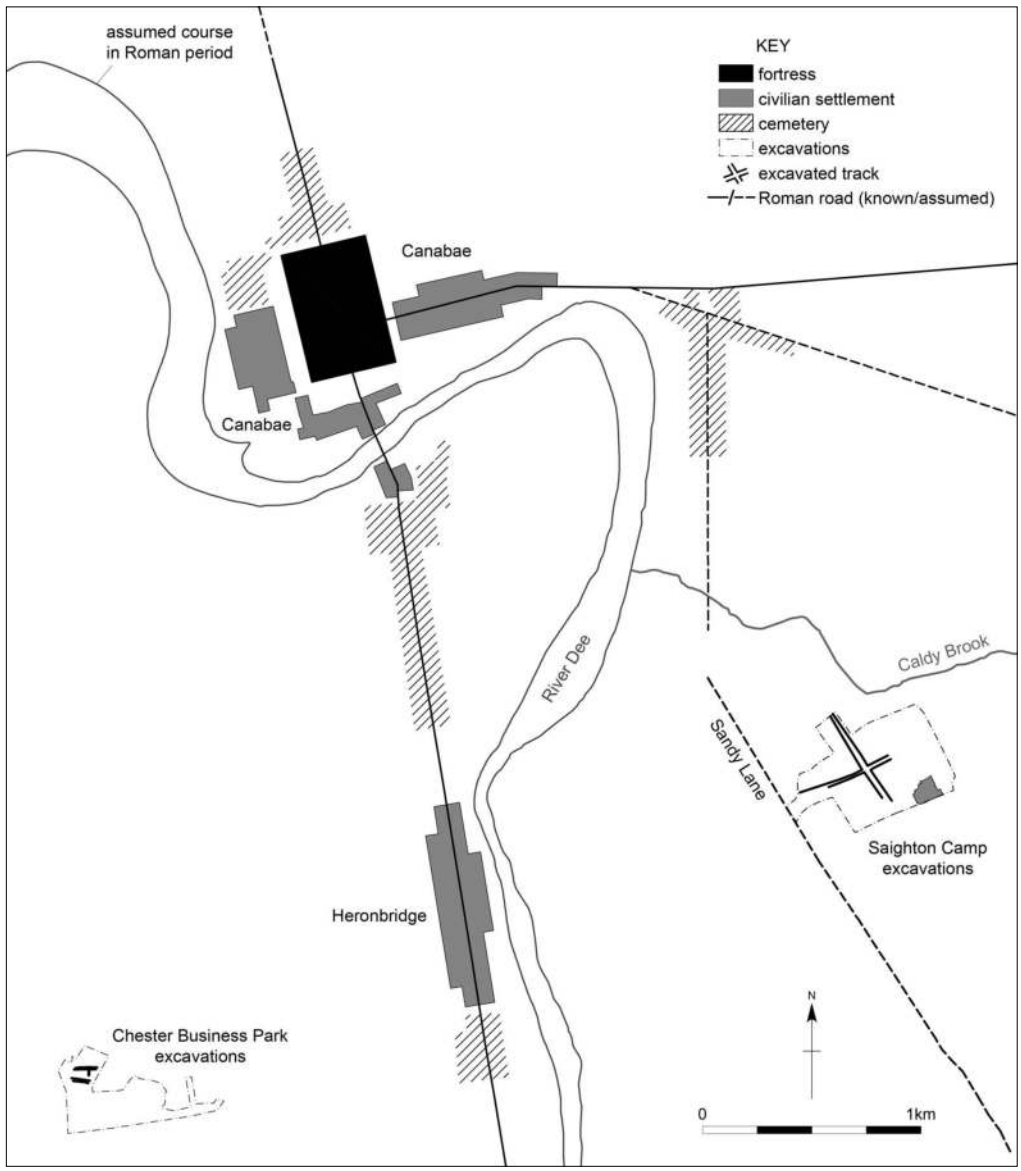

Figure 38. Roman Chester, Saighton Camp and hinterland (after Mason 1988)

apart (Figure 3). The excavated enclosures are likely to reflect arrangements further south in the perceived centre of the settlement. The difference in orientation may be significant and could indicate for instance that the settlement began before the trackway was created, with the latter laid out according to a wider plan, either oriented on the proposed Stocks Lane/Sandy Lane route, or perhaps extending from the north (i.e. from Deva outwards).

As noted above, at least part of the trackway ditch system appears to have been cut twice in the late medieval period and possibly after, suggesting the route was in use – possibly continuously – for considerably more than a thousand years. The track may have been re-used to provide access to the medieval settlement excavated at the southern edge of the former camp, or to the moated site to its east (Figure 3).

Although the trackways seem to have been in use into the medieval and possibly post-medieval periods, the post-medieval enclosure fields within and around the former camp did not incorporate them. A widespread north-west to south-east and north-east to south-west alignment of modern fields can be seen, but this is by no means universal. Visible remains of the trackways might have influenced individual field boundaries, either directly or via previous open-field arrangements. Evidence for 'broad' (5–8m apart) ridge and furrow cultivation over the former camp was again oriented south-west to north-east, but showed a number of variations and it overlay the trackways in several places. A number of factors are likely to have influenced the enclosure field layout in and around the camp, including watercourses, the local roads (including Sandy Lane, whether it was a Roman route or not) and farm tracks. Three streams also ran on south-east to north-west courses through or bounding the camp. The two within the camp have been culverted and it is uncertain whether any flowed on their modern courses in the Roman period. In the immediate area of the Roman settlement, the field boundaries and ridge and furrow are more likely to have followed the orientation of the moated site to the south. Given that it is believed that the centre of the Roman settlement lay under or close to the moated site, it is however quite possible that the moat itself was laid out respecting remains of the Roman settlement. The available evidence suggests therefore that the alignment of the excavated Roman period remains may have had a subtle influence on post-medieval land division, but had little direct impact on the immediate landscape as it appears today.

The excavated trackways formed a crossroads, and one was parallel to a possible Roman road. These suggest that the land was divided at least partly using a grid system. The system of Roman land division known as centuriation is recorded historically for areas in Italy and southern France, and although it varied considerably based on local conditions; a grid based on twenty actus (2400 Roman feet, *c.* 710m) was considered to be the optimum size (Campbell 1996: 84–5). Centuriation has been proposed for several locations in Britain, including in north-west England (Philpott 2006: 77). An area south-west of Chester appears to have a rectangular field system aligned on the Roman road running south through Heronbridge, and while this may be Roman in date, it is not seen as evidence of true centuriation (Carrington 2012b: 377). The distance between the edge of Sandy Lane and its parallel trackway ditch is *c.* 395m, or a little over 11 Roman actus. This is not a recorded measurement for centuriation, but the exact location of a Roman route under Sandy Lane is unknown. As the field system did not appear to have a great effect on the later enclosure fields, only further large scale investigation of the land adjacent to the camp would determine just how regular and extensive the excavated system was and whether it can be related to centuriation land division.

The scale and regularity of the field system, its parallel alignment to a potential Roman road and the disregard for previous land divisions, does however suggest the hand of a single, powerful new landowner. This may have been the occupants of the Roman settlement, but as noted, the trackways and settlement enclosures were not closely aligned. The excavated field system may originally have been part of a much larger system of land division (whether a form of centuriation or not) but the site lies 3km from the Roman fortress in the presumed prata legionis (discussed above). Given this location so close to the fortress, it seems most likely that the legion was the primary agency for creation of the field system, to better exploit and to stamp its ownership on its land, although the date at which this was carried out is not clear.

Excavated structures

The identified structures comprised sub-circular, rectangular and irregular constructions, utilising beam slots, postholes and stone footings. The range of recovered building materials indicates one or more stone-built structures elsewhere in the wider settlement. Several structures could be

confidently assigned to a particular phase, while others were aligned with the enclosure system, implying a date of the mid to late second century, or after.

Of the four probable sub-circular buildings, two (699 and 808, Figure 8, A) were stratigraphically assigned to Phase 2 (early to mid-second century), the others were unphased (553 and 607, Figure 8, B and C), although the latter contained Roman coarseware pottery and cut infilled Phase 2 ditches. The continued use of circular or sub-circular structures in the Roman period is well known, both in this region and elsewhere. They have been found on rural farm sites, such as the nearby Birch Heath and Chester Business Park sites, where domestic and storage functions have been suggested (Fairburn 2002: 104–5; Lightfoot and Martin 2004: 45). They also occur on more Romanised forms of settlement, such as Wilderspool, where both circular and rectangular structures of first- and second-century date were found in one of the industrial zones (Hinchliffe and Williams 1992: 100–19). At Stamford Bridge, another roadside settlement near York, circular and sub-circular structures were replaced in the early third century by rectangular buildings. Circular structures of second-century date were also found beside villa buildings at Welton Wold in East Yorkshire (Roskams 1999: 53, 69). Of the buildings at Saighton Camp, one was circular (553), one oval (607), while the remaining two (699 and 808) were conjoined. Although this phenomenon is thought to be rare, one building with a possible annex and second conjoined structure was excavated at Birch Heath. This was thought to have been used for metalworking, and was post-Roman in date (Fairburn 2002: 105–6). Possible analogies in Wales have been noted however, and the presence of irregular ring gullies, some with annexes or conjoining structures of late Iron Age and Roman date are known from several sites in North Yorkshire and the Tees Valley. In this area, examples of *c.* 6m diameter or below were considered likely to be outbuildings of varying types, and the two conjoining structures at Saighton Camp fall within this size (Sherlock 2012: 43–8). The two larger buildings may therefore represent dwellings, although with their lack of internal features and associated domestic waste, their function as houses or further agricultural structures remains unclear.

The site also contained three rectangular, post-built structures, one of which (671) is thought to have been a Phase 2 feature, one (977) belonged to Phase 3, and building 1335, which was late third- or fourth-century (Phase 4). The largest and earliest structure (671, Figure 8, D) enclosed an area *c.* 11m by *c.* 6.5m, with relatively small, widely spaced posts. As noted above, it could be the truncated remains of a domestic dwelling using sill beams and posts, but it is more likely to have been an open-sided storage structure with a light-weight roof. The outline of the second building (977) was difficult to establish and it is unclear whether it had paired posts of an aisled structure, although a length of *c.* 9m is suggested (Figure 8, E). An internal partition (1161) divided the structure into slightly unequal halves. The final rectilinear post-built structure (1335) of fourth-century date comprised five pairs of substantial posts, with evidence of a short internal division and for an outer line of smaller posts along both the long walls, giving a size of *c.* 12m by *c.* 9.75m. The main function of buildings 977 cannot be determined, although 1335 might have incorporated a forge or smithy. One and possibly both were aisled buildings. These have been found on many Roman period sites including rural sites, villas, roadside settlements and towns They range from agricultural structures such as barns and animal sheds (where evidence of drains or stalls were found), to elaborate houses with a suite of rooms at one end. (Morris 1979: 42, 63–4; Perring 2002: 53–5).

Two short lengths of gully (883 and 913), assigned to Phase 2 on the basis of pottery evidence, may have formed eaves-drip gullies around part of a small sub-rectangular building whose full extent has been lost to extensive later disturbance (Figure 8, J).

The three short lengths of linear stone-packed foundation (1104, 1128 and 1248) lay near the north-western edge of the settlement (Figure 8, G; Figure 18). Two of them, 1128 and 1248, may represent a single feature. They did not appear to be sections of foundations for a single, rectangular building, as they comprised discrete rectangular cuts, with no evidence of any similar features

linking them. Rather, they seem to represent the discrete foundations for two (or possibly three) platforms, supporting stone or substantial timber constructions. These foundations lay relatively close to the location where the statue, altars and pila were found. Concentrations of building stone were also noted in the top of neighbouring ditches. The carved stones may have been brought from the same source as the building stone, in the presumed centre of the settlement to the south of the excavation. It is possible, however, that they had been set up on low stone platforms resting on these foundations (the significance of this is discussed below).

The final excavated structure (1014) survived as an area of paving with cobbles to their north-west, and three small postholes (1007, 1016, 1221 and 1223) beyond (Figure 8, H; Figure 19). From their size, the roof the postholes supported may not have been substantial, and there may or may not have been side walls. This structure is likely to have had an agricultural or craft function.

Religious observance on the settlement

The statue fragments, two miniature altars and possibly also the adapted stone pila found with them, constitute a significant group of ritual stonework. They were deposited along with building stone in a ditch. Although it is possible that they were brought to the site from Chester with recycled building stone, they are not the only devotional objects recovered during the excavation, strengthening the belief that they were used in the settlement. If one of the iron objects recovered was indeed a tripod candlestick rather than a more simple type, this may also be evidence of religious ritual, as they are associated with sanctuary (as well as military) sites. Although all of these items derived from secondary deposits, together they form remarkable evidence of religious observance in the Roman settlement.

The most unusual object is the statue, surviving as the legs, feet and base, with some of the fingers (Figure 32). The statue could represent one of a number of figures, including Mercury, Apollo, Hercules or a genius. Damage means that it is unclear whether it was freestanding or originally part of a larger frieze or other scene. Although it is heavily weathered, the complete altar is likely to have been left blank or possibly had a painted inscription. Similar miniature altars have been found in and around Chester, and the great majority of these objects have been found on military sites or their associated settlements. The statue and altars are thought to be second- or third-century in date. A considerable body of both figurative carving and altars have been recovered from the fortress and canabae at Chester, with smaller numbers also found at Heronbridge including many tombstones and other funerary stonework. The statue, altars and pila from Saighton were all of local sandstone and were probably originally carved in the canabae. The adapted stone pila might have acted as the base for a statue, although by analogy to examples from Chester and at Eaton-by-Tarporley, the original stone is likely to have been carved in the fourth century, making it significantly later than the objects it was found with.

The statue had been broken some time before it was put in the ditch, as the top of the legs were heavily weathered. The two parts of the feet and legs were found some metres apart and so were again broken at or just prior to the time they were deposited. The state of the statue and one, possibly both altars, suggests they stood outside for years, perhaps decades. The weathering patterns on the statue and complete altar, and the less worn state of the statue base also suggest they stood upright during this period. Given their nature (altars and part of a human figure), it is likely that although they were outside they were still used and venerated, or at least acknowledged as being religious objects. Their deposition in a ditch along with stones from a demolished building indicates they were no longer regarded as sacred, and the breaking of the statue and one altar may be examples of deliberate desecration.

As noted above, these objects were found in one of the ditches closest to the lengths of stone-packed foundation (1104, 1128 and 1248; Figure 8, G). If the carved stones were indeed set up on low stone platforms on these foundations, they would have been positioned at the very edge of the settlement. This may have been done so they were closest to the trackway and field system, or, given their nature, to remove them to a peripheral location while not discarding them entirely.

This group of objects is a significant collection for a rural site in north-west England, but the lack of knowledge as to their original contexts makes it uncertain to what extent they can influence interpretation of the Roman settlement. Physical evidence of religion in Roman Britain can take a great variety of forms, ranging from personal items symbolising a deity, through to complex rural and urban temples. House shrines have been identified in urban dwellings and villas, from both from finds (including statuary) and occasional structural evidence (Henig 1984: 168–72, 179–80). It is possible that the Saighton Camp settlement included a temple of some form; however, the excavated evidence suggests that agriculture was a principal activity on the site and a more likely scenarios for the presence of this group of finds is that they derive from a private shrine in a villa building.

Conclusions

Investigation of the site of Saighton Camp has produced a remarkable collection of archaeological remains, principally (but by no means exclusively) of the Roman period. Of the latter, the primary elements were the large and regular field system, together with the smaller enclosures, but was also persuasive evidence for the settlement forming part of a villa complex. The settlement seems to have been established in the early second century and there is evidence of continued activity until at least the fourth century. The enclosures and the finds recovered from them, especially the pottery, show that they were only part of a larger settlement, whose inhabitants enjoyed Roman styles of eating, drinking and religious worship. Without extensive further work outside the limit of the former camp however, we cannot tell whether any villa was a grand residence or a more modest affair.

The settlement did not lie isolated within the Roman landscape, and the development of Saighton Camp has given a rare opportunity to examine a contemporary field system extending over 20 hectares to the north and west. The trackways this revealed show new land division on a large scale, and the most obvious context for this reorganising of the landscape was the presence of the Roman army at Chester. The arrangement of the trackways suggests that nearby Sandy Lane follows the route of a Roman road which can be traced for almost 3km, and this links with previous evidence for a road south out of the fortress but east of the river Dee.

It has been suggested that such a villa could have been built for an official in the prata, or by a family of veterans or civilians, either local or incomers. The primary source within the settlement is uncertain for the building materials, religious objects and likely much of the ceramics, and this limits further discussion, such as a firmer chronology for the site.

The excavations at Saighton Camp have added significantly to our knowledge of settlement in the hinterland of Roman Chester in several ways, not least the identification of stone-built buildings here. The buildings themselves, as often happens in archaeology, lie beyond the trench edge - just out of reach.

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