FLAVIAN AND LATER BUILDINGS AT SNODLAND ROMAN VILLA

Excavations at Cantium Way, Snodland, Kent

Giles Dawkes

FLAVIAN AND LATER BUILDINGS AT SNODLAND ROMAN VILLA: EXCAVATIONS AT CANTIUM WAY, SNODLAND, KENT

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FLAVIAN AND LATER BUILDINGS AT SNODLAND ROMAN VILLA: Excavations at Cantium Way, Snodland, Kent

by

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Front cover: Fragment of glass bowl with incised male head (4th century AD)
Back cover: (Clockwise from top left) Skeleton of a young juvenile interred in a partically tile-lined grave [268] (mid 4th century AD); reconstruction drawing showing Snodland during the 3rd–early 4th century AD ©Andy Gammon Art & Design 2014; photograph of an *in situ* masonry internal wall of Building 2 (3rd–early 4th century AD); Amphora sherds with cursive pre-firing inscription.

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SUMMARY

In the summer of 2006, during the digging of geotechnical test pits on the site of a former sports field, workmen heard a sound 'like breaking glass' as hundreds of copper-alloy coins fell out of the JCB bucket. This dramatic discovery of a hoard of almost 3600 Roman coins was the precursor to an archaeological investigation, mostly undertaken in 2008, of the western edge of the scheduled ancient monument of Snodland Roman villa. Although the villa had been investigated on several occasions, both by antiquarians and more recently, its origins and development were in general poorly understood, and it was hoped that the new excavations might offer a framework for the beginnings of its reconsideration. However, it must be borne in mind that this site differs from the previous excavations, being located not in the main villa residences but some 80m to the west at the interface between the outer buildings and the agricultural land. The findings, mostly of pits and ditches, rather than of mosaics and hypocausts, reflect this peripheral location, although a somewhat enigmatic concentric building with masonry foundations was also identified.

The evidence for pre-Roman activity on the site was limited to a few pits and a late prehistoric trackway with some ditched elements of an adjacent field. Roman occupation at the site began in the middle of the 1st century AD with a field boundary, probably laid out as part of the founding of the villa to the east. Also recovered was the earliest evidence of buildings from Snodland – a significant assemblage of residual Neronian ceramic building material from a bath house.

Towards the end of the 1st century AD, the site was extensively occupied for the first time. A building with masonry foundations (B1) was constructed in the extreme east, most of which is beyond the eastern limits of the site, and a rigorous linear system of fields laid out to the south and west. Building 1 had an apparent concentric layout with a central room surrounded by a corridor, and represented a distinctive, if poorly understood, building type found mainly in Kent.

The modified building (B1) survived until the 3rd century AD, when it was at least partially demolished and replaced by a larger structure (B2). Two possible timber buildings (B3 and B4) were also constructed to the north and south, and the surrounding field system reorganised.

Building 2 was an enlargement of Building 1 and, in terms of form, appeared to be its direct successor, maintaining the same concentric plan, but with the corridor element subdivided into small rooms. Its function was uncertain; one of the rooms may have been a kitchen and there was some evidence for the storage of crops.

The early to mid 4th century AD saw a significant decline and change in the nature of the activity on the site. Building 2 and the possible outbuildings (B3 and B4) were demolished and the fields fell out of use. The site was largely abandoned and the most significant new land use was a small enclosed inhumation cemetery (C1). Two coin hoards, one found during the preliminary geotechnical works on the site, were located towards the southern boundary of the excavation area. From the post-Roman period until recently, the site appeared to have remained as open ground with no significant occupation identified.

RÉSUMÉ

Pendant l'été 2006, lors d'un diagnostic géotechnique sur le site d'un ancien terrain de sports, les employés entendirent un son "comme du verre cassé" lorsque des centaines de pièces de monnaie en alliage de cuivre tombèrent du godet de la pelleteuse. Cette découverte fortuite de presque 3600 pièces a initié une campagne de fouilles archéologiques qui a eu lieu en 2008, à la limite ouest de la villa Romaine de Snodland (site inscrit). Bien que la villa ait été étudiée à plusieurs reprises, ses origines et son développement demeurent assez obscurs. Ce site, contrairement aux précédents, est situé 80m à l'ouest de l'actuelle villa et se trouve à l'interface entre bâtiments annexes et terres agricoles. Les découvertes reflètent cette localisation en périphérie: elles se composent de fosses et fossés plutôt que de mosaïques et hypocaustes. Cependant, un bâtiment de forme concentrique à fondation maçonnée a aussi été identifié, même si son interprétation reste incertaine.

L'occupation préromaine du site se limite à quelques fosses, une voie datant de l'Age du Fer et quelques fossés associés à un champ voisin. La période Romaine sur le site semble commencer au milieu du 1er siècle après J.C. avec la division d'un champ, qui correspond probablement à l'époque de la création de la villa à l'est. Parmi les dévouvertes les plus importantes, nous remarquons un assemblage résiduel de matériaux de construction provenant de bains Romains de l'époque de Néron: cet assemblage est le plus ancien du site en ce qui concerne l'occupation Romaine.

Vers la fin du 1er siècle après J.C., l'occupation du site s'est intensifiée. Un bâtiment avec des fondations en pierre (B1) fut construit à l'est (en grande partie hors emprise du chantier) et un système linéaire d'organisation de l'espace agricole fut mis en place à l'ouest et au sud. Le bâtiment 1, de plan concentrique avec une pièce centrale entourée d'un couloir, représente un type de construction commun dans le Kent, même si son interprétation demeure incertaine.

Le bâtiment 1 a été modifié et utilisé jusqu'au 3ième siècle après J.C., puis il a été partiellement démoli pour être remplacé par une structure plus imposante (B2). Deux bâtiments en bois (B3 et B4) ont été construits au nord et au sud et les champs alentour ont été remodelés.

Le bâtiment 2 est un agrandissement du bâtiment 1. Il semble conserver le même plan concentrique que son prédécesseur, même si le couloir se retrouve divisé en petites pièces. Sa nouvelle fonction demeure incertaine: une des pièces pourrait être interprétée en tant que cuisine, et des traces de stockage de grain ont aussi été retrouvées.

Durant la première moitié du 4ième siècle après J.C., le site a connu un certain déclin. Le bâtiment 2 et les possibles dépendances B3 et B4 furent démolis et les champs en grande partie abandonnés. Le site est alors transformé en petite nécropole (C1) contenant plusieurs inhumations. Deux trésors numéraires (dont l'un trouvé lors du diagnostic géotechnique précédant les fouilles) étaient situés à la limite sud du site. Depuis l'abandon de la nécropole, le site semble être resté inoccupé.

ZUSAMMENFASSUNG

Während der Probegrabungen auf einem ehemaligen Sportfeld im Sommer 2006 hörten Arbeiter ein Geräusch, dass sie hinterher wie das Splittern von Glasscherben beschrieben. Es war allerdings kein Glas, das zersplittert war: das Geräusch rührte von hunderten Bronzemünzen her, die mit einem Male aus einer Baggerschaufel gerutscht waren. Diese dramatische Entdeckung eines römischen Münzhortes von etwa 3600 spätrömischen Münzen war der Anlass der archäologischen Grabung in 2008. Die Grabung fand auf einem Areal westlich der bekannten römischen Villa von Snodland statt, eine römische Ruine die unter hiesigem Denkmalschutz steht (GB: scheduled ancient monument). Obwohl die römische Villa in der Vergangenheit schon häufiger untersucht worden war – (sowohl in jüngerer Zeit als auch im 19. und frühen 20. Jahrhundert) ist über ihre Entstehung und ihre Entwicklung nicht viel bekannt und so bot diese neue Grabung eine hervorragende Möglichkeit, die Hintergründe der Erbauung der Villa besser zu verstehen. Anders als in vergangenen Jahren wurde dieses Mal allerdings nicht innerhalb der Grundmauern der Villa gegraben, sondern auf einem Areal, das sich ca. 80m weit entfernt vom Hauptgebäude befindet. Es liegt direkt an der Grenze zwischen den Aussengehöften und den von der Villa bewirtschafteten Feldern. Diese periphere Position spiegelt sich klar auch in den Befunden wider: statt Mosaiken und Hypokausten stießen die Archäologen hier auf Gruben und Gräben, und auf nur ein einziges rundes Gebäude mit einem Fundament aus Stein.

Befunde und Funde für eine vorrömische Besiedlung des Areals waren nur sehr begrenzt. Die Grabungen legten nur nur wenige Gruben und einen prähistorischer Pfad frei, und fanden mögliche Hinweise auf einige vorgeschichtliche Feldbegrenzungen an einem benachbarten Feld.

Die römische Besiedlung der Gegend begann Mitte des 1. Jh.n.Chr. mit einer einfachen Feldbegrenzung, die aber sehr wahrscheinlich bereits Teil der geplanten Villa östlich der Felder war. Während der Grabung wurden klare Hinweise auf die früheste römische Bebauung des Geländes gefunden, unter anderem Baumaterial fur das erste römische Bad, dass noch während der Amtszeit Neros erbaut wurde.

Gegen Ende des 1. Jahrhunderts war die Gegend zum ersten Male intensiv besiedelt. Ein Gebäude mit Steinfundament (B1) wurde im äußersten Osten der Anlage erbaut, und es wurde ein sehr präzises System aus Feldern im Süden und Westen des Geländes angelegt. Das Gebäude B1 hatte ein konzentrisches Fundament mit einem zentralen Raum, der von einem Korridor umgeben war: dies ist zwar ein characteristischer, aber leider bisher kaum verstandener römischer Gebäudetyp, der hauptsächlich in der englischen Grafschaft Kent vorkommt.

Dieses erste runde Gebäude (B1) wurde bis ins 3. Jahrhundert instand gehalten, was Ausbesserungen und Reparaturen im Baumaterial deutlich zeigen. Im 3. Jahrhundert wurde es dann aber dann teilweise abgerissen und durch ein grösseres Gebäude ersetzt (B2). Zwei weitere, kleinere Holzgebäude wurden an der Nord- und Südseite des Rundhauses errichtet (B3 und B4) und das Feldsystem um das Gehöft wurde neu organisisert.

Das spätere zweite Gebäude (B2) war eine Vergrösserung von Gebäude 1 (B1): der Gebäudeplan ist im Prinzip der gleiche (beide sind konzentrisch), aber der Korridor von B1 war nun in kleinere, separate Räume unterteilt: einer dieser Räume war vermutlich eine Küche und es gibt Hinweise darauf, dass in anderen Räumen Getreide gelagert wurde.

Während des frühen bis mittleren 4. Jahrhunderts geriet das Gebäude jedoch sichtlich in Verfall und der Charakter der gesamten Anlage begann sich nun deutlich zu verändern. Gebäude 2 und die kleineren Außengebäude B3 und B4 wurden abgerissen und die Felder wurden nicht mehr weiter bewirtschaftet. Das Gelände war nun zum grössten Teil verlassen, und nur ein kleiner Teil wich der einzigen ‚Erneuerung': einem kleinen, eingefriedeten Gräberfeld (C1). Die zwei römischen Münzhorte (von denen der in 2006 bei Bauarbeiten gefundene Hort zu dieser Grabungsmassnahme geführt hatte) wurden im südlichen Teil des Geländes gefunden.

In den Jahrhunderten die der römischen Bebauung folgten wurde das Gelände nicht wieder bebaut oder anders genutzt.

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Clive Meaton supervised the excavation and completed some provisional post-excavation work. The project was managed for ASE in the field by Darryl Palmer and in post-excavation by Jim Stevenson, Dan Swift and Louise Rayner. The figures were prepared by Fiona Griffin and Justin Russell. Members of the excavation field team were: Matt Bradley, Liz Chambers, Lesley Davidson (survey), Rob Davis, Kate Griffiths, Stacey Harris, David Honess, Rhiannon Jackson, Nicola Kalimeris, Richard Krason, Mark Landymore, Maureen Murphy, Liane Peyre, Luke Randall, Tudor Skinner, Michelle Statton and John Woodall. On-site processing of the ceramic building material was undertaken by Susan Pringle.

The summary was translated into French by Odile Rouard and into German by Dot Bruns. The index was compiled by Francesca Hillier.

CHAPTER 1 INTRODUCTION

1.1 CIRCUMSTANCES AND SITE LOCATION

An archaeological excavation was undertaken on land off the old High Street, Snodland (NGR 570605 162072; Fig 1.1) after the discovery of a large 4th-century AD Roman coin hoard during geotechnical works in advance of the proposed redevelopment of the site. The excavation of a *c* 7200m² area was conducted by Archaeology South-East (ASE) between February and July 2008.

The site is located towards the eastern end of Snodland, off the old High Street, with the River Medway lying close by to the east. The site is bounded to the east by the Maidstone–Rochester railway line, to the west by the A228 West Malling–Rochester road, to the south by the sports pavilion land and to the north by private properties and scrub. The scheduled ancient monument of Snodland Roman villa is on the other side of the railway line. The main villa buildings lay 80m to the east of the site, which is fairly flat and situated close to the west bank of the River Medway. The underlying geology is alluvium with head deposits in the south-west corner of the site (BGS Sheet 272 Chatham).

1.2 ARCHAEOLOGICAL BACKGROUND

Recent excavations in the vicinity have identified two prehistoric settlements; at Holborough Quarry to the west and at Margetts Pit, Burham on the eastern bank of the River Medway (Fig 1.1). The Late Bronze Age settlement at Holborough Quarry produced evidence of roundhouses and four-post granary structures and, with the discovery of sword clay moulds fragments, of metalworking (Boden 2005, 41). A high-status Roman burial mound was also excavated at Holborough Quarry, in the 1950s (Jessup et al 1954). At Margetts Pit, the earliest occupation was a small amount of Neolithic activity, possibly associated with a nearby causewayed enclosure, and substantial evidence of Late Bronze Age/Early Iron Age shale bracelet manufacture (Milward 2009, 2–3).

The Roman villa at Snodland itself (Fig 1.2) is known from several previous excavations (Ocock & Syddell 1967; Frere et al 1989; Birbeck 1995) and is one of more than 20 villas identified in the Medway valley, making this an area with one of the densest concentrations of villas in England.

The Anglo-Saxon name was first documented in AD 838. 'Snodd' is an Old English personal name and the translation is, literally, 'the agricultural land of Snodd' (Currie 1994, 367). The focus of the medieval village appears to have developed around the church, which was located immediately to the south of the villa.

1.3 PREVIOUS DISCOVERIES AND EXCAVATIONS AT THE SITE

Previous archaeological work on the villa falls into two categories: chance antiquarian discoveries in the 19th and first half of the 20th century, and intermittent rescue excavations between 1964 and 1994 (Fig 1.2).

The first recorded investigation of the villa was in 1800, when a 'bath' structure was allegedly found (Wright 1854); subsequently, in 1844, masonry walls, a tiled floor and artefacts were found in the river bank and nearby field (Roach Smith 1845, 164). During the 1920s and 1930s attempts were made to record exposed archaeology with notes made on structures and finds retrieved. The structures were described as 'shapeless foundations' but the finds were much more informative: a terracotta mask and a military bronze buckle-plate of late 4th-century AD date (Cook 1928, 79). A stone sarcophagus containing a skeleton encased in lime was found during later work (Keith & Ward 1934, 202). The present location of the skeleton is known but, sadly, the sarcophagus has been lost.

The first rescue excavations were undertaken in 1964–5 by the Lower Medway Archaeological Research Group in advance of gas works. These were located mostly on the southern range of buildings but also identified a central 'bath' structure and two rooms of the northern range. The results were published in 1967 (Ocock & Syddell 1967, 192–217).

In the years following, work was undertaken by the Maidstone Area Archaeological Group (MAAG), who devoted their time to expanding the plan of the villa. The results from these extensive excavations have never been fully published but the outline ground plan is known from a summary (Frere et al 1989, 325). From this plan it is clear that the MAAG excavations identified elements of the north, west and east

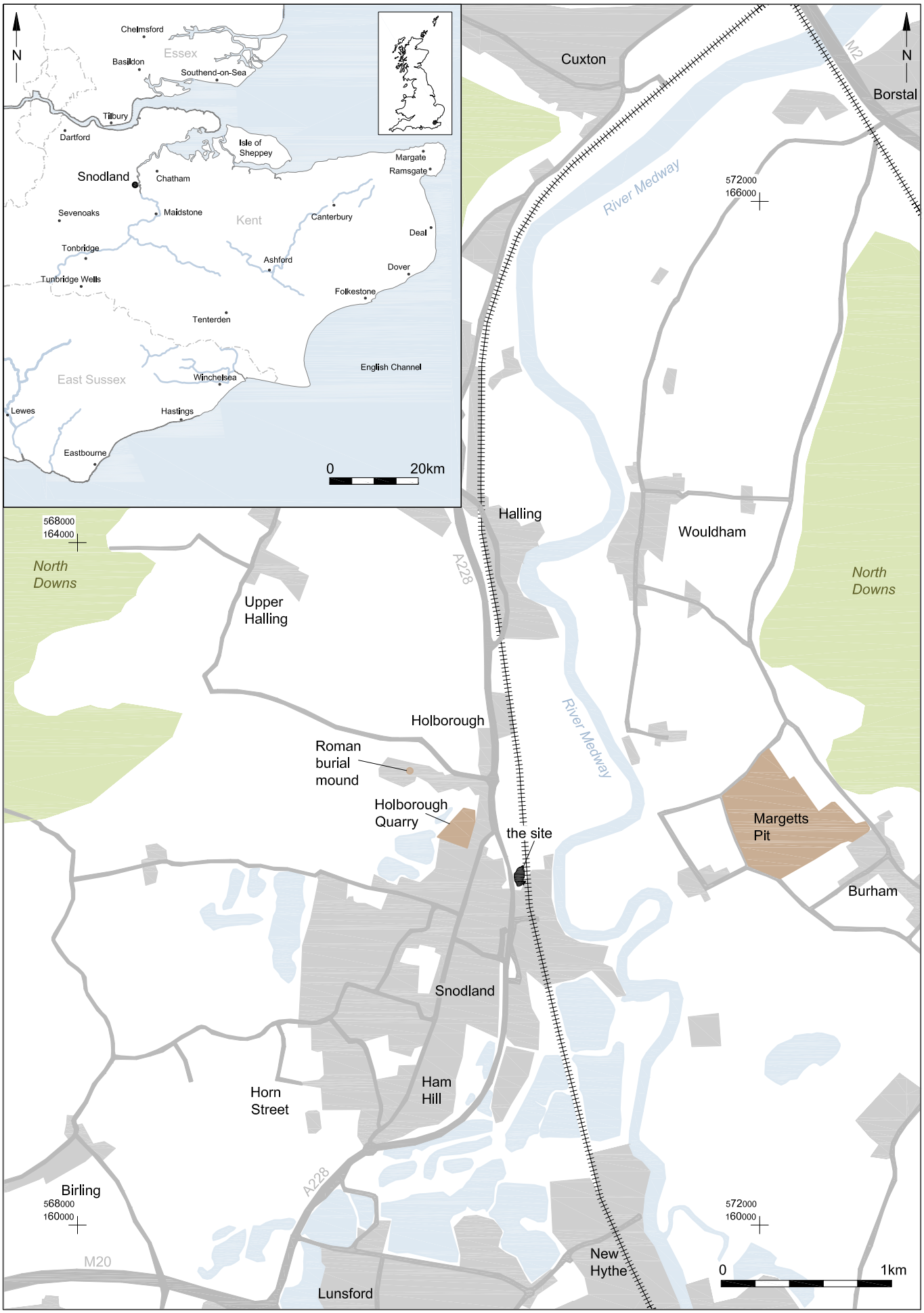

Fig 1.1 Site location

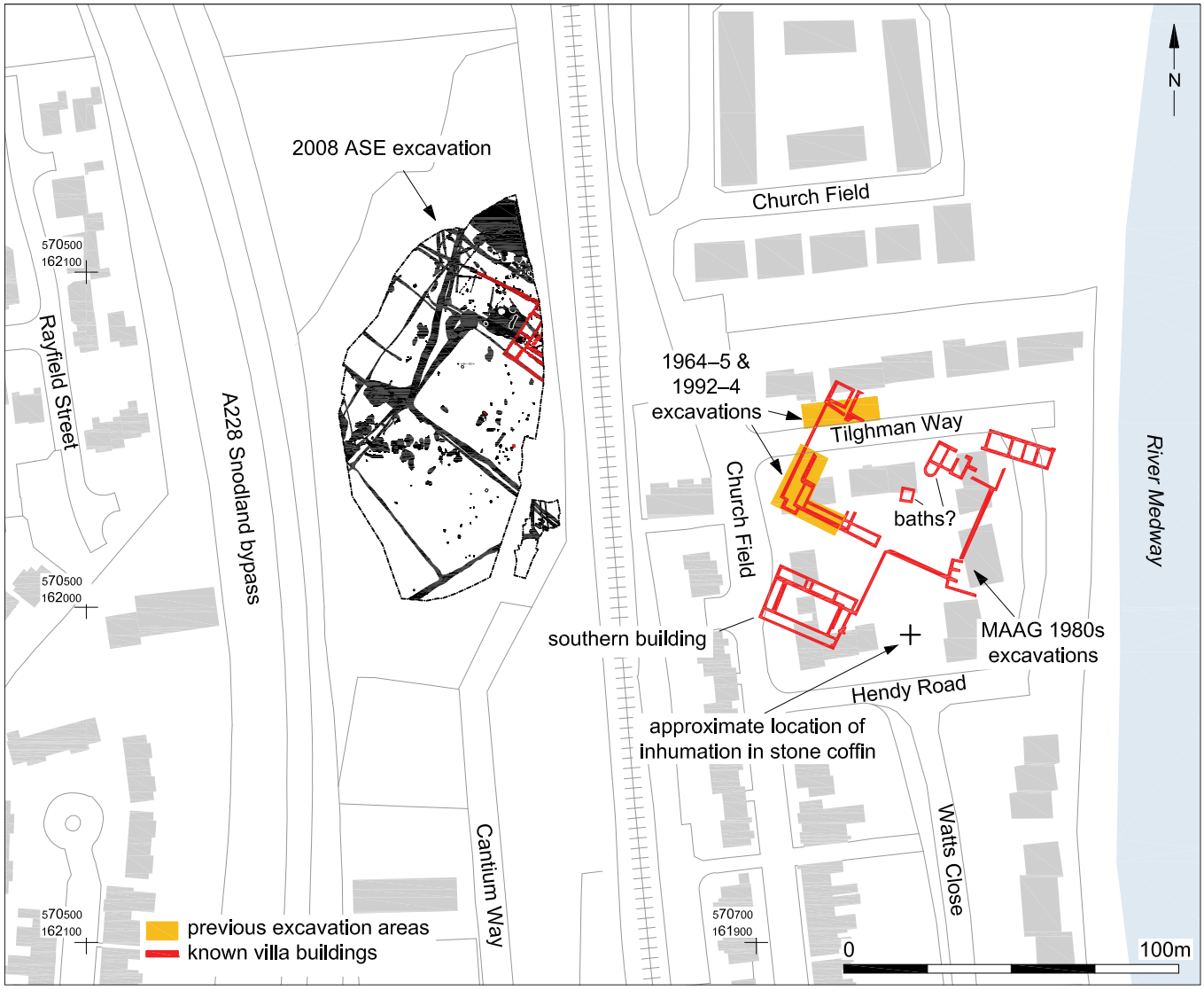

Fig 1.2 Location of excavations at and around Snodland villa

ranges, in addition to a large concentric building to the south. Further rescue excavations were undertaken by Wessex Archaeology in 1992–4 in advance of redevelopment of the areas of the south and west ranges (Birbeck 1995, 71–120).

In summary, it seems from the previous work on the villa that it was occupied in the late 1st century AD until sometime in the 3rd century. Fourth-century AD occupation has also been postulated, but there appears to be no positive evidence that any buildings were in use at this date. After the initial foundation there was rebuilding and enlargement of the complex during the early 2nd century AD and further refurbishment in the mid 2nd century. At its peak, the villa included three or four ranges set around a central courtyard, together with at least one free-standing ancillary building to the south. The main residence appeared to be in the west range with a frontage facing to the south-east towards the river. Rooms heated by hypocaust are known from the south and north ranges and there was at least one bath house. No mosaics have been found and floors in the initial period were mostly of rammed chalk, later replaced by plain tessellated tile pavements.

Despite this considerable amount of excavation, a reconsideration of the site is urgently required. Surprisingly little can be said about the villa with any confidence and the chronology of the buildings and the date of the villa's foundation and decline are still vague. Sadly, the almost exclusive focus on masonry remains has seen the wider environs of the villa ignored and there is almost no knowledge of ancillary structures or any associated estate. In addition, a complete absence of environmental sampling has greatly limited the scope of any previous conclusions. It is no surprise, therefore, that the immediate predecessors of the 2008 excavations concluded that 'little can be deduced about the nature of the occupation, its economic and domestic life or about its wider implications' (Birbeck 1995, 120).

As a consequence, and despite their peripheral location, the new excavations were seen as presenting an important

opportunity to shed more light on the nature of the villa as a whole, and to offer a framework for a reconsideration of its dating and wider context.

1.4 STRUCTURE OF ANALYSIS AND REPORT

A hierarchical context, group, and land-use framework was used to structure the data. This framework is summerised below.

CONTEXT

A unique number is assigned to each archaeological context in the field. Context numbers are shown in square brackets: [000].

GROUP

Group numbers (shown as G000) are an interpretative structuring of the context data and comprise a number (sometimes many) of interrelated contexts. For example, all the individual context numbers associated with a single phase of a ditch have been grouped together under a single group number. The same applies to all other features (eg, a cluster of associated pits or postholes has been assigned a single group number).

LAND USE

Each group has been assigned to a land use, which encompasses many separate features. These numbers are used to characterise broadly the function of the land for a given period. The following land use classifications have been used:

- B = Building
- C = Cemetery
- EN = Enclosure
- FS = Field System
- OA = Open Area (open fields, yards etc)
- ST = Structures (roundhouses, post-built structures etc)
- TD = Track/Droveway

The following chapters, which detail all chronological phases, each consist of a brief introduction outlining the broad nature of the archaeological remains followed by a narrative of the land use. As far as possible, an integrated approach has been followed, with relevant finds (RF<0> indicates Registered Find number) and environmental information (<0> indicates sample number) included as part of the narrative.

CHAPTER 2 PRE-ROMAN ACTIVITY

2.1 PERIOD 1: MESOLITHIC/EARLY NEOLITHIC

OPEN AREA (OA1)

A cluster of pits ([316], [412], [465], [471], [607]) and a short length of gully ([457]) containing Mesolithic and/or Early Neolithic worked flint were recorded in the western part of the site (Fig 2.1). Pit [316] also contained a tiny sherd (2g) of flint-tempered pottery of possible prehistoric date. Given the amount of residual prehistoric material recovered from the later phases, an early prehistoric date for these features cannot be established. Nevertheless, the majority of the worked flint recovered from elsewhere on the site (343 pieces) was also characteristic of Mesolithic and/or Early Neolithic flintworking, and it is evident that the site was used at least sporadically during this period.

The site is on the other side of the river from, and directly opposite, the Neolithic causewayed enclosure adjacent to Margetts Pit (Milward 2009, 2–3). Mesolithic and Neolithic residual worked flint has also been found *c* 80m to the east (Birbeck 1995, 81) and to the west at Holborough Quarry (Boden 2005, 41), indicating further riverside activity perhaps centred on the causewayed enclosure, but potentially originating earlier in the Mesolithic period.

2.2 PERIOD 2: LATE BRONZE AGE TO LATE IRON AGE

TRACK/DROVEWAY 1 (TD1) AND ASSOCIATED FIELD SYSTEM 1 (FS1)

The first distinct evidence of land division is apparent in the later prehistoric period, although the dating resolution of individual features in this period in general is poor, owing to the recovery of only a very small, undiagnostic, pottery assemblage (15 sherds).

A track or droveway (TD1), delineated by two parallel shallow ditches aligned north-west–south-east, was set out at some point in the Bronze Age or Iron Age (Fig 2.2). The ditches of the trackway contained a few largely undiagnostic later prehistoric pottery sherds and a small assemblage of wheat cereal grains and weed seeds characteristic of arable land. Some of the worked flint assemblage is also later prehistoric, perhaps Bronze Age, although much of this material is undiagnostic and no distinctive implement types were found.

Two other short remnants of north-east–south-west-aligned ditches appeared to delineate the edges of a field or enclosure (FS1) to the south of the trackway, suggesting that the land was loosely organised according to the orientation of the river. This field system was probably more extensive than the surviving evidence implies and later truncation may well have removed other contemporary ditches.

To the south of the trackway were the only other features dated to this period: five small shallow pits ([168], [353], [450], [546] and [1227]) that contained small amounts of largely undiagnostic flintwork.

Several late prehistoric finds were also recovered residually within later features, including a Late Bronze Age copper-alloy sword pommel and handle (RF<256>), a La Tène I brooch (RF<285>) and two La Tène III brooch fragments (RF<66> and RF<100>) (see Chapter 5.6).

DISCUSSION

Although the dating evidence was sparse and little survived of the field or enclosure (FS1), this was the earliest evidence for settled agricultural exploitation of the land. Clear evidence of agricultural practices was lacking, but the presence of a possible droveway (TD1) for moving livestock and the small macrobotanical assemblage characteristic of arable fields tentatively imply a mixed farming regime.

This fragmentary evidence for a late prehistoric field system helps to shed light on several features found in previous excavations on the villa. Ditches, containing no finds but stratigraphically pre-dating the main villa buildings, were found in the excavations to the east (Birbeck 1995, 77) and are likely to have been part of the same late prehistoric field system as the ditches recorded here.

This field system is broadly contemporary with nearby later prehistoric settlements. At Holborough Quarry, *c* 200m to the west of the site, the remains of Late Bronze Age roundhouses and four-post granary structures were recovered, together with some rare evidence for metalworking in the shape of finds of sword clay mould fragments (Boden 2005, 41–2). The mould

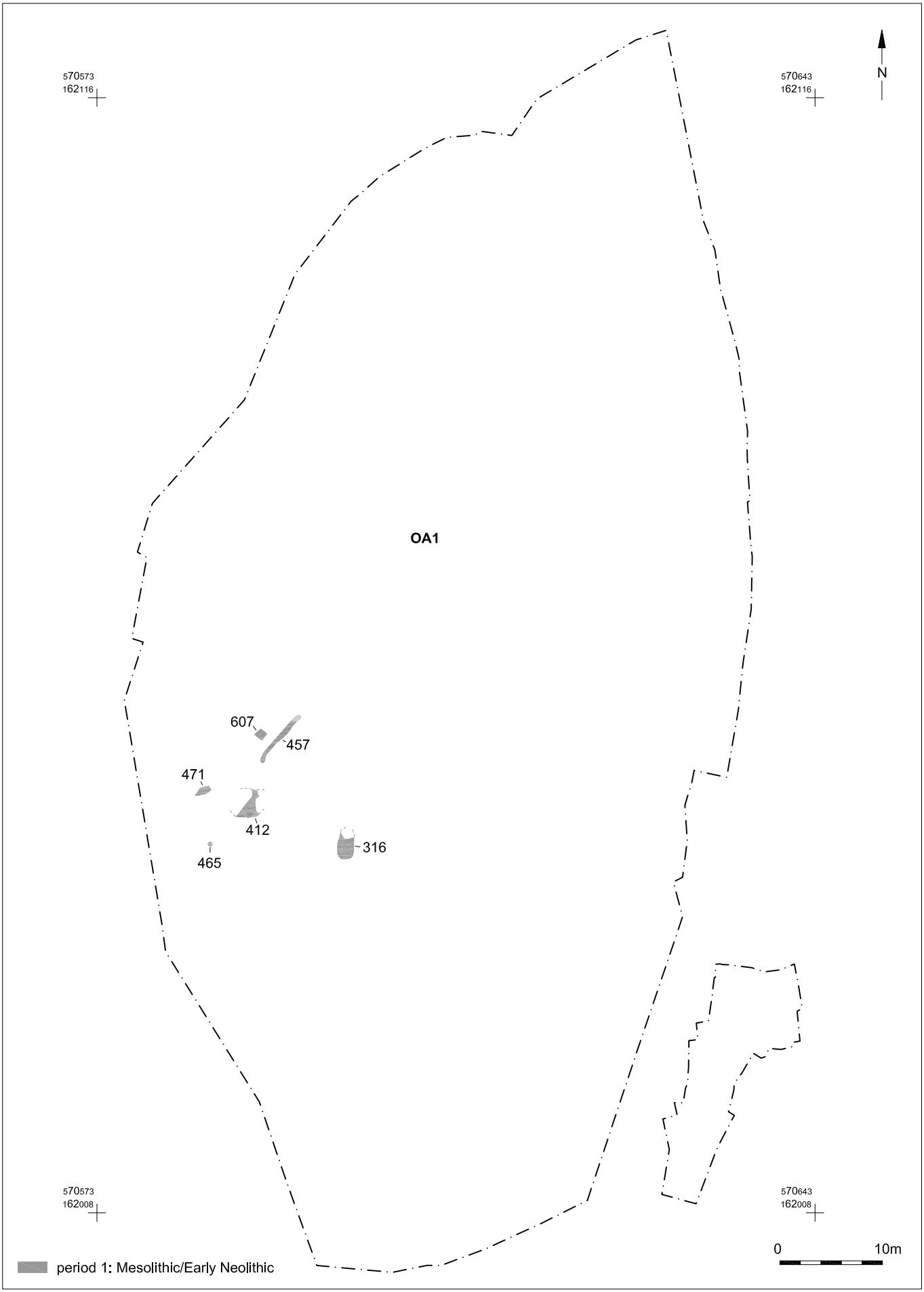

Fig 2.1 Plan of period 1 features

Fig 2.2 Plan of period 2 features

fragments were the clay casing for the manufacture of a bronze sword, probably of Ewart Park type (ibid), and it is noteworthy that a Late Bronze Age copper-alloy sword pommel and handle (RF<256>) was found in a dump at Snodland (G71; period 3, phase 4). At Margetts Pit, Burham on the opposite side of the river, a Late Bronze Age/Early Iron Age enclosure, with evidence of shale bracelet manufacture, and further field boundary ditches were recorded (Milward 2009, 2–3)

The field system was therefore clearly part of a wider organised landscape. The trackway probably met the river at a fording point to the east and may have connected the settlements of Holborough Quarry on the west bank with Margetts Pit on the east bank. This route may well have had earlier antecedents and the presence of a Medway river crossing in the vicinity of Snodland, relating to known prehistoric trackways following the North Downs, has long been postulated (Margary 1965; Thornhill 1974).

Thornhill believes that the marshes on the opposite bank were not present during the prehistoric period and that the river was shallow and abraded, making a ford a much easier prospect than now (ibid, 91–100). Although this trackway had fallen out of use by the end of this period, it is highly likely that an east–west route following the North Downs with a river crossing near Snodland was maintained into the Roman (Sheldon et al 1993, 43) and later periods (Margary 1965, 259).

CHAPTER 3 ROMAN ACTIVITY

3.1 PERIOD 3, PHASE 1: MID 1ST CENTURY

FIELD SYSTEM 2 (FS2)

The late prehistoric features (period 2) had probably fallen out of use and silted up long before the land was divided by a single north-west–south-east-aligned ditch defining a field (FS2; Fig 3.1). The ditch cut through the position of the earlier trackway (TD1), providing a *terminus ante quem* for the use of the route. Finds from the ditch include a single, possibly intrusive, unsourced Roman colour-coated pottery sherd and, more importantly, three fragments of mid 1st-century AD Roman tile, which, along with other contemporary ceramic building material found in later features, are evidence of Neronian (AD 54–68) building activity. To the south of the ditch, pits [1249] and [1270] contained no finds but are tentatively dated to this period by stratigraphic relationships.

More pre-Flavian (pre-AD 69) pottery and fragments of ceramic building material were recovered as residual finds within later features, mostly from demolition dumps of the 3rd or 4th centuries AD (G71; period 3, phase 4). Interestingly, the pre-Flavian ceramic building material included fragments of half box-flue tile and wheel-thrown ceramic pipe, indicative of a bath house. In addition, significant amounts of abraded mid-1st century AD roof tile were recovered from the later 1st-century AD field system (FS3; period 3, phase 2) and associated features, which could well be demolition material from a Neronian bath house roof.

Ceramic building material evidence

The residual ceramic building material assemblage provides the earliest evidence so far discovered for construction on the site. The flat, flanged half box-flue tile (T4; see Fig 5.11) was similar in appearance to tegulae but with vents cut in the flanges. These were used to line internal walls as a pillared hypocaust with the vents in the flanges allowing hot air to circulate, and this is the same basic structure as the wall linings of tegulae mammatae in the baths of Pompeii (Adam 1994, 268–9). Flanged half-box flues were one of the earliest forms of wall jacketing and are found in pre-Flavian deposits in London, Colchester and Canterbury (Betts 1992; Black 1995; Pringle 2007) as well as at Eccles (although the context is unfortunately unknown), and this type of tile is often found associated with military bath houses.

Also likely to be of 1st-century AD date is a wheel-thrown ceramic pipe (T17; see Fig 5.13), with an external diameter of *c* 180mm and internal bore of *c* 100mm. The thickness of the pipe wall, *c* 40mm, suggests that it was used to drain water underground. Similar pipes have been found at Eccles and the interim reports attribute them to the early part of the first bath house phase of AD 65–120. Clay pipes were found in Room 13, where they drained a 'cold plunge bath' and were later replaced by lead piping (Detsicas 1963, 132). In addition, the same report mentions 'drain-pipes' in an unspecified material, as draining a possible latrine (Room 4). Clay pipes were also used in Room 58, a 'hot plunge bath', within a 'vertical water-conduit'; the lowest clay pipe 'curved beyond the inner face of the wall to project into the hypocaust space' (Detsicas 1965, 77). Detsicas assumes that these clay pipes were encasing lead pipes which carried hot water via the hypocaust into the plunge bath. Clearly a bath house is the most likely location for this kind of pipe, though at Fishbourne pipes of similar dimensions were used in the garden of the Flavian palace to provide water for basins and fountains (Cunliffe 1971, 47).

Discussion

The residual ceramic building material assemblage suggests the presence of a mid 1st-century AD bath house, constructed using tiles in fabric 7 (MOL 2454) produced at the Eccles villa, and incorporating a room heated by a pillared hypocaust with a cavity wall. Tile production at Eccles started between *c* AD 50 and AD 60/65, pre-dating the construction of the first phase of the Eccles villa c AD 65 (Detsicas 1977a, 19, 28), and the ceramic pipe is also likely to belong to this early phase. It is not clear whether the Eccles and buff tiles were precisely contemporary, but they appear to be the two earliest fabrics used on the site.

The site seems to have been open fields (FS2) during the mid 1st century AD with no features, such as wall footings or sill-beam trenches, relating to *in situ* evidence of buildings or structures. However, the assemblage of residual mid 1st-century AD ceramic building material suggests that there was a pre-Flavian bath house at Snodland, probably of a similar date to the first phase of Eccles, ie *c* AD 65. This bath house would not have existed in isolation, so it is reasonable to expect other early Roman buildings in the vicinity. The field system (FS2) is therefore most likely associated with any such settlement and contemporary with it.

Fig 3.1 Plan of period 3, phase 1 features (mid 1st century AD)

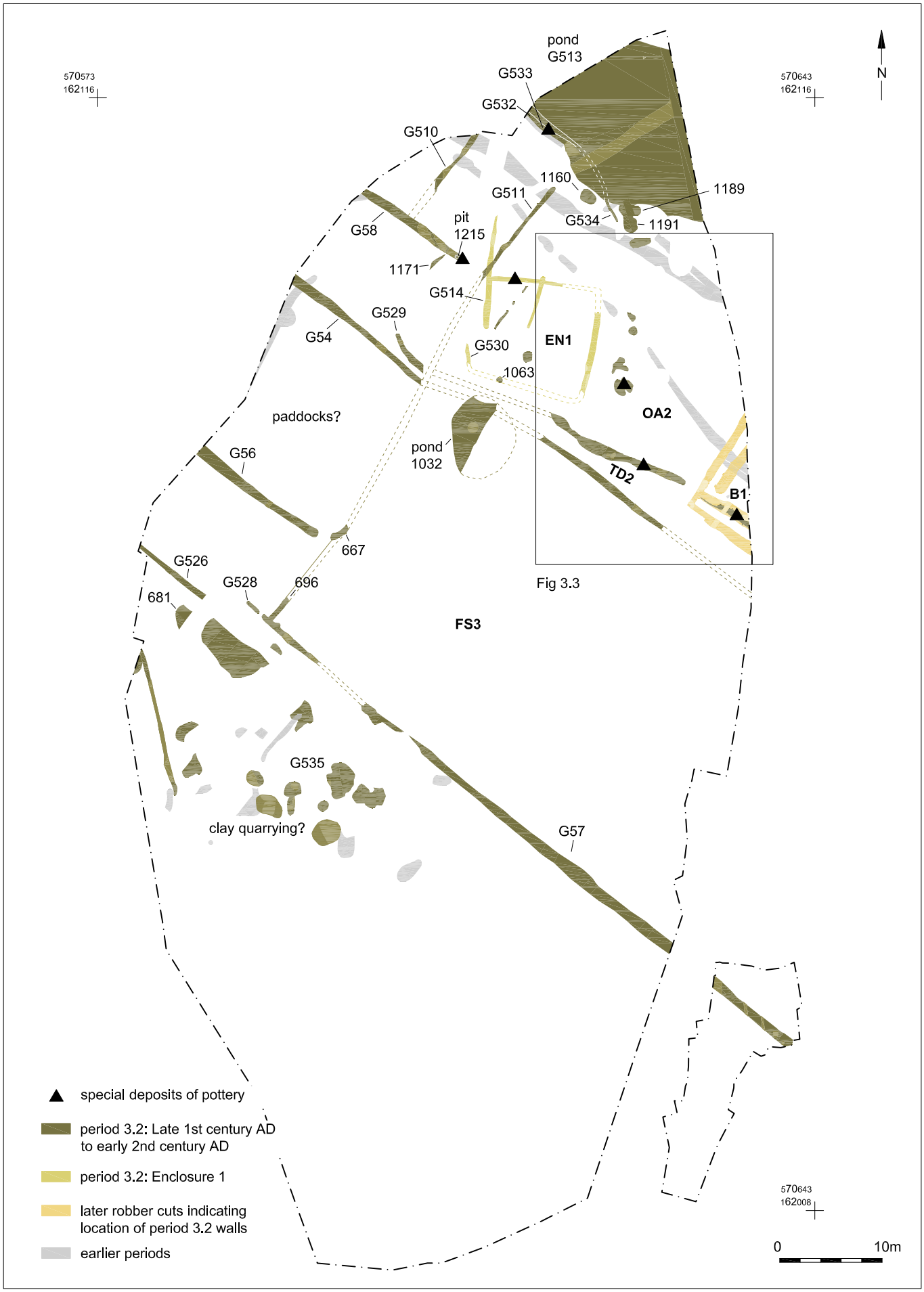

Fig 3.2 Plan of period 3, phase 2 features (late 1st century to early 2nd century AD)

3.2 PERIOD 3, PHASE 2: LATE 1ST CENTURY AD TO EARLY 2ND CENTURY AD

Towards the end of the 1st century AD, the site was extensively occupied for the first time. A building with masonry foundations (B1) was constructed in the extreme east, most of which lay beyond the eastern limits of the site, and a rigorous linear system of fields (FS3) was laid out to the south and west (Fig 3.2).

BUILDING 1 (B1)

Building 1 was constructed towards the end of the 1st century AD. Only the south-western corner of the building was exposed. Two corridors (Fig 3.3) about 1.0m wide, along the south-west side (Room A) and the north-west side (Room C), surrounded a central room (Room B).

The location of most of the masonry walls of B1 were identified by later activity that had robbed almost all the stonework. These robbing events either dated from later rebuilding (period 3, phases 4 and 5) or were post-Roman. However, the foundations of one internal wall (G51; Figs 3.3 and 3.4) remained largely intact and contained a datable finds assemblage. The foundation was constructed of unmortared and unfaced ragstone blocks with a central rubble core of large flint cobbles and chalk blocks. It was trench-built with the masonry laid onto a stiff clay layer ([620] and [1022]). A large mortarium sherd, dating to AD 60–180, and a partially complete poppy-head beaker (P15, Fig 5.3), dating to AD 70–120, were possibly deliberately placed votive offerings (see Chapter 5.3). Roof tile of 1st-century AD date was also utilised in the construction and derived, almost certainly, from the remains of the nearby earlier Neronian building.

No *in situ* flooring was identified (presumably it had been robbed or destroyed by later ploughing) but situated between walls G51 and G53 were several silt-clay deposits that contained abraded 1st-century AD ceramic building material fragments and were probably the remnants of floor make-up layers.

OPEN AREA 2 (OA2): YARD

On the west side of the building was Open Area 2, which included two remnants of a hard-standing surface (G520; Figs 3.3 and 3.5). The surface was a layer of rammed chalk and flint cobbles and contained a broken copper-alloy mirror disk (RF<258>). The full extent of this yard area is unknown but it may have extended from trackway ditch G518 in the south to the pond G513 in the north, and from Building 1 in the east to Enclosure 1 in the west, an area measuring up to *c* 25 × 15m.

Fig 3.4 Photograph of walls G51 and G52 (B1) under excavation, facing west, illustrating the difference between the *in situ* masonry of wall G51 and the robbed fill of wall G52 (period 3, phase 2)

FIELD SYSTEM 3 (FS3)

Field System 2 seems to have been in use for only a short period, perhaps less than 50 years, before a new rectilinear field system (FS3) was laid out (Fig 3.2). This was defined by generally small, shallow, north-west–south-east-aligned ditches. Occasional traces of small north-east-south-west-aligned ditches were also recorded. The finds from the ditch fills included a complete turquoise frit melon bead (RF<450>) and a partially complete grey ware carinated beaker from the base of ditch G533. A Patch Grove storage jar, lacking both rim and base and placed upright in pit [1215], was located in the terminus of ditch G58.

A moderate assemblage of ceramic building material from the ditches included 1st-century AD fabrics with 149 abraded fragments of roof tile and thin brick, nearly all in buff fabric 7. Like the roof tile in the wall foundations, these were probably

Fig 3.3 Detailed plan of Building 1 and Open Area 2 (period 3, phase 2)

Fig 3.5 Photograph of hard-standing surface G520 (OA2) associated with Building 1 (period 3, phase 2), surviving beneath demolition dumps G71 (period 3, phase 4) (1.0m scale)

the demolished remains of the putative Neronian bath house building (period 3, phase 1).

In the northern corner of the southernmost field was a concentration of shallow pits (G535; Fig 3.2). These generally lacked finds and were possibly dug for clay quarrying.

Two possible ponds ([1032] and G513) contained fills of waterlaid clay. The former feature had steep sides and was probably deliberately dug, while the latter was a large, shallow hollow and may have been a natural low-lying depression that collected water seasonally.

TRACKWAY 2 (TD2)

A trackway (TD2) defined by ditches G518, G529 and G55 led from the side of Building 1 to the field defined by ditches G54 and G58. The central elements of these ditches had been truncated by later features, but the trackway seemed to run between an enclosure (EN1) and a pond ([1032]) before opening into a paddock (Figs 3.2 and 3.3). Ditch G518 contained half a stamped samian platter and a fine grey ware jar as well as a large assemblage of roof tile, especially imbrex. The roof tile was mostly in pale yellow fabric 6, and some or all of the assemblage may be derived from the roof of Building 1 or from buildings elsewhere within the villa complex. The lack of more complete tegulae tiles suggests these were retained and reused, probably in the 2nd-century AD refurbishment (period 3, phase 3). The ditch produced a small assemblage of poorly preserved cereal caryopses, chaff and a single pea, as well as a small charcoal assemblage including oak, wild cherry/blackthorn and heather.

ENCLOSURE 1 (EN1): STOCK ENCLOSURE

Five gullies (G514, G515, G516, G517 and G530) in the northern part of the site were aligned along a slightly different orientation and post-dated the FS3 ditches. They may have formed a timber stock enclosure (EN1) roughly 10 × 10m in size. A near-complete bead-rimmed jar had been smashed in the base of gully G517 and possibly represented another votive foundation offering.

DISCUSSION

The plan of Building 1 can be reconstructed from the evidence of later robber trenches, but no *in situ* features survived to suggest how it might have functioned. The apparently concentric layout of the building with a central room (or rooms) and surrounding corridor has been identified elsewhere in Kent and further afield, and may represent a distinctive, if poorly understood, building type (see Chapter 6 for further discussion).

A large assemblage of 1st- and 2nd-century AD bath house ceramic building material was also recovered, mostly from later features, but none of the forms and fabrics could be dated exclusively to the late 1st century AD and the initial use of Building 1. While this building may have been part of a detached bath house located on the western edge of the main villa residence, too little was seen to make any such interpretation more than speculative.

The nature of the contemporary late 1st-century AD pottery is of interest as the assemblage, mostly recovered from later features, had an unusually high proportion of drinking vessels such as flagons and beakers (see Chapter 5.3), high even for a villa site and nearer the levels seen in urban assemblages.

This Flavian building would clearly not have existed in isolation at Snodland and contemporary buildings – probably the main residential elements – were almost certainly located nearby, as well as a host of associated periphery activity such as timber outbuildings, yard surfaces, rubbish pits and field boundary ditches. The likely location for this earlier phase is beneath the 2nd-century AD main villa buildings excavated to the east. The residual mid to late 1st-century AD finds do suggest earlier occupation, but no buildings or features of 1st-century AD date were identified there (Ocock & Syddell 1967, 209; Birbeck 1995, 116) (although it must be borne in mind that most of the excavations on the main villa buildings still await publication).

The gullies of EN1 cut elements of FS3 in a later addition to the late 1st-century AD landscape. The enclosure also seems to have had at least two phases, with gully G515 cutting G517 (Fig 3.3). The southern extent was truncated by later features and is unknown. The form of the superstructure is difficult to envisage clearly but it is likely to have been built in timber, perhaps for animal stock. The fragments of a near-complete bead-rimmed jar recovered from the base of one gully may have been a votive foundation deposit. They make up one of eight possibly deliberate pottery deposits dating to period 3, phases 2 and 3.

The Flavian field system (FS3) kept to roughly the same alignments as the earlier Roman and prehistoric fields but subdivided the land to a greater extent (Fig 3.2). This reorganisation of land accompanied the construction of Building 1 in the later 1st century AD. What does seem clear is that throughout the life of the villa, fields extended out almost from the doorstep of the buildings, and agriculture must have been an integral part of daily life.

Little macrobotanical evidence for farming practices was recovered from the features, with only a limited assemblage of poorly preserved cereal caryopses and a single pea from trackway ditch G518. Overall, the fields seemed to be relatively small, in places only 10–15m wide, and may have been more suitable for keeping livestock than for any arable use. A pattern of small fields, interpreted as paddocks, close to the villa with larger fields located further away, possibly for arable farming, has been postulated on several sites, in particular at Roughground Farm, Lechlade (Dark & Dark 1997, 96–7) and such an arrangement could well be the case here.

In the south-east of Britain excavations have demonstrated that field systems first established in the later prehistoric period were frequently reused and subdivided in the Roman period as part of a local reorganisation, often laid out perpendicular to long-established trackways and rivers (Taylor 2007, 67). At Snodland, the late prehistoric and Roman field systems were both on similar alignments, although there is no clear evidence for continuity and reuse of the same fields.

3.3 PERIOD 3, PHASE 3: 2ND CENTURY AD

During the 2nd century AD Building 1 continued in use and Rooms A and B were modified. Outside the building substantial changes were made: the late 1st-century AD field system (FS3) was replaced by a new system of ditches (FS4); the possible stock enclosure (EN1) fell out of use; the two ponds ([1032] and G513) were infilled and the yard area (OA2) was superseded by two enclosed areas (EN2 and EN3) (Fig 3.6).

BUILDING 1 (B1): MODIFICATIONS

The internal layout of the building was modified with the demolition of internal wall G61, which removed the narrow western corridor, Room C, and enlarged the central Room B (Fig 3.7). The masonry footings of wall G61 were robbed out and the backfill contained a large assemblage of 2nd-century AD pottery, including the only substantial amount of samian ware from the site (see Chapter 5.3). Other modifications included the insertion of possible masonry drain G521 (Figs 3.7 and 3.8) through wall G53, emptying into adjacent ditch G519 of Enclosure 2 (EN2).

The exact function of tile-built channel G521 is open to question and an alternative function is possible: namely, that it formed a flue from a small external furnace. A similar tile-built channel associated with a hypocaust found in the main villa buildings was tentatively interpreted as a furnace flue, although a corn-dryer was another suggested function (Ocock & Syddell 1967, 202; Birbeck 1995, 88–9). However, both interpretations present problems. If it was a furnace, there was no evidence of an external stokehole or any signs of scorching; if it was a drain, there was no evidence of any silting or waterlaid deposits.

The possible drain was 3.0m long and 0.5m wide. The base of the channel was constructed of lydion bricks (fabric 1b) laid flat, and the coursed sides were built from brick (mostly fabric 3) and fragmentary imbrices and tegulae. This suggests that new bricks were used for the base while the sides were constructed with reused materials. The drain was dated by two sherds of pottery (*c* AD 120–200) retrieved from within the masonry build. The east end of the drain had been truncated and it is uncertain how far it originally extended into the building.

Ceramic building material evidence

Building material of 2nd-century AD date recovered from later features, principally demolition dumps G71, included a large amount of ceramic building material associated with a bath house. The assemblage included *bessalis* tiles from hypocaust or bath pilae, hollow voussoir tiles and box-flue tiles with combed keying. Although box-flue tiles occasionally appear in the 1st century AD, combed keying and hollow voussoir tiles are more common in the 2nd century AD.

Also found were six fragments of an unusual rectangular brick (140mm high, 150mm wide and 220mm long) with a lengthways moulded U-shaped channel (T15; see Fig 5.13).

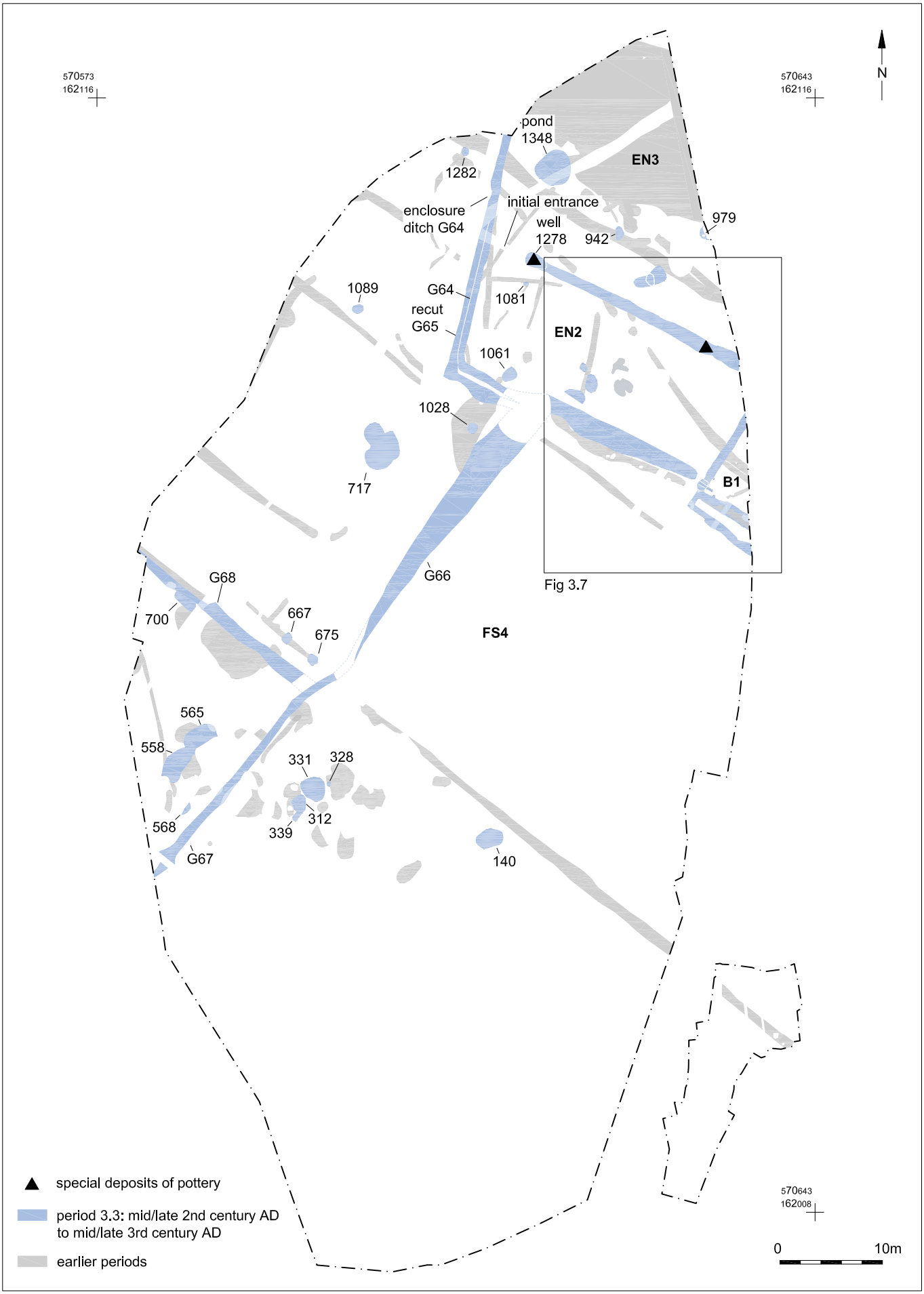

Fig 3.6 Plan of period 3, phase 3 features (2nd century AD)

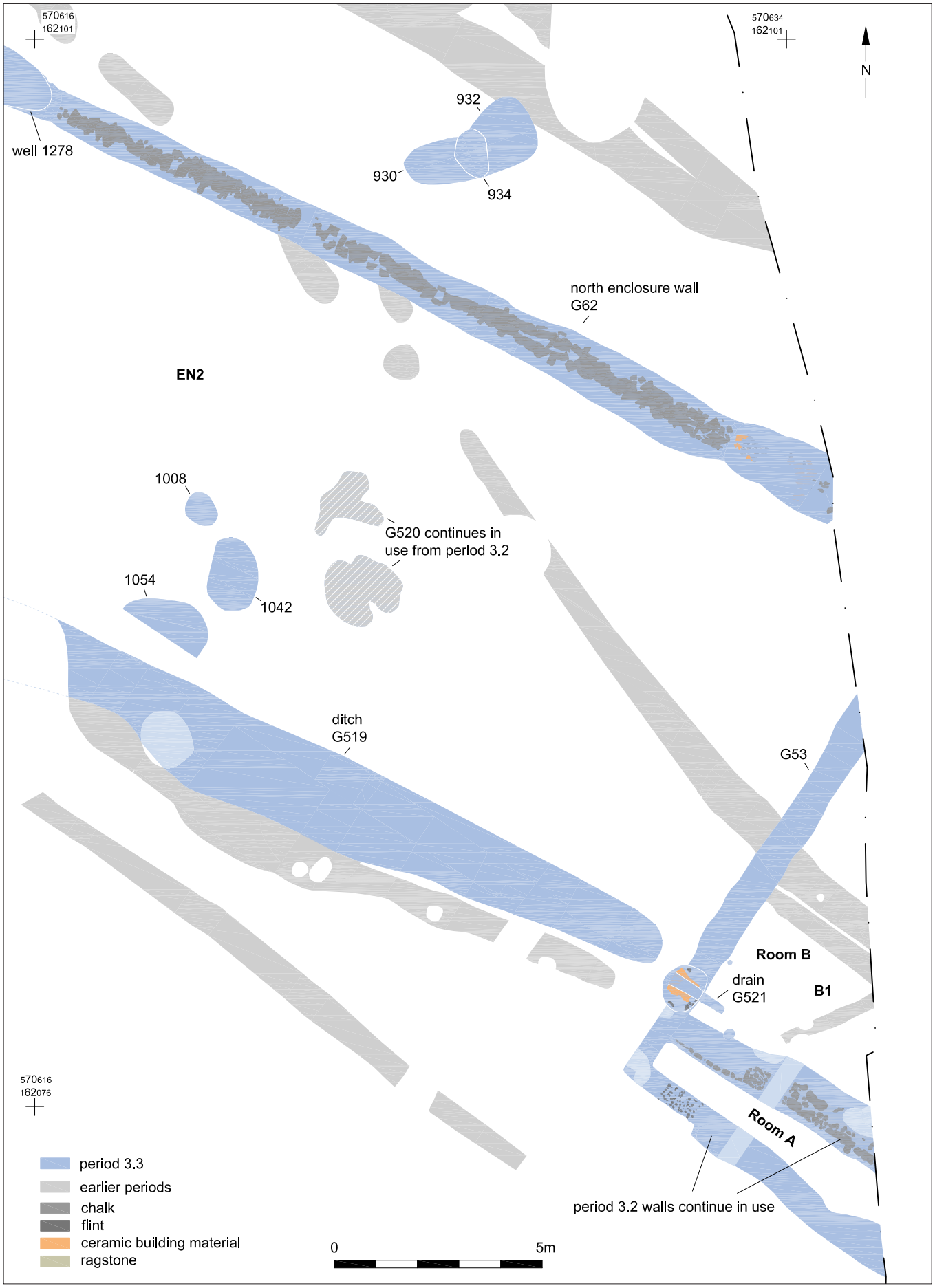

Fig 3.7 Detailed plan of Building 1 modification and Enclosure 2 (period 3, phase 3)

Fig 3.8 Photograph of drain G521, facing north-east (period 3, phase 3)

Its most likely function was to support a length of lead piping. Roman lead pipes, similar to those from Queen Street in London (Wilmott 1982, 240–1), had external dimensions (67 × 44mm) that would have fitted easily into the U–shaped channel (*c* 70mm wide by *c* 85mm high). These channelled bricks are not readily datable although the coarse fabric suggests that they are likely to be from the 2nd century AD.

A large fragment of curved *opus signinum* mortar render perhaps also dates to this period. It may originally have been painted red. This was probably part of an internal architectural feature, such as a door, window aperture or plunge pool (T18; see Fig 5.15).

ENCLOSURE 2 (EN2)

Immediately west of B1 was another enclosure (EN2), a yard area enclosed by a wall (G62) to the north and ditches elsewhere, replacing the earlier yard area (OA2). The enclosure wall (G62) was at least 20m long × 1m wide and presumably abutted the external wall of B1 to the south-east just beyond the limits of the excavation (Fig 3.7). The north-west end of the wall did not return but appeared to have a stub end forming a wide access point into the northern enclosure (EN3).

The wall was largely unaffected by robbing and the foundations survived mostly as uncoursed and unmortared chalk blocks with ceramic building material fragments (Fig 3.9). The construction cut backfill [815] contained pottery sherds dating to AD 120–200 and, as in the case of the earlier wall (G51) in B1, a partially complete poppy-head beaker (P16, Fig 5.3), dating to AD 70–120, had been placed in the base of the foundation – apparently another votive foundation deposit. The identical selection of vessels is unlikely to have been accidental and attests to the fact that these walls were probably built within living memory of each other. Nearest to B1 the south-east end of wall G62 appeared to have been rebuilt or partially robbed.

Fig 3.9 Photograph of G62, north wall of Enclosure 2, facing north-west (period 3, phase 3) (1.0m scale)

The ceramic building material fragments used in the wall foundation included 1st-century AD roof tiles, as well as a new distinctive group of large tegulae fragments with square nail holes (mostly in fabrics 1 and 1b). This is the first evidence of tegulae with nail holes on the site, and the only examples with square holes, rather than the more usual circular ones. These tegulae, as well as the lydion brick (fabric 1b) from the base of drain G521, seem to have been objects newly introduced to the site.

The rest of Enclosure 2 was defined by ditch G64 (later recut as ditch G65) to delineate an area *c* 25m long by *c* 10m wide. The earlier yard surface (G520) was apparently retained.

At the end of enclosure wall G62 a well ([1278]) was located at the enclosure entrance (Fig 3.7). The primary silting of the well ([1109]) contained a partially complete poppy-head beaker and an unguentarium (Fig 5.3, P14 and P13). Both vessels appeared to be part of another votive foundation deposit. A rich assemblage of waterlogged fruit seeds, pips and stones was recovered from the primary fill, including the remains of elder, bramble, crab apple, sloe and wild cherry as well as exotic fruits, figs and grapes. Some or all of these fruits may have been associated with the votive foundation deposit, although the common use of wells for rubbish disposal makes this association uncertain (see Chapter 5.10). Also recovered were the remains of uncharred weeds typical of disturbed ground, grassland and arable land as well as a small quantity of charred cereal grains and chaff.

A few pits ([1008], [1042], [1054], [1061] and [1081]) had been dug within the enclosure (Figs 3.6 and 3.7). They contained relatively few finds and their function is unclear.

ENCLOSURE 3 (EN3)

Immediately north of EN2 was EN3. This measured at least 25 × 25m and was defined by wall (G62) to the south and by the continuance of ditch G64 to the west (Fig 3.6). The function of the enclosure is not clear, but several pits were present ([979], [942], [930], [932] and [934]), as well as a pond ([1348]) near the west side.

In the north, the area of the earlier pond or depression (G513; period 3, phase 2) continued to accumulate waterlaid deposits, possibly overbank deposits from the river. One fill ([765]) contained a plano-convex forge bottom, demonstrating the presence of smithing activity.

FIELD SYSTEM 4 (FS4)

A new field system (FS4) defined by ditches G66, G67 and G68 was laid out to the west and south of B1 and EN2–3 (Fig 3.6). Wheat caryopses and glume bases were recovered from ditch G67. Generally, the new fields were larger than the earlier examples in period 3, phase 2.

Fourteen shallow pits, not concentrated in any particular area, were recorded across FS4. These pits contained only small assemblages of pottery and may have been dug for a number of reasons, including quarrying clay and planting.

DISCUSSION

Building 1 (B1) continued in use with modifications throughout the 2nd century AD, although clear evidence of its function is still lacking. The extent of the modifications and refurbishments is unclear as much of the building lies beyond the site limits. However, two changes were detected: the enlargement of Room B; and the insertion of masonry drain or flue G521. The quantity of roof tile found in other period 3, phases 2 and 3 features may suggest that a light yellow tiled roof was replaced by predominantly orange-red tiles during this phase (see Chapter 5.4).

B1 probably consisted of a timber superstructure constructed on low masonry sill walls. There was little evidence for the types of flooring used, although some bricks and *bessales* from the demolition deposits of B1 had worn surfaces, suggesting possible reuse as utilitarian floors.

The ceramic building material assemblage indicates the presence of a 2nd-century AD bath house, no doubt the direct successor to the putative Neronian building, and it is likely that this material is derived from the main villa residence, where a bath house is known from the latter 2nd century AD (Ocock & Syddell 1967). While the possibility remains that B1 was a bath house, there was no clear *in situ* evidence of its function. The possible interpretations of the only internal feature, masonry channel G521, are ambiguous, and do not help establish B1's function.

The assemblage does allow some features of the bath house, whether represented by the foundations of B1 or not, to be postulated at least in part. It reveals that the building had underfloor hypocaust heating, cavity walling, a vaulted ceiling, a plunge bath and possibly internal lead-pipe plumbing. The internal plumbing is likely to have consisted of narrow-bore lead piping, possibly connected to a boiler or supplying a fountain.

The small amount of box-flue tiles and hollow voussoir tiles identifiable in destruction deposits indicates that at least a small area of cavity walling and internal vaulting was present in conjunction with a hypocaust floor. The form of the roof is without exception the most difficult and contentious aspect to reconstruct from archaeological evidence and no definite design can be ventured.

Over half of the large ceramic building material assemblage consisted of tegulae and imbrex roof tiles, suggesting that the majority of the building was probably covered by a standard pitched tile roof with tie-beams. However, the recovery of a tegula with a pronounced lengthways convex curve indicates that at least some tiles were mortared on to a barrel-vaulted roof and the building may have had an arrangement of both

roof types, with the barrel vault over the hot rooms and the pitched roof over the rest. Many bath houses and buildings incorporating baths of various dates had a combination of apsidal-ended and rectilinear rooms, and this combination of pitched and vaulted roofs is therefore not unusual.

The creation of Field System 4 (FS4) included the recutting of a handful of earlier (FS3) ditches; some boundaries fell out of use and overall field sizes increased. These larger fields may reflect a change in use, for example from paddocks to arable. Pits, possibly for quarrying clay, continued to be dug in the fields as they were in period 3, phase 2.

Two enclosures (EN2 and EN3), superseding Open Area 2 (OA2) and EN1, were situated immediately to the west of B1 and it is most likely that there was access between these external spaces and the building. The rammed chalk and flint surface G520 had been retained from the earlier period and similar external surfaces are known to have been laid around the villa complex to the east as part of the wider 2nd-century AD developments (Ocock & Syddell 1967, 200; Birbeck 1995, 86).

Within these enclosures only a few small pits were dug and there was little evidence for any other activity. A walled enclosure at the Mount Roman villa, Maidstone, produced evidence for post-built timber buildings (Kelly 1992, 182) but the enclosures at Snodland seem to have been left open. Their exact function is unknown, but enclosed outdoor areas were common in villas and have often been interpreted as gardens and yards. Well [1278] and wall G62 both contained votive foundation deposits of pottery, continuing a practice which had begun at the site in the late 1st century AD (period 3, phase 2).

3.4 PERIOD 3, PHASE 4: 3RD CENTURY AD TO EARLY 4TH CENTURY AD

BUILDING 1 DEMOLITION AND BUILDING 2 (B1 AND B2)

The modified Building 1 (B1) survived until the 3rd century AD, when it was at least partially demolished and replaced by the larger Building 2 (B2). Two possible timber buildings (B3 and B4) were constructed to the north and south of B2 and the surrounding Field System 4 (FS4) and enclosures were again reorganised (FS5) (Fig 3.10).

The external walls (G52 and G53) of B1 may have been retained as internal partition walls in B2 but the extent of later robbing makes this uncertain. B2 maintained the same alignment as B1, but was enlarged by *c* 4.0m to the north-west and south-west beyond its footprint. Enclosure wall G62 appears also to have been maintained, although its south-eastern end must have been partially demolished to accommodate the new build.

Overall, B2 appeared to maintain the same concentric layout as B1, but in this case the corridor was divided into small cellular rooms. Although more of B2 than B1 was seen, the majority of the structure lay beyond the excavation and its interpretation is tentative.

Demolition dumps (G71)

To the immediate north-west of B2 was a roughly square area of demolition deposits (G71), dumped over earlier hard-standing surface G520. The deposits were substantial, *c* 8 × 10 × 1m deep, and were probably dumped to level and raise the ground level and form an area of rough hard-standing (Figs 3.11 and 3.12). The deposits were filled with a variety of material, including contemporary refuse, as well as additional levelling material brought in and dumped apparently from long-lived midden deposits elsewhere.

The dumps were composed of several deposits ([571], [572], [617] and [812]) containing over 500kg of ceramic building material and over 50kg of pottery, mostly of residual 1st- and 2nd-century AD date. Other finds included the handle and pommel of a Late Bronze Age sword (RF<256>); over 250 iron nails; numerous iron tools, including chisels and punches (RF<453>, RF<454>, RF<512>, RF<464> and RF<506>); shears (RF<71>); joiner's dogs (RF<423> and RF<467>); a drill bit (RF< 355>); and a copper-alloy padlock bar (RF<220>). Other more domestic finds included a copper-alloy suspension loop (RF<324>); a silver ring (RF<70>); copper-alloy writing styli (RF<69> and RF<212>); an iron knife (RF<71>); and iron strips with decorative leaf-shaped terminals, probably from the binding of a box or casket (RF<186>) (see Chapter 5.6). Almost 5kg of mature oyster shells were also recovered but, because of the amount of clearly residual material present, the likely date of the shellfish harvesting is unknown (see Chapter 5.13).

Building 2 (B2)

The external walls (G72 and G73) of the new and enlarged building were aligned north-west to south-east and north-east to south-west respectively (Fig 3.11). Like B1, the foundations of these walls were entirely robbed out at a later date, apart from some small *in situ* remnants of wall G73 (Fig 3.13). These walls were constructed of similar materials to the earlier walls of B1 and the form suggests that B2 was built in a similar way. The new enlarged building was clearly substantial, measuring at least 15 × 20m, although its full extent is unknown.

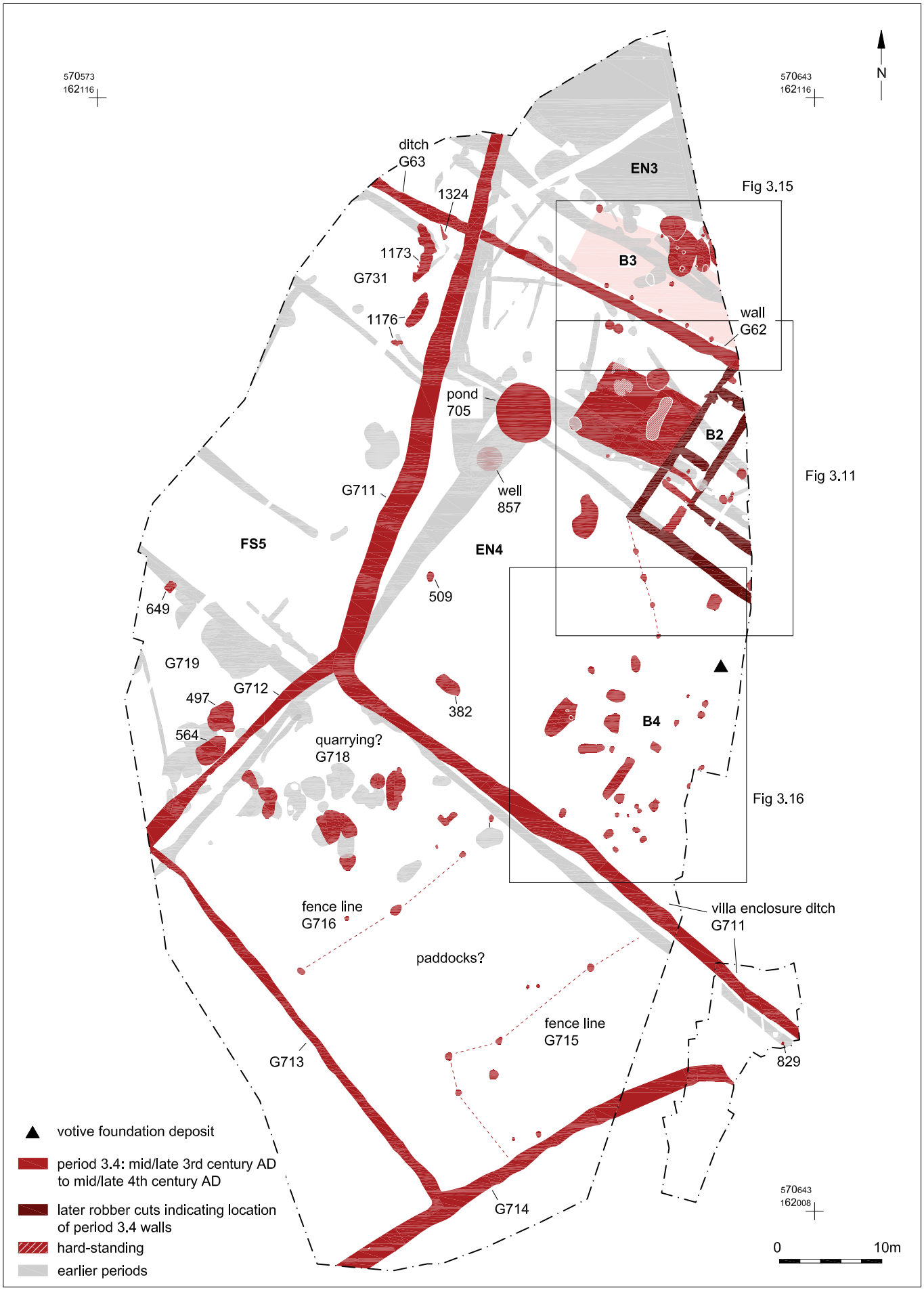

Fig 3.10 Plan of period 3, phase 4 features (3rd to early 4th century AD)

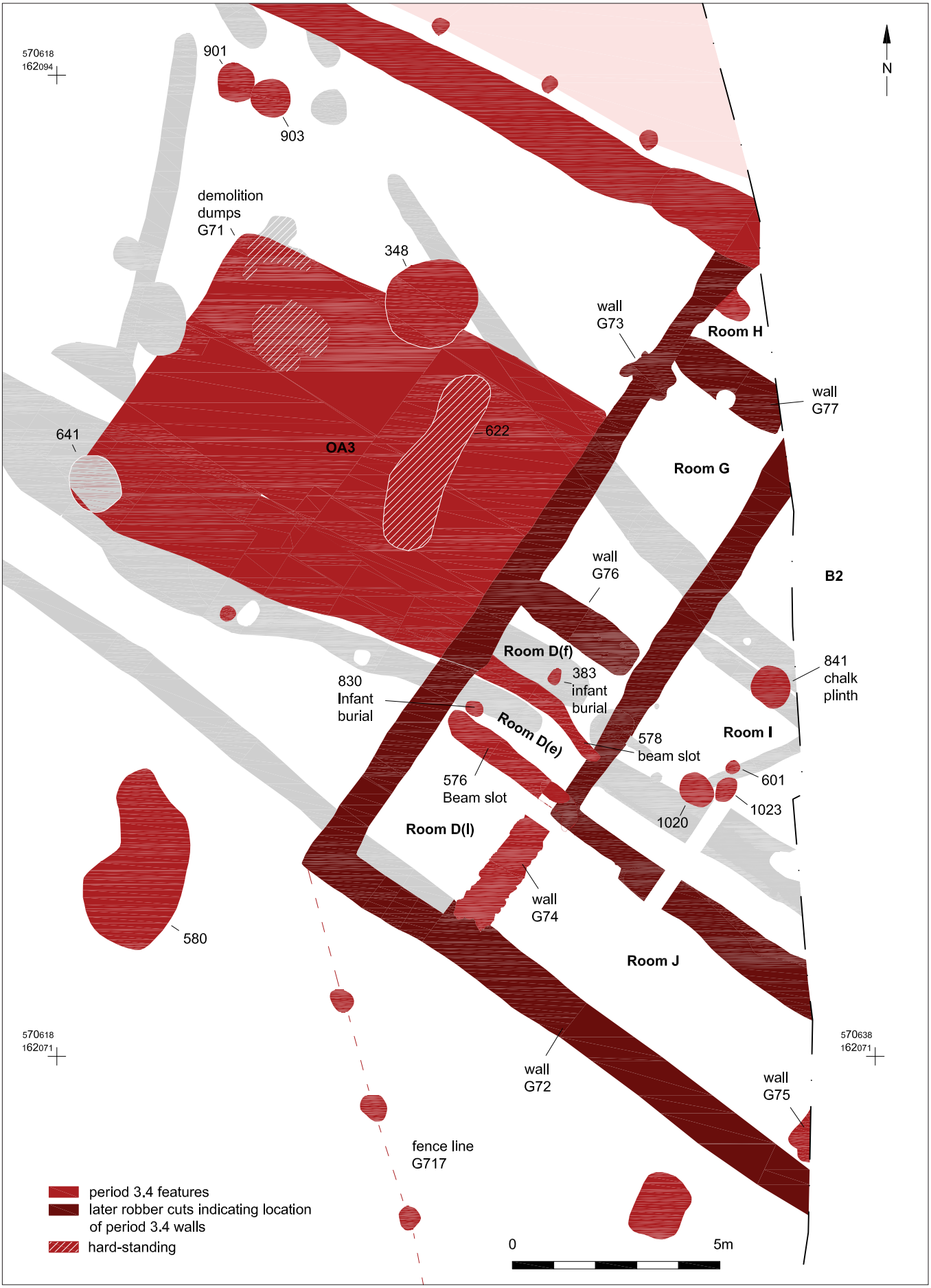

Fig 3.11 Detailed plan of Building 2 and G71 (period 3, phase 4)

Fig 3.12 Photograph of demolition dumps G71, facing south-east (period 3, phase 4), overlying the fragmentary remains of the earlier hard-standing surface G520 (2.0m, 1.0m and 0.4m scales)

Fig 3.13 Photograph showing *in situ* masonry wall G73 remains in the bottom of a robber trench (period 3, phase 4) (0.1m, 0.3m and 0.4m scales)

INTERNAL ROOMS

Four masonry wall foundations (G74, G75, G76 and G77) formed the partition walls for the internal rooms (Rooms D, G, H and J), which were set around large, central, Room I (Fig 3.11). As with most other foundations and walls, these were also largely robbed out. Where the masonry did survive, however, in walls G74 and G75, it was found to be constructed from chalk and flint cobbles set within a clay matrix (Fig 3.14). Over 3kg of burnt daub was recovered from overlying demolition deposit [17], suggesting that this was a wattle-and-daub construction, perhaps within a timber frame, set on low masonry sill walls.

The function of these four rooms is not clear as truncation had removed any evidence of flooring, entrances and associated finds. The rooms were of similar size, with Room J about 8.0m long by 3.0m wide, and Rooms D and G both around 6.0m long by 3.0m wide. Too little of Room H was exposed to make any meaningful measurement possible, but it was probably of a similar width to the others. It is uncertain where the openings

Fig 3.14 Photograph showing *in situ* masonry of internal wall G74 in the enlarged Building 2, facing south-west (period 3, phase 4) (1.0m scales)

to these rooms were located although it is probable that all had entrances to central Room I.

The exact function of the postholes ([1020], [601] and [1023]) and chalk plinth base ([841]) in Room I is uncertain. However, they were unlikely to be roof supports but probably rather represented some internal structure or division.

Two parallel beam slots ([576] and [578]) abutted the internal face of external wall G73, and are likely to have been for sills of internal walls of wattle-and-daub construction. In the base of beam slot [578] was a large unworked ragstone block (19.5kg) that had been utilised as a post pad. These partitions appeared to have been added after the masonry walls, and they further subdivided Room D into three small rooms (Rooms L, E and F).

INHUMATIONS

Two infants, aged 6 months or less, were interred under the floor inside the building. Infant burial [830] was located in the corner of Room E, aligned north-west–south-east with the head to the south-east. Infant burial [383] was placed on a tegula and interred centrally in Room F. Recovered from the grave fill of the latter was an assemblage of charred glume bases, poorly preserved barley and wheat cereal grains and a single possible broad bean. It is uncertain whether these burnt macrobotanics were deliberately interred in the grave as a burial rite or were accidental inclusions.The other infant burial grave

fill was sampled but produced few macrobotanical remains. No other environmental samples were taken from the other features in B2.

INTERNAL PAINTED WALL DECORATION

A small assemblage of painted wall plaster fragments was recovered from the robber trenches. These are the only evidence of a possible decorative scheme in the individual rooms (Table 3.1).

Robber trench	Adjacent rooms	Wall plaster fabric and form	Decoration
G72	J and D	two fragments of coarse sandy lime mortar possibly originally laid over an *opus signinum* layer	white plaster scrim with a smooth surface; one piece was painted deep reddish-rose pink and the second was painted with a similar pink and overpainted with green; sparkling quartz inclusions show through the paint, possibly as a deliberate decorative effect
G75	J or room beyond the limits of excavation	one fragment of a sandy lime mortar	painted pink
G73	G, H and D	three conjoining fragments of curved *opus signinum* mortar with slightly coarse sand	plain plaster scrim overpainted with plain pinkish-red paint with sparkling inclusions
		three fragments of sandy lime mortar	white plaster scrim and painted pale pink
		one fragment of sandy lime mortar	one with a white plaster scrim
		one curved moulding fragment of sandy lime mortar	painted pink
G77	G and H	fragments of sandy lime mortar	white plaster scrim painted plain reddish-pink with a very slight sparkle
		fragment of pink *opus signinum* plaster	thin white plaster scrim with a smooth unpolished surface possibly painted white or lime-washed

Table 3.1 Painted wall plaster fragments from robber trenches

Whilst it is impossible to reconstruct the decorative scheme in any detail, the north-west side (Rooms D, G and H) may have been decorated with a white, pink and red scheme, while the rooms on the south-west (Rooms J and perhaps D) were painted pink and green. The use of sparkling quartz inclusions may have been a deliberate effect. There was no clear evidence of replastering as would be expected at some stage during the century-long existence of B2.

ENCLOSURES, FIELDS AND BUILDINGS AROUND BUILDING 2

The new building (B2) was accompanied by a possible timber outbuilding (B3), set within Enclosure 3 (EN3) to the north, which was retained. To the south a large new enclosure (EN4) was set out with a well ([857]), an area of hard-standing ([622]) and a possible timber outbuilding (B4) (Fig 3.10).

Enclosure 3 and Building 3 (EN3 and B3)

In EN3 the presence of post-built B3 can be conjectured on the basis of 13 postholes occupying an area at least *c* 17m long by *c* 7.0m wide, constructed respecting the north side of enclosure wall G62 (Fig 3.15). If the postholes did represent a building, this suggests the presence of a timber agricultural outbuilding, such as a barn or stable. Finds from the postholes included pottery and glass sherds of 3rd- and 4th-century AD date. Well [1278], at the west end of wall G62, was backfilled during this period.

Enclosure 4 (EN4)

A large new enclosure was set out around B2, represented by wall G62 to the north (retained from the earlier period) and substantial ditch G711. Ditch G63 aligned with the western stub end of wall G62 and crossed ditch G711 to continue the land division further west. The ditch was contemporary with ditch G711 and appeared to block the access between the north (EN3) and south (EN4) enclosures.

Ditch G711 enclosed masonry B2 and timber B3 and B4, and its laying out was contemporary with the creation of a series of new fields (FS5) in the surrounding area. Together these represented a considerable reconfiguration of the landscape (Fig 3.10).

A square-sectioned prismatic bottle base (RF<461>) was recovered from ditch G711. The bottle had external vertical scratches, indicating frequent removal from a close-fitting container. Other finds from the ditches included a 1st-century AD Colchester-derivative brooch (RF<40>); a heavy copper finger ring with a light blue glass intaglio showing a simplified figure (RF<73>); and three iron boot-plates (RF<480>, RF<500> and RF<505>). An iron two-link snaffle bit (RF<27>) from a horse harness was recovered from ditch G714 as well as a partially complete cattle cranium.

Within the enclosure, pond [705] was dug, cutting through the fills of earlier pond [1032] (period 3, phase 2),

Fig 3.15 Detailed plan of post-built timber Building 3 (period 3, phase 4)

suggesting that this area was consistently wet and low lying. The primary silting of the pond, waterlaid grey clay [704], produced a large quantity of uncharred macro-plant remains, including seeds of elder and blackberry/raspberry and a single sloe stone, in addition to the seeds of weeds including stinging nettle, black nightshade and docks. In the subsequent period (period 3, phase 5) the pond was used for the dumping of domestic waste, including a large amount of animal bone.

Well [857], to the south-west of the pond, had a primary fill of a similar grey waterlaid clay ([863]) although macrobotanical remains and finds were largely lacking from this and from the upper fill [862].

The sporadic remnants of a hard-standing surface in EN4, rammed chalk and flint cobbles [622], were found overlying demolition dumps G71 (Fig 3.11).

Building 4 (B4)

Also within the enclosure, to the south-west of B2, was a second possible timber structure (B4), *c* 19m long by *c* 7.5m wide (Figs 3.16 and 3.17). In this area were numerous postholes (16) and post pads (7), as well as a scatter of pits (7). Some of the post pads were substantial, with sizable boulders of ragstone in [310] and chalk in [877]. Under the latter stone was a worn coin dating to AD 275–85, interpreted as a special foundation deposit. A number of the postholes contained burnt deposits, including over 2kg of daub from posthole [152], but it is uncertain if these originated from this building or from the nearby B2.

The building appeared to be aligned north-east–south-west, respecting enclosure ditch G711, but it is not possible to be certain as more remains may lie beyond the limits of the excavation to the south-east. Fence line G717 appeared to run between the corners of B2 and B4, indicating that they may have been contemporary. As the interpretations of both B3 and B4 are tentative, other possible explanations can be proposed, such as a post-built cattle stockade.

Field System (FS5)

To the west and south of EN3 and EN4, new fields were laid out, defined by ditches G712, G713 and G714 (Fig 3.10). The

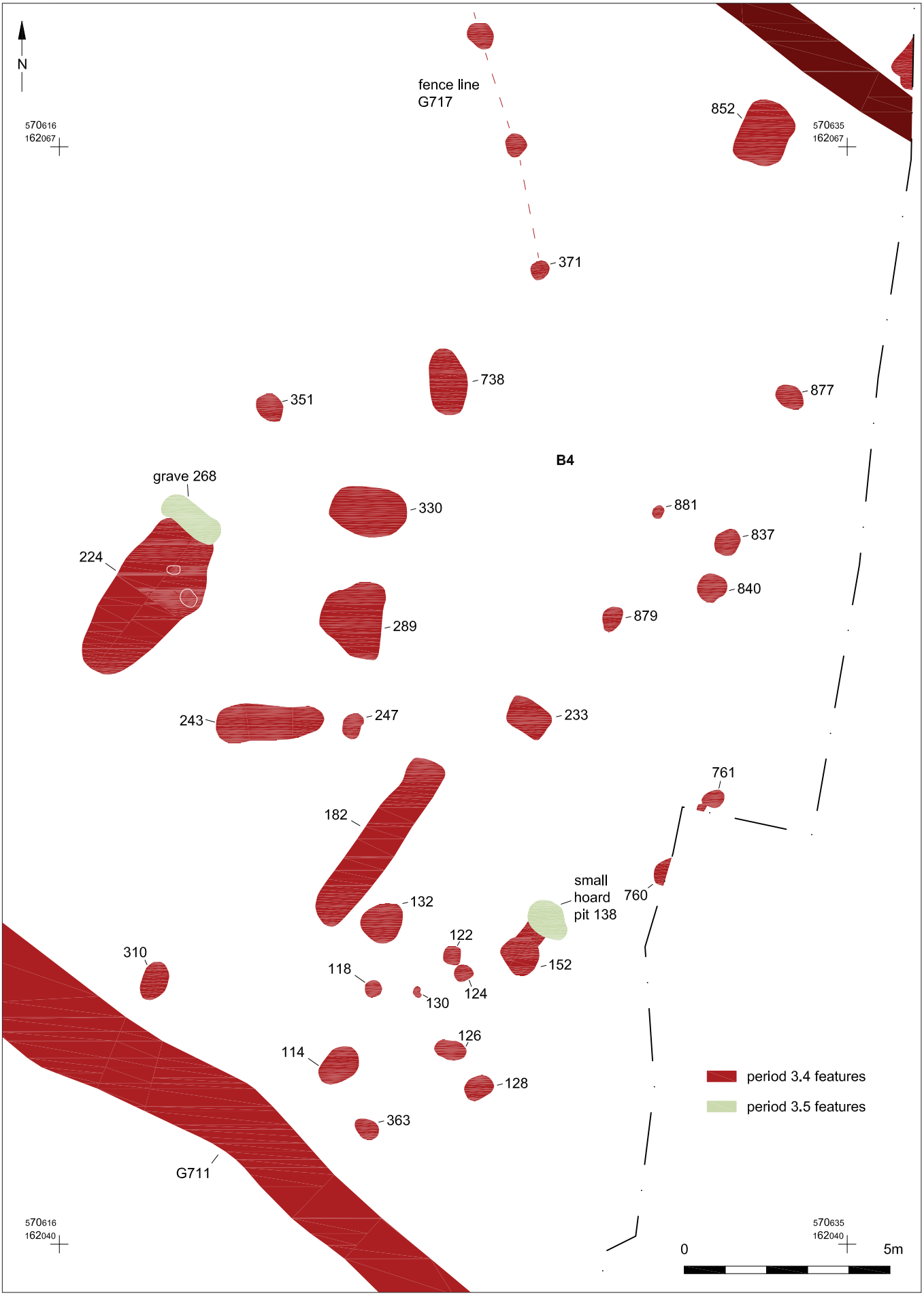

Fig 3.16 Detailed plan of area around possible post-built timber Building 4 (period 3, phase 4)

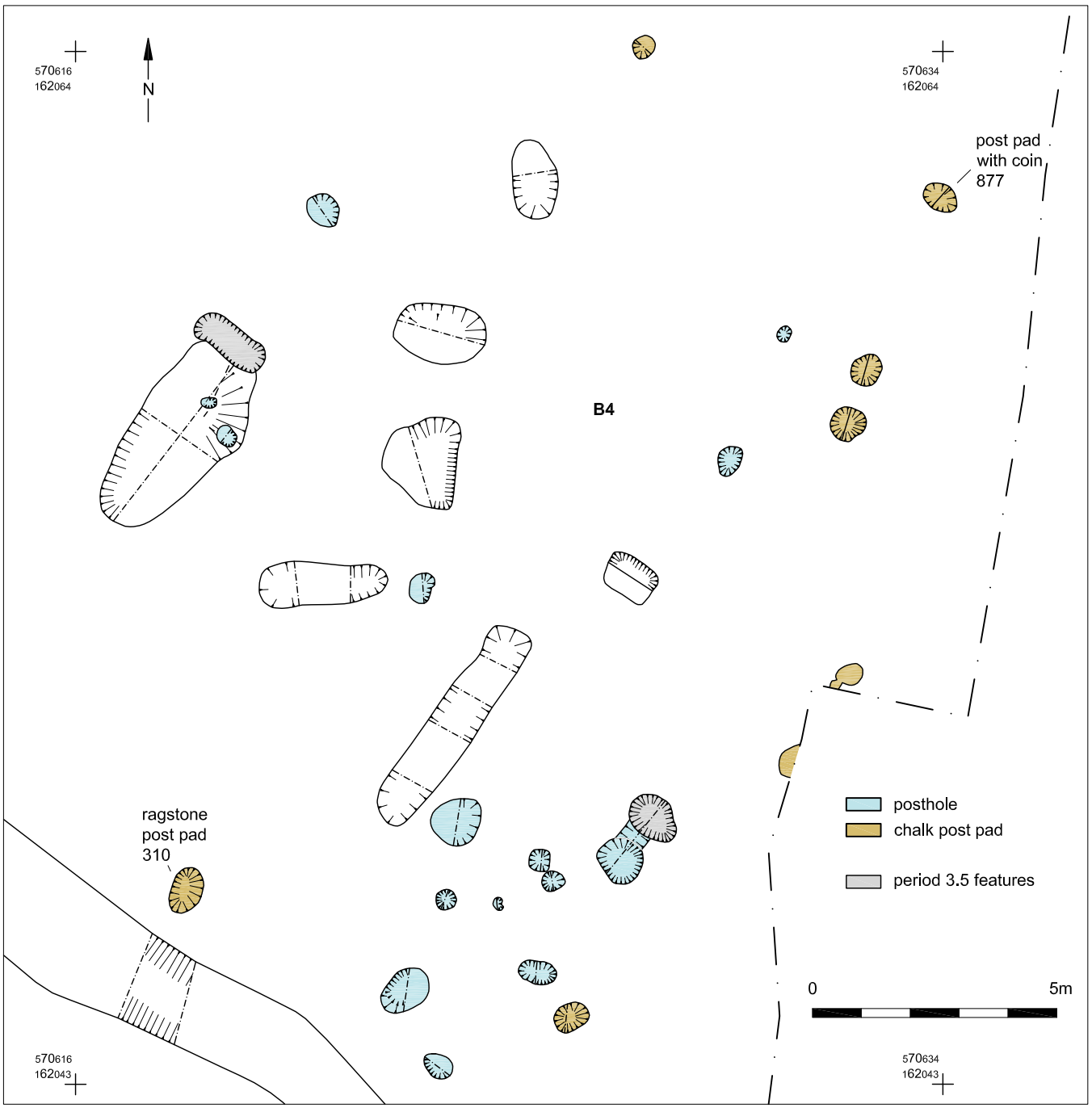

Fig 3.17 Detailed plan of structural elements of possible post-built timber Building 4 (period 3, phase 4)

one complete field that lay within the excavated area measured *c* 45 × *c* 30m, with a possible entrance in the south-east corner and two possible internal fence lines, G715 and G716.

Within FS5 were two clusters of pits, G719 and G718. These were mostly only shallow 'scoops' with few finds and were, like the earlier pits in the fields, probably the result of localised quarrying. One cluster of pits, G718, was located in the same area as the earlier quarry pit clusters G535 (period 3, phase 2) and G610 (period 3, phase 3). This is not easily explained, but may be due to the perception that this particular area had better clay than elsewhere, although no obvious difference in the natural could be discerned on site. Discrete dumps of ceramic tile and stone rubble (G731), located in the corner of the field adjacent to EN4, may have been the vestiges of the rebuild or alteration of Building 2.

DISCUSSION

Building 2 (B2)

This building was an enlargement of Building 1, and in terms of form, appeared to be its direct successor, maintaining the same 'concentric' plan. Buildings with concentric layouts are being identified more frequently on villa sites, mainly in Kent but also further afield, and are now considered as a possible distinctive type (see Chapter 6).

There was more evidence for the form of this structure (B2) than the earlier one (B1). The robbing of the majority of the masonry wall foundations disturbed many of the stratigraphic relationships, making the identification of contemporary rooms difficult, but it seems likely that the external walls of B1 were retained as internal walls in B2, since the internal masonry partition walls appeared to respect these earlier walls. However, the division of Room D must have seen at least a partial modification of wall G53, with drain G521 falling out of use. As in the case of the earlier B1, the superstructure is likely to have been a timber-frame founded on low masonry sill walls.

The painted wall plaster fragments recovered from later robber trenches suggest that the north-west rooms (Rooms D, G and H) may have been decorated with a white, pink and red scheme and the rooms on the south-west (Rooms J and perhaps D) were painted pink and green. Although little else can be said about the building, both its size and the painted decoration suggest that it was of some status.

Of the other concentric buildings known from Kent, the ancillary structure at Keston villa, known as 'the south masonry building' had a layout and development that was strikingly similar to those of B1 and B2 (Philp et al 1991, 120–4). Initially built in the late 3rd century AD with two open concentric walls (akin to B1), its corridor was later subdivided by inserted masonry walls into rooms of roughly the same size as those of B2. Another parallel with B2 may be seen in the insertion of timber beams into the floor of a room, though in this case these were interpreted as forming a raised wooden floor rather than further partitioning (ibid). Sleeper walls for a raised wooden floor are a possible alternative interpretation for beam slots [576] and [578] in Room D, but more slots would have been required to support any floor adequately in this room, and the bases of internal timber walls seems a more likely explanation.

Another similarity is the cluster of four contemporary infant burials located immediately to the east of the ancillary structure at Keston (ibid, 125), although what the significance, if any, of these are to the building is uncertain. The function of the Keston building was unknown but it was suggested that it was likely to be domestic rather than agricultural (ibid).

However, the insertion of a raised wooden floor at Keston has a direct parallel with another concentric building, the Horton Kirby granary. The granary had a raised wooden floor in the large central room, but later (period 3) a similar raised floor was inserted into parts of the surrounding corridor, increasing the storage space (Philp & Mills 1991, 8–19). With this in mind, it seems plausible that at Keston part of the concentric domestic building was adapted for grain storage, and that the structure had a multipurpose function.

Infant burials and possible shrines

The division of Room D by timber partition walls [576] and [578] may have been accompanied by the interment of infant burials in the floor of the two new Rooms, E and F. These burials may give a clue to the likely function of these small rooms, as they are often found in kitchens and areas where agricultural products were processed (Perring 2002, 197–8). Indeed kitchens, infant burials and shrines were all associated with the fertility and prosperity of the Roman house and their close spatial connection would have been seen as helping to contribute to the care of the living (ibid). The rich macrobotanical assemblage recovered from the fill of infant burial [383] may add to the evidence for the function of this room as a kitchen or store (see Chapter 3.5).

Infant burial [383] was interred on a tegula tile; whilst this clearly exhibits a level of care in burial, it is not in itself significant as such tiles must have been readily available. An infant interred in a cist made of roofing tile was found in the main villa buildings in the corner of a room with a tessellated floor. This infant appeared to be neonatal and was possibly interred with a late 2nd-century AD storage pot and numerous animal bones, including a pig fibula, vole femur and bird bone fragments (Ocock & Syddell 1967, 192–217).

Enclosure ditch (G711) and timber buildings (B3 and B4)

The enclosure of the buildings by ditch G711 (EN4) seems significant: unlike the earlier periods, there was now a defined area, up to 30m wide, separating B2 from the surrounding field systems. The presence of possible timber buildings and a well in EN3 and EN4 suggests that these areas were important working spaces both for the running of the villa and for farming activities.

While the possible B3 and B4 were both affected by truncation, making interpretation difficult, they were potentially the first timber outbuildings to have been identified at the Snodland villa. These must have been two of numerous timber structures, both large and small, spread around the core of masonry structures, a layout that has been found at many villa sites, such as Stanwick, Northamptonshire (Neal 1989) and Beddington, Surrey (Howell 2005). The lack of evidence for timber buildings in the east, around the main villa buildings, is perhaps a result of excavators focusing exclusively on masonry structures.

Field system (FS5)

The reorganisation of the fields was accompanied by the apparent enclosure of the buildings by ditch G711, and this separation may have been associated with the possible introduction of crop processing on the site. A complete field is identifiable from this period: largely rectangular, *c* 30 × 45m, with an entrance at the east and apparently subdivided into thirds by post-built fences. It was probably for stock keeping, perhaps a paddock for horses. Finds from the ditches of the field included an iron snaffle bit (RF<27>) from a horse harness and a cattle cranium. An arrangement of paddocks and stock enclosures adjacent to the house has been suggested at other villa sites, such as Barton Court Farm, Oxfordshire (Miles 1988, 66–8).

3.5 PERIOD 3, PHASE 5: EARLY TO MID 4TH CENTURY AD

This period saw a significant decline and change in the nature of the activity on the site. Building 2 (B2) and the possible outbuildings (B3 and B4) were demolished and the field system fell out of use (Fig 3.18). The site was largely abandoned (OA3) with only a few pits dug and the most significant new land use was a small enclosed inhumation cemetery (C1). Two coin hoards, one found during the preliminary geotechnical works on the site, were located towards the southern boundary of the excavation area.

CEMETERY 1 (C1)

Five inhumations within simple graves in Cemetery 1 were apparently enclosed by a small ditch (G81). The apparent cemetery ditch (G81) cut the earlier enclosure ditch G711, further indicating the change in land use between this and the earlier period. Although not recorded as part of this excavation, the pit ([11]) with the large coin hoard found in a geotechnical trench in 2006 appeared to be cut through the silted-up cemetery ditch G81 (see below). All the graves were aligned north-west–south-east and three of the inhumations had the head at the south-east (Fig 3.19). The inhumations have been identified as an adult ([79]), a mature adult male ([799]), two infants ([85] and [807]) and a possible infant tegula burial ([825]).

BURIAL CATALOGUE

Grave [80]

Inhumation burial of possible adult male. Only the lower half of skeleton [79] survived with the rest probably truncated by ploughing (Fig 3.18). The body had been laid out supine, extended with the feet together and, placed by the feet, a small jar with unusual moulded decorative ring handle attachments, dating to AD 270–400 (Fig 3.20). The vessel was broken in half and was visibly burnt and sooted, possibly from its use in a burial rite such as the burning of scented oils.

Grave [86]

Inhumation burial of a child (skeleton [85]) interred supine and extended with the arms by the sides in a wooden coffin, marked by nine nails angled inwards around the body. The age of the child is estimated at 6–8 years. At the feet were two pottery accessory vessels, a disc-neck flagon, dating to AD 250–400, and a dish (Fig 3.21). Both vessels were broken, and while plough damage cannot be entirely ruled out, this may have been deliberate. The rim of the flagon was snapped off and placed next to the body of the vessel and the walls of the dish had been removed with only the base interred (see Chapter 5.3). It is not certain whether these vessels were placed within or outside the coffin. In addition to the accessory vessels, a single eroded piece of granite, probably originating from the south-west of England, was recovered from grave fill [84] (see Chapter 5.2). Although its exact location in the grave is uncertain, this non-local stone may have been an additional grave good. Round stones, including granite and quartz, were used as grave goods from the prehistoric to the medieval periods, suggesting a belief that these stones had 'natural magic' properties and functioned as protective amulets for the dead (Philpott 1991, 163–4; Gilchrist 2008).

Grave [801]

Inhumation burial of mature male adult [799], interred supine and extended with the left arm across the stomach without any apparent accessories or coffin. The grave fill ([800]) contained a charred macrobotanical assemblage with evidence of crop processing and this may have been interred as a 'grave good' (see phase 5 discussion below). Significantly, there were similarities with the assemblage from baby burial [383] in B2 (period 3, phase 4). A modern drainage trench had cut across the torso and most of the legs were lost, probably to ploughing (Fig 3.22).

Grave [809]

Inhumation burial of infant [807], heavily truncated with only the skull surviving (Fig 3.23). The age at death has been estimated at between 3 and 7 years. The presence of a single nail within grave [809] suggests that the body may have been interred in a wooden coffin but this is not certain.

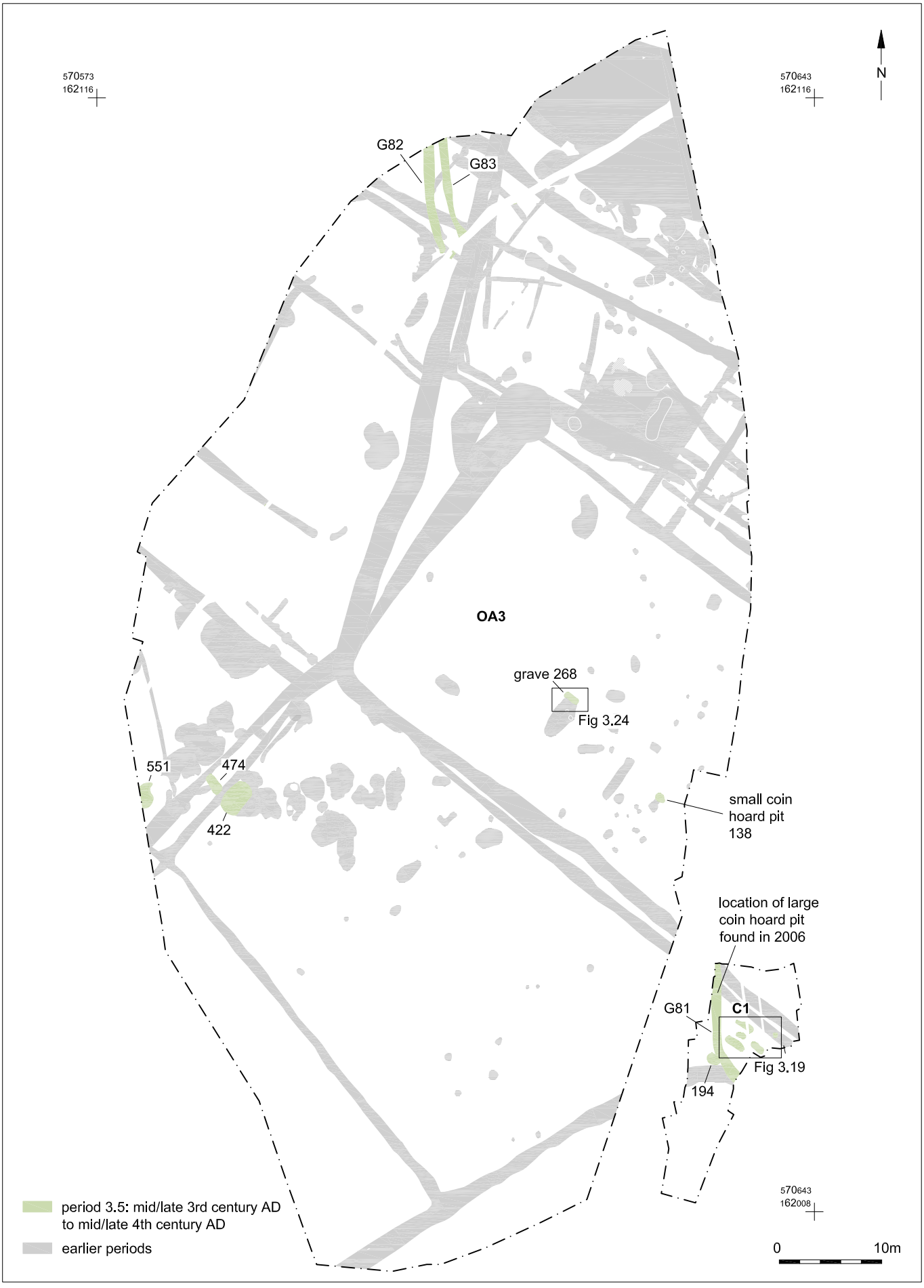

Fig 3.18 Plan of period 3, phase 5 features (early to mid 4th century AD)

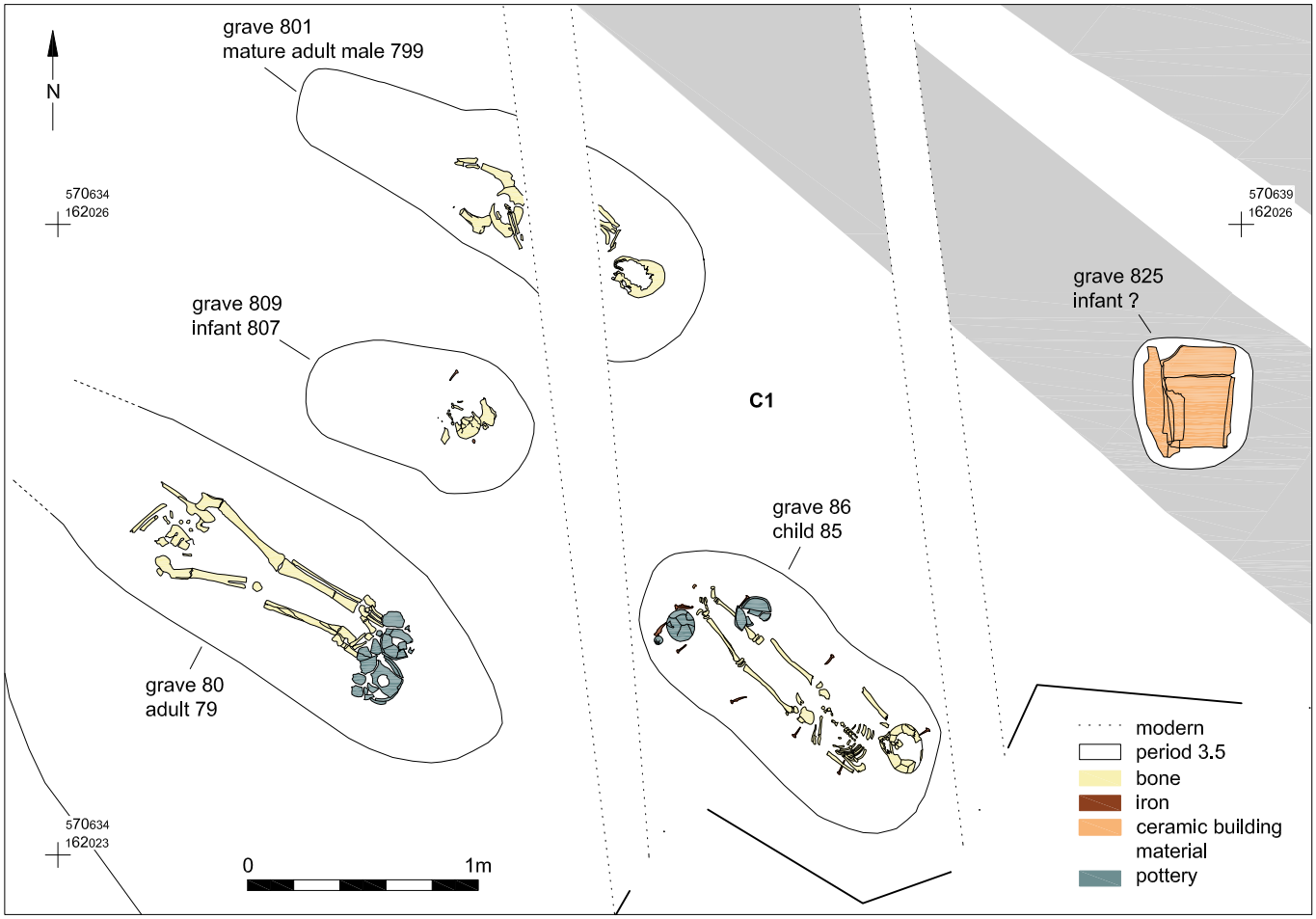

Fig 3.19 Detailed plan of period 3, phase 5 burials (Cemetery 1) (early to mid 4th century AD)

Fig 3.20 Photograph of grave [80] and skeleton [79], facing north-west

Fig 3.21 Photograph of grave [86] and skeleton [85], facing south-east (0.1m scale)

Fig 3.22 Photograph of grave [801] and skeleton [799], facing south-east (0.4m scale)

Fig 3.23 Photograph of grave [809] and skeleton [807], facing south-west (0.1m scale)

Burial [825]

A tegula tile ([825]) buried flat in a pit within the cemetery may once have carried an infant burial, but no skeletal remains survived.

Outlying burial [268]

An outlying sixth grave was revealed some 30m to the north-west of the main cluster in OA3 (Fig 3.18). The inhumation burial of a young juvenile ([267]) was interred supine and extended in partially tile-lined grave [268] (Figs 3.24–3.26).

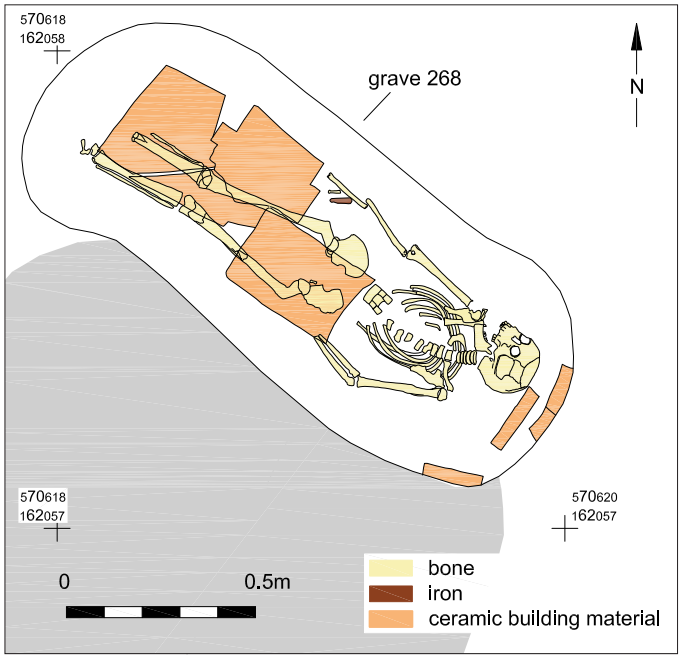

Fig 3.24 Detailed plan of outlying grave [268]

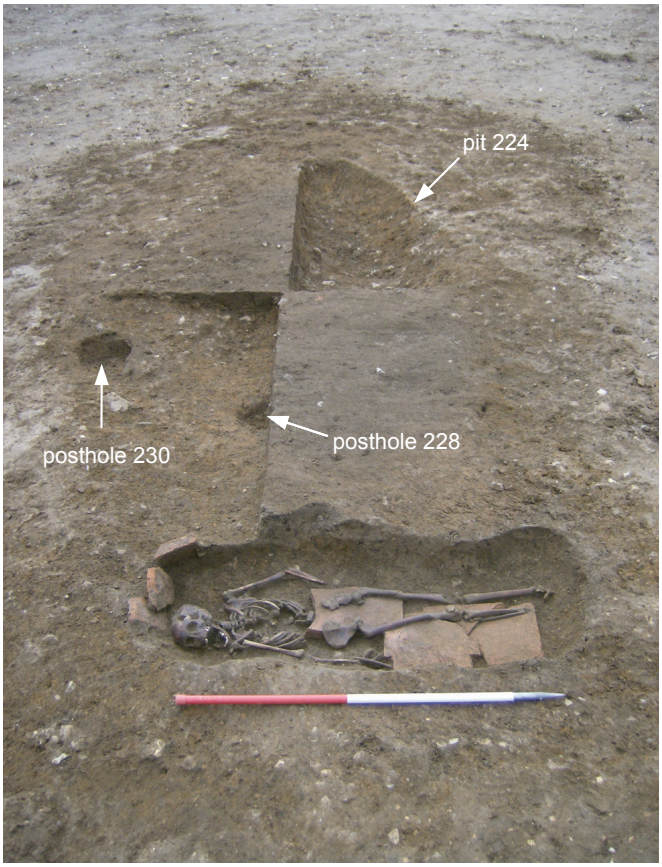

Fig 3.25 Photograph of grave [268] with period 3, phase 4 Building 4 features, facing south-west (1.0m scale)

Age at death was estimated at between 8 and 12 years. The macrobotanical remains recovered from the grave fill ([266]) were similar to grave fill [800] and baby burial [383].

Fig 3.26 Photograph of skeleton [267] in partially tile-lined grave [268], facing south-west

COIN HOARDS

Two coin hoards of similar date were buried within *c* 25m of each other. The larger hoard – of nearly 3600 copper-alloy coins, all minted between AD 330 and AD 348 – was found during geotechnical works in 2006 (Richardson 2007, 2–3). The hoard was contained in a pottery vessel and interred in a small pit which cut through the fill of cemetery enclosure ditch G81, suggesting that the cemetery was no longer in use by the time the hoard was hidden.

The much smaller hoard of 16 copper-alloy coins was buried in small pit [138]. These were all *nummi*, mostly of the House of Constantine, AD 330–35, but the latest coin identified was a slightly worn coin of Magnentius, AD 350–53. Also recovered from pit [138] were several iron tools (RF<354>, RF<355> and RF<356>, as well as other registered finds) and numerous fragments of a charred textile, which may represent the remains of a cloth bag container for the hoard (see Chapter 5.9). However, there is no indication the coins themselves were burnt and given the pit contained a large charred macrobotanical assemblage, similar to that of grave [268], with evidence of crop processing in the vicinity, the charred textile may relate to this material instead

OPEN AREA 3 (OA3)

Only three pits ([551], [474] and [422]) were identified, reflecting the decline in activity on the site (Fig 3.18). The southern ends of two parallel north–south ditches (G82 and G83) were identified in the northern part of the site. These may have formed a trackway or an isolated bivallate field boundary, and were located on a different alignment from earlier Roman ditches.

Sometime in the early 4th century AD, Buildings 2, 3 and 4 were abandoned. B2 was sealed beneath various demolition deposits ([7], [17], [283], [602], [618], [725], [305] and [811]) (see for example Fig 3.27). Other nearby features, including pond [705], well [860] and ditches G711 and G712, were also filled in with demolition dumps.

Fig 3.27 Photograph showing example of building demolition dumps overlying Building 2, containing large quantities of ceramic building material, under excavation, facing west

The remains of possible B4 were cut by small coin hoard pit [138], which was dated to AD 350–53 at the earliest. The upper fills of the south-east portion of ditch G711 both contained burnt material, as well as over 100kg of ceramic building material, probably from B2. All this clearly indicates that the villa buildings in this part of the estate were demolished sometime around the mid 4th century AD.

The demolition deposits sealing the area of the masonry B2 contained over 250kg of ceramic building material, mostly roof tile. From these deposits a large pottery assemblage of more than 2000 sherds was also retrieved. It consisted mostly of late 3rd- to early 4th-century AD wares, with substantial quantities of residual 1st- to mid 2nd-century AD material. The latest coin from these deposits was a slightly worn *nummus* of Constantius II, AD 355–61.

Other finds included a shallow convex glass bowl with the free-hand incised figure of a male head (RF<57>); lead offcuts; a lathe-turned bone handle (RF<102>); antler-working waste; an iron door latch-lifter fragment (RF<433>); and a circular

leather horse harness fitting with small glass and enamel inlayed squares (RF<25>) (see Chapter 5.6).

DISCUSSION

After the apparent prosperity of the 3rd century AD, by the start of the 4th century this part of the villa estate was in clear decline, with a considerable reduction in activity. This decline may well have been more widespread, with the admittedly limited evidence from the excavations on the main buildings suggesting an occupation until sometime in the 4th century AD (Ocock & Syddell 1967; Birbeck 1995).

Enclosed inhumation Cemetery 1 (C1)

Based on the finds and stratigraphic evidence, the cemetery was in use only during the first half of the 4th century AD. Although the funerary accessory vessels cannot be dated more closely than *c* AD 250–400, the cemetery enclosure ditch provided better evidence: cutting through the 3rd- to early 4th-century AD villa enclosure ditch (G711; period 3, phase 4), the silted-up cemetery ditch was then itself cut by the large coin hoard pit, with the latest coin dating to AD 330–48.

The graves within the cemetery enclosure all appeared to respect the position and alignment of the other graves, suggesting they were originally marked and contemporary. Only the westernmost end of the cemetery was exposed, while the rest lay to the east beyond the site. This is the first formal cemetery associated with the villa to have been found although other individual burials closer to the main villa buildings are known. An adult male inhumation in a stone coffin was found in 1933–5 during the construction of a factory but its precise location is unknown. The remains were examined by a doctor who declared that the man was 'handsome, imposing and strong' and that the collar bone and numerous ribs had been broken but had healed (Keith & Ward 1934, 202–3). A second burial, also not archaeologically recorded, was allegedly found in this general vicinity (Ocock & Syddell 1967, 193). These two inhumations may well have been part of a central high-status cemetery.

The presence of infant burials in a formal adult cemetery is uncommon. They are more often found buried within buildings, although a wide variety of other locations, including quarry pits, rubbish middens and boundary ditches, is also known (Philpott 1991, 97–101). Such unceremonious disposal of infant bodies is not the case here, for all the infants were buried with apparent care and respect.

The possible infant inhumation ([825]) buried on a tegula tile would have been similar to the period 3, phase 5 infant burial ([383]), although significantly the former infant was not buried within a building but with adults in an enclosed cemetery. The contrast between the two burials may be that the later infant possessed an attribute such as speech, which in Roman law would define it as an individual and worthy of a formal burial, in this case with adults in an enclosed cemetery (ibid, 101). In the 4th century AD infants are increasingly found buried with adults, perhaps reflecting a growing belief that children were to be treated as distinct individuals (ibid).

Although there is nothing which marks these burials as being of high status, the inclusion of pottery vessels, the evidence of ritual and the enclosure ditch all clearly indicate that these were individuals of at least a moderate standing. They did not seem to have been buried in a late Roman Christian manner, although it has been recognised that the whole practice of attempting to identify the religion of the deceased from the buried remains is fraught with problems (Philpott 1991, 226–8; Williams 1999, 96–107).

Outlying grave [268] was partially lined with tegulae and seems to have been contemporary with the cemetery enclosure. This apparent exclusion from the enclosed cemetery may be of no significance but it is possible that it represents a social distinction. It has been suggested that formal burial spaces were occupied by landowners to legitimise their right to the land while tenants, slaves and workers had no land rights and therefore no formal cemeteries (Pearce 1999, 157). Tile-lined burials are for the most part of 2nd- and 3rd-century AD date and are found in major urban and military centres while being generally scarce in rural sites (Philpott 1991, 66–7). This 4th-century AD example of a tile-lined grave is uncommon, therefore, and it is not known why this grave alone was lined.

Clearly this is a very small burial population and generalisations about burial practices cannot be ventured. However, there may be a distinction between the burying of the adults and the children: the children were all buried in coffins or had tile-lined graves while both adults were apparently interred in simple graves. It is uncertain what the reason for this is and whether it is a real distinction or not.

The two coin hoards

Two coin hoards were recovered from the site: a very small one of 16 coins and a very large one of almost 3600 coins. As the latter hoard was not part of this excavation, it is reported on here only in terms of its general significance.

These hoards were largely contemporary with the latest coins minted in AD 348 and AD 350–53 respectively. When the coins were buried, the site is likely to have been abandoned

and ruinous as the large hoard was cut into the silted-up cemetery enclosure ditch and the small hoard cut the remains of possible timber Building 4 (B4). The vestiges of the masonry buildings would have provided a handy visual marker for the owner(s) of the hoards to find the burial spots again, although obviously this never happened. Later Roman hoards are known from other Medway villa sites at Cobham Park (Tester 1961, 89), Allington (Page 1974, 144) and Boxley Hill (ibid, 104), suggesting that the valley was not entirely unaffected by unrest during this period.

Evidence of crop processing or special deposits?

Two features from this phase (grave [268] and hoard pit [138]) contained large, broadly similar macrobotanical assemblages, dominated by spelt/emmer wheat caryopses and glume bases, as well as a moderate amount of charred peas and beans in the latter feature (see Chapter 5.10). Interestingly, these assemblages were also similar to the macrobotanical remains found with earlier infant burial [383] within B2 (period 3, phase 4; Fig 3.28).

The abundant spelt glume bases and occasional spikelet forks and the scarcity of stem fragments in the macrobotanical assemblage indicate that spelt wheat was being brought to the site in a semi-processed state. The final stages of crop processing, such as parching and pounding to aid de-husking and sieving, may have been undertaken in the vicinity. This may have been undertaken in both phases 4 and 5 of period 3 or, alternatively, only in the early phase with residuality in the latter (see Chapter 5.10). Either way, the process seems to have been focused within Enclosure 4 (EN4) and possibly B2 and B4 (all period 3, phase 4), based on the distribution of features containing waste products.

An alternative interpretation is that the charred plant remains represented votive deposits, sourced from potentially anywhere on the villa estate, and that their occurrence here was a result of the unusual nature of the cut features (two graves and a hoard pit). Rather than being an accidental event, the burning of the plant remains could have been part of a deliberate rite undertaken at the side of the open feature. Accordingly, the 16 coins in hoard pit [138], as well as the iron tools and other objects, may also have been interred as special deposits and were perhaps never intended to be recovered.

An examination of the samples from grave [268], however, suggests votive deposition of the charred plant remains was unlikely. Two samples were taken from grave [268]: sample <16> from the upper portion of the fill and sample <17> from the lower portion. The former sample had a much greater density of macrobotanical remains than the latter (*c* 27 fragments per litre compared to *c* 11; see Chapter 5.10 and Table 5.26). If these remains had been interred as a form of grave good, it would be expected that the lower portion of the grave fill, being in closer vicinity to the body than the upper, would have a higher density of macrobotanical remains. This was not the case here, and so it seems the more likely explanation is that the fill of these features was taken from an area in which crop processing was undertaken or where the waste was discarded. Unfortunately, there is no evidence for the exact locations of these activities.

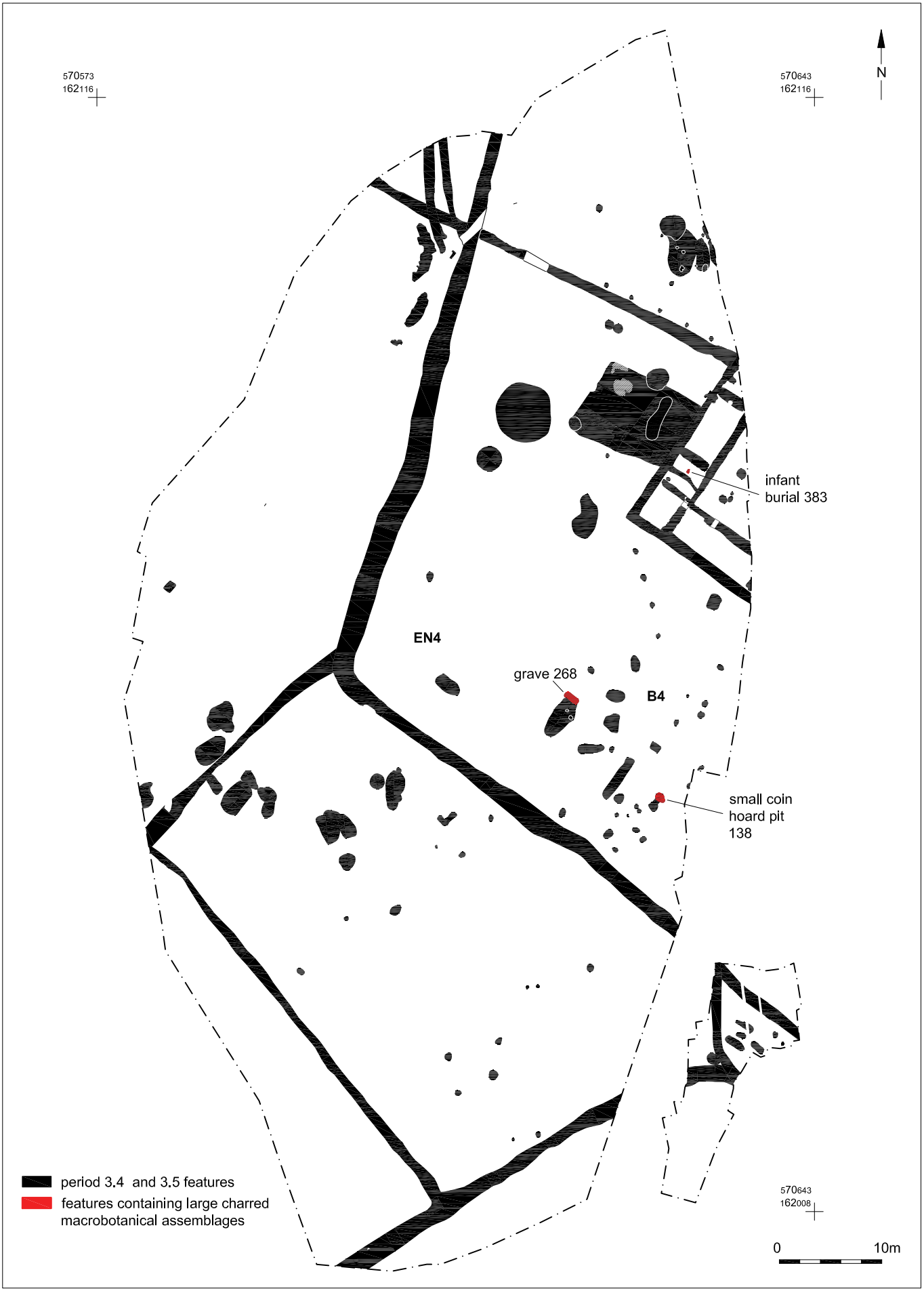

Fig 3.28 Plan of the locations of macrobotanical assemblages with evidence of crop processing from period 3, phases 4 and 5

CHAPTER 4 MEDIEVAL FIELDS

4.1 PERIOD 4: 1050–1300

The only medieval feature identified was a single field boundary ditch (G91; FS6) broadly curving south-west to north-east (Fig 4.1). Finds from the ditch fills included late 11th- to 13th-century pottery as well as abundant residual Roman material. The ditch was perhaps typical of the continuous open agricultural land use of the site from the immediate post-Roman period until recent times.

A small collection of medieval copper-alloy personal items was found in the topsoil by metal detecting: a strap-end with textile attached (RF<15>); a stud with a Maltese cross and traces of silver inlay (RF<168>); a strap-end from horse tack with the apparent Scottish royal arms shown on a shield cast in relief (RF<169>); a stud with traces of gilt (RF<337>); a quatrefoil decorative leather mount (RF<334>); and a diamond-shaped mount with incised decoration (RF<407>).

DISCUSSION

The unstratified finds associated with personal adornment and the horse tack fixture emblazoned with a royal coat of arms are finds of higher status than would normally be expected from a medieval open field, and their presence is not easily explained. The site lies 300m north of the church on the apparent fringes of the medieval village. The finds may have originated from domestic waste dumped with manure on the fields and they are perhaps an indication of the status of some of Snodland's medieval inhabitants.

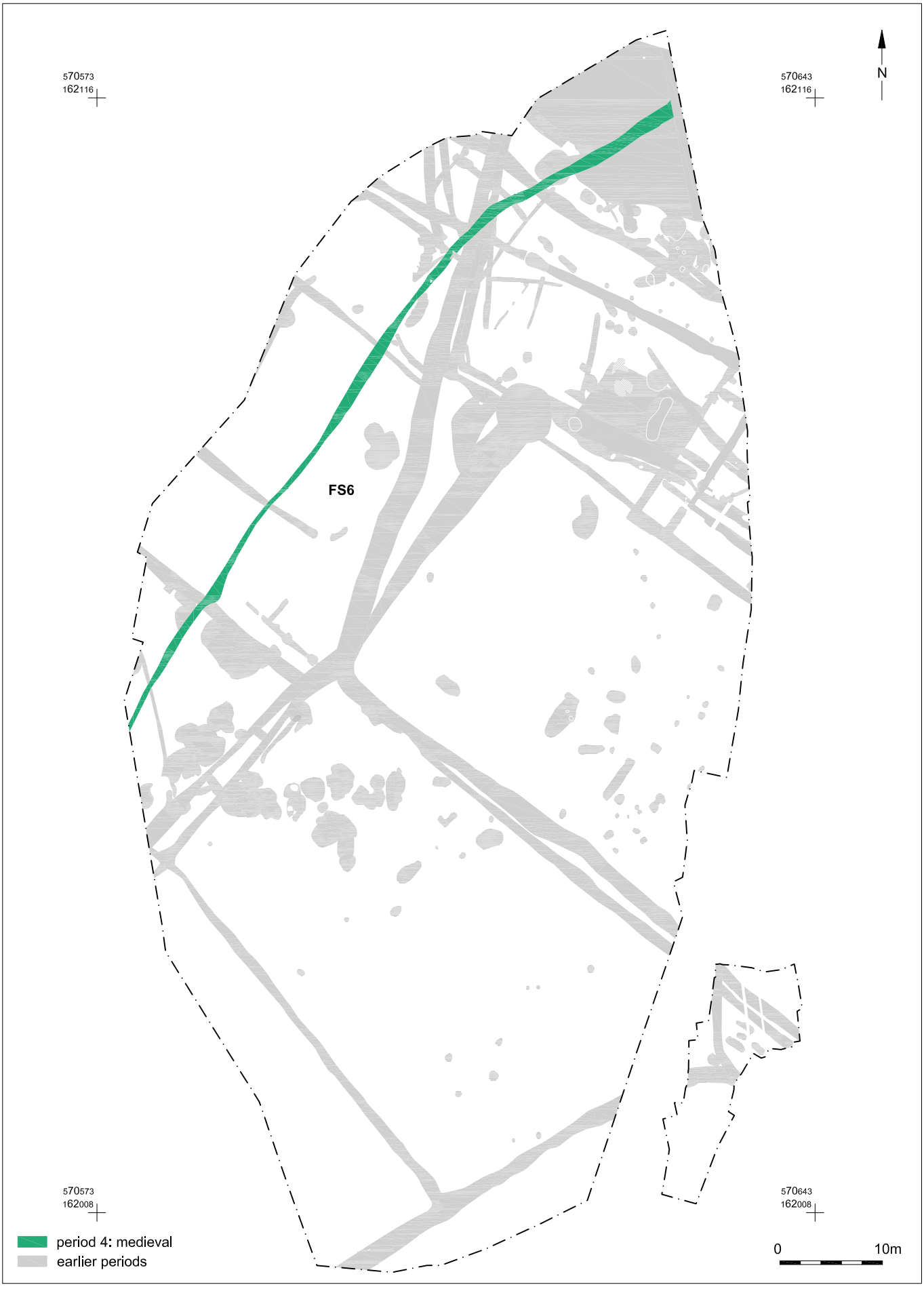

Fig 4.1 Plan of period 4 feature (medieval)

CHAPTER 5 SPECIALIST REPORTS

5.1 WORKED FLINT

Chris Butler

RAW MATERIAL

The excavations recovered a total of 343 pieces (4.37kg) of worked flint (Table 5.1). The raw material is a variety of different types: many of the pieces are a mottled grey- to black-coloured flint with a dark buff-coloured cortex, whilst quite a number of pieces are a light grey colour. There are also numerous mottled blue and blue-grey heavily patinated pieces with a light buff cortex. A small number of pieces are an orange to yellow-orange stained colour. A single piece of Bullhead flint was also found. These different types suggest that a number of different sources of raw material were being exploited.

DEBITAGE

The debitage consists of a mixture of flakes, blades and bladelets, together with numerous fragments of these types. Just over half of the debitage is hard hammer-struck, with some 47% of the debitage being soft hammer-struck. Flakes predominate – only 22 blades (11% of the debitage) and 12 bladelets were recovered, although many of the flakes are blade-like in appearance. Over one quarter of the flakes, blades and bladelets (26%) show evidence for platform preparation. There are at least two axe-thinning flakes amongst the flakes and a small number of pieces of debitage are retouched. The majority of the debitage probably dates from the Mesolithic or Early Neolithic, and it is likely that there are pieces from both periods present, although it is difficult to differentiate. A proportion of the debitage is also probably later prehistoric in date.

There are only six cores in the assemblage: a single-platform flake core; two multiple-platform flake cores; a three-platform flake; a blade core; and two two-platform bladelet cores. The bladelet cores (eg Fig 5.1, no 1) are Mesolithic, whilst the flake and blade core (Fig 5.1, no 2) is probably Early Neolithic in date, although it has little evidence of platform preparation. One of the multiple-platform flake cores, a residual find from Roman ditch [548], is also early prehistoric, but may have been reused in a later period. The other two flake cores are likely to be later prehistoric in date. A core rejuvenation flake and a crested blade could date from either the Mesolithic or the Early Neolithic period.

Type	No of pieces
Hard hammer-struck flakes	90
Soft hammer-struck flakes	74
Hard hammer-struck blades	3
Soft hammer-struck blades	19
Soft hammer-struck bladelets	12
Flake/blade fragments	95
Bladelet fragments	9
Axe-thinning flakes	2
Chips	10
Shattered pieces	5
Core rejuvenation pieces	2
Cores	6
Scrapers	9
Utilised fragment	1
Burin	1
Notched flake	1
Microdenticulate	1
Microlith fragment	1
Pick	1
Weight	1
Total	**343**

Table 5.1 Quantification of worked flint by type

IMPLEMENTS

There are 16 implements (0.5%) in the assemblage, half of which are end scrapers mostly manufactured on hard hammer-struck flakes. The scrapers are largely undiagnostic, but are most likely to be of Neolithic and Bronze Age date. A single side-and-end scraper (Fig 5.1, no 3) was manufactured on a soft hammer-struck blade and this could be of either Mesolithic or Early Neolithic date. A small or broken pick (Fig 5.1, no 4) and a broken microlith fragment (Fig 5.1, no 5) are Mesolithic and the bladelet cores, together with the bladelets and blades, provide some evidence for microlith production, although there are no microburins in the assemblage.

Other implements include a burin (Fig 5.1, no 6) on a blade; a microdenticulate on a blade of Bullhead flint (Fig 5.1, no 7); a utilised fragment, probably from a blade ([1139]); and a small soft hammer-struck flake with a small notch at its distal end. All these pieces could equally be of either Mesolithic or Early Neolithic date. A final possible implement is a small cylindrical natural piece of flint with a hole ([1118]) and it is possible that this may have been utilised as a weight, although there is no abrasion or wear visible.

DISCUSSION

A proportion of the assemblage is diagnostically Mesolithic in date, including the bladelets, some flakes and blades, the bladelet cores, the core rejuvenation piece, and the pick and microlith. Significantly, some of this debitage suggests microlith production was taking place.

The majority of the assemblage has the characteristics of earlier Neolithic flintworking technology, although many pieces could be Mesolithic owing to the similarities in the debitage from these two periods. This group has a reasonable proportion of soft hammer-struck pieces and of some platform preparation with both blades and long flakes being present. The cores seem to be reasonably well worked – most have two or three platforms – whilst many of the implements also have the characteristics of those in an Early Neolithic assemblage.

The microdenticulate on a fragment of Bullhead flint is important, as it is the only piece of Bullhead flint from the site. Bullhead flint was frequently utilised for implements such as microdenticulates in the Early Neolithic period, for example at the Ringlemere and Kingsborough sites (Butler 2008; 2009). This suggests either special selection of Bullhead flint for these implements, or possibly a trade in the finished artefacts.

Snodland thus appears to provide another example of what is becoming increasing well known in Kent: a transitional later Mesolithic to Early Neolithic worked flint assemblage. Whether this represents continued activity at the same preferred location through these periods or a transitional flintworking technology

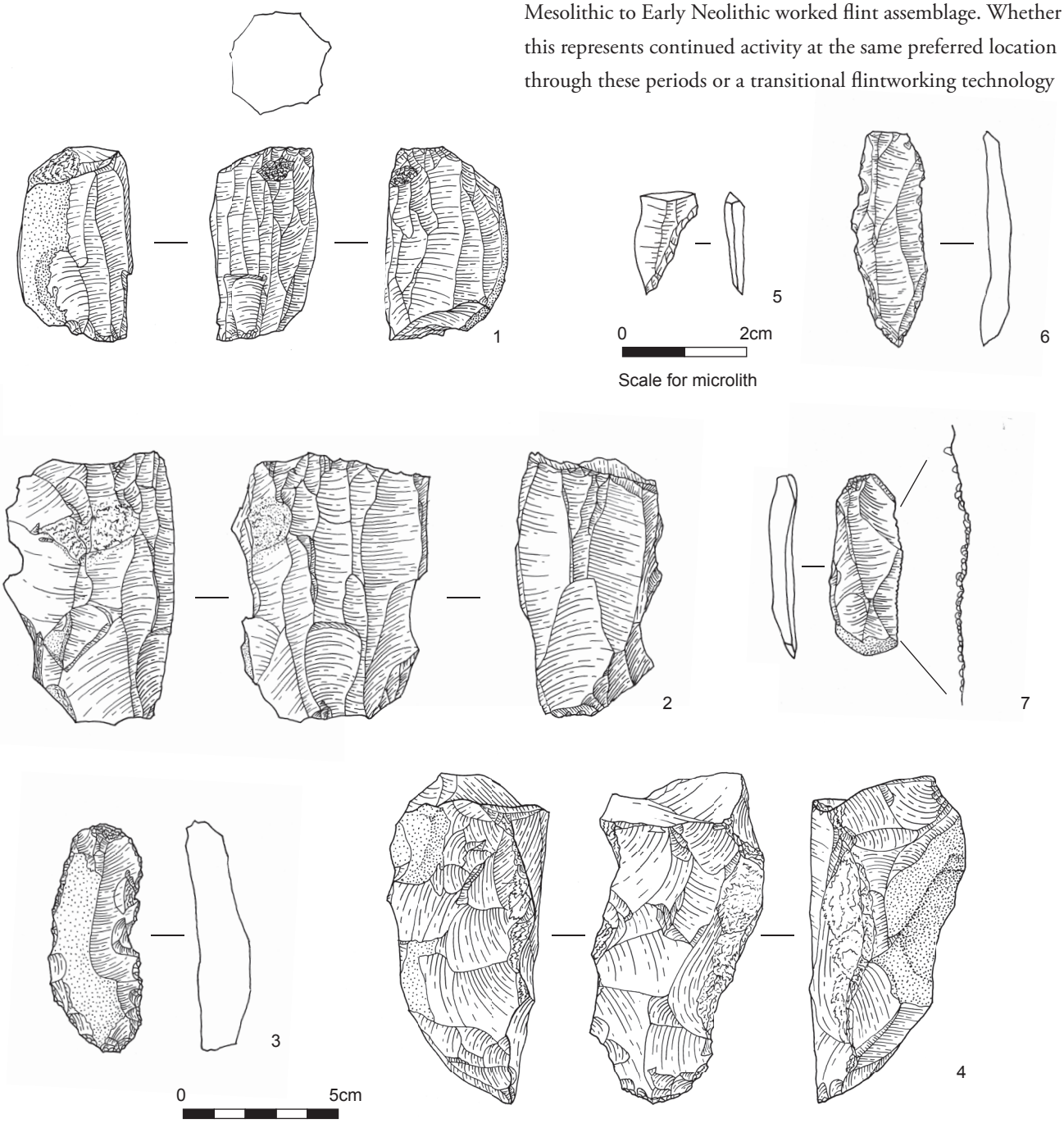

Fig 5.1 Worked flint nos 1–7

is not clear, as much of the assemblage is residual. Given the residual nature of much of the worked flint, it is difficult to assign otherwise undated features to this early phase on the basis of just one or two flint pieces being present in their fills.

5.2 STONE

Luke Barber

The excavations recovered 257 pieces of stone, weighing a little over 169kg, from 96 contexts (Table 5.2). The material has been fully quantified by context and stone type on a pro-forma, which is housed with the archive.

The majority of the stone occurs naturally on, or relatively close to, the site. Certainly the chalk, downland flint, iron pyrites and probably the tufa would have been close to hand and the Kentish Ragstone/Greensand chert would have been available only a little way to the south. Although the Medway would have been responsible for the natural transport of the eroded and water-worn Kentish Ragstone, carstone and Greensand chert adjacent to the site, the larger blocks of Kentish Ragstone would have been deliberately brought in. The source of the Tertiary sandstones is less clear. Although some may have been available locally as remnants of the eroded beds over the chalk it is probable most were brought in from the Woolwich/Oldhaven/Thanet Beds which outcrop along the north Kent coast. The few pieces of Hastings Beds sandstone, Wealden clay ironstone and Bethersden Marble could have been deposited nearby by the Medway though these pieces do not look worn and probably represented transport of materials out of the Weald. With the exception of the single eroded piece of granite, which probably originated from the south-west of England (grave [86], fill [84]), the only Roman non-regional stone present was a scattering of Millstone Grit, probably from the Peak. The remaining non-local material, consisting of coal and Welsh slate, was all from post-Roman deposits or considered to be intrusive in period 3, phase 5 features. The German lava fragments from fill [536] of robber trench [534] (period 3, phase 5) represented the only definite imported material.

	Period													
	2		3.2		3.3		3.4		3.5		4 & unphased		Totals	
No of contexts	**1**		**11**		**7**		**31**		**29**		**17**		**96**	
	N	**Wt (g)**	**N**	**Wt (g)**	**N**	**Wt (g)**	**N**	**Wt (g)**	**N**	**Wt (g)**	**N**	**Wt (g)**	**N**	**Wt (g)**
Stone type														
Flint (2 variants)					3	560	3	792	4	4116			10	5468
Chalk			6	3581			36	13747	13	12950	1	46	56	30324
Iron pyrites							4	490					4	490
Kentish Ragstone (2 variants)			1	850	7	6275	26	38766	4	24996	4	4366	42	75253
?Lower Greensand					1	140	2	938					3	1078
Lower Greensand carstone					2	3	12	76	1	26	2	18	17	123
Lower Greensand chert	6	438	6	240	2	38	27	8255	14	588	5	562	60	10121
Ferruginous sandstone (?Lower Greensand beds)					4	292	4	914	1	74	2	366	11	1646
Hastings Beds sandstone							1	16					1	16
Wealden clay ironstone							1	30					1	30
Bethersden Marble									2	927			2	927
Tufa			4	1100			1	5100	9	17774			14	23974
Tertiary (?) misc fine sandstones (2 variants)			1	700	1	11500					2	150	4	12350
Tertiay Sarsen-type							1	252	1	12	1	288	3	552
?Tilgate-type sandstone							2	52					2	52
Shelly limestone											1	554	1	554
Granite									1	14			1	14
Millstone Grit (4 variants)							4	4293	3	2189			7	6482
German lava									4	70			4	70
Coal									1	2	5	11	6	13
Welsh slate									1	2	7	94	8	96
Totals	**6**	**438**	**18**	**6471**	**20**	**18808**	**124**	**73721**	**59**	**63740**	**30**	**6455**	**257**	**169633**

N – number of pieces; Wt (g) – weight in grams

Table 5.2 Characterisation of geological material by period (number of pieces by weight in grams)

The earliest contexts producing stone (period 2 and period 3, phase 2) contained very little. Most consisted of the Greensand chert pieces that the Medway may have delivered to the site naturally; certainly such pieces would have no particular use and unsurprisingly all are water-worn/weathered with no signs of human modification. The lack of stone in period 3, phase 1 does not mean it was not being imported and used. Stone incorporated into structures at this time would not be likely find its way into archaeological deposits until demolition/refurbishment later in the Roman period. The presence of Kentish Ragstone and chalk building blocks (the latter in wall [288]) demonstrates the use of some of these materials at this early date. There was a much greater quantity of stone in period 3, phases 4 and 5, much of it probably derived from earlier structures and related activity. Taken as a whole, the assemblage can be divided up into three functional groups: building material, artefacts (see Chapter 5.6) and miscellaneous unworked pieces (not discussed further).

BUILDING MATERIAL

Kentish Ragstone and chalk appear to be the most common building materials represented in the excavated assemblage. Most of the chalk from the site consists of irregular weathered pieces not obviously suitable for construction. The presence of marine burrows in at least one piece (posthole fill [600]; period 3, phase 4) suggests much of the chalk may be in this condition because of its being collected from the coast/estuary rather than being quarried directly. Such material may well have been collected for lime burning and post packing but is unlikely to have been of much use for walling. A number of harder, less weathered, roughly shaped chalk building blocks are present in the assemblage, however. These would have been quarried directly from the nearby downs and shaped as needed for internal walling. Dated blocks of this type were recovered from deposits of period 3, phases 2, 4 and 5. Fill [349] of pit [348] (period 3, phase 5) contained two blocks measuring 250 × 190 × 95mm and 320 × 140 × 90mm, and weighing about 6kg each. A further chalk block from robber trench fill [364] of wall G75 (period 3, phase 4) is of generally similar size (210 × 180 × 140mm; 7kg).

Although some downland flint was retained, only one piece (fill [535] of robber trench of wall G72, period 3, phase 5) shows signs of having been deliberately faced; most were used unaltered. Roughly faced blocks of Kentish Ragstone are present in deposits of period 3, phases 3 to 5. Robber trench [368] of wall G75 produced a roughly shaped rectangular block weighing 7kg. However, the block from beam slot [578] in Building 2 was a massive 19.5kg, clearly demonstrating the much more varied sizes of the Kentish Ragstone blocks. It is likely that such a large piece would have been utilised as a post pad since most of the samples from construction of the walls do not exceed 3.5kg.

The other material that was clearly used in construction was tufa. As well as chalk blocks, demolition deposit [349] contained two roughly shaped tufa blocks measuring 285 × 175 × 70mm (2kg) and 230+ × 200 × 90mm (2.5kg). A larger block, measuring 350 × 230 × 110mm (5.1kg), was recovered from fill [1146] of the period 3, phase 4 enclosure ditch G711.

5.3 PREHISTORIC AND ROMAN POTTERY

Anna Doherty

INTRODUCTION

The excavations at Snodland produced a sizable pottery assemblage ranging in date from prehistoric to late Roman (Table 5.3). Periods 1 and 2 produced only tiny quantities of undiagnostic pottery. Although there is some limited ceramic evidence that the villa may have had its origins in the early Roman period, there are no stratified groups of pottery from period 3, phase 1. Overall the date range of the pottery is suggestive of peaks in settlement activity in the late 1st–early to mid 2nd century AD and in the 3rd century AD. Many of the larger groups, from period 3, phases 4 and 5, suffer from quite severe problems of redeposition associated with successive phases of demolition and wall robbing. Significant aspects of the assemblage include a possible trend for votive or structured deposits in period 3, phases 3 and 4, vessels associated with two inhumations (period 3, phase 5) and a small but diverse late Roman amphora assemblage.

Period	SC	Wt (g)	EVE	ENV	% of demonstrably residual sherds
1 Late Mesolithic/ Early Neolithic	1	2	0	1	0
2 Late Bronze Age–Late Iron Age	15	58	0	12	0
3.1 AD 1–75	1	4	0	1	0
3.2 AD 75–120/40	964	12760	9.5	441	3
3.3 AD120–200	699	8678	6.24	468	27
3.4 AD 200–300/325	4275	69286	44.66	3561	25
3.5 AD 300–350/400	2682	38490	28.35	2322	32
4 Post-Roman	334	5498	3.44	249	100
Total	**8971**	**134776**	**92.19**	**7055**	

SC – sherd count; Wt (g) – weight in grams; EVE – estimated vessel equivalent; ENV – estimated number of vessels

Table 5.3 Quantification of prehistoric and Roman pottery by period

METHODOLOGY

The pottery was recorded using a ×20 binocular microscope and quantified by sherd count (SC), weight (Wt), estimated vessel equivalent (EVE) and estimated vessel number (ENV). Data were recorded on pro forma sheets, which have been retained for the archive, and entered into an Excel spreadsheet. In the absence of a published type-series for Kent, the Roman pottery was recorded using Museum of London codes (MOL) (Marsh & Tyers 1978; Davies et al 1994). This system of coding has been adopted for other major assemblages in Kent (eg Booth 2009). A full list of fabric codes and a suggested concordance with the unpublished fabric-series used by the Canterbury Archaeological Trust (CAT) is provided in Table 5.4 (Macpherson-Grant et al 1995).

PERIOD 3, PHASE 1

Period 3, phase 1 deposits were dated by their stratigraphic relationships but produced only one sherd, a (possibly intrusive) unsourced Romano-British colour-coated ware. While the earliest pottery from Snodland villa before the current excavation dated to the late 1st century AD (Ocock & Syddell 1967, 209), the ceramic building material assemblage from this current excavation indicates the presence of a 1st-century AD building built with fabric type(s) comparable to that from pre-Boudican contexts in London and Colchester. It is worth noting that flint-tempered wares, which make up around 2% of the assemblage (by fabric) in period 3, phase 2, are unlikely to have been produced as late as the Flavian period (Booth 2009, 7). The near-absence, however, of glauconitic fabrics is probably of some chronological significance. These made up 27% of the Late Iron Age/early Roman assemblage from the nearby West Malling and Leybourne bypass site (G Jones 2009, 19) and have been shown to be particularly concentrated in pre-Conquest or very early Roman contexts in the Medway valley, including Thurnham villa, which probably had earlier origins than Snodland (Pollard 1988, 31; Booth 2009, 4). Contexts of later periods did produce a small number of likely pre-Flavian forms, including handmade plain or slightly everted-rimmed jars comparable to Thompson's (1982) C1–C3 forms (P1–P3, Fig 5.2), a small bowl or cup similar to type E1 (not illustrated) and a single example of a pedestal base which has been perforated (P4, Fig 5.2). Overall, the impression is that there was probably some small-scale Late Iron Age/early Roman activity in the vicinity, although no features or deposits were closely dated to this period.

Having said this, pre-Flavian imported tablewares or Romano-British imitations are almost absent from the assemblage as a whole. The complete absence of Gallo-Belgic style platters and the very small number of butt-beaker forms (Fig 5.2, P5), either in grog-tempered or Romanised wares, contrasts with other early villa assemblages from the region, including Keston and Eccles, where high-quality examples of these forms were being produced as well as used (Detsicas 1977a, 20; Cooper & Parfitt 1991, 199–205). It remains unclear whether this absence is entirely related to the chronology of the site or whether it suggests that any early activity was, in comparison with other early villas, of low status. The character of the 1st-century AD assemblage from Lullingstone villa seems similar (although it is unquantified); there Aylesford–Swarling fine ware fabrics and forms appear rare, despite clear evidence of 1st-century AD coarse wares (Pollard 1987, 208, 211).

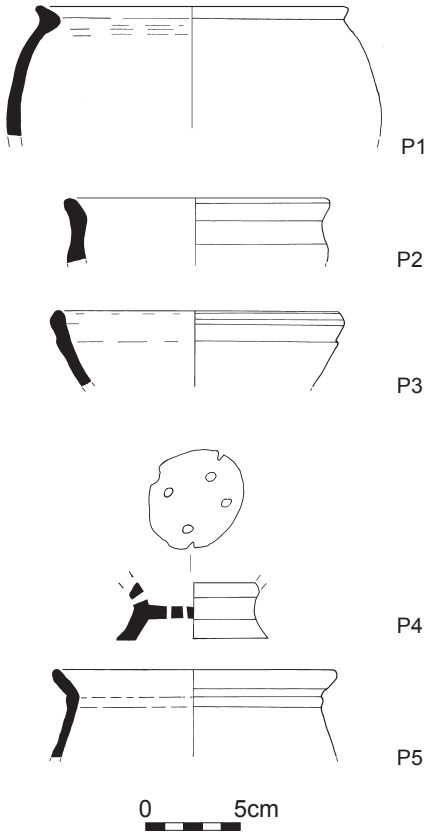

Fig 5.2 Pottery vessels nos P1–P5

Catalogue (Fig 5.2)

P1 Jar of Thompson (1982) type C1; fabric SHEL (unstratified)

P2 Jar of Thompson (1982) type C3; fabric GROG ([150], ditch G57, period 3, phase 2)

P3 Jar of Thompson (1982) type C3; fabric FLIN (residual in [765], pond G513, period 3, phase 3)

P4 Pedestal base with pre- and post-firing perforations, including some on the outside of the pedestal base; fabric GROG (residual in [572], demolition dumps G71, period 3, phase 4)

P5 Plain butt-beaker; fabric SAND (residual in [763], pond G810, period 3, phase 5)

MOL fabric code	Expansion	CAT fabric code	SC	Wt (g)	ENV	% SC	% Wt	% ENV
AHFA	Alice Holt/Farnham ware	LR5	81	1060	64	0.9	0.8	0.9
AMPH	unsourced amphora fabric	R98	15	870	11	0.2	0.6	0.2
BAET	Baetican Dressel 20 amphora fabric	R50	8	572	5	0.1	0.4	0.1
BAETE	Baetican early Dressel 20/Haltern 70 fabric	R50	189	24756	115	2.1	18.4	1.6
BAETL	Baetican late Dressel 20 fabric	R50	7	980	6	0.1	0.7	0.1
BB1	black-burnished ware 1	R13	38	632	32	0.4	0.5	0.5
BB2	black-burnished ware 2	R14	956	9922	886	10.7	7.4	12.6
BBS	black-burnished-style ware	R73.1	52	822	47	0.6	0.6	0.7
CCRB	unsourced colour-coated wares		7	30	6	0.1	0.0	0.1
CGBL	central Gaulish/Lezoux black colour-coated ware	R35	1	0	1	0.0	0.0	0.0
COLCC	Colchester colour-coated ware	R33	21	116	13	0.2	0.1	0.2
COLWW	Colchester white ware	R63	17	978	15	0.2	0.7	0.2
EIFL	Eifelkeramik	LR19	4	42	1	0.0	0.0	0.0
FINE	unsourced fine reduced wares	R7	8	30	6	0.1	0.0	0.1
FLIN	unsourced flint-tempered wares		67	384	35	0.7	0.3	0.5
FMIC	fine micaceous reduced ware		1	8	1	0.0	0.0	0.0
GAUL	undistinguishable Gaulish amphora fabrics		6	244	3	0.1	0.2	0.0
GAUL1	Pélichet 47/Dressel 30 amphora fabric	R56	61	1318	30	0.7	1.0	0.4
GAUL2	London 555/Haltern 70 similis amphora fabric		1	304	1	0.0	0.2	0.0
GAUL3	Gaulish Dressel 2-4 amphora fabric		3	532	3	0.0	0.4	0.0
GLAUC	glauconite-tempered (greensand) wares	B9.1	3	16	3	0.0	0.0	0.0
GROG	unsourced grog-tempered ware	B1/R1	541	7666	472	6.0	5.7	6.7
GROGE	LIA/early Roman grog-tempered ware	B1	140	2496	108	1.6	1.9	1.5
GROGL	late Roman grog-tempered ware	LR1	70	1292	36	0.8	1.0	0.5
GROGSH	unsourced grog and shell-tempered ware	B2.3	30	478	25	0.3	0.4	0.4
HOFA	hollow foot amphora fabric	R59	8	492	2	0.1	0.4	0.0
HOO	Hoo Island white-slipped ware	R18.1	50	258	28	0.6	0.2	0.4
KOLN	Cologne colour-coated ware	R25	5	16	5	0.1	0.0	0.1
LIME	limestone-tempered ware		2	66	2	0.0	0.0	0.0
MHAD	Much Hadham oxidised ware	LR13	4	66	4	0.0	0.0	0.1
MICA	miscellaneous mica-dusted ware	R27	14	134	12	0.2	0.1	0.2
MORT	unsourced mortarium fabric	R99	9	972	6	0.1	0.7	0.1
NAFR1	North African lime-rich amphora fabric	R57	7	936	1	0.1	0.7	0.0
NFSE	north French/southeast English oxidised ware	R61	1	170	1	0.0	0.1	0.0
NGWH	north Gaulish white ware	BER5-11	1	4	1	0.0	0.0	0.0
NKGW	north Kent fine grey ware	R16	425	2110	230	4.7	1.6	3.3
NKOX	north Kent fine oxidised ware	R17	26	116	23	0.3	0.1	0.3
NKRS	north Kent red-slipped ware		4	46	3	0.0	0.0	0.0
NKWS	north Kent white-slipped ware		299	3034	160	3.3	2.3	2.3
NVCC	Nene valley colour-coated ware	LR11	40	358	28	0.4	0.3	0.4
OXID	unsourced oxidised ware	R74	733	9928	570	8.1	7.3	8.0
OXIDF	unsourced fine oxidised fabric	R110	33	502	17	0.4	0.4	0.2
OXPA	Oxfordshire parchment ware	LR7	2	28	1	0.0	0.0	0.0
OXRC	Oxfordshire red/brown colour¬coated ware	LR10	38	474	31	0.4	0.4	0.4
OXRC/WS	Oxfordshire red or white slipped red ware		3	10	3	0.0	0.0	0.0
OXWS	Oxfordshire white-slipped red ware		3	26	3	0.0	0.0	0.0
OXWW	Oxfordshire white ware	LR22	8	194	8	0.1	0.1	0.1
PATCH	Patch Grove grog-tempered ware	R68	245	6856	124	2.7	5.1	1.8
PORD	Portchester ware D	LR6	3	46	3	0.0	0.0	0.0
RWS	unsourced white-slipped wares		8	162	6	0.1	0.1	0.1
SAM	unsourced Gaulish samian	R46.1	2	20	2	0.0	0.0	0.0
SAMCG/EG	central or east Gaulish samian	R45	11	158	10	0.1	0.1	0.1
SAMEG	east Gaulish samian	R46	17	136	12	0.2	0.1	0.2
SAMLG	La Graufesenque samian	R42	11	266	11	0.1	0.2	0.2
SAMLZ	Lezoux samian	R43	130	1848	95	1.4	1.4	1.3
SAMMT	Montans samian	R43	3	56	2	0.0	0.0	0.0
SAMMV	Les Martres-de-Veyre samian	R43.1	2	22	2	0.0	0.0	0.0
SAND	unsourced sand-tempered wares	R109	3584	36706	3146	40.0	27.2	44.6
SHEL	unsourced shell-tempered wares	B6/R69	903	12726	568	10.1	9.4	8.1
VRW	Verulamium region white ware	R15	10	286	10	0.1	0.2	0.1
Total			**8971**	**134776**	**7055**	**100.0**	**100.0**	**100.0**

Table 5.4 Quantification of Roman pottery fabrics across all periods (SC = sherd count; Wt (g) = weight in grams; ENV = estimated no of vessels)

PERIOD 3, PHASE 2

Period 3, phase 2 was the first to contain any quantity of stratified pottery and was relatively unaffected by residuality or intrusiveness. In this period, Estimated Vessel Number (ENV) is probably the most reliable method of quantification for fabric because a number of partially complete but fragmentary vessels probably distort figures for both sherd count and weight. It is of note that almost a third of fabrics in this period are still made up by tempered wares, the majority of them shell-tempered. Shell-tempered wares in this period, and in the assemblage as a whole, are more commonly associated with thinner-walled sherds and usually, where rim sherds are present, with bead-rimmed jars (eg Fig 5.3, P6). This combination of fabric and form would generally be associated with 1st-century AD groups, although shell-tempered wares made up a similar proportion in a Flavian–Trajanic group at Rochester (Pollard 1988, 40). Shell-tempered storage jars of north Kent origin are fairly common in the assemblage as a whole (Fig 5.3, P7), and these probably had a much longer period of currency into the late 2nd century AD (ibid). Unsourced grog-tempered wares also make up over 10% of wares.

Roman coarse grey wares are relatively uncommon in this period, accounting for just over a quarter of fabrics; related coarse ware necked jars (Fig 5.3, P8) are less common than expected in the earlier Roman period, and jars as a whole make up less than 50% of forms by EVEs (Table 5.5). These wares are generally not distinctive enough to be sourced definitively but it is believed that the north Kent/Thameside industry may have had a near monopoly on the supply of coarse wares in the Medway area (Pollard 1992, 232). Unsourced oxidised wares also make up a significant proportion of the assemblage (*c* 15%), although these represent a mixture of different ware types, including north Kent coarse oxidised wares, white/buff flagon or mortarium sherds and an unusual buff fabric associated with poorly formed storage jars, which may be very local products. Other oxidised coarse wares include small numbers of sherds in Verulamium region white ware and Colchester white ware, as well as other unsourced mortaria. Of particular note is the very high proportion of north Kent white-slipped wares, which make up over 7% of the assemblage during this period. These are mostly slightly coarser variants of the classic Hoo Island fabric, but are clearly associated with very similar forms.

Associated with a generally high proportion of oxidised wares is a large quantity of flagons (Fig 5.3 eg P9), which account for nearly a fifth of forms by EVE in this period. This is unusually high for a rural assemblage, even from a site of higher status. The large number of liquid-holding vessels is matched by a high quantity of drinking vessels. These account for about a quarter of the period 3, phase 2 assemblage by EVE, approaching the quantities that might be seen in urban assemblages and possibly reflecting the drinking practices of high-status individuals.

Form	Expansion	% EVE
Flagons		**19.6**
1B	ring-necked flagon	13.9
1B.3–4	ring-necked flagon with vertical or everted neck and prominent rim	5.7
Jars		**45.1**
2 (C3)	plain-rimmed (Thompson C3) jar	0.5
2A	bead-rimmed jar	16.2
2AX	flattened bead-rimmed jar	5.3
2F/T	everted or necked jar	1.3
2T	necked jar	20.8
2X	lid-seated jar	0.9
Beakers		**25.6**
2/3	fine jar/beaker	1.6
3A	butt beaker	2.9
3B	ovoid beaker	2.3
3F	poppy-head beaker	5.4
3G	carinated beaker	13.3
Bowls		**1.6**
4H	round-rimmed bowl	1.6
Dishes/platters		6.3
5DR18	Dragendorff form 18 platter	5.0
5DR18/31	Dragendorff form 18/31 platter/dish	1.3
Mortaria		**1.7**
7HOF	hook-flanged mortarium	1.7
Total		**100.0**

Table 5.5 Quantification of forms by percentage of EVE in period 3, phase 2

The period 3, phase 2 assemblage does not, however, present an unambiguous picture of high-status consumption. Samian cups, for example, are completely absent and there are few other imported wares. It is also worth noting that, aside from two samian examples, there is a lack of fine ware platters/dishes. This is perhaps particularly surprising given the very established pattern of supply of fine wares from north Kent, where such forms were commonly produced. It is also clear that a number of vessels from this period have been deliberately deposited in a partially complete state and that beakers in particular seem to have been commonly selected for this purpose and so might be disproportionately represented in the assemblage.

Deliberate or special deposits of pottery in period 3, phases 2 and 3

Pottery from the late 1st to the mid 2nd century AD on the site shows a pronounced trend for the deposition of partially complete vessels, including a diverse range of forms placed in

various different feature types. Amongst the coarser vessels, pit [1215] produced a truncated Patch Grove storage jar, initially taken to be a cremation vessel, which appeared to have been placed in the ground mostly intact, although lacking both rim and base sherds. Perhaps this vessel served a functional purpose, for example as a lining to a storage pit. However, gully G517 also produced fragmented sherds of a near-complete shell-tempered bead rim jar (Fig 5.3, P6) concentrated at the base of the cut, suggesting it may have been deliberately smashed *in situ*.

Other examples of possible structured deposits include trackway ditch G518, which contained a semi-complete stamped samian platter (Fig 5.3, P10) and a fine jar in north Kent grey ware (Fig 5.3, P11,). This deposit may have been truncated, as a cross-fitting piece of the samian stamp was found in a period 3, phase 5 feature. Another linear feature, G533, contained a partially complete upper profile of a carinated beaker in north Kent grey ware (Fig 5.3, P12). In the early part of period 3, phase 3 a near-complete unguentarium (Fig 5.3, P13), a vessel type strongly associated with votive practices, was deposited in the primary fill of well [1278] alongside another partially complete poppy-head beaker (Fig 5.3, P14). Two of the most interesting vessels, partially complete upper profiles of north Kent poppy-head beakers (Fig 5.3, P15 and P16), were found in the base of Building 1 wall G51 and enclosure wall G62. These two groups are phased respectively to period 3, phases 2 and 3 on stratigraphic grounds, although they were probably deposited within living memory of each other.

Although most of these vessels are no more than half-complete and could represent the deposition of fresh refuse material, the evidence from this period as a whole shows a disproportionate number of drinking and dining vessels being represented in such groups, especially poppy-head beakers (see Table 5.5). This strongly suggests a tradition of deliberately placed deposits, perhaps linked to practices of feasting or libation. The deposition of vessels has been increasingly recognised as an element of votive practice and has been shown to be particularly associated with wells and pits in urban contexts (Fulford 2001). In the case of the vessels from the wall foundation cuts, the presence of identical vessels and identical parts of the vessel profile may be significant and could represent repeated rituals associated with the foundation of new elements of the building. Interestingly, deliberately broken pottery vessels, including a poppy-head beaker, were associated with construction of walls at the Mount Roman villa, Maidstone (Kelly 1992, 200, fig 13, nos 4–9, 216). At Snodland, structured deposits seem to have been confined to quite a brief time span. In only one case did a period 3, phase 4 feature produce a contemporary near-complete vessel: a large grey ware jar with wide mouth (Fig 5.3, P17) from ditch G712.

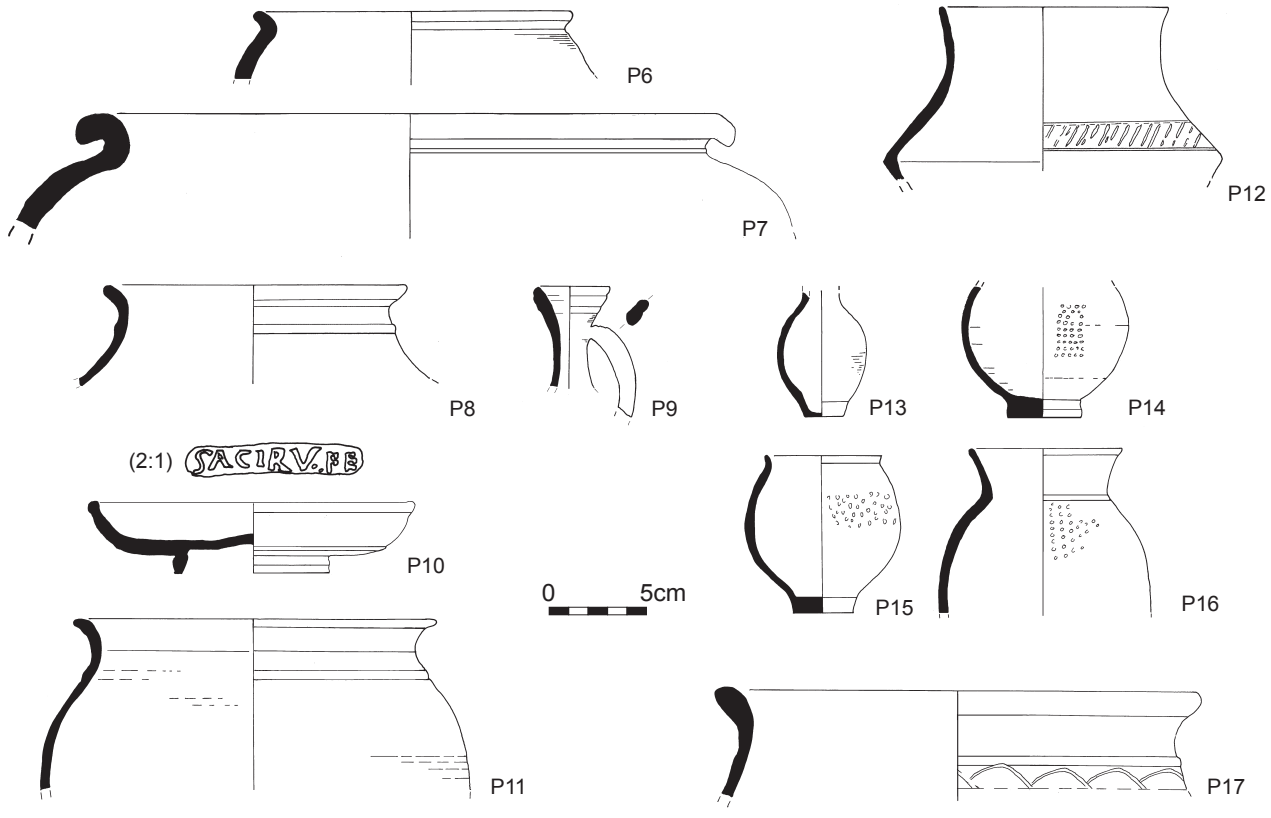

Fig 5.3 Pottery vessels nos P6–P17

Catalogue (Fig 5.3)

P6 Bead-rimmed jar; fabric SHEL ([1086], gully G517, period 3, phase 2)
P7 Storage jar; fabric SHEL ([867], gully G61, period 3, phase 3)
P8 Necked jar; fabric SAND ([1084], gully G517, period 3, phase 2)
P9 Ring-necked flagon; fabric OXID ([1112], gully G529, period 3, phase 2)
P10 Dragendorff form 18 platter (RF<204>); fabric SAMLG ([726], gully G518, period 3, phase 2)
P11 Fine cordoned, necked jar; fabric NKGW ([726], gully G518, period 3, phase 2)
P12 Rouletted, carinated beaker; fabric NKGW ([726], gully G518, period 3, phase 2)
P13 Unguentarium; fabric OXID ([1109], well G614, period 3, phase 3)
P14 Poppy-head beaker; fabric NKGW ([1109], well G614, period 3, phase 3)
P15 Poppy-head beaker; fabric NKGW ([620], wall G51, period 3, phase 2)
P16 Poppy-head beaker; fabric NKGW ([818], wall G62, period 3, phase 3)
P17 Wide-mouthed necked jar; fabric SAND ([505], ditch G712, period 3, phase 4)

PERIOD 3, PHASE 3

Not only did period 3, phase 3 produce one of the smallest assemblages of pottery, but many features contained a high proportion of residual material pre-dating the mid 2nd century AD (see Table 5.3).

The only contemporary group of significance came from robbed wall footing G61, which produced a closely dated assemblage of over 180 sherds (Fig 5.4, P18–P23). This feature had an unusual composition in that it was the only feature from the site to produce a substantial samian assemblage, totalling over 10% of the group by sherd count and over 20% by EVE. However, the coarse wares are almost entirely dominated by jars, including bead-rimmed and black-burnished-style everted-rimmed forms. It is also noteworthy that while most of the samian sherds in this group were very severely burnt, very few of the coarse ware vessels were visibly burnt, although the deposit also contained other burnt material, suggesting that group represents refuse derived from more than one source.

Grog-tempered wares in particular continue to account for an unusually high proportion of the assemblage in period 3, phase 3 (overall *c* 16% by sherd count) and only a quarter of this is made up by Patch Grove wares, which were certainly in contemporary use in this phase. Shell-tempered wares also make up around 6% of sherds. It is suspected that a large proportion of these may be residual although tempered wares were present in only slightly lower proportions in a period dated to *c* AD 130–75 at the Mount Roman villa, Maidstone (Savage 1999, 119). North Kent fine ware fabrics still account for almost 15% of sherds although, again, this figure may be distorted by the small number of partially complete fragmentary vessels discussed above.

There is also an increasing proportion of black-burnished-type ware 2 (BB2) in this phase, accounting for around 10% of sherds. It has been noted that dividing BB2 from other locally produced sandy wares is a fairly subjective process in north Kent (ibid, 114; Pollard 1988, 88). For the purposes of recording, the term BB2 is applied here only to slipped and burnished fabrics. However, fabrics with identical clay matrixes often feature greyer or less well-finished surfaces and may be associated both with black-burnished forms and with other vessel types; these wares, which make up just over a fifth of sherds, have not been defined as BB2, although many of them may come from similar kiln sources.

The growing influence of local BB2 and related fabrics is linked to an increase in everted-rimmed jars (2F; eg P20–P22, Fig 5.4) and round-rimmed bowls (4H; P24, Fig 5.4), accounting for 16% and 14% of EVEs in this phase respectively. Amongst the non-typical black-burnished forms associated with north Kent sandy wares, bead-rimmed jars (eg P18, Fig 5.4) are particularly common, making up around 8% of EVEs.

One significant trend amongst fine wares is a much increased proportion of central Gaulish samian, now accounting for around 5% of the assemblage by sherd count, and the introduction of a small quantity of east Gaulish samian, accounting for a further 1%. In terms of vessel numbers, these are fairly evenly split between bowls, dishes and cups, the last of which was notably absent from the previous phase. Fine ware beakers are confined to poppy-head forms dating either to the very start of this phase or curated/residual. Another pronounced contrast with the previous phase is the complete absence of flagons from the EVE total, although body sherds of these forms are represented.

Overall, the second half of the 2nd century AD appears to have been a period of decline in the quantity of pottery being used. Although features of subsequent phases contained large amounts of residual pottery, most seems to relate to period 3, phase 2. One statistic which highlights this fact is that, across all phases, 159 examples of the round-rimmed dish form were recovered but only six are decorated. Decorated versions of this form were common in the mid to late 2nd century AD but had been more or less replaced by plain versions by the start of the 3rd century AD (Pollard 1988, 91).

Catalogue (Fig 5.4)

P18 Flattened bead-rimmed jar; fabric SAND ([868], gully G61, period 3, phase 3)
P19 Bead-rimmed jar with carinated shoulder; fabric SAND ([867], gully G61, period 3, phase 3)
P20 Everted-rimmed jar; fabric BB2 ([867], gully G61, period 3, phase 3)
P21 Everted-rimmed jar; fabric SAND ([867], gully G61, period 3, phase 3)
P22 Everted-rimmed jar; fabric SAND ([868], gully G61, period 3, phase 3)
P23 Severely burnt samian Dragendorff form 18/31 dish; fabric SAMLZ ([867], gully G61, period 3, phase 3)
P24 Round-rimmed bowl; fabric BB2 ([815], wall G62, period 3, phase 3)

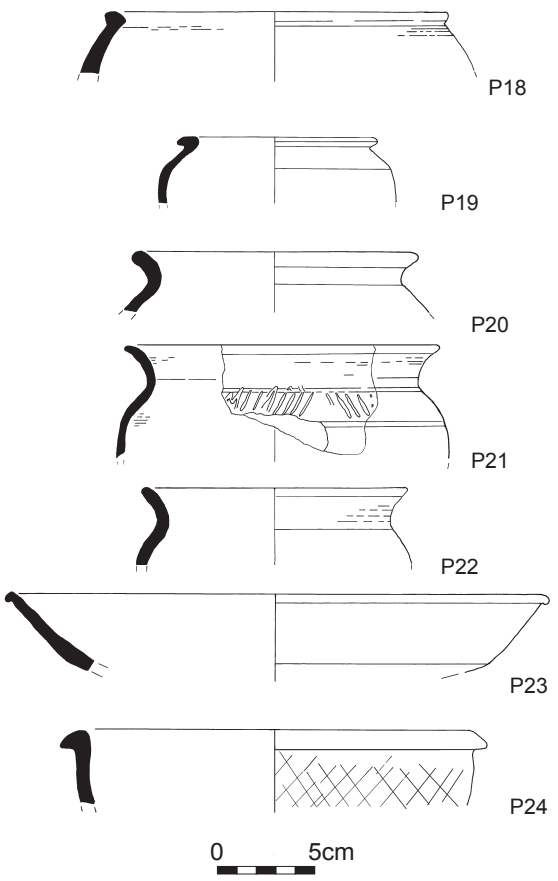

Fig 5.4 Pottery vessels nos P18–P24

PERIOD 3, PHASES 4 AND 5

Period 3, phases 4 and 5 produced the largest quantities of pottery and, although the 3rd century AD seems to have been a period of intensive pottery usage, a large proportion comes from groups of very mixed date, including period 3, phase 4 demolition layers G71 and G731 and period 3, phase 5 demolition dump G84, which produced respectively assemblages of 2654, 517 and 1052 sherds. All these groups appeared to have been deposited in the late 3rd to early 4th centuries but contained substantial quantities of residual 1st- to mid-2nd century AD material.

These deposits also yielded very large assemblages of most other classes of find, possibly indicating that domestic waste, perhaps from mixed or long-lived midden sources, was deliberately amassed as levelling material. In general, there are few notable differences in group composition over phases 4 and 5, suggesting these groups do not accurately reflect contemporary patterns of usage and discard. This makes it difficult to draw firm conclusions about the nature of supply and consumption in the 3rd and 4th centuries AD.

Reduced sandy coarse wares, mainly of north Kent origin, became more common in period 3, phase 4, making up around 45% by sherd count, although the quantity of true black-burnished-type ware 2 (BB2) seems to have remained unchanged at just over 10%. A large range of other fabric types is also represented but many of the most common of these were almost certainly residual by period 3, phase 4. For example, 14% of the pottery in both phases 4 and 5 is made up by various tempered wares of which only a very small proportion is thought to be contemporary late 3rd- to 4th-century AD grog-tempered fabric.

It is quite striking that non-residual fine wares are extremely rare in the later Roman period. Central and east Gaulish samian, which might have been in contemporary usage in the 3rd century AD, amount to less than 1% of phase 4 sherds; two sherds of central Gaulish black-slipped ware are the only other imported fine wares. North Kent fine wares and tablewares continue to make up a very significant part of the assemblage but, where form elements are present, these are almost all associated with 1st- and 2nd-century AD forms. Although the proportion of jar forms decreased significantly, this is only in line with regional and national trends, linked to the popularisation of black-burnished-style open forms (Booth 2009, 18–19). Fine wares and tablewares (other than quite a high proportion of residual 1st-and 2nd-century AD beakers and flagons) remain very uncommon, accounting for only a small percentage of EVE totals

Period 3, phase 4 marked the first appearance of many later regionally traded Romano-British wares, including beakers in Nene valley colour-coated ware (Fig 5.5, P25,), mortaria in Oxfordshire white ware (Fig 5.5, P26), samian-derived bowls in Oxfordshire red/brown colour-coated ware (Fig 5.5, P27) and Much Hadham oxidised ware, and coarse ware jars in Alice Holt/Farnham ware (Fig 5.5, P28). Another new element is the late 3rd- to 4th-century AD grog-tempered wares, associated with black-burnished-style forms (Fig 5.5, P29–P30). However, each of these fabric types is represented by just a tiny number of sherds in period 3, phase 4, quantities which increased only slightly in period 3, phase 5.

This probably reflects the fact that the greatest intensity of settlement activity occurred towards the beginning and middle of period 3, phase 4 with an apparent decline in pottery usage from the late 3rd century AD onwards, when many of these fabric types either first appeared or became more common in usage. It should also be noted that, although a number of coins minted after AD 350 were found on the site, there is very little ceramic evidence to suggest continuity of domestic occupation into the latter half of the 4th century AD. Several key aspects of very late Roman groups are missing – for example, only three certain examples of Portchester D ware are identified from the site and

only one of *Eifelkeramik*. Midlands shelly ware, which is fairly distinct from early north Kent products, is completely absent.

This chronological pattern is perhaps best illustrated by the proportion of coarse ware forms in this phase. In the mid 3rd century AD the production of the round-rimmed (4H) bowl form (eg Fig 5.4, P24) was rapidly eclipsed by the new bead-and-flange (4M) form (Fig 5.5, P31), but in period 3, phase 4 at Snodland, 4H outnumbers 4M by nearly 3:1, the ratio altering only slightly to 2:1 in period 3, phase 5. Similarly, the flattened bead-rimmed jar form (2A) (eg Fig 5.4, P20) remains one of the most common types, accounting for over 10% of forms in period 3, phase 4, dropping off to around 3% in period 3, phase 5. Based on stylistic affinities with forms produced at Alice Holt, this perhaps dates to between AD 100 and AD 250 (Lyne & Jefferies 1979, 45).

Late Roman amphorae from Snodland

Amongst the less common late Roman amphora types found at Snodland are an Africana II (Fig 5.5, P32), in a lime-rich fabric of Tunisian origin, used to transport olive oil, and a 'hollow foot' Kapitän II vessel, of unknown contents, thought to derive from an Aegean source (Tomber & Dore 1998, 101, 109); both are from late 3rd-century AD contexts. Several smaller body sherds of a brick red fabric, with large gold mica flecks and rare/sparse fine calcareous inclusions, were found in a number of contexts. This is assumed to be amphora from an unidentified source which has some similarities to fabrics from the eastern Mediterranean or North Africa.

Although represented by only a few vessels, the diversity of amphora sources is striking. It has been noted that by the later Roman period imported pottery in general, and amphorae in particular, became more exclusively concentrated in the major urban centres like London and Colchester and was usually absent from other types of settlement assemblages, including from many Roman towns (Symonds & Tomber 1991, 81). Several exceptions to this pattern can be seen in the Medway and Darenth valleys, however. A complete example of the Africana II form variant, from the Holborough Tumulus, Snodland, is one of only five British examples noted in a gazetteer published in the 1990s (Cook 1954, 49; Williams & Carreras 1995, 247). Similarly, Tyers' (1996, 2.16) distribution of 'hollow foot' amphorae records this fabric on only 18 sites in Britain, of which Lullingstone and Chalk villas are amongst a very small minority of rural find-spots (Peacock 1977; Pollard 1987, no 47, fig 68, 220). The latter site also lends its name to another rare late Roman amphora type, which was first identified there (Peacock 1977).

Unfortunately few villa assemblages from the region have been analysed or published in detail, so amphorae might be even more widespread than is currently known. As it is, this unusual pattern of distribution may suggest that villa estates in north-west Kent benefitted from closer trading links with London than similar settlements in nearby regions. However, there is little other artefactual evidence to suggest particularly high-status consumption at Snodland and so it is possible that the unusual distribution of amphorae in this area of Kent reflects more direct involvement with trade from the Continent. Interestingly, tidal regression in the 3rd century AD appears to have made waterborne trade into the City of London more problematic and we know much less about how commodities arrived in this period (Brigham 1990, 147). More recently, at Shadwell, a bath house complex and settlement site located close to the river a few kilometres to the east of the City of London, a diverse range of late Roman imported goods was noted, including a late Roman amphora assemblage which appeared larger than average for City sites. In the absence of obvious wharves or warehouses on the site it remains ambiguous as to whether these represented high-status consumption or a direct role in importation (Gerrard 2011, 84–5; Bird 2011, 291).

Most of the late Roman amphora assemblages described above cluster in river valleys and it seems likely that the vessels arrived by water. However, although not noted on this site, late Roman imported fine wares are also generally more common in Kent than elsewhere, and it has previously been suggested that Canterbury may have played a role in their importation and distribution, perhaps suggesting that Watling Street was also an important part of the supply network (Pollard 1988, 141–3; Symonds & Tomber 1991, 82).

Catalogue (Fig 5.5)

P25	Short funnel-necked beaker; fabric NVCC ([572], demolition dump G71, period 3, phase 4)
P26	Mortarium with vertical reeded flange; fabric OXWW ([763], pond G810, period 3, phase 5)
P27	Samian-style bowl with stamped rosette decoration; fabric OXRC ([77], ditch G711, period 3, phase 4)
P28	Necked jar with frilled decoration; fabric AHFA (unstratified)
P29	Bead-and-flange bowl; fabric GROG ([307], demolition dump G84, period 3, phase 5)
P30	Plain-rimmed bowl/dish; fabric GROG ([139], pit G811, period 3, phase 5)
P31	bead-and-flange bowl with burnished arc decoration; fabric BB1 ([74], ditch G813, period 3, phase 5)
P32	Africana II/Peacock & Williams class 34D amphora; fabric NAFR1 ([254], ditch G813, period 3, phase 5)

POTTERY VESSELS IN GRAVES

Two of the graves in the enclosed cemetery (C1) contained pottery vessels as grave goods. In grave [80], the associated

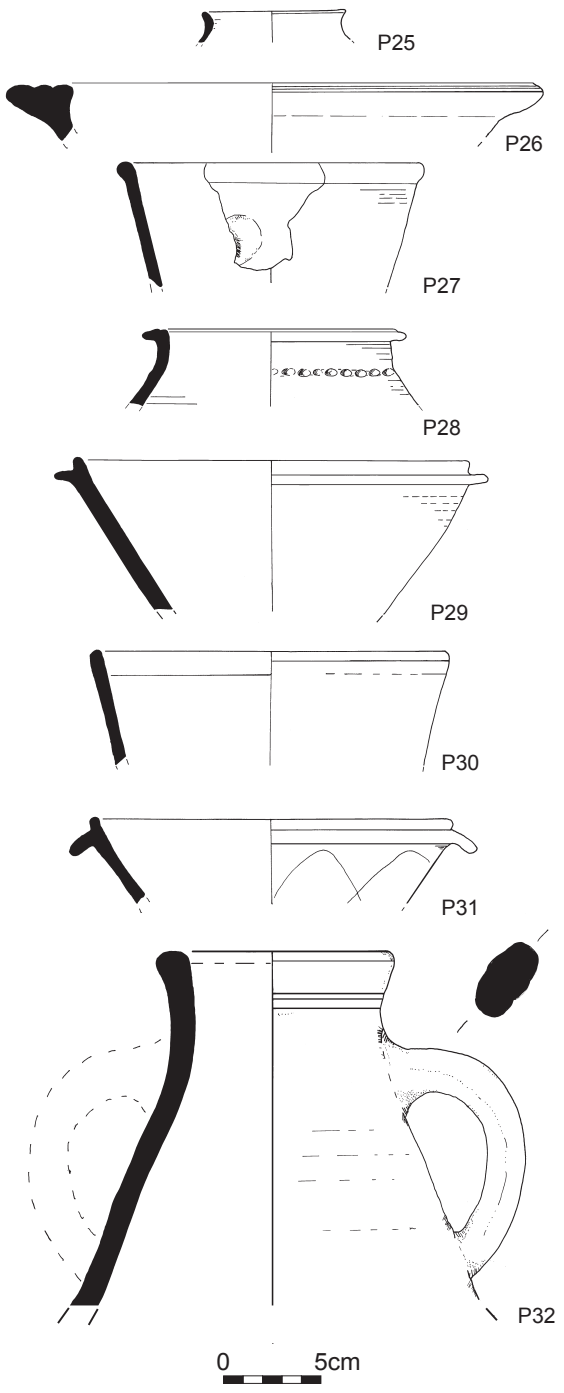

Fig 5.5 Pottery vessels nos P25–P32

vessel was a small jar with unusual moulded decorative ring handle attachments (Fig 5.6, P34), in an unsourced coarse buff oxidised ware. This vessel form is unusual although two parallels are known from Staines (P Jones 2009, fig 6.18, no 43, 352) and from a context dating to *c* AD 270–400 at recent excavations at 14–18 Gresham Street, London (Amy Thorp, pers comm). The ring attachments may imitate suspension loops on some metal or glass flasks and the fact that this vessel was burnt and sooted suggests it might have been used as a container for oils or incense burnt as part of the funerary rite.

Grave [86] contained a disc-necked flagon (P34, Fig 5.6) in an unslipped orange oxidised fabric with a matrix comparable to north Kent white-slipped ware. Alongside this was a chamfered base (P35, Fig 5.6), probably from a black-burnished-style dish in a north Kent grey ware fabric. The dating of the flagon implies a date after *c* AD 250 and the stratigraphic relationship of the cemetery enclosure ditch to the pit containing the largest coin hoard suggests the graves pre-date the mid 4th century AD.

One interesting aspect of the two grave assemblages is the fragmentary condition of the vessels. Although complete, the handled jar in grave [80] was found broken, with sherds from the base and lower half upright and sherds from the rim and upper half face down beside it. The flagon in grave [86] was more intact but the rim was also detached and found face down beside the intact body and neck. In both cases the damage may have been caused by later truncation which just missed the skeleton, but the similarity of the positioning raises the possibility that the vessels had been deliberately broken. In grave [86] only the base of the dish survived even though most of the associated flagon, a much taller vessel, survived upright and intact, suggesting that the walls must have been removed before deposition. This would have rendered the vessel useless as a receptacle, and may suggest either a modification in order to change the function of the vessel (for example changing it into a covering or lid) or deliberate destruction linked with the concept of 'killing' vessels in votive deposits.

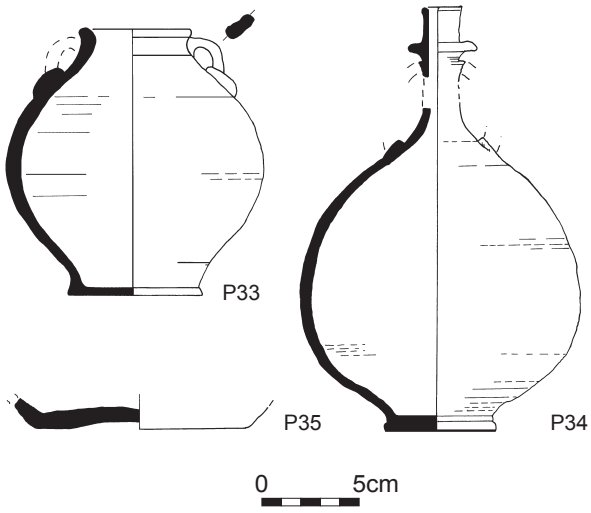

Fig 5.6 Pottery vessels nos P33–P35

Catalogue (Fig 5.6)

P33 Jar with loop handle attachments; fabric OXID ([78], grave [80], period 3, phase 5)

P34 Disc-necked flagon in fine oxidised fabric of similar matrix to north Kent white-slipped fabrics but lacking any surface treatment; fabric OXIDF ([84], grave [86], period 3, phase 5)

P35 Chamfered base from truncated black-burnished-style dish or bowl; fabric SAND ([84], grave [86], period 3, phase 5)

ASSEMBLAGE STATUS AND FUNCTION

Aside from the late Roman amphorae there was relatively little evidence of high-status consumption from the site, especially in the later phases of the villa. It is possible that this is related to the types of features or deposits, which are outside the main villa complex. However, the assemblage appears very comparable in this respect to material excavated in other areas of the site, more centred on structural elements (Seager-Smith 1995). Similarly, stratified groups from the Mount Roman villa, Maidstone produced only small quantities of fine wares and it has been noted that the Thurnham villa assemblage was not very different from other lower-status rural assemblages recorded as part of the High Speed 1 rail scheme (HS1) (CTRL) project (Pollard 1992, 233; Booth 2009, 18). In the latter case, this was taken to indicate that comparing pottery assemblages may be an invalid way of measuring status because the idea that there was little social differentiation between these different site types was considered improbable given the costly nature of villa buildings (ibid). Certainly, the under-representation of fine wares could be partly explained by the use of higher-status metal or glass vessels, which are less likely to survive in the archaeological record.

However, it may be that we need to re-evaluate our interpretation of the full range of activity happening in local villas based on the material culture in use. One question to consider is why they consistently produce much more pottery than other types of rural site. This sample of the deposits in one small area of the villa and its environs produced sherds from thousands of vessels, suggesting that the total number in use over the approximate 300-year life span of the villa could have been many tens of thousands. This site is by no means alone amongst villas in producing much larger assemblages than even larger rural settlements. Of the 15 Late Iron Age and Roman sites uncovered in the HS1 (CTRL) corridor, Thurnham, the only villa site, produced more than a third of the pottery (Booth 2009, table 1).

Although villas were undoubtedly constructed by wealthy landowning families or individuals, they were also the centres of large estates involved in agriculture, crafts and industry. As such, they would have been the focus for activity carried out by a larger community, encompassing people from different strata of society, living or working in close proximity. The size and composition of the assemblage seems more indicative of this varied type of activity, perhaps involving more everyday food preparation and storage. Visible displays of wealth and status, which were clearly one element of the function of the villa, may be less archaeologically visible in a ceramic assemblage simply because high-status dining represents only a tiny part of a much more diverse range of daily activity.

DECORATED SAMIAN

Gwladys Monteil

A very small group of decorated samian ware was analysed for the purpose of this report, mostly recovered from features in period 3, phases 3 and 4. The assemblage is made up of 20 sherds, several of which join, and represents a minimum number of ten vessels, all central Gaulish Dragendorff form 37 (DR37) bowls.

The earliest decorated samian vessels, from [1051] and [1154] of period 3, phase 3, are fragmentary and abraded, of Hadrianic date. One is by the potter Secundinus II, the other by the Sacer–Attianus group. The rest of the decorated samian vessels are Antonine with several styles identified: a bowl by Iullinus ([305]), one by Cinnamus ([572] and [617]), one by Doeccus ([572]), one by Criciro ([867]) and one by Laxtucissa ([868]). The example by Criciro is made up of several joining sherds that have all been subjected to intense heat and shattered as a result before being deposited.

The following catalogue lists and identifies the more interesting and diagnostic decorated pieces recovered from the site. The letter and number codes used for the non-figured types on the central Gaulish material (eg B226, C190) are those created by Rogers (1974). The figured types referred to as Os (eg Os1214) are those illustrated by Oswald (1936–7).

Catalogue (Fig 5.7)

P36 [305] Central Gaulish, DR37, abraded and with evidence of internal wear. The ovolo is square with two borders, an inner core and a beaded tongue, B153. The ovolo and corded border are both part of Iullinus' repertoire (Stanfield & Simpson 1990, pl 125, no 1). AD 170–200.

P37 [572] Central Gaulish, DR37, burnt black. The ovolo is B161, the leaf H101 and the detail U246; all used by Doeccus. AD 170–200.
Central Gaulish, DR37, ovolo B161. Not burnt but probably part of the same bowl as the sherd above.

P38 [617] Central Gaulish, DR37, scroll where only part of a leaf remains, possibly leaf H13. This leaf was used by Cinnamus (ibid, fig 47, no 38). Antonine.
Central Gaulish, DR37, [572], the lower part of what looks like leaf H13 is visible; probably same bowl as sherd above, [617]. Antonine.

P39 [867] Central Gaulish, DR37, six joining rim sherds with ovolo and beaded line, an additional non-joining rim sherd with ovolo, beaded line and head of lion (?) and one body sherd with panel decoration consisting of the bottom half of caryatid Os1207A, the back legs of a stag (Os1720? 1743?) and part of mask Os1214 in festoon or medaillon. The ovolo is possibly B47 (?). All the motifs were used by several contemporary potters but Criciro used the caryatid, the ovolo B47 and the lion (ibid, pl 118, nos 15, 17). The mask is as yet unknown in his work. All the sherds have been subjected to intense heat. AD 150–70.

P40 [868] Central Gaulish, DR37 with very partial decoration. The three-branched motif is probably part of figured type Os92, the little trifid motif probably G159; both were used by Laxtucissa and Censorinus

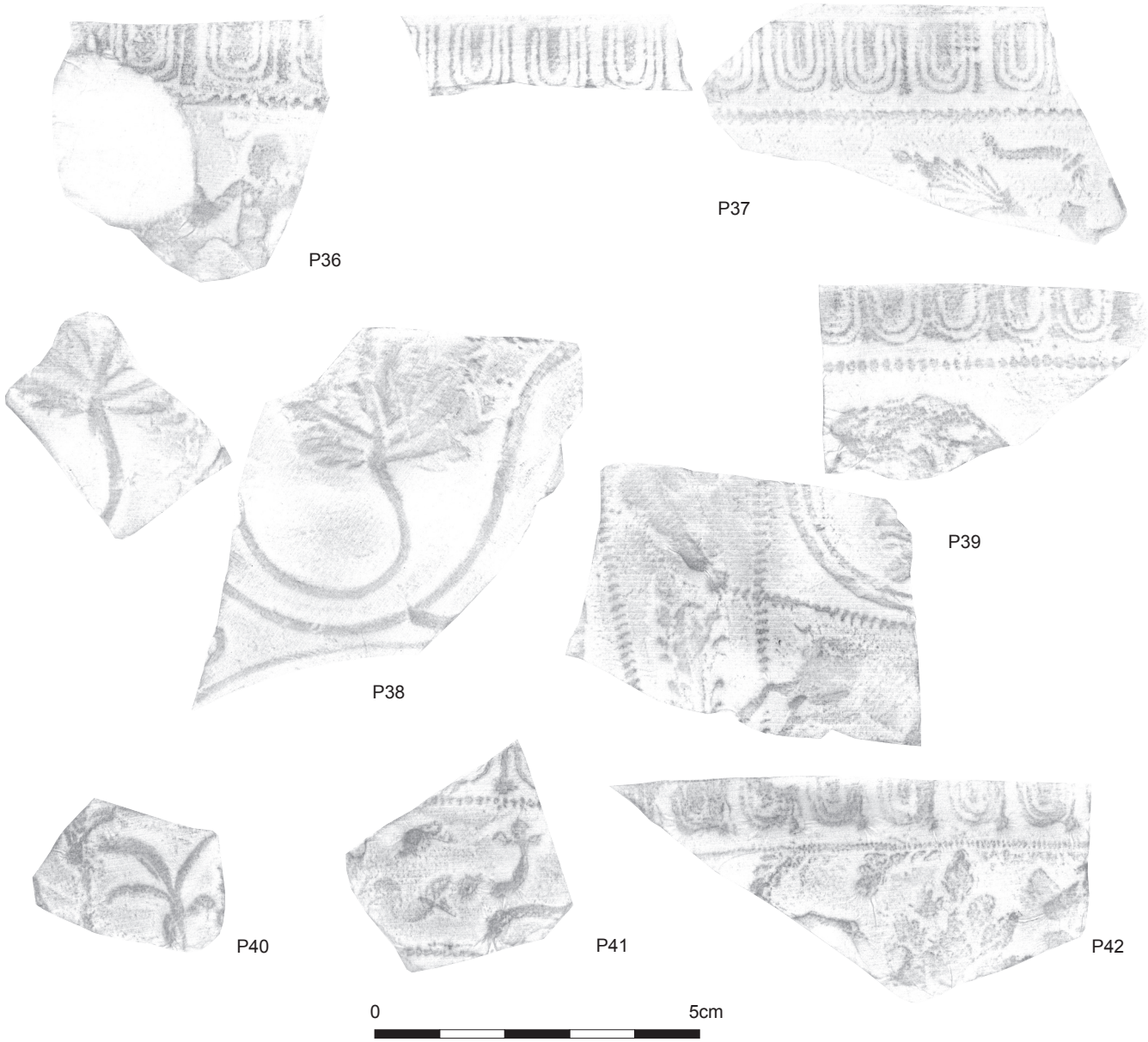

Fig 5.7 Decorated samian pottery nos P36–P42

though the former is associated with bowls with a very similar arrangement (ibid, pl 97, no 5 and pl 100, no 24). AD 160–80.

P41 [1041] Central Gaulish, DR37, very partial ovolo with a tongue terminated by a rosette (B7? B18?). The back of a sea animal (Os42?), framed by two little dolphin-like motifs (Os2402?), is visible. Sacer–Attianus group. AD 120–45.

P42 [1154] Central Gaulish, DR37, ovolo badly impressed but probably B114. The decoration is partial but consists of the top of leaf/tree (N14?) and possibly little leaf J160 overlapping the beaded row. The finely beaded row is A1. See Rogers 1999, pl 106, no 19 for both leaves and finely beaded row: Secundinus II. AD 120–40.

SAMIAN STAMPS AND REPAIR

RF<204> (P10, Fig 5.3) [726]
Complete profile, south Gaulish, Dragendorff form 18 dish (DR18), two joining sherds across contexts. The beginning of the stamp comes from RF<65> ([392]) while the base comes from RF<204> ([726]). The stamp reads SACIRV..FE. Sacirus i, die 1a, AD 70–100 (Dickinson 1999, CAR10, S438).

RF<322> [1062]
Base, central Gaulish, Dragendorff form 33 (DR33) with complete stamp: LVCINIOF. Lucinus i, die 1a, AD 160–200 (Hartley & Dickinson 2009, 119–20).

RF<419> [765]
Base, central Gaulish, Dragendorff form 31 dish (DR31) with some wear on the stamp: ALBVCI. The die could be 6d of Albucius ii (Hartley & Dickinson 2008a, 138). See also the Felix Oswald Collection at Nottingham University Museum, die 6d found on a DR33 from Margidunum: M.33.764-A. AD 145–75.

RF<519> [1100]
Base, central Gaulish, DR31 with a partial and abraded stamp: SAX [ ]M. Probably by Saxamus, die 1b, AD 160–200 (Dickinson 1986, 3.187).

RF<520> [1108]
Base, central Gaulish, DR31. The stamp is very abraded in its middle section so the reading is incomplete. Possible reading: CA(P?) [...] C but an exact match cannot be found in Hartley & Dickinson 2008b. Antonine.

RF<539> [572]
Base, central Gaulish, DR31. Very partial stamp:]S F. Antonine.

OTHER STAMPS, INSCRIPTION, REPAIR AND GRAFFITI

Repair

RF<445> (Fig 5.8) [752]
Wall of central Gaulish Dragendorff form 18/31 dish (DR18/31) with lead repair.

Fig 5.8 Photograph of RF<445>, central Gaulish Dragendorff form 18/31 dish with lead repair

Mortarium stamp

RF<525> (P43, Fig 5.9) [3]
Verulamium region white ware hooked-flanged mortarium rim with stamp reading FLVGVDV; period 3, phase 4, [3], G711. This is a counterstamp of the type used by the potter Albinus, believed to have worked at Verulamium (Hartley 1972, 369–73).

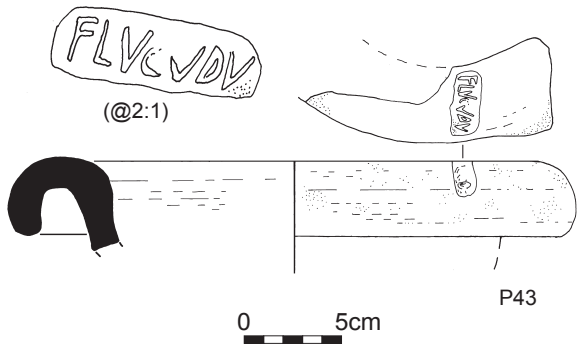

Fig 5.9 Mortarium stamp no P43

Inscriptions and grafitti

Roger Tomlin

RF<248> (P44, Fig 5.10) [617]
Four conjoining body sherds from Dressel form 20 Baetican amphora (BAETE) with inscription. Inscribed before firing in cursive letters: IIDIVLES | [...]LVCRIONIS, *i Id(us) Iule(a)s* | *Lucrionis*. 'One (day before) the Ides of July [14 July], (work) of Lucrio.'.

The surface to the left of line 1 is unmarked except for a casual scratch, so there is only a single digit (*i*) in the date-numeral; exceptionally, the scribe wrote *i Idus* as an alternative to the usual *pr(idie) Idus. Iules* is for *Iulias*, probably because post-consonantal *i* in hiatus was confused with *e* (as in *Iuleas* for *Iulias* in *CIL* iv 814) and the *a* was then omitted. Confusion may have been easier because five out of twelve month-dates ended in *-es*, not *-ias*. In line 2, the tip of initial *l* survives in the broken edge, also the end of the first stroke of *u*. The second stroke of *o* was extended downwards and to the left, so as to provide the first stroke of ligatured *n*. There is another instance of *Lucrionis* inscribed on a Dressel 20 before firing (*CIL* xv 3614, Monte Testaccio), but the hand is not the same, and the content of the graffito is different.

RF<526> [572]
Central Gaulish, wall of DR31 with graffito XII on exterior surface.

RF<527> [617]
Base, central Gaulish with small graffito X on underside, burnt and very worn interior surface; probably base of Dragendorff form 27 cup (DR27).

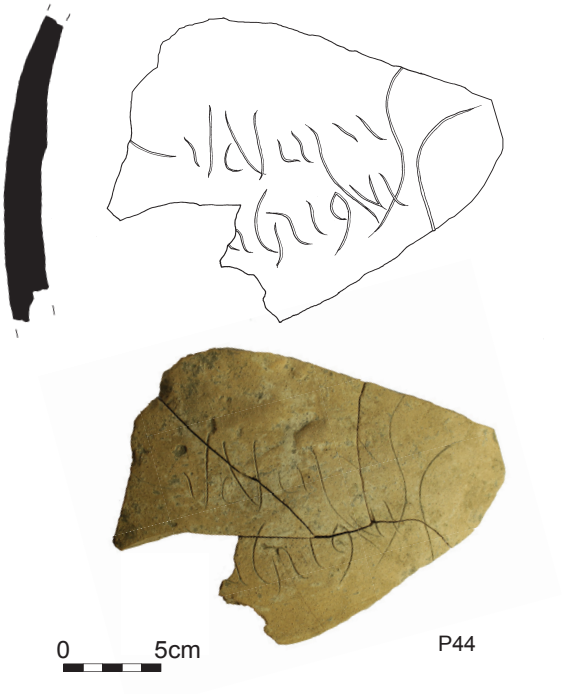

Fig 5.10 Amphora with inscription no P44

5.4 CERAMIC BUILDING MATERIALS

Susan Pringle with Sarah Porteus

The ceramic building materials from the excavation at Snodland were predominantly of Roman date with only small quantities of medieval and post-medieval brick and tile, which are not discussed further.

METHODOLOGY

All the excavated ceramic building material was recorded and quantified by fabric, form, weight and fragment count in all cases, with the exception of some of the very large deposits. A simplified quantification by form and broad fabric group was used for very large contexts from which a sample of at least 20kg of tile had already been examined in detail. Where possible, tile fabrics were cross-referenced to the Canterbury Archaeological Trust (CAT) and Museum of London (MOL) building materials type-series. Samples of the bricks and tiles, including the keyed flue tiles, and the tile fabrics were retained.

The detailed analysis for this report was carried out using only the data obtained from quantification by specific fabric.

SUMMARY OF MATERIAL

The brick and tile fabrics

The brick and tile fabric categories were distinguished with the aid of a hand lens. Subsequent microscopic examination of the clays has revealed that the boundaries between several of these fabrics are not always clear and they are likely to reflect a similar geology, although textural variations and differences in the grade and frequency of inclusions suggest that a variety of clay sources may be represented.

Three main fabric groups were identified: orange-red, pale yellow and buff (Table 5.6). Of the orange-red fabrics, fabric 1 was the most abundant. It has a fairly clean matrix with sparse to moderate black and white quartz inclusions; a coarser variant, fabric 1w, contains moderate to common coarse white quartz grains. Fabric 1b has a similar matrix to fabric 1 but contains more quartz and a higher proportion of black grains. Fabrics 2 and 3 are similar in colour to the fabric 1 group; fabric 2 has a higher calcareous content, with inclusions of white or cream silty clays, and fabric 3 is orange-red with some quartz and cream silt and coarse rounded dark red inclusions.

Snodland fabric code	Count	Count as % of total	Wt (kg)	Wt as % of total
1	4610	48.9	655.590	44.2
1b	833	8.8	229.395	15.5
2	297	3.2	67.792	4.6
3	627	6.7	232.591	15.7
4	117	1.2	28.394	1.9
5	7	0.1	1.920	0.1
6 (MOL 2454 - Eccles)	1313	13.9	176.770	11.9
7 (buff)	1616	17.2	91.067	6.1
Total	**9420**	**100.0**	**1483.519**	**100.0**

Table 5.6 Relative quantities of brick and roof tile fabrics from stratified deposits

All the orange-red fabrics show similarities, though with perhaps fewer very coarse inclusions, to MOL fabric 3050 and CAT fabrics 11 and 17, which match tiles from the Roman kiln at Doods Road, Reigate. It seems likely that this visual similarity is the product of similar geological environments rather than of direct trade, and a local source is more probable. A less common fabric in this group is fabric 4, which has a granular matrix containing abundant very fine quartz and little else. It is similar to MOL fabric 2459B and CAT fabric 7, and also occurs at the Eccles villa and at the Roman site at Florence Road, Maidstone.

Fabric 6 (MOL 2454; CAT fabric 8) has a distinctive light-coloured matrix and moderate inclusions of white or rose quartz. It is identical to the tile fabric produced at the Eccles villa, which was almost certainly its source. Fabric 7 is light brown with variable amounts of quartz and some coarse inclusions; its source is not known but is likely to be close to chalk geology; both these fabrics are made from light brown- or light yellow-firing Gault clays. Present in much smaller quantities is fabric 5, which is light orange with distinctive angular cream silt and red iron-rich inclusions.

The flue tile fabrics are broadly similar to those described above, fabrics F1 and F3 representing approximately the range of textures in orange-red fabrics 1, 1b and 3. These fabrics account for approximately 90% of the flue tile assemblage by both count and weight, and are likely to represent a local clay source. Of the minority fabrics, F2 and F4 are the most abundant. F2 is brownish-orange, slightly silty, with abundant very fine quartz, sparse coarser quartz and some red iron-rich material (similar to fabric 4); F5 is a slightly coarser version. F4 is a brighter orange with cream silty lensing and some dark orange-red or rounded purple inclusions. It contains very little quartz and is close to MOL fabric 3018, dated in London to *c* AD 100–20. Tile in this fabric may have been produced at the kilns at Hartfield, East Sussex. Two tiles were also present in fabric 6.

Dating

The 1st-century AD deposits were dominated by three fabric types, fabrics 1, 6 and 7. Tile in fabric 6 matches the majority of the ceramic brick and tile from the Eccles villa, which was almost certainly made at kilns close to Eccles. Tile production there started early in the Roman period; Detsicas describes the presence of tile amongst a deposit of pottery wasters at his Site D, which he dates to *c* AD 50–60/65 (Detsicas 1977a, 19, 28), pre-dating the construction of the first phase of the Eccles villa in *c* AD 65. The proximity of the Eccles villa to Snodland suggests that tile in fabric 6 could date from the mid 1st century AD.

Tile fabric 7 was also abundant in 1st-century AD deposits. This cannot at the moment be matched to kiln material, and on the available evidence does not appear to have been used at Eccles. Its distribution on the site differed slightly from that of fabric 6 and it may originally have been used in structures with different construction or demolition dates. There was a high residuality of tile flakes in fabric 7 throughout the site, often in association with abraded material in fabric 6, suggesting that a destruction event had taken place, probably at an early date.

Of the orange-red fabrics, the earliest appear to be fabrics 1 and 2, both present in the 1st century AD. The fabrics with common black quartz inclusions (fabrics 1b and 3) appeared in very small quantities before the 2nd century AD when lydion bricks in fabric 1b were used to construct the base of drain G521 in the modifications to Building 1 (period 3, phase 3). Brick and roof tile in fabric 3 also occurred in dumps G71. Flue and voussoir fabrics F1 and F3, very similar to fabrics 1b and 3, also seemed to appear first in the same demolition dumps. Fabrics 4 and 5 were scarce before period 3, phase 4 and probably reflected later 2nd- or 3rd-century AD building work.

Tile and brick fabrics

Note: initial fabric categories were drawn up on site using a hand lens only. Post-excavation descriptions of samples utilised ×20 magnification. Colour codes refer to Munsell 1992.

ROOF TILE AND BRICK

Fabric 1 (generic code 1g)

M: 2.5YR:5/8 (red): compact orange to orange-red matrix with silt-sized quartz. Moderate inclusions of fine to medium reddish-black and clear quartz and sparse red iron-rich material; poorly mixed with clean areas and sparse pale yellow silt . Medium moulding sand. All 1g fabrics have sparse coarse quartz < *c* 2mm. Near MOL 3050, CAT 11. A slightly coarser version of F1 with rock fragments < *c* 1.5mm was called F7.

Fabric 1B (generic code 1g)

M: 2.5YR 5/8 (red): as fabric 1 with common reddish-black quartz. Near MOL 3050, CAT 11/17.

Fabric 1W (generic code 1g)

M: 2.5YR 6/8 (light red): as fabric 1 with less dark and more coarse white quartz. Near MOL 3050, CAT 11. A bright orange fabric in what appears to be a coarse version of fabric 1w was used for the channelled brick.

Fabric 2 (generic code 1g)

M: 2.5YR 6/6 (light red): light orange with cream bands and/or inclusions and moderate medium white quartz with lenses of reddish-black quartz; sparse, coarse to very coarse red iron-rich inclusions. Silty version of fabric 1. Medium moulding sand.

Fabric 3 (generic code 1g)

M: 10R 5/8 (red): orange-red matrix with silt-sized background quartz and variable amounts of cream streaking/mottling; moderate to common poorly sorted quartz, mode is medium but grains < *c* 1mm; moderate coarse dark red or purple siltstone inclusions, typically rounded; sparse very coarse white calcareous inclusions. Medium moulding sand. May be MOL 3050, CAT 11/17, 'Reigate' fabric.

Fabric 4 (generic code 1g)

M: 2.5YR 5/8 (red): Orange matrix with abundant fine quartz and common fine mica and white grains; granular appearance; sparse inclusions of medium quartz. Fine moulding sand. Near MOL 2459, CAT 7.

Fabric 5 (generic code 1g)

M: 5YR 7/6 to 6/6 (reddish yellow): light orange/brown matrix with creamy white marbling; fine to very coarse angular inclusions of common dark red and moderate cream clay or siltstone < *c* 11mm; sparse medium to coarse white quartz and angular or platy cream siltstone. Fairly fine moulding sand. Near MOL 3238 and 3226.

Fabric 6 (generic code 2454g)

Colour variable but usually in range M: 2.5Y 8.4 (pale yellow) to M: 10YR 8.3 (very pale brown): light orange, light brown or yellow with sparse to moderate white or rose quartz, abundant within lenses; sparse to moderate inclusions of red iron-rich clay and white calcareous material. MOL 2454, CAT 8.

Fabric 2454b (generic code 2454g)

Near MOL 2454 but with some darker quartz.

Fabric 7

M: 5YR 6/6 (reddish-yellow): light orange-brown or buff with sparse to common inclusions of clear and rose quartz and some black grains. Ill-defined boundary with MOL 2454, but inclusions tend to be coarser.

FLUE TILE

Fabric F1

Orange matrix with silt-sized background quartz and very fine mica; some lighter silty streaks; common poorly sorted fine to coarse quartz, < *c* 1mm. Sparse coarse calcareous and dark red iron-rich fragments. Poorly sorted fine to coarse moulding sand. Box-flue and voussoir fabric. Near MOL 3028.

Fabric F2

Orange, slightly silty, with abundant very fine quartz; moderate fine mica and medium quartz and flint; sparse to moderate very

coarse red iron-rich inclusions. Medium moulding sand. Box-flue fabric, near fabric 4.

Fabric F3
Compact orange matrix with paler streaking, common medium quartz, mainly reddish-black, sparse dark red iron-rich inclusions and very coarse flint and quartz. Voussoir fabric? Close to fabrics 1b and F1.

Fabric F4
Orange with prominent cream silty lensing and cream, orange and red siltstone inclusions. Very little quartz. Sample from [7] has coarse moulding sand composed of white and red quartz and flint. Box-flue fabric. Near MOL 3018.

Fabric F5
Brownish-orange fabric with abundant fine quartz (coarser than F2) including white grains (possibly flint? – coarse white flint fragment in sample), and red iron-rich clays. Sample has fine moulding sand with sparse coarse quartz. Flue tile fabric.

Fabric F6
As tile fabric 7.

Fabric F7
Orange matrix with silt-sized quartz (similar to fabric 1) and cream marbling. Common poorly sorted inclusions of moderate to coarse quartz (white, red, and blackish) sparse coarse to very coarse flint and inclusions of red iron-rich clay. Moulding sand similar to inclusions. Probably sandy version of fabric F1.

Tile and brick types

BRICK

Bricks account for approximately 10% (by fragment count) of the Roman ceramic tile assemblage (Table 5.7). Most are in fabrics 1, 3 and 6, with substantial amounts in fabrics 1b and 7. Bricks in fabrics 6 and 7 are most common in period 3, phase 3; bricks in fabrics 1b and 3 were particularly associated with drain G521 in Building 1, period 3, phase 3.

Although most bricks are fragmentary their survival is sufficient to enable the identification of three standard Roman sizes (Table 5.8): lydion (rectangular, 1 by 1.5 Roman feet), *pedalis* (1 Roman foot square) and *bessalis* (two thirds of Roman foot square). One possible *sesquipedalis* (1.5 Roman feet square) was noted in a period 3, phase 5 pit (G88). The presence of some very thick brick fragments, 50mm or over, suggests that there may have been more large bricks; most of the thick brick fragments are in early fabrics 6 and 7. The *bessales* from this excavation appear to be smaller and thinner than those recorded from the 1992–4 excavations, for example 215–223mm square (two examples) and 25–33mm thick (eight examples) compared with '*pila* tiles' of 280 × 240 × 50mm from the eastern part of the villa complex (Birbeck 1995, 89). Although the primary function of *bessales* was the construction of pilae in hypocaust systems, some of the bricks from period 3, phase 4 dumps had worn surfaces, suggesting they had been used as floor tiles. Tiled floors were noted by Detsicas within the Eccles bath house.

A non-standard brick in fabric 2 was noted from demolition dump G731 (period 3, phase 4). The surviving fragment, 30mm thick and mould-made, has an obtuse-angled corner of *c* 130 degrees. Its original size and purpose are not known (Fig 5.11, T1).

Form	Count	Count as % of total	Wt (g)	Weight as % of total
Tegula	5342	32.57	1203421	48.67
Imbrex	3717	22.66	487882	19.73
Brick	1706	10.40	581250	23.51
Combed flue*	197	1.20	21561	0.87
Voussoir	39	0.24	12051	0.49
Box-flue	16	0.10	2887	0.12
Water pipe	11	0.07	48	0.00
Channelled brick	9	0.06	5772	0.23
Half box-flue	5	0.03	1468	0.06
Unidentified tile	5358	32.67	156186	6.32
Total	**16400**	**100.00**	**2472526**	**100.00**

*Miscellaneous fragments with combed keying; box-flue or voussoir

Table 5.7 Roman ceramic brick and tile: comparative counts and weights of tile types

Period	Land use	Roman size	Length (mm)	Breadth (mm)	Thickness (mm)	Fabric
3.3	B1	*pedalis* or small lydion	240+	268	38	1
3.3	B1	lydion	166+	303	39	1b
3.3	B1	lydion	220+	310	39	1b
3.3	B1	lydion	460	310	37	1b
3.3	B1	lydion	458	313	35	1b
3.3	B1	lydion	365+	305	35	3
3.3	B1	lydion	360+	310	40	3
3.3	B1	lydion	340+	310	42	3
3.3	B1	lydion	445	317	38	3
3.4	FS5	*bessalis* (used as floor tile?)	215	203+	32	3
3.4	FS5	*pedalis* or small lydion	262+	288	35	7
3.5	OA3	*bessalis*	223	222	30	3
3.5	OA3	*pedalis* or small lydion	247+	270	36	3

Table 5.8 Bricks with one or two complete dimensions

ROOF TILE

Tegulae and imbrices in fabric 6 account for over 50% (by weight) of the roof tile assemblage in period 3, phase 2 deposits, with lesser amounts of roof tile in fabrics 1 and 7 and insignificant quantities in fabrics 1b, 2, 3 and 4. There was, however, a marked change in the assemblage in period 3, phase 3, when fabric 1 predominated, and continued to be a major presence on site for the remainder of the Roman period with, from period 3, phase 4, an abundance of tile in fabric 1b. Evidence such as the quantity of tegulae and imbrices in gully G518 suggests that Building 1 (B1) may have been tiled with light yellow roof tile in fabric 6 in period 3, phase 2 but it seems probable that from period 3, phase 3 both B1 and the subsequent B2 were roofed in the orange-red fabrics; large pieces of tegula in fabric 1b came from destruction levels over the building.

The ratio of the weight of tegulae to imbrices for the whole assemblage is 2.5:1, which is consistent with demolition material from a tiled roof or roofs (Brodribb 1987, 11–12) and it is similar for the tiles in fabric 6; however, the tegula:imbrex ratio for fabric 7 is approximately 5:1. If this preponderance of tegulae was explained by selective reuse, such as the selection of flat tiles rather than curved, it might be expected to apply equally to the tiles in fabric 6, which appear to have similar dates on the site. It may be the case that the two early fabrics were originally used in different types of structure, or that the tiles in the buff fabric pre-date the introduction of tiles in fabric 2454.

TEGULAE

The tegula flanges are typically square in profile, although rounded flanges are also common on tiles in early fabrics 6 and 7, and a number of tall thin flanges, probably indicating later production, were noted on tiles in fabrics 3 and 4. Knife-cut upper cutaways were recorded on tiles in fabrics 1, 2, 3, 4, 6 and 7. Moulded upper cutaways were also present; the use of mould inserts was noted on tiles in fabrics 1b, 2, 3, 4 and 7. Lower cutaways, particularly in fabrics 1 and 1b, were moulded with an inset and the corner then cut diagonally with a knife. On tiles in fabrics 6 and 7, lower cutaways were knife-cut. Nail holes, although not common, are a feature of the assemblage. Fifteen pre-formed holes, made before the tiles were fired, were recorded. Of these, eight are round in plan, five of these being placed close to a flange (fabrics 1, 1b, 3), and seven are square, placed centrally near the top end of the tile (fabrics 1, 1b) and some set diagonally. None of the tiles with nail holes close to the flange is complete, so it is unclear whether there was a corresponding hole near the opposite flange. The square nail holes may be the earlier as they are seen on tiles deposited in period 3, phases 3 and 4, while the round nail holes occur in period 3, phase 4 and particularly phase 5 deposits. Nine nail holes (three of them from dumps G71) that had been chipped or bored through the tile after firing were also recorded; these had been positioned between 60mm and 90mm from the flanged edge of the tiles.

One tegula, in fabric 1, from fill [14] of ditch G714 (period 3, phase 4), has a pronounced lengthwise convex curve (Fig 5.11, T2). Warry suggests that such tegulae were deliberately made for use on a curved vaulted roof (Warry 2006, 111–18). It is very likely, from the quantity of hollow voussoir tiles on the site, that at least one room was vaulted but there is no clear evidence of how it was roofed or where it was located.

Tegulae in fabrics 1 and 2 were used to line the graves of burials [825], [267] and infant burial [383]. Infant burial [383] was interred on a tegula which was 480mm long and 310–340mm wide; in fabric 1, it is not closely datable. Juvenile burial [267] contained large fragments of four tegulae (fabrics 1 and 2). As the graves where traces of wooden coffins survived contained nothing more than residual flakes of tile in fabric 7, it appears that flat roof tile linings were used as an alternative to wooden coffins.

IMBRICES

Most of the imbrex from the site is in fabric 1, followed by fabric 1b. The only unusual feature of the assemblage is that many of the imbrices in fabrics 1 and 1b have small dimpled depressions at the apex of their wider end (Fig 5.11, T3). The dimpled tiles came from period 3, phases 4 and 5 deposits, including the demolition material from dumps G71, and seem to be typical of the roof tiles used in the 2nd and 3rd centuries. They may have replaced a 1st-century AD roof of light yellow tiles in fabric 6; there is a concentration of fabric 6 tegula and imbrex fragments in trackway ditch G518 (period 3, phase 2), which is likely to represent demolition debris from a roof.

FLUE TILE

Half box-flue tiles

Six fragments of half box-flue tile in fabric 6 were recovered, three of which were with the bath house demolition material from dumps G71. These tiles have lattice-scored keying on the sanded base and flanges on the smoothed upper face; flanges *c* 68mm and 70–75mm tall survive on two of the tiles, both of which have burnt *opus signinum* mortar on their keyed face (Fig 5.11, T4). The other examples are from demolition layers

in the same area, with the exception of one from fill [1014] of ditch G519 (period 3, phase 2), which, if it is not intrusive, may pre-date those in dumps G71. This type of tile was used to form a heated internal cavity wall in conjunction with a pillared hypocaust system, and is often associated with military bath houses, though it also appears in urban contexts (Brodribb 1987, 65–7; Black 1996, 60–62). In London, half box-flue tiles in MOL fabric 2454 (the same as Snodland fabric 6) have been found in pre-Boudican fire destruction deposits in the City and Southwark (Pringle 2007, 207, fig 3) and they are the earliest type of flue tile found in Canterbury (Black 1995, 1269, 1278). Perhaps of greater relevance to their appearance at Snodland is the occurrence of half box-flue tiles in the tile assemblage from Eccles villa, where they were probably manufactured.

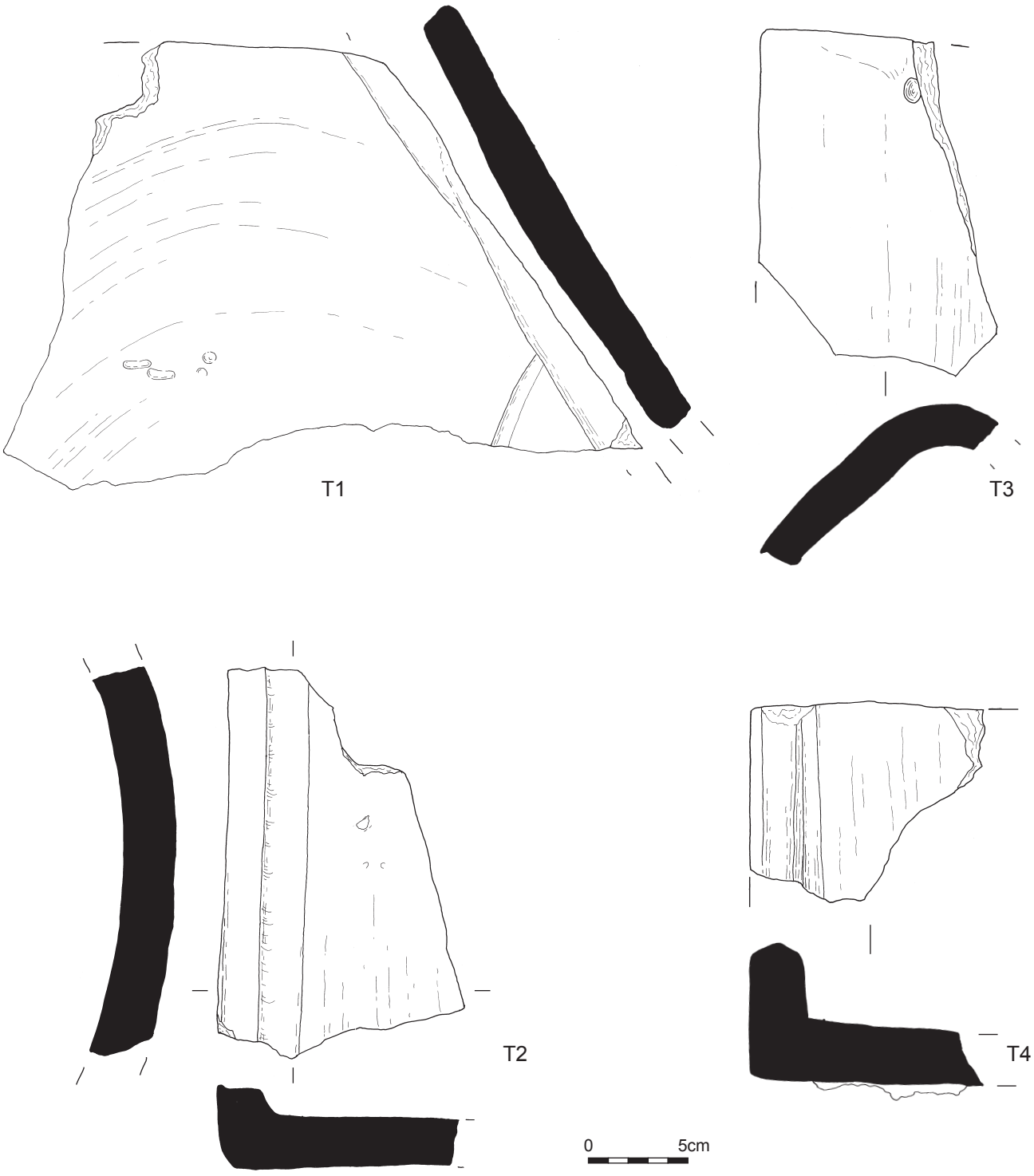

Fig 5.11 Roman tiles nos T1–T4

Box-flue tiles

The most common keying pattern on both box-flue and voussoir tiles in fabrics F1 and F3 appears to be diagonal or saltire combed bands, though vertical and curved bands are also present (Fig 5.12). The near impossibility of distinguishing between box-flue and voussoir tiles in the case of smaller fragments means that the latter are probably under-represented in the quantification. Of the box-flue tiles that can be positively identified, most are in fabrics F1 and F2.

Almost all the keyed faces have combed keying, the exception being a tile with scored lattice keying in fabric F2. An example in fabric F4 with vertical bands of combed keying (keying type 7) from fill [4] of ditch G714 (period 3, phase 4) has a straight knife cut on the keyed face, probably part of a rectangular vent (T5). A tile in fabric F2 from the same fill, with vertical, widely spaced, wavy combing (keying type 8), has a curved cut on a plain face, probably part of a circular or ovoid vent (T6). Distinctive combing patterns were also noted on several other fragments; all the flue tile in fabric F6, from period 3, phases 4 and 5, has sharply curved combing (keying type 3), which has not been observed on any other fabrics in the flue tile assemblage (T7). Several tiles in fabric F2 with deeply impressed combing (keying type 4) came from demolition deposits, including the debris from dumps G71 (T8). Broad zigzag combing (keying type 2) was noted on two tiles from period 3, phase 5 dumps, in fabrics 2 and 5 (T9). Part of a box-flue tile in fabric F1, with diagonal combed bands of keying on adjacent faces, has a slightly concave horizontal vent cut 45–50mm long set only *c* 91mm from its end; this may have had two vents in one face (T10). Lattice-pattern keying using a two-toothed comb (keying type 9) was seen on a tile in fabric F2 (T11).

VOUSSOIR TILES

Hollow voussoir tiles were used to construct arches in vaulted roofs, usually but not invariably in conjunction with hypocausts, and probably first came into use in the 2nd century AD. The majority of the tiles here, which are in fabrics 1 and 3, appear to have combed keying on all faces, predominantly crossed diagonals (saltire), with a small round vent in the longer, tapered face (Fig 5.12). A complete intrados face (the smaller end of the tile) with this type of keying in fabric F1, measuring *c* 143 × 130mm, came from period 3, phase 4 demolition deposits (T12). Tile T13, from dumps G71, shows the tapered side face of a similarly keyed tile with a circular vent *c* 20–25mm in diameter (fabric F3). The vent is 115mm from the end of the tile. A less common type of voussoir tile, also in fabric F3, has diagonal, horizontal and vertical combing (T14). This probable extrados face has an edge-to-edge dimension of 145mm.

CHANNELLED BRICK

Eight fragments of moulded rectangular brick (fabric 1b) with a U-shaped channel running the length of the brick were found amongst the demolition material in dumps G71 (period 3, phase 4) (Fig 5.13). The most complete example is *c* 140mm high, 150mm wide and 220mm long; the internal height of the walls is *c* 85mm and the diameter of the channel is *c* 70mm (T15). The second example (T16), from the same pit, has no complete dimensions. Brodribb refers to a brick with a semicircular channel from Lower Thames Street in London published, without any indication of its size, by Roach-Smith in 1849 (Brodribb 1987, 88), and suggests that it is clearly a drain, but the diameter of the channel in the Snodland examples appears to be too small to have served as an external drain. It seems feasible from their dimensions that they may have acted as supports for a horizontal run of narrow-bore lead piping which would have formed part of the water supply system, possibly connecting water tank to boiler or leading from boiler to point of use, or to a fountain. Lead pipes such as those found at Queen Street in the City of London, one of which has external dimensions of 67 × 44mm, would have fitted comfortably into these channels (Wilmott 1982, 240–41).

WATER PIPE

Fragments of a flanged wheel-made ceramic pipe in a fine, soft version of fabric 6 were recovered from period 3, phase 4 demolition deposits in dumps G71; the external diameter of the pipe was approximately 180mm, and the internal diameter *c* 100mm with walls *c* 40mm thick (T17, Fig 5.13). Wheel-made ceramic pipes in similar fabric and with similar dimensions were recovered from the first phase of the bath house at Eccles, where they were provisionally identified as functioning as drains and as a conduit for lead piping (Detsicas 1963, 132; 1965, 77). Although their function at Snodland is uncertain, their date is likely to be the same as at Eccles, early in the period *c* AD 65–120 (Detsicas' provisional dating).

REDUCED AND VITRIFIED BRICK AND TILE

Reduced and vitrified tile, mainly brick and tegula, came from a number of contexts. Over 50% of the reduced tile came from period 3, phase 5 demolition deposit [1012]; this group is composed mainly of brick, including three possible vitrified *bessales* and one imbrex, and is likely to have come from a hypocaust, although other sources are possible. A concentration of vitrified brick was present in posthole fill [613] of period 3, phase 4.

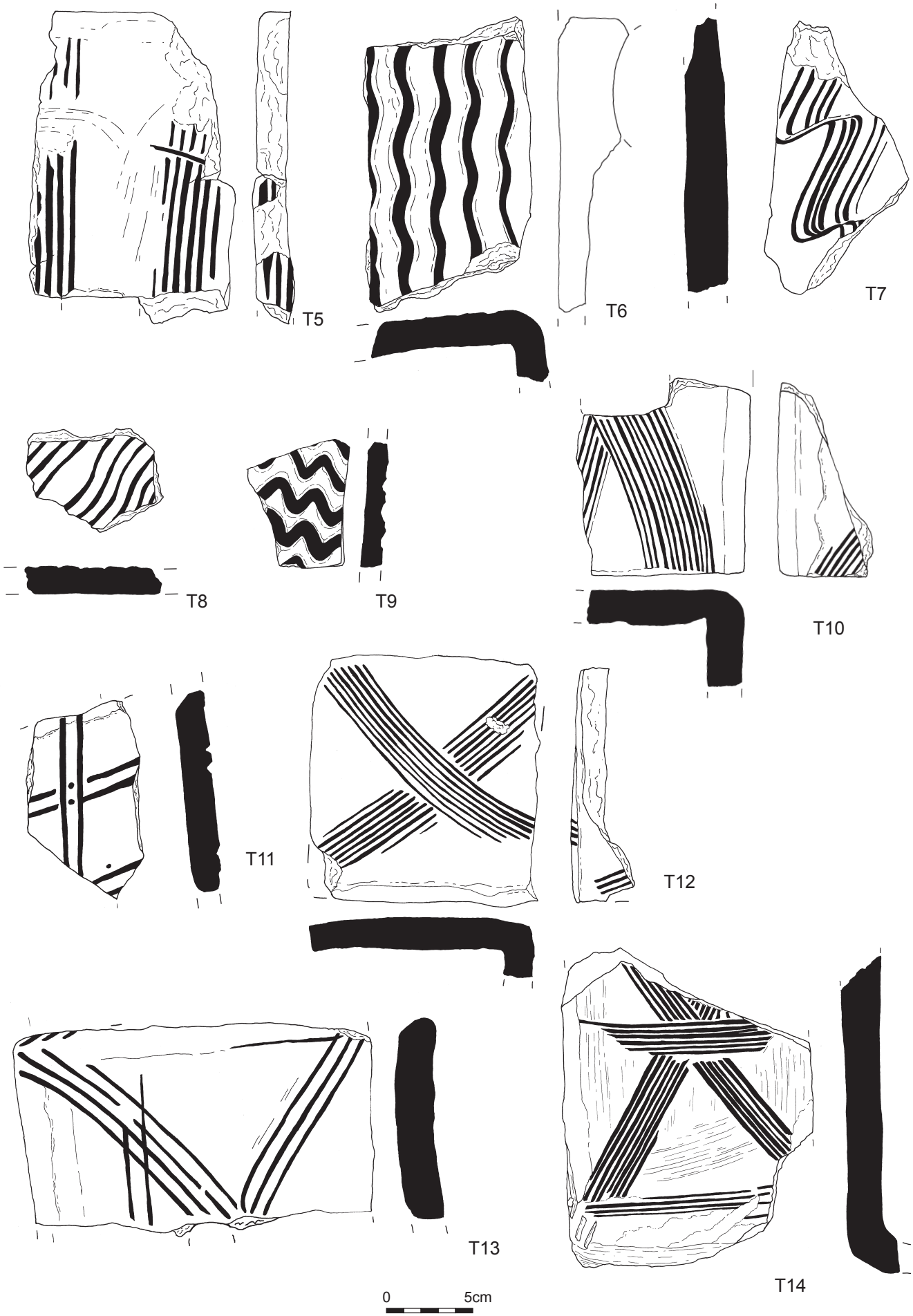

Fig 5.12 Roman tiles nos T5–T14

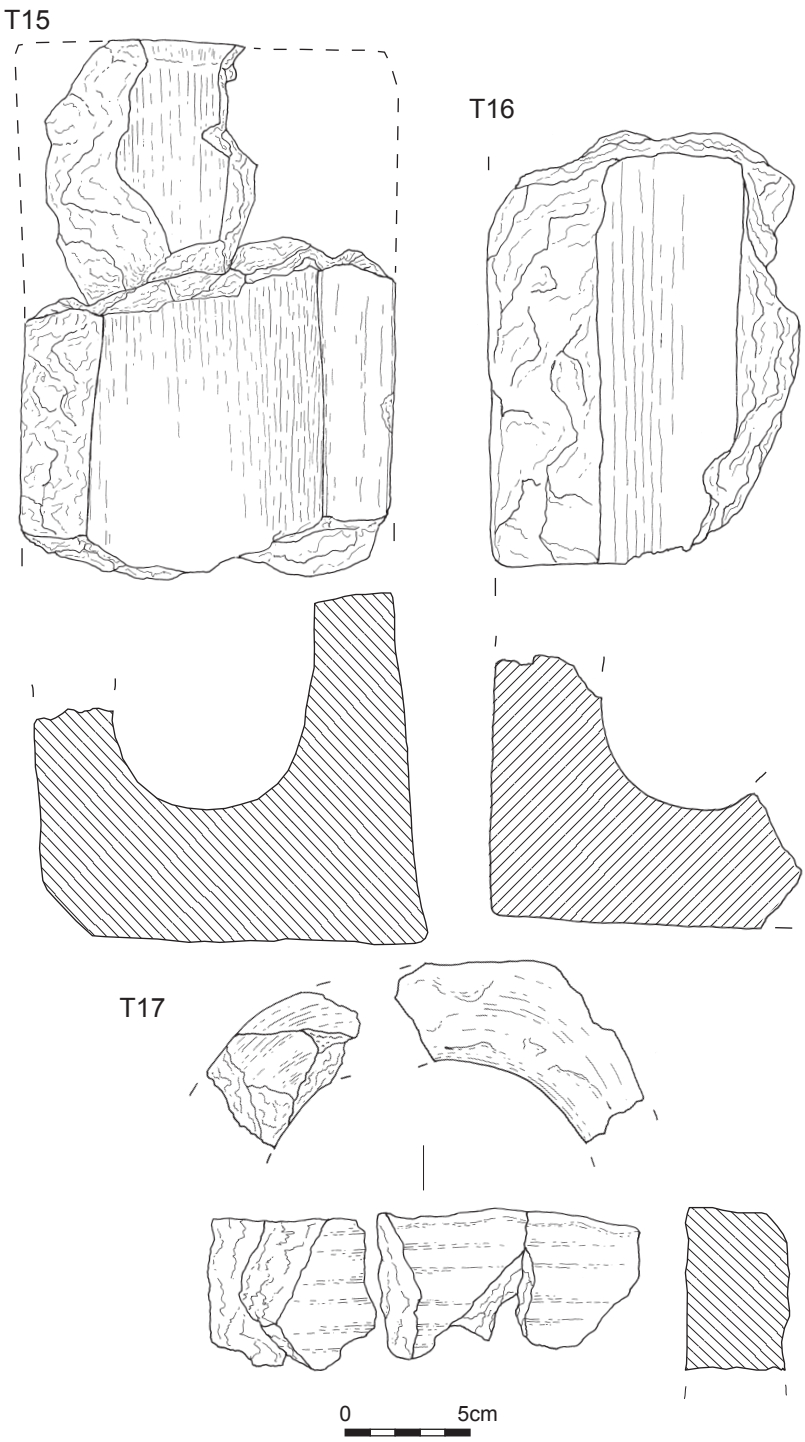

Fig 5.13 Roman channelled brick and water pipe nos T15–T17

Tile markings

Sarah Porteus

SIGNATURE MARKS

A total of 36 different 'signature' and tally marks were identified in the Snodland material. The most common signature type is the semicircular arc, given the code 'arc' in the notation. A number preceding the code indicates the number of times the pattern is repeated in parallel, an 'S' or 'L' after the code indicates a smaller or larger version respectively. Where possible, the marks have been related to the Warry type series (Warry 2006, 149); where a Warry type could not be assigned a code containing 'SFS' was allocated. For ease of understanding Warry types A and S are simplified to 'arc'. The majority of 'signature' marks are variations of the semicircular arc, with 93 examples of the single arc. The arcs vary in number from one to three running parallel to each other in a 'rainbow' style. The semicircular arc accounts for 61% of all marks identified and the large wide semicircular arc for 17%; the remaining 12% of marks are shared between 21 different basic types. In some cases the two types appear together on a tegula. The signatures occur on tegulae and bricks in all fabrics and do not appear to be specific to any particular fabric, though fabric 6 was marked mostly with the wider arc. Table 5.9 shows the breakdown of signature and tally marks with the count of number of fragments.

TALLY MARKS

Knife-cut marks of the type known as 'tally marks' appeared on the ends of three tiles: one '\' mark and one '/\' mark, both from [572] (period 3, phase 5), demolition material in dumps G71; and one 'I' mark from demolition deposit [307] (period 3, phase 5). There is widely believed to be a lack of tally marks from civilian sites (Warry 2006, 91) and the data from the tiles at Snodland appear to follow this trend. However, a number of markings observed on the upper surfaces of the tiles may have served a similar purpose, roughly corresponding to Roman numerals and including I, V, X, L and C (Warry codes P and X; Snodland codes SFS/G, SFS/J/and SFS/H). A code of 2SFS/G was given where two vertical strokes were present (Table 5.10). In four cases these possible tally marks occurred in conjunction with the arcing signature marks.

GRAFFITI

Unusual markings were found on four flat tile fragments (Fig 5.14). One, in fabric 6 from demolition dump [811] (period 3, phase 5), has been inscribed with a rounded tool with a truncated mark which looks like 'VD' with a knife-scored line to one side (T19, RF<536>). A second, probably a tegula, in fabric 2 from fill [859] of ditch G66 (period 3, phase 4),

Code	Description	Count
1arc	1 arc (variant of Warry S)	93
2arc	2 arcs (variant of Warry S)	30
3arc	3 arcs (variant of Warry S)	12
1arcS	1 small arc (variant of Warry S)	3
2arcS	2 small arcs (variant of Warry S)	4
3arcS	3 small arcs (variant of Warry S)	1
1arcL	1 wide arc (variant of Warry A)	25
2arcL	2 wide arcs (variant of Warry A)	8
3arcL	3 wide arcs (variant of Warry A)	5
4arcL	4 wide arcs (variant of Warry A)	1
Warry 1B	1 loop	1
Warry 2B	2 loop	1
Warry 2BS	2 small loops	1
Warry 2BL	2 large loops	2
Warry H	inverted arc	3
Warry O	circle	4
Warry P	approximate V shape	1
Warry Q	inverted loop with downturn at left side	1
Warry R	2 overlapping arcs side by side	2
Warry X	X shape	2
Warry H/Q	inverted arc with slight downturn at left side	1
SFS/A	half arc	4
2SFS/A	2 half arcs	1
SFS/B	3 arcs over X	1
SFS/C	arc with 1 vertical line and 1 arc across the corner.	1
SFS/D	2 crossed arcing lines	1
SFS/E	loose 'R' shape	1
2SFS/E	2 loose 'R' shapes	1
SFS/F	arc with small squiggle below	1
SFS/G	1 vertical mark	7
2SFS/G	2 vertical marks	4
SFS/H	backwards leaning 'C'	1
SFS/I	back slash mark '\'	1
SFS/J	'L' mark	1
SFS/K	half arc across corner	1
SFS/L	2 horizontal marks	1
SFS/M	half arc over loop	1
Total marked fragments		**232**

For codes, see Chapter 5.4

Table 5.9 Signature marks: descriptions and numbers of marked fragments

has a series of lines scored with a blunt implement including a possible 'V' and 'D', with a faint finger-drawn line below and further truncated marks (T20, RF<536>). A fragment in fabric 1 from fill [764] of pond G81 (period 3, phase 5) has two scalloped lines, one superimposed on the other, with a scored line below (T21, RF<534>). This may be an example of decoration or cursive handwriting and is a shallow incised pattern made with a fine object which appears to have two side-by-side points, similar to a modern-day fountain pen nib. The final mark is on a tile fragment in fabric 1b from fill [585] of gully G518 (period 3, phase 2). Incised lines drawn with a knife point or similar fine implement appear to show the eye and part of the nose of a horse wearing a bridle, represented by two lines over the nose (T22, RF<535>).

Inscription detail	Description	Count
Knife cut, on end of tile	\	1
Knife cut, on end of tile	/\	1
Knife cut, on end of tile	I	1
Finger drawn on surface of tile	I	8
Finger drawn on surface of tile	II	4
Finger drawn on surface of tile	V	1
Finger drawn on surface of tile	X	2
Finger drawn on surface of tile	L	1
Finger drawn on surface of tile	C	1
Finger drawn on surface of tile	3 arcs with 'X' below (SFS/B)	1
Finger drawn on surface of tile	2 arcs with 'I' below (2arc + SFS/G)	1
Finger drawn on surface of tile	1 arc with 'I' below	2
Finger drawn on surface of tile	half arc with 'I' below	1

For codes, see Chapter 5.4

Table 5.10 Descriptions of possible surface tally marks with number of marked fragments

OTHER MARKS

Imprints of flora and fauna were identified on 26 brick and tile fragments. By far the most commonly represented animals were dogs and cats; two potentially datable hobnail shoe impressions were also identified (Table 5.11). During the drying process leaves or twigs have also blown onto the surfaces and left impressions, and it appears that a hole in the upper surface of an imbrex from pond fill G513 (period 3, phase 3) was caused when the tiler attempted to remove a twig prior to firing, similarly with leaves from the same context. A worm tunnel was identified in the underside of a tegula.

Wall plaster and mortar

PAINTED WALL PLASTER AND *OPUS SIGNINUM*

Forty-three fragments of painted wall plaster are present. The plaster is of plain quality; backing mortars are either sandy lime mortar or *opus signinum* mortar in a variety of textures. The paint colours used on the *opus signinum* are white and red, with white, pale pink, red and green on the sandy mortar; too little survives to provide information on the decorative schemes.

The earliest painted plaster is from a period 3, phase 4 deposit in Room C in Building 2, which produced a single fragment of plain pink painted plaster on sandy lime mortar. Most of the painted plaster is from period 3, phase 5 wall-robbing trenches. Fragments painted white, pink and pink overpainted with green were found in the robber trenches of walls G62, G72, G73 and G77, probably deriving from the interior decoration of some or all of rooms C, D, G and H, but the remains are too fragmentary to provide information on the decorative schemes within the rooms. Painted plaster on *opus signinum* backing came from robbing of walls G72, G73 and G77; this tile-flecked mortar, which has hydraulic properties, is usually used in structures associated with water.

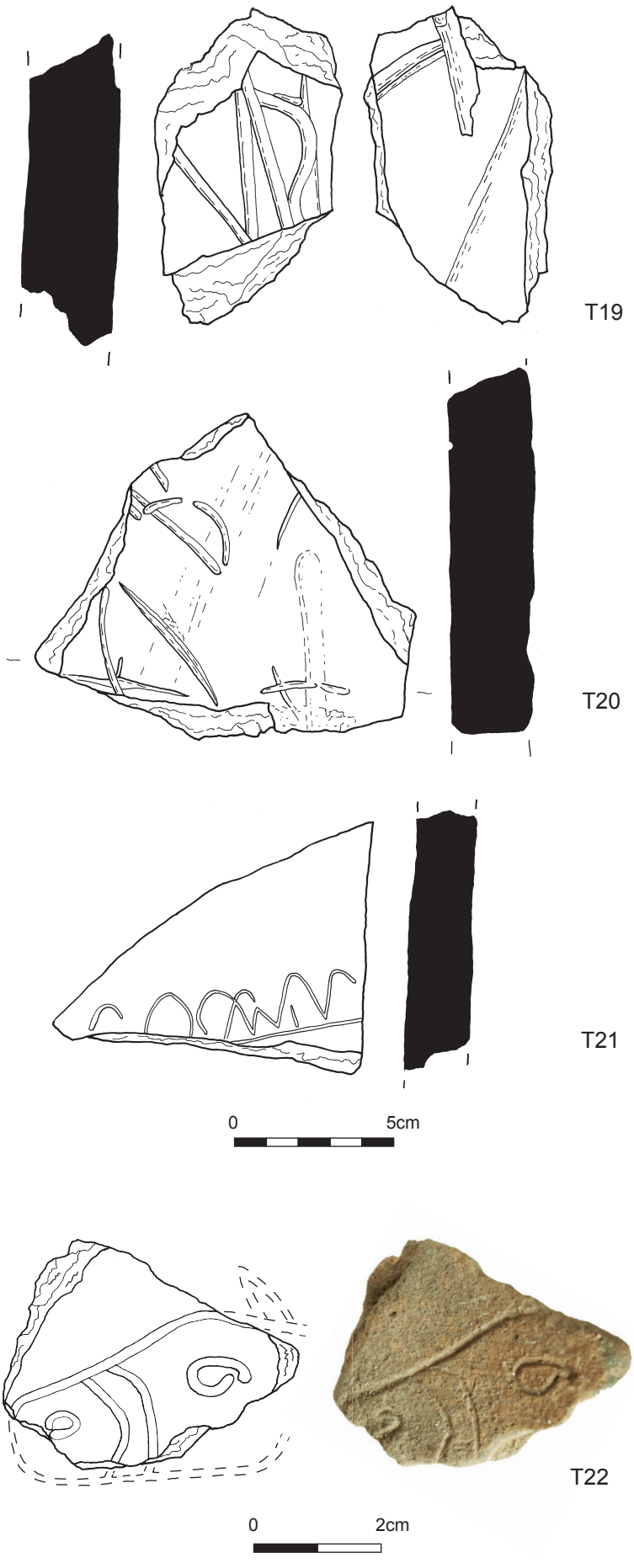

Fig 5.14 Roman tiles with graffiti nos T19–T22

Animal/plant	No of tiles
Dog?	7
Cat?	5
Dog/cat	4
Sheep/goat	1
Rabbit	2
Leaf	2
Twig	1
Worm	1
Hoof	1
Hobnailed footwear	2

Table 5.11 Accidental prints and impressions on ceramic tiles

Opus signinum mouldings were found in deposits of period 3, phases 4 and 5. From demolition dumps G71 came a large fragment of curved opus signinum mortar render with a smooth surface; its surviving dimensions are 210+ × 170+ × 27.5mm. It may have come from an internal architectural feature such as a door or window aperture or a tank or plunge pool (T18, Fig 5.15). The robber-trench backfill at the north-east end of wall G73 produced two pieces of curved opus signinum mouldings, both painted pale pink ([511], [513]) and possibly associated with activities carried out in rooms G or H.

MORTAR

Two main types of mortar were noted, both of which may have been used as wall render or a base layer for wall plaster.

Fabric M1 has a moderate to coarse textured sandy lime mortar, light brownish-yellow to white in colour with rounded pebble inclusions. It contains very sparse, if any, tile inclusions. It first appeared in 2nd-century AD deposits and was found in the backfill of the robber trenches of walls G62, G72, G73 and G77.

Fabric M2 is a fine to medium grade sandy lime mortar, white to cream in colour, with blocky white lime inclusions up to 5mm and sparse tile inclusions. It was found in the backfill of the robber trenches of walls G62, G72, G73, G74 and G75.

DISCUSSION

Most of the occupation on the site is from the Roman period: post-medieval activity is limited to small quantities of brick and tile from modern service trenches or other disturbances and sporadic small-scale rubbish disposal.

The majorioty of the Roman tile from the site, including that used on Buildings 1 and 2, is in

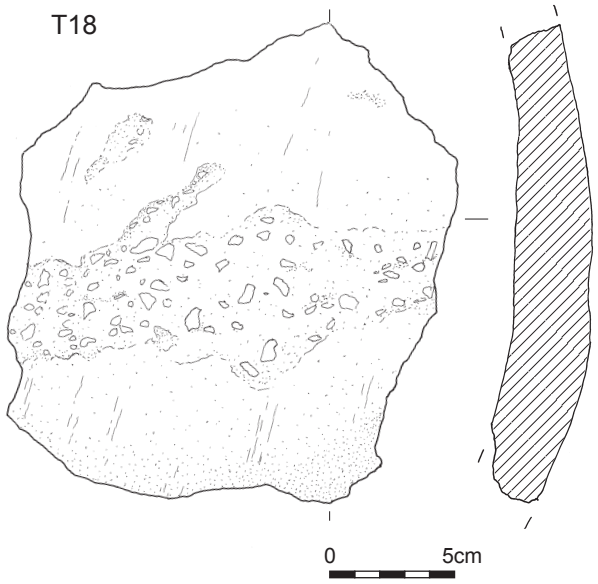

Fig 5.15 *Opus signinum* no T18

variations of an orange-red fabric which is likely to have been made in the vicinity of the villa. As well as roof tile and bricks, tiles in this group of fabrics include specialised types such as box-flue and voussoir tiles and channelled bricks.

Building materials brought in from other sources include tile almost certainly made at the Eccles Roman villa, a smaller amount of tile in fabrics similar to those of the Thames valley brickearth of London and Canterbury, and flue tile possibly made at the kilns at Hartfield, East Sussex.

At least three building phases are suggested by the building materials assemblage. The first building phase for which we have structural evidence appears to be date to the second half of the 1st century AD and is characterised by the use of the light yellow and buff fabrics 6 and 7 and orange-red fabric 1. Some new material, including the versions of the orange-red fabrics containing more abundant blackish quartz and more iron-rich inclusions, used for bricks and keyed box-flue and voussoir tiles, appeared probably early in the 2nd century AD. There also seems to have been widespread reuse of the earlier tile in the buff/yellow fabrics, some of which may still have been in use. The bulk of the tile from the site, including the roof tile from the destruction spread, probably came from later structural phases from the 3rd or 4th centuries.

The tile types present in fabric 6 (MOL 2454), which appears to be one of the earliest fabrics on the site and is thought to have originated from the nearby Eccles villa, are of interest. As well as brick and roof tile, half box-flue tiles and ceramic pipes are present. Both these forms were found at the Eccles villa, where the ceramic pipes were associated with the first phase of the bath house in the mid 1st century AD.

5.5 FIRED CLAY AND DAUB

Elke Raemen

A relatively small assemblage, consisting of 454 fragments weighing just over 9kg, was recovered from 19 contexts. The group is dominated by daub fragments. The assemblage was recorded in full detail on pro forma sheets for the archive.

OVERVIEW AND DISCUSSION

Six different fabrics were identified (Table 5.12). Fabric 1 dominates, followed by fabric 2A (Table 5.13). Given the small overall quantities, little can be concluded about sources for raw material, although they are likely to have been local nor is it possible to draw inferences about chronological variations in fabric and the use of temper.

Although most pieces are featureless, the presence of wattle imprints (ranging in diameter between 2mm and 28mm) as well as corner fragments and pieces retaining flat (wall) surfaces suggests that many of the fragments could be structural daub.

Fabric	Description
F1	sparse fine sand-tempered with occasional to moderate organic temper and occasional chalk to 5mm; some rare quartz to 1mm
F2A	sparse fine sand-tempered with rare iron oxide inclusions to 1mm
F2B	sparse fine sand-tempered with rare iron oxide inclusions to 1mm and occasional organic temper
F3	fine silty clay
F4A	moderate fine to medium sand-tempered with rare quartz and iron oxide inclusions to 2mm
F4B	moderate fine to medium sand-tempered with rare quartz inclusions to 1 mm; occasional organic temper

Table 5.12 Overview of the fired clay fabrics

	Period					
Fabric	3.2	3.3	3.4	3.5	4	**Total**
	N					
1	1		36	261		298
3	1		22	10		33
2A	1	5	3	109		118
2B		2			1	3
4A			1			1
4B				1		1
Total	**3**	**7**	**62**	**381**	**1**	**454**

N = no of pieces

Table 5.13 Quantification of the fired clay by fabric and period

As the majority of the fragments were recovered from period 3, phase 5 demolition deposits, the use of the structural daub should almost certainly be dated to the earlier phases, potentially to Building 4 (B4; period 3, phase 4).

The majority of the fragments were recovered from three features. Two of these (posthole [152], fill [139] and pit [138], fill [113]) were associated with or cut possible B4. Fill [139] contained a total of 108 fragments weighing just over 2kg.

The complete absence of fragments from the other postholes associated with the building is unusual and is not fully understood. Small hoard pit [138] was cut into the southern part of B4 and contained 137 fragments of burnt clay (2868g), including two pieces with impressions of rectangular stakes.

Demolition deposit [17] over the masonry remains of B2 yielded 116 pieces (3334g) and these fragments clearly related to the former structure. Material from other features is scarce and often consists of fewer than 10 pieces.

5.6 REGISTERED FINDS

Elke Raemen

A total of 537 objects were assigned a registered finds number (RF<00>), including the stamped samian ware, building material fragments, glass and coins, all of which are discussed elsewhere (Chapter 5.3, 5.4, 5.7 and 5.8). Discussed here are the remaining 219 artefacts that are ascribable to a functional category.

Also included are the 924 nails from stratified contexts; those recovered from the subsoil and topsoil are not covered. The nails were not assigned registered finds numbers and are described within their functional categories – for example, nails with structural metalwork, hobnails with other shoe elements. Nails have not been included in the quantification tables.

After the summary of the assemblage, the finds are discussed by category, with a catalogue of full descriptions. Abbreviations used in the catalogue are L (length), W (width), H (height), T (thickness), Di (diameter) and Wt (weight).

The finds overview focuses primarily on stratified, Roman finds (131 in total). However, as a result of the metal detector survey, there are in addition a large number of unstratified objects. These are included in the catalogue and where they are believed to be of Roman date, they have been considered with the stratified finds. Prehistoric or post-Roman finds and objects of uncertain date have been only briefly discussed. A full catalogue can be found with the archive.

The high proportion of metal finds within the registered finds (89%) is almost certainly due to the use of metal detectors on site. As most of the finds recovered in the 19th century and from the previous excavations have never been published, it is difficult to compare this assemblage to the previous ones although where possible reference has been made.

SUMMARY OF THE ASSEMBLAGE

Over half of the stratified finds, based on the dating of the pottery, are likely to be residual but most of these are the 36 objects recovered from the fill [572] of dumps G71. The problem of knowing how much of the assemblage is residual is exacerbated by the fact that most of the objects are not intrinsically datable.

Finds were recovered from features assigned to period 3, phases 2 to 5 (Table 5.14) and although finds of earlier date were also recovered these were either unstratified or residual. It should be noted that although the finds derive mainly from the demolition deposits of period 3, phases 4 or 5, they could easily have been in use during the earlier phases. Overall, the largest functional groups were personal adornment accessories and tools.

	Period					
Function	3.2	3.3	3.4	3.5	unstratified	**Total**
	N					
Personal adornment	2	1	12	12	36	63
Toilet instruments			4	1		5
Household equipment	1	3	4	9	6	23
Locks & keys			1			1
Writing equipment			2		2	4
Weighing/measuring			2	3	5	10
Textile working/ production				1	3	4
Agricultural tools			3	2	2	7
Tools – other			17	11	3	31
Bone-working waste				1		1
Fishing equipment			1		1	2
Horse equipment			1	1	3	5
Military equipment					1	1
Weapons/bullets			1		2	3
Structural fittings			4	2	1	7
Miscellaneous fittings			6	2	17	25
Miscellaneous other			1	3		4
Undiagnostic			3			3
Unknown function		3	7	4	6	20
Total	**3**	**7**	**69**	**52**	**88**	**219**

N = no of pieces

Table 5.14 Overview of the registered finds by period and by functional type

An overview of objects by land use is given in Table 5.15. Enclosure 4 (EN4 period 3, phase 4) and Open Area 3 (OA3, period 3, phase 5) represent the largest concentrations of finds, mostly in demolition deposits and robber trenches. Unstratified finds reflect both casual losses and agricultural land use, for example manuring.

OVERVIEW BY PERIOD

Period 3, phase 2

In this phase only three objects were found: a buckle fragment (RF<325>) and a melon bead (RF<450>) from Field System 3 (FS3) and a single copper-alloy sheet fragment (RF<462>) from rubbish pit G535.

Although there were very few finds from features, those recovered from later deposits almost certainly also date to this phase and as most finds are not intrinsically datable assigning the use of finds to exact phases is problematic. An exception

Land use	No of artefacts
B2	2
B4	2
EN2	2
FS3	3
FS4	5
FS5	13
EN4	52
OA3	52
Total	**131**

Table 5.15 Quantification of stratified registered finds by land use

is nail-cleaner RF<226> from dumps G71, which is a type generally dated to the mid 1st–2nd century AD (Crummy 1983, type 1a, 57–8). In addition, stratified brooches dating to the 1st century AD recovered from later features include a Colchester type (RF<40>) and La Tène III brooch (RF<66>). A further five Colchester types and Colchester-derivatives were recovered from the subsoil.

Period 3, phase 3

Only seven finds came from this phase. Diagnostic objects include a triple-segmented bead (RF<58>) and a copper-alloy stud (RF<10>) representing a box or furniture fitting. Some possible iron vessel fragments (RF<314>) were recovered from well [1278]. Other finds consist of undiagnostic sheet or strip fragments.

Period 3, phase 4

BUILDING 4 (B4)

Quern fragments RF<531> and RF<533> were recovered from Building 4 (B4). As the fragments were recovered from posthole [879] and post pad [760], it seems unlikely they were in contemporary use with B4 (see below for further discussion on quernstones).

DEMOLITION DEPOSITS G71

The largest assemblage of registered finds was recovered from demolition fill [572] in dumps G71 (Table 5.16). An overview of the finds by functional type can be found in Table 5.16. As mentioned above, many of the dress accessories as well as the toilet instruments could be residual. Unfortunately too little survives of most of the tools to establish their exact function and none are complete, which suggests discard after breakage rather than casual loss. Why these metal items were discarded and not recycled is not clear. Readily identifiable tools include an awl (RF<455>), a chisel or punch (RF<453> and RF<512>) and a whetstone (RF<517>). Most of the finds probably represent a range of tools used as part of the daily workings of the farm, rather than for any specialised crafts or industries. Given the presence of probable residual items in the dumps, and that the tools themselves cannot be closely dated, it is difficult to know the period of use to which the tools. Other demolition deposits yielded a further 13 finds, including various tools and dress accessories.

Function	No of artefacts
Personal adornment	5
Toilet instruments	3
Household equipment	1
Locks & keys	1
Writing equipment	2
Weighing/measuring	1
Agricultural tools	1
Tools – other	10
Miscellaneous fittings	2
Structural fitting	3
Undiagnostic	3
Unknown function	4
Total	**36**

Table 5.16 Registered finds assemblage from demolition deposit [572] by functional type

FIELD SYSTEM 5 (FS5)

No particular concentrations were found in the ditches. The largest assemblage, of nine finds from ditch G711 (EN4), includes an intrusive medieval lead rolled fishnet sinker (RF<289>) and a heavy, copper-alloy ring with intaglio (RF<73>). Rubbish pit G718 contained a single registered find of a residual La Tène III brooch (RF<66>).

Period 3, phase 5

Of the 52 artefacts, 19 were recovered from demolition dumps G84 and ten from small hoard pit [138]. Among the latter are three tool fragments and a possible steelyard weight, in addition to pieces of molten copper-alloy and glass, which are likely to represent burnt objects rather than waste. No larger groups or significant finds were recovered from other features or groups.

OVERVIEW BY FINDS CATEGORY

Prehistoric small finds

A copper-alloy sword pommel and handle (RF<256>) of Late Bronze Age date was recovered from demolition dumps G71 (period 3, phase 4). This fragmentary piece presumably derives from a disturbed Bronze Age feature or is possibly a curated object.

1. RF<256> Copper-alloy sword (Fig 5.16)
[571], G71, EN4; PERIOD 3.4
Incomplete. Pommel and handle fragment. Late Bronze Age.

2. RF<285> Copper-alloy brooch (Fig 5.16)
[2], G1000, SUBSOIL
Incomplete. Bow and spring fragment only. La Tène I (Hull & Hawkes 1987, type 1B). 4th century BC.

Fig 5.16 Prehistoric registered finds nos 1 and 2

Roman small finds

PERSONAL ADORNMENT AND DRESS

The majority of objects in this category consists of jewellery. Fewer than half of them are complete or near-complete, suggesting a mixture of casual loss and discard after breakage. Both male and female adornment is represented. Shoe wear is represented by hobnails as well as boot-plates.

Brooches

The brooches are all of 1st-century AD type. The Snodland brooches, all utilitarian examples, coincide therefore with the main period when brooches were fashionable (see Bayley & Butcher 2004, 206–7). Previous excavations recovered a Nauheim-derivative, found to be residual in an early to mid 3rd-century AD context (Seager Smith 1995, 93).

ONE-PIECE BROOCHES
3. RF<66> Copper-alloy brooch (Fig 5.17)
[319], G718, FS5; PERIOD 3, PHASE 4
Incomplete. Nauheim-derivative. Spring with four turns; half the bow and most of the pin survive; catch-plate missing. Bow decorated with marginal grooves.

4. RF<100> Copper-alloy brooch (Fig 5.17)
[2], G1000, SUBSOIL
Near-complete. Nauheim-derivative. Spring with four turns. Catch-plate partially corroded away. Bow decorated with punched holes.

TWO-PIECE BROOCHES
5. RF<171> Copper-alloy brooch (Fig 5.17)
[2], G1000, SUBSOIL
Incomplete. Colchester. Oval-sectioned bow fragment with fragment of side wings. Severely corroded.

6. RF<365> Copper-alloy brooch (Fig 5.17)
[945], G1000, SUBSOIL
Incomplete. Colchester. Crested bow with marginal grooves. Spring with eight turns. Pin missing.

7. RF<12> Copper-alloy brooch (Fig 5.17)
[2], G1000, SUBSOIL
Near complete. Colchester B. Spring and wing incomplete; part of pin missing. Plain.

8. RF<40> Copper-alloy brooch (Fig 5.17)
[77], G711, EN4; PERIOD 3, PHASE 4
Incomplete. Colchester BB. Slight crest and catch-plate with single triangular perforation. Pin, wings and part of spring broken.

9. RF<14> Copper-alloy brooch (Fig 5.17)
[2], G1000, SUBSOIL
Incomplete. Colchester-derivative. Groove on upper part bow, crossed by oblique lines. Pierced catch-plate; pin and most of spring missing.

PENANNULAR
10. RF<264> Copper-alloy brooch (Fig 5.18)
[623], G84, OA3; PERIOD 3, PHASE 5
Complete. Fowler type C (Fowler 1960, 152). Pin bent. 1st century BC to 5th/6th century AD (see Crummy 1983, 18–19 for note by Fowler on dating).

Hairpins

Of the 12 hairpins, nine are incomplete and only examples with intact heads have been illustrated. The six hairpin fragments recovered from previous excavations are mainly of bone (Seager Smith 1995, 95). Where the head is preserved, they are spherical-headed (eg, Crummy type 3; Tilley 1967, 214, nos 2, 3 and 9). Copper-alloy hairpins were represented by one fragment (no 10), as well as a complete example with grooved head on a concave base (Cool 1990, 164, group 13), recovered from a mid 3rd-century AD context (Seager Smith 1995, 93).

COPPER ALLOY
11. RF<417> Copper-alloy hairpin (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 51+mm. Terminal missing.

IRON
12. RF<282> Iron hairpin (Fig 5.19)
[746], G1000, SUBSOIL
Complete. L 50mm. Small pin with knob head (Cool 1990, group 1c).

13. RF<436> Iron hairpin (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 48.5+mm. Terminal missing.

14. RF<510> Iron hairpin (not illustrated)
[617], G731, FS5; PERIOD 3, PHASE 4
Incomplete. L 60+mm. Terminal missing.

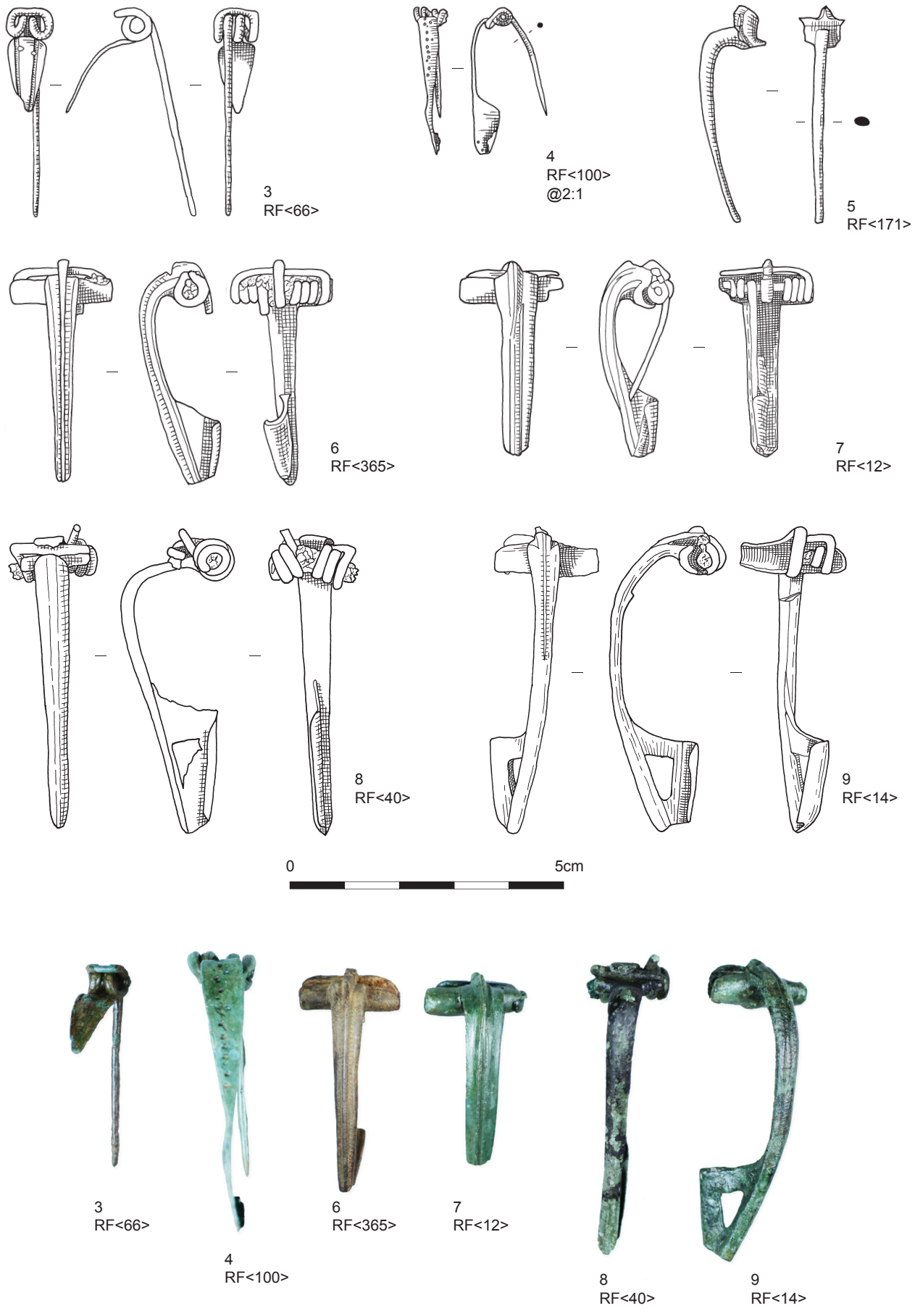

Fig 5.17 Registered finds: brooches nos 3–9

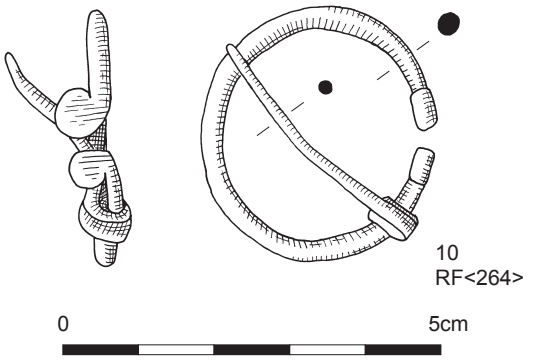

Fig 5.18 Registered find: penannular brooch no 10

BONE

Where possible, bone hairpins have been classified according to Crummy 1983 and Greep 1995. Of the majority of pins, however, only the shaft survives, and although some of these can be identified as hairpins (eg RF<254>) the identification of a number of them is uncertain and the possibility that they are needle fragments cannot be excluded (eg RF<68> and RF<175>).

15. RF<255> Bone hairpin (Fig 5.19)
[617], G731, FS5; PERIOD 3, PHASE 4
Incomplete. L 58.9+mm. Conical head (Crummy type 1). Later 1st to 4th century AD.

16. RF<39> Bone hairpin (Fig 5.19)
[74], G813, OA3; PERIOD 3, PHASE 5
Complete. L 88mm. Semicircular head with slightly conical upper half (Crummy type 3B). AD 150–400.

17. RF<253> Bone hairpin (Fig 5.19)
[74], G813, OA3; PERIOD 3, PHASE 5
Complete. L 85.8mm+. Inverted cone with circular outline (Greep type B2.1).

18. RF<68> Bone ?hairpin (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 88.6+mm, max Di 4.11mm. Head missing.

19. RF<175> Bone ?hairpin (not illustrated)
[74], G813, SG355, OA3; PERIOD 3, PHASE 5
Incomplete. L 37.8+mm, max Di 5.07mm. Segment from shaft.

20. RF<243> Bone ?hairpin (not illustrated)
[617], G731, FS5; PERIOD 3, PHASE 4
Incomplete. L 59+mm, max Di 3.55mm. Head missing.

21. RF<254> Bone hairpin (not illustrated)
[74], G813, OA3; PERIOD 3, PHASE 5
Incomplete. L 88.5+mm, max Di 3.9mm. Head missing.

GLASS

22. RF<241> Glass hairpin (Fig 5.19)
[623], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 33+mm. Blue-green glass with globular head and twisted shaft. Tip missing (similar to Crummy 1983, 28, fig 25, no 462; Woodward & Leach 1993, 170, fig 131, no 13).

Finger rings

Finger rings were a predominantly male dress accessory and most rings from Snodland are fairly plain and cannot therefore be dated apart from by their context. The few which are datable are 3rd-century AD types.

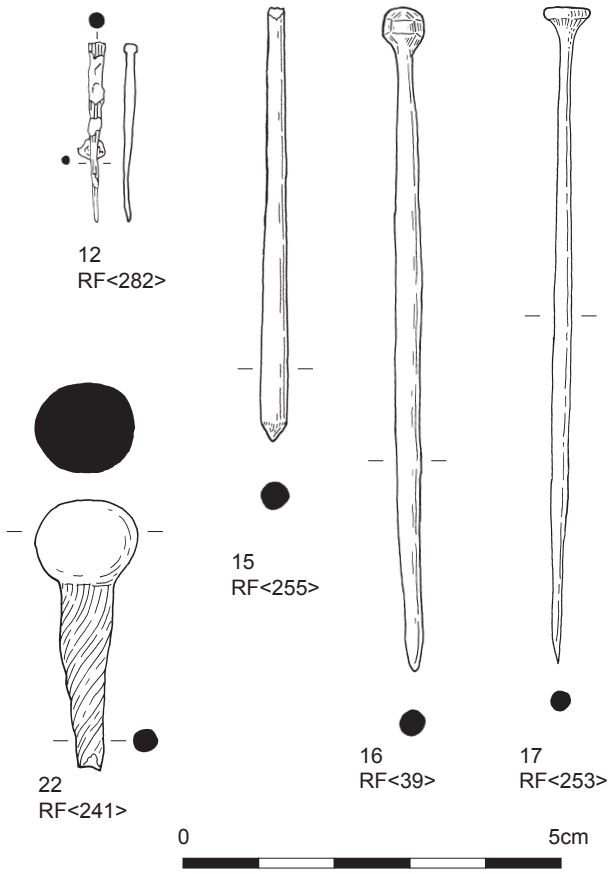

Fig 5.19 Registered finds: hairpins nos 12, 15–17 and 22

Finger ring RF<73>, including an intaglio, is almost identical to a ring of the same size recovered from Exeter (Henig 1991, 241, no 2). The piece compares to various other rings of the same type, such as at Boxgrove, Sussex (Henig 1993, 92, fig 18). The type is found almost exclusively in southern Britain, and represents a Romano-British imitation (Henig 1991, 242).

23. RF<43> Copper-alloy finger ring (Fig 5.20)
[74], G813, OA3; PERIOD 3, PHASE 5
Incomplete. Band with grooved decoration and circular, raised bezel. Curving groove on bezel; it is not clear whether this represents a flaw in the cast or whether it has been cast purposely.

24. RF<62> Copper-alloy finger ring (Fig 5.20)
[2], G1000, SUBSOIL
Complete. Band with rope-twist decoration. Probably Roman.

25. RF<70> Silver finger ring (Fig 5.20)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. Plain silver band with lopsided, rectangular plain bezel.

26. RF<73> Copper-alloy finger ring (Fig 5.20)
[883], G711, EN4; PERIOD 3, PHASE 4
Complete. Light blue glass intaglio with simplified figure on a base line (Henig 1978; type 2), set in a heavy copper-alloy ring with oval loop containing central ridge and with pronounced triangular shoulders (Henig 1978; type VIII). 3rd century AD.

27. RF<167> Copper-alloy finger ring (Fig 5.20)
[2], G1000, SUBSOIL
Complete. Ring with oval loop and facetted, grooved shoulders. Lozenge-shaped bezel. Henig 1978; type VIII. 3rd century AD.

28. RF<214> Copper-alloy finger ring (Fig 5.20)

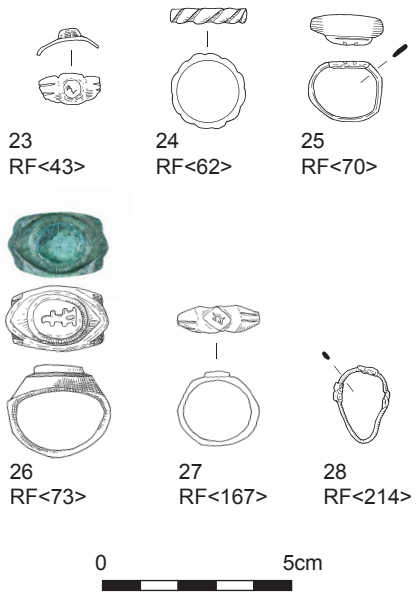

Fig 5.20 Registered finds: finger rings nos 23–28

[572], G71, EN4; PERIOD 3, PHASE 4
Complete. Distorted and heavily corroded band. Plain and slightly widened at front.

Bracelets

The recovered bracelets are all made of copper alloy and are of strip designs common in the 3rd and 4th centuries AD. Three shale bracelet fragments were recovered during previous excavations (Tilley 1967, 214, no 1; Seager Smith 1995, 96–7).

29. RF<240> Copper-alloy bracelet (Fig 5.21)
[623], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 32+mm, W 5mm. Rectangular-sectioned fragment. Panels with a double ring-and-dot motif alternate with panels consisting of two pairs of small, single ring-and-dots next to each other and flanked by grooves. The panels are divided from each other with a double groove.

30. RF<333> Copper-alloy bracelet (Fig 5.21)
[2], G1000, SUBSOIL
Incomplete. L 46.9+mm, W 3.9–4.9mm. Rectangular-sectioned. Decorated with crudely incised transverse gooves.

Buckles
31. RF<325> Copper-alloy buckle (Fig 5.21)
[1051], G516, FS3; PERIOD 3, PHASE 2
Incomplete. Small buckle frame fragment (D-shaped); bar missing.

Beads
32. RF<58> Glass bead (Fig 5.21)
[58], G610, FS4; PERIOD 3, PHASE 3
Complete. Opaque blue glass, triple-segmented bead. This type can be found in contexts from the 2nd century AD onwards but continues well into post-Roman times (Guido 1978, 91–3, fig 37, no 2).

33. RF<450> Glass bead (Fig 5.21)
[1250], G511, FS3; PERIOD 3, PHASE 2
Complete. H 13.9mm, Di 18.15mm; perforation Di 6.9mm. Turquoise frit melon bead with worn glaze both on perforations and ribs. Ill-defined gadroons. Roman melon beads appear mainly between the mid 1st century and the end of the 2nd century AD (ibid, 100).

Bells
34. RF<409> Copper-alloy ?bell (Fig 5.21)
[2], G1000, SUBSOIL
Incomplete. Suspension loop with part of sheet object, possibly bell (compare Crummy 1983, 127, fig 143). ?Roman.

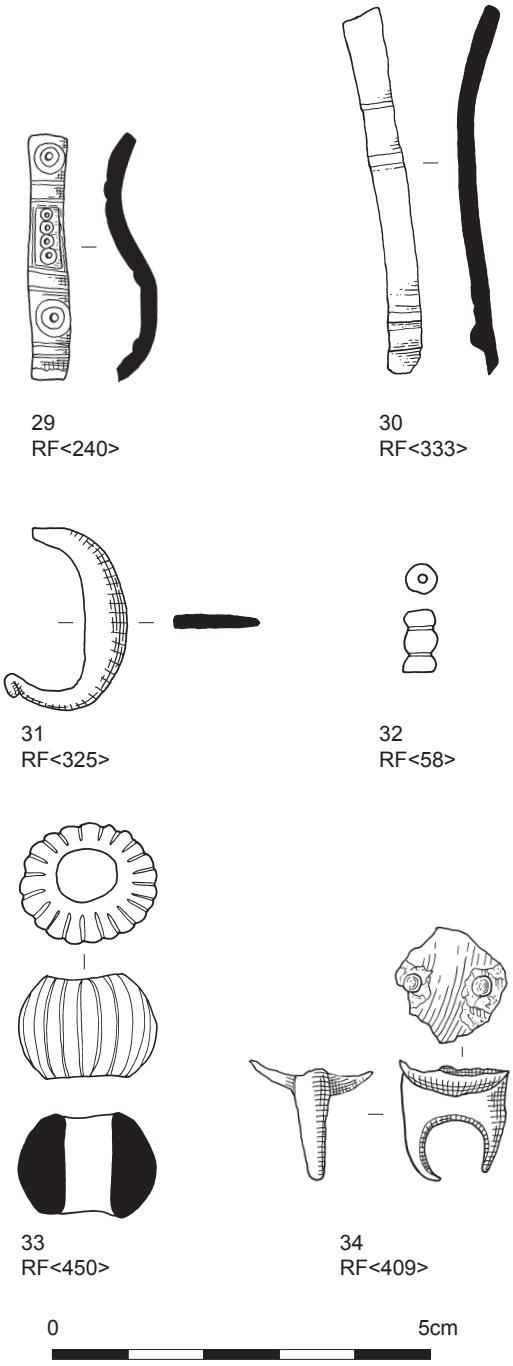

Fig 5.21 Registered finds: bracelets, buckles, beads and bell nos 29–34

Footwear

In addition to the three boot-plates listed below, a total of 33 hobnails (nail type 6, Fig 5.31) were recovered from 13 different contexts. The largest group consists of seven hobnails from ditch [75]. It is clear that none of the groups of hobnails represent a complete discarded shoe and the hobnails indicate casual losses through wear. No significant concentrations were observed. Head diameters range between 3 and 7mm, the head heights between 3 and 7mm and total lengths vary from 15 to 23mm.

Two tegulae display partial nailed shoe imprints ([302] and [572]); however, neither are complete enough to establish hobnail pattern type. In addition, unless they are particularly elaborate, these pattern types are not closely datable on isolated

finds (van Driel-Murray 2001, 350), nor can the type of shoe be established from the hobnail pattern alone.

35. RF<480> Iron boot-plate (Fig 5.22)
[74]/[103], G813, OA3; PERIOD 3, PHASE 5
Incomplete. L 35mm, W 14mm; arm L 15+mm. Lenticular cleat with slightly bent, extent arms.

36. RF<500> Iron boot-plate (Fig 5.22)
[77], G711, EN4; PERIOD 3, PHASE 4
Incomplete. L 23mm, W 15.8mm; arm L 18mm. Oval body. One arm missing.

37. RF<505> Iron boot-plate (Fig 5.22)
[254], G813, OA3; PERIOD 3, PHASE 5
Incomplete. L 26.4mm, W 11.85mm; arm length 25mm. Oval body, one arm missing.

Toilet instruments

38. RF<226> Iron nail-cleaner (Fig 5.22)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. Flattened terminal with piercing for suspension. Slightly flaring blade (Crummy 1983, type 1a, 57–8). Mid 1st–2nd century AD.

39. RF<239> Copper-alloy tweezers (Fig 5.22)
[5], G84, OA3; PERIOD 3, PHASE 5
Near-complete. Parallel-sided and undecorated. Tip of one blade missing.

40. RF<324> Copper-alloy suspension loop (Fig 5.22)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Circular-sectioned (Di 3.73mm) with flattened terminals. Similar in size, form and style to a suspension loop from a cosmetic set from Kingscote (Viner 1998, 165, fig 80, 2.5). It has been suggested elsewhere that this type of object is related to armour (Howard-Davis 2009b, 705–6, fig 355, nos. 5 and 6)

41. RF<258> Copper-alloy mirror (Fig 5.22)
[622], G733, EN4; PERIOD 3, PHASE 4
Incomplete. Two curving fragments from a circular speculum mirror, decorated with three concentric lines along the border of the unpolished back. Mirrors, both complete and fragmented, have been found across Britain, with examples found in Canterbury (Lloyd-Morgan 1995, 1010), London (Wardle 2009, 232), Winchester (Rees et al 2008, 67–71) and Wroxeter (Rees et al 2008, 129).

42. RF<222> Copper-alloy binding (Fig 5.22)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Decorative, ridged binding with elaborate edge, possibly for razor or toilet knife.

DOMESTIC UTENSILS AND FURNITURE

Strip and sheet fragments used to reinforce wooden objects such as boxes and furniture fittings have been included in this category. Where their function of strips and sheets was less obvious, they have been included with other miscellaneous fittings.

Possible box or furniture fittings recovered from previous excavations consist of three copper-alloy studs, including a lead-filled example, and a copper-alloy sheet (Tilley 1967, 216, nos 11–13; Seager Smith 1995, 94).

Furniture fittings

43. RF<2> Copper-alloy stud (Fig 5.23)
[3], G711, EN4; PERIOD 3, PHASE 4
Complete. Convex head; probably for furniture upholstery.

44. RF<10> Copper-alloy stud (Fig 5.23)
[141], G610, FS4; PERIOD 3, PHASE 3
Incomplete. Conical head; furniture upholstery. Compare Crummy 1983, fig 116, 115.

45. RF<523> Iron stud (not illustrated)
[113], G89, OA3; PERIOD 3, PHASE 5
Complete. H 12mm; head H 5mm, Di 17mm. Small stud with domed head.

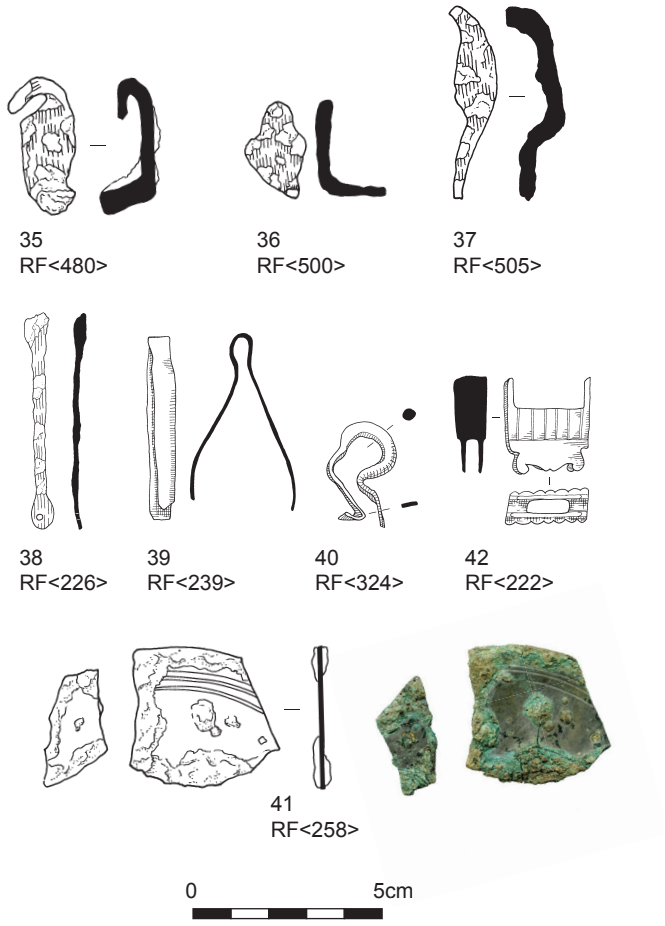

Fig 5.22 Registered finds: footwear and toilet instruments nos 35–42

46. RF<186> Iron fitting (Fig 5.23)
[571], G71, EN4; PERIOD 3, PHASE 4
Incomplete. D-shaped strip at right angles and with leaf-shaped terminal. Other end broken. Possible box or casket fitting.

47. RF<75> Copper-alloy boss (Fig 5.23)
[883], G711, EN4; PERIOD 3, PHASE 4
Complete. Di 43.5mm. Convex circular boss with inverted centre. Possible furniture terminal. Comparable to a similar object recovered from the Uley shrines (Woodward & Leach 1993, 204, no 13), in this case filled with solder.

48. RF<301> Iron hinge (Fig 5.23)
[763], G810, OA3; PERIOD 3, PHASE 5
Near-complete. Large iron hinge strap with rounded end. The other end is pierced and linked to a looped, incomplete staple. Possibly for a large box (compare to the box fittings from Victoria Road, Winchester, in particular Rees et al 2008, 102, fig 50, nos 550–52).

49. RF<394> Iron strip (not illustrated)
[617], G731, FS5; PERIOD 3, PHASE 4
Incomplete. Rectangular, measuring 43+ × 23mm and 16mm thick, with one nail *in situ*. Probably binding strip from a box/casket.

50. RF<401> Copper-alloy sheet (Fig 5.23)
[763], G810, OA3; PERIOD 3, PHASE 5
Incomplete. Fragment (0.91mm thick) with convex-headed nail *in situ*.

51. RF<429> Iron mount (Fig 5.23)
[74], G813, OA3; PERIOD 3, PHASE 5
Complete. L 59.22m. Fixing hole at either end, for example for a box or furniture.

52. RF<434> Iron strip (Fig 5.23)
[305], G84, OA3; PERIOD 3, PHASE 5
Incomplete. W8.3mm; L 127+mm. D-sectioned strip bent at right angles and with leaf terminal pierced by an *in situ* rivet. Other terminal broken. Probable box/casket binding. A larger version was recovered from Fishbourne Palace (Cunliffe 1971, 137, fig 62, no 61).

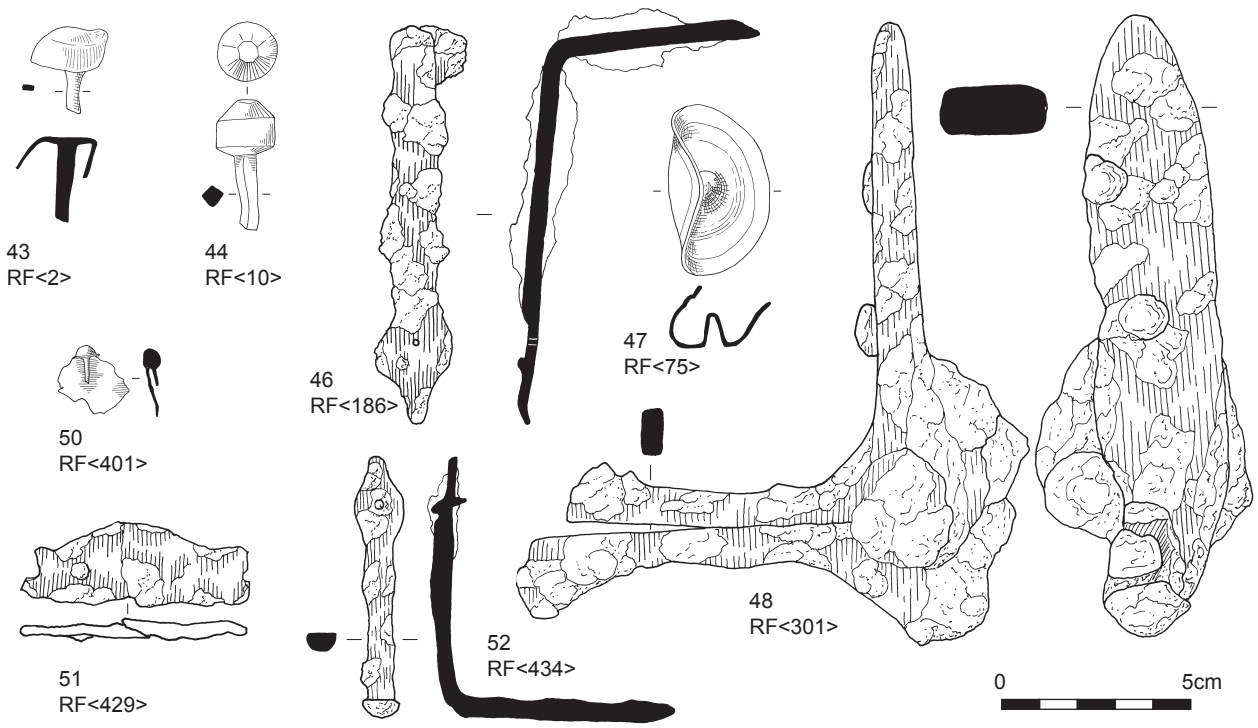

Fig 5.23 Registered finds: furniture fittings nos 43–52

Other domestic equipment

53. RF<31> Iron chain link (not illustrated)
[7], G84, OA3; PERIOD 3, PHASE 5
Complete. Oval measuring 54 × 42mm. Circular-sectioned (Di 6.7mm).

54. RF<474> Iron chain link (not illustrated)
[187], G815, OA3; PERIOD 3, PHASE 5
Complete. 35 × 29mm. D-sectioned ?end loop from chain. Circular cross section (Di 8mm).

55. RF<514> Iron chain link (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 73mm. Fragment from figure-of-eight loop. Square cross section (8 × 8mm)

56. RF<314> Iron vessel (Fig 5.24)
[1109], G614, EN2; PERIOD 3, PHASE 3
Incomplete. Four fragments including slightly everted rim. Thickness 1.75–5mm. Form ?rectangular.

57. RF<402> Copper-alloy vessel repair (Fig 5.24)
[763], G810, OA3; PERIOD 3, PHASE 5
Complete. Folded sheet; possible rivet repair.

WRITING EQUIPMENT

Not all the styli could be identified with absolute certainty. Stylus RF<69>, for example, is rather slender and could be a pharmaceutical or cosmetic tool although the end does appear to be designed for erasing.

58. RF<69> Copper-alloy stylus (Fig 5.25)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Slender stem splaying into flat eraser. Point missing.

59. RF<212> Copper-alloy stylus (Fig 5.25)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. L 136mm. Simple design with spatulate flattened eraser and lacking any decoration.

60. RF<259> Copper-alloy stylus (Fig 5.25)
[623], G84, OA3; PERIOD 3, PHASE 5
Complete. L 80mm. Moulded decoration above splaying eraser.

Fig 5.24 Registered finds: vessel fragments nos 56–57

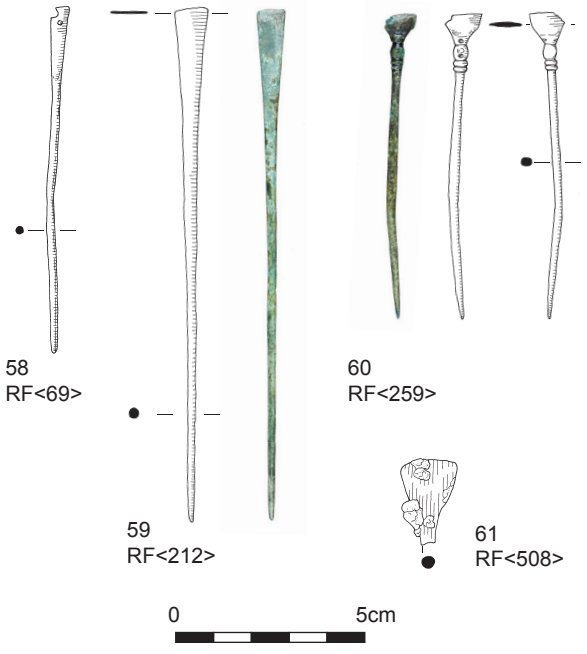

Fig 5.25 Registered finds: styli nos 58–61

RF<508> Iron ?stylus (Fig 5.25)
[746], G1000, SUBSOIL
Incomplete. L 22+mm. Circular-sectioned stem fragment with short, rectangular eraser.

OBJECTS EMPLOYED IN WEIGHING AND MEASUREMENT

The majority of weights were recovered from the subsoil and therefore cannot be dated with absolute certainty to the Roman period. Of probably Roman date are the lead biconical weights with iron attachment loop and spindle RF<278> and RF<280>. Stratified weights include both biconical and spherical weights with iron suspension loops and these are likely to have been steelyard weights.

62. RF<13> Lead weight (Fig 5.26)
[451], G712, FS5; PERIOD 3, PHASE 4
Complete. Wt 50g. Biconical weight with iron spindle and suspension loop. Badly flaking.

63. RF<418> Lead weight (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Wt 462g. Spherical weight with iron spindle and suspension loop fragment.

64. RF<427> Lead weight (Fig 5.26)
[752], G615, OA3; PERIOD 3, PHASE 5
Incomplete. Conical weight. Iron spindle and suspension loop missing.

65. RF<524> Lead ?weight (Fig 5.26)
[113], G89, OA3; PERIOD 3, PHASE 5
Complete. H 41mm; base Di 19mm. Conical, irregular object. Central cavity may have contained iron spindle and attachment loop.

66. RF<518> Clay ?weight (Fig 5.26)
[17], G84, OA3; PERIOD 3, PHASE 5
Complete. H 92mm, Di 61mm, Wt 394g. Cylindrical object with protrusion at top, possibly accommodating handle. Medium-fired with sparse, medium sand temper and rare chalk inclusions to 3mm. Occasional quartz to 1mm.

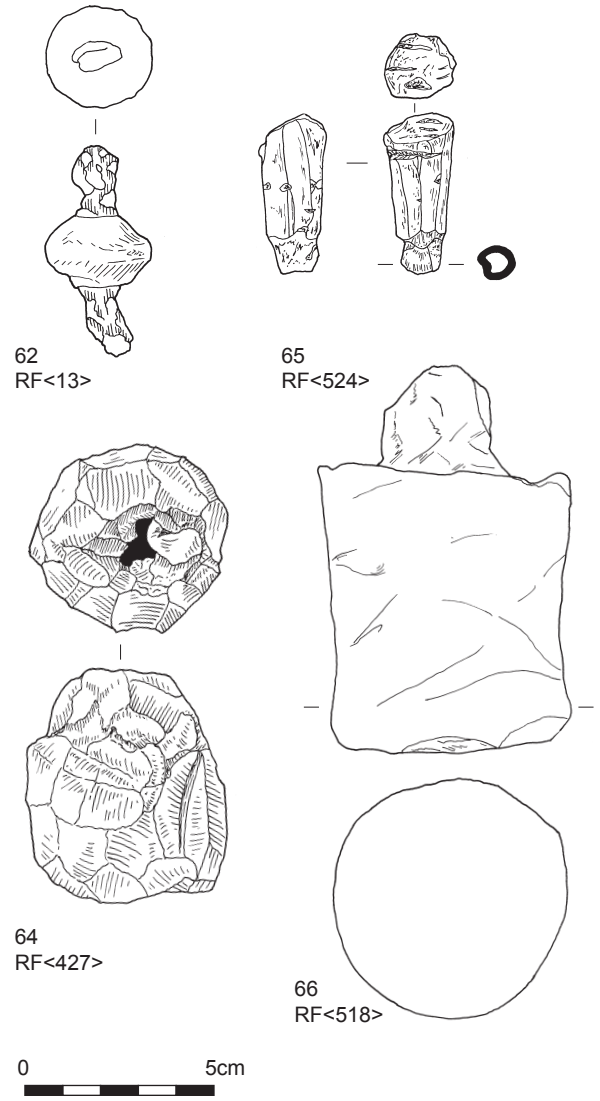

Fig 5.26 Registered finds: weights nos 62–66

TEXTILE PRODUCTION AND WORKING

Somewhat surprisingly only one object from this category was recovered although some of the annular lead weights that came from the subsoil may in fact be spindle whorls of Roman date, and some bone shafts listed with the hairpins may represent needles. Even if this is the case, the quantity of textile-working equipment is still low. It is almost certain, however, that domestic-scale textile production and working would have taken place somewhere within the villa estate.

67. RF<101> Bone needle (Fig 5.27)
[305], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 55.5+mm. Segment of shaft with part of eye surviving.

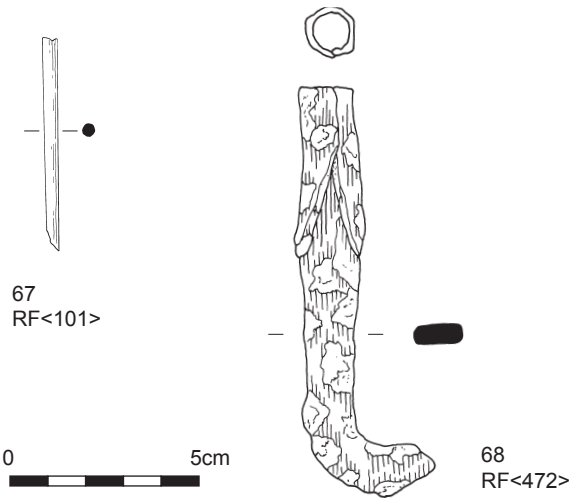

Fig 5.27 Registered finds: needle and hook nos 67–68

OBJECTS RELATING TO AGRICULTURE, HORTICULTURE AND ANIMAL HUSBANDRY

Agricultural tools

The term 'small hook' (RF<472>) is used by Manning to group smaller versions of reaping hooks; although they are often referred to as pruning hooks, they may well have been general purpose tools, serving several functions (Manning 1985, 56–7). Previous excavations uncovered an example from a chalk floor (Tilley 1967, 216, no 8).

68. RF<472> Iron small hook (Fig 5.27)
[572], G71, EN4; PERIOD 3, PHASE 4

Incomplete. L 110mm. Blade tip broken. Socketed with possible nail *in situ*. Manning type 2 (1985, 57).

Quernstones

With identifications by Luke Barber

Virtually all quernstones are in one of a number of variants of non-calcareous coarse sandstones of the Millstone Grit series, probably from the Derbyshire Peak District (though other sources are possible). All examples are from period 3, phases 4 and 5 deposits although most are likely to be residual in these contexts. The example from fill [763] of pond [1351] (RF<290>) consists of a grain rubber fragment with notable smoothed upper face. It is probable this represents a fragment of a broken rotary quern which has been reused for improvised hand grinding. The other piece is from a more typical Roman rotary quern upper stone, some 55mm thick, from rubble dumps [1179], G731. The other pieces of this quern type from the site came from posthole [879] and from post pad [760] (both Building 4).

The last two are of interest as their size and notably grooved grinding faces suggest they are from either very large hand-querns or millstones. Unfortunately too little remains of these pieces to be able to assess their original diameters accurately. However, they show clear signs of having been reused as grain rubbers after breakage as there is a notable area of wear running at 90 degrees to the original rotary wear. Such reuse of large querns/millstones is well known on the West Sussex coastal plain, particularly on peasant settlements (Barber in prep).

The use of Millstone Grit quern/millstones is now fairly well known in the south-east, particularly in Kent at Roman sites such as Bexley, Darenth, Farningham, Orpington and Faversham (Black 1987, 117–18). Fragments of a Millstone Grit millstone were also found at the Mount Roman villa, Maidstone (Kelly 1992, 228) and Keston (Philp et al 1991, 180). The main distribution of these finds suggests the stones were obtained via river trade along the Thames and its tributaries.

This excavation recovered only four fragments of German lava RF<538>, all of which are featureless and were present in a period 3, phase 5 robber trench. Previous excavations revealed a German lava upper stone from a rotary quern, believed to date between the mid 2nd and mid 3rd century AD. Given the presence of mortar on one of the surfaces, it seems likely that the piece was reused as building material (Penn 1967, 213–14).

69. RF<290> Stone grain rubber (not illustrated)
[521], G810, OA3; PERIOD 3, PHASE 5
Incomplete. Millstone Grit. Fragment with worn upper surface.

70. RF<531> Stone quern (not illustrated)
[878], G710, B4; PERIOD 3, PHASE 4
Incomplete. Small, Milllstone Grit quern fragment. 19mm thick. ?Late Roman.

71. RF<533> Stone quern (not illustrated)
[760], G710, B4; PERIOD 3, PHASE 4
Incomplete. Millstone grit. Two large, conjoining fragments (30mm at edge), with grooved grinding face. Too little survives to establish their diameter but they are likely to have derived from either very large hand-querns or millstones. Reused as grain rubbers after breakage, with a notable area of wear running at 90 degrees to the original rotary wear. Such reuse of large querns/millstones is well known on the West Sussex coastal plain.

TOOLS

The vast majority of tools are incomplete. Most of them would have been discarded after breakage. A few pieces such as complete punches may have been misplaced.

Knives

Too little survives of most of the knives to establish their type, including blade tip RF<246> and highly corroded blade fragments RF<507> and RF<522>. Of interest is RF<466>, which consists of a complete blade with a rivet hole and decorative edge; this may have formed the thin blade of a clasp knife, of which usually only the highly decorative handles survive.

72. RF<71> Iron knife (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Knife with complete, rectangular-sectioned whittle tang ending in a spherical knob. Back and cutting edge tapering towards point. Back slightly curving; tip missing.

73. RF<466> Iron knife (Fig 5.28)
[102], G813, OA3; PERIOD 3, PHASE 5
Incomplete. L 65.3mm. Knife blade with decorative edge and rivet hole (visible on X-ray plate only). Blade complete; possibly from clasp knife.

Whetstones

74. RF<517> Whetstone (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 59+mm. Subrectangular cross section (15 × 23mm). Tilgate/Thanet sandstone.

Handles

75. RF<102> Bone handle (Fig 5.28)
[305], G84, OA3; PERIOD 3, PHASE 5
Incomplete. Lathe-turned, probable handle fragment. Corrugated between two bands of ridge-and-groove decoration. Polished by wear.

76. RF<210> Antler handle (Fig 5.28)
[17], G84, OA3; PERIOD 3, PHASE 5
Complete. Crude antler handle with circular-sectioned, iron whittle tang fragment *in situ*. The use of antler may indicate a late Roman date as antler then replaced bone as the main available raw material (MacGregor 1985, 32). Antler handles usually appear in later contexts, although earlier examples are known as well (eg Howard-Davis 2009c, 747, fig 412.3).

77. RF<529> Bone handle (Fig 5.28)
[603], G71, EN4; PERIOD 3, PHASE 4
Complete. L 68mm. Plain, crudely finished probable handle. Oval cross section (12 × 14mm). Polished through wear.

Leatherworking tools

78. RF<416> Iron awl (Fig 5.28)
[811], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 83+mm. Awl with broken, bent tang and square-sectioned stem ending in a chisel edge (Manning 1985, 40–1, type 4b). A similar example was recovered from Hod Hill (ibid, E27).

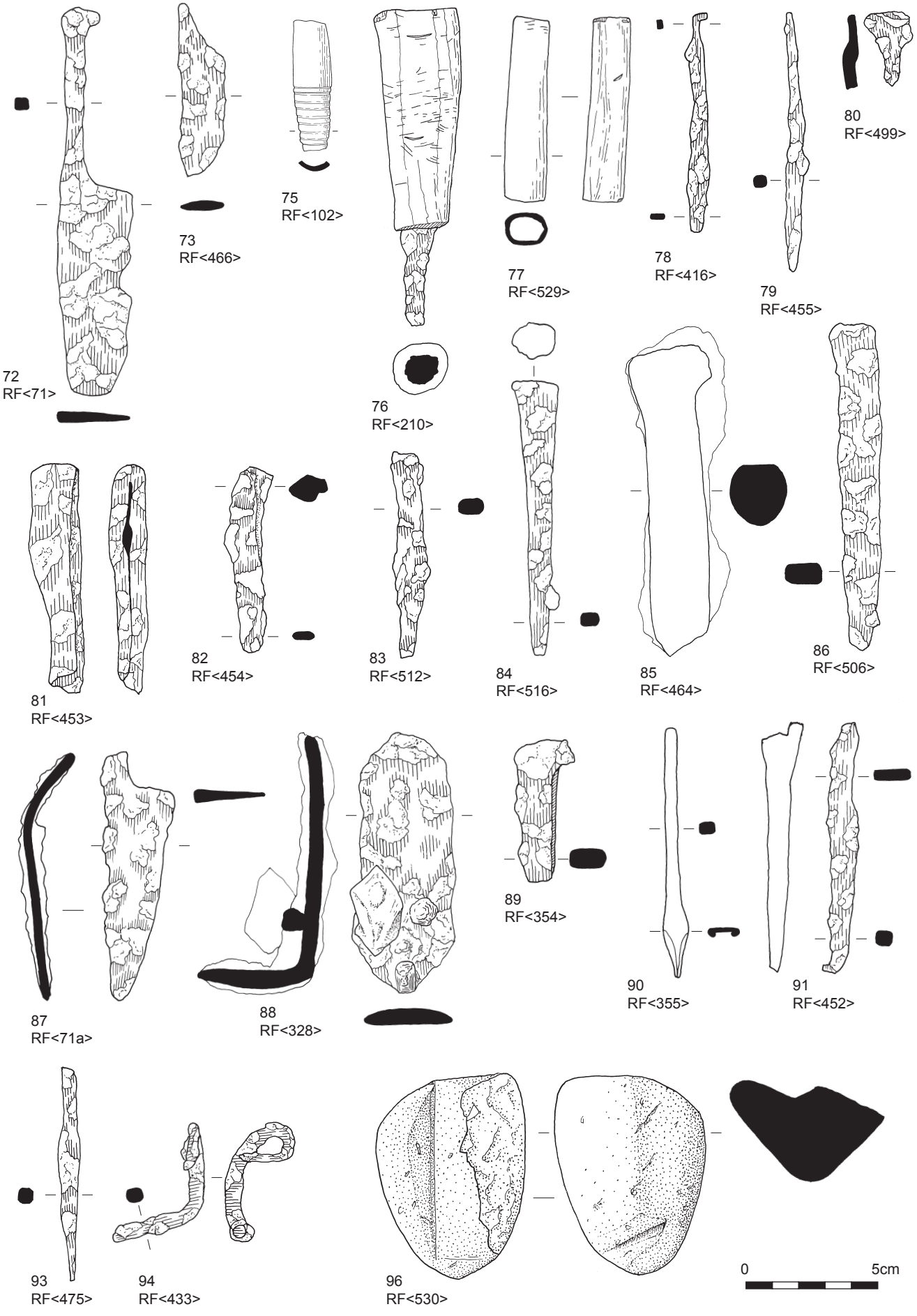

Fig 5.28 Registered finds: knives, handles and tools nos 72–96

79. RF<455> Iron awl (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 98+mm. Awl with tapering, round-sectioned stem. Stem broken (cf ibid, 40, E17).

Woodworking tools
80. RF<499> Iron chisel (Fig 5.28)
[77], G711, EN4; PERIOD 3, PHASE 4
Incomplete. L 28+mm. Circular-sectioned stem with short, triangular blade. Compare ibid, 24, B43–B44.

Metalworking tools
81. RF<453> Iron chisel or punch (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 87+mm. Rectangular-sectioned, tapering (14 × 11mm to 10 × 9mm) tool fragment; probable chisel or punch. Tip missing.

82. RF<454> Iron chisel or punch (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. L 70mm. Rectangular-sectioned, tapering tool. Distorted. Possible chisel or punch.

83. RF<512> Iron chisel or punch (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 77+mm. Rectangular-sectioned, tapering into point. Head missing.

84. RF<516> Iron ?chisel or punch (Fig 5.28)
[617], G731, FS5; PERIOD 3, PHASE 4
Complete. L 105mm. Rectangular-sectioned tool tapering into small wedge. Possible chisel or punch.

85. RF<464> Iron ?punch (Fig 5.28)
[603], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 123+mm. Object with rectangular cross section (21 × 22mm) with rounded corners. Head present but tip has been cut. Large punches have been previously found at Rushall Down, Wiltshire (ibid, 10, E27–E28).

86. RF<506> Iron punch (Fig 5.28)
[3], G711, EN4; PERIOD 3, PHASE 4
Incomplete. L 122+mm. Rectangular-sectioned, slender rod, tapering into point (X-ray plate). Head missing. Comparable to an equally slender example from Hod Hill (ibid, 10, A30).

Wool/cloth processing
87. RF<71a> Iron ?shears (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Triangular blade possibly of shears (cf ibid, 34, D7).

Uncertain function
88. RF<328> Iron tool (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Whittle-tanged tool with rectangular blade, rounded at both ends. Tang broken. Unknown function.

89. RF<354> Iron chisel, punch or wedge (Fig 5.28)
[113], G89, OA3; PERIOD 3, PHASE 5
Complete. L 52.5mm. Either smith's tool or wood-splitting wedge. Nearly identical to an example from Hod Hill (ibid, 10, A26).

90. RF<355> Iron ?punch or drill-bit (Fig 5.28)
[113], G89, OA3; PERIOD 3, PHASE 5
Incomplete. Square-sectioned stem with pointed, triangular head. Sides of head flanged. End missing.

91. RF<452> Iron tool (Fig 5.28)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Tanged tool with splaying or spoon-shaped blade (broken). Tang broken.

92. RF<511> Iron ?tool (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. L 112+mm. Heavy, rectangular-sectioned (15 by 8mm), non-tapering blade. ?Tang obscured by iron concretions.

93. RF<475> Iron drill-bit or awl (Fig 5.28)
[532], G731, FS5; PERIOD 3, PHASE 4
Incomplete. Tool fragment with pyramidal head and round-sectioned stem fragment. Point/blade missing. Similar heads are found on drill bits (woodworking) and awls (leather working). Compare ibid, 26, B52–B4, and 40, E9.

94. RF<433> Iron tang (Fig 5.28)
[305], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 56+mm. Rectangular-sectioned tang fragment ending in loop, which would have held the (organic) handle in place.

95. RF<478> Iron ferrule (not illustrated)
[888], G731, FS5; PERIOD 3, PHASE 4
Incomplete. Long socket from large tool. L 65+mm, Di 36mm.

96. RF<530> Ceramic tool (Fig 5.28)
[17], G84, OA3; PERIOD 3, PHASE 5
Complete. L 75mm. Flange fragment from tegula, worn through use as polishing or smoothing tool.

OBJECTS RELATING TO BONE, ANTLER AND HORN WORKING

97. RF<287> Antler waste or unfinished object (Fig 5.29)
[305], G84, OA3; PERIOD 3, PHASE 5
One end cut off. Further knife cuts near this point. Tip missing (abraded surface).

MILITARY EQUIPMENT

Finds recovered during the works in 1927 include an apparently unstratified fragment of a high-quality military buckle-plate of late 4th-century AD date (Webster 1967, 212–13). The only military object from this excavation was also unstratified.

98. RF<170> Copper-alloy apron mount (Fig 5.29)
[2], G1000, SUBSOIL
Near-complete. Silvered with integral rivets. Widespread (eg Crummy 1983, 133, fig 151, no 4219; Bishop & Howard-Davis 2009, 707, fig 357.7). 1st century AD.

HORSE EQUIPMENT

99. RF<25> Copper-alloy strap decoration (Fig 5.30)
[7], G84, OA3; PERIOD 3, PHASE 5
Incomplete. Circular strap decoration with small green, white and red glass paste inlayed squares, dotted across the surface. One of rear lugs missing. Central perforation. Probably horse harness fitting; compare roundel within the Canterbury harness fittings hoard (Lawson 1995, 988–9, 997, fig 415, no 155).

100. RF<27> Iron snaffle bit (Fig 5.30)
[9], G714, FS5; PERIOD 3, PHASE 4
Incomplete. Two-link snaffle bit. Fragmented.

STRUCTURAL FITTINGS/FASTENERS

No finds relating to internal decoration were recovered, although works in 1927 uncovered a terracotta mask believed to have formed part of a decorative scheme (Cook 1928, 79, 83).

101. RF<423> Iron joiner's dog (Fig 5.31)
[74], G813, OA3; PERIOD 3, PHASE 5
Complete. Arms tapering to a point. L 30mm and 34mm, W 61mm, T 11mm.

102. RF<467> Iron joiner's dog (Fig 5.31)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Arms taper to a point; one arm broken. L 41.47mm, W 33.25mm, T 3.74mm.

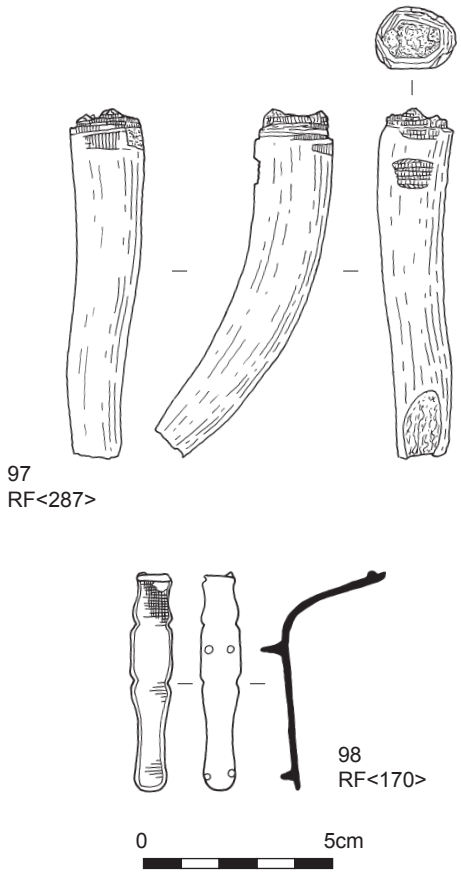

Fig 5.29 Registered finds: antler waste no 97 and military mount no 98

103. RF<503> Iron joiner's dog (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. Arms taper to a point. L 45.8mm, W 46.5mm, T 5.4mm.

104. RF<465> Iron double-spiked loop (Fig 5.31)
[77], G711, EN4; PERIOD 3, PHASE 4
Complete. L 72.3mm. Rectangular cross section (13 × 5mm).

105. RF<473> Iron double-spiked loop (Fig 5.31)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. L 77.6mm. Rectangular cross section (6.1 × 8.3mm).

106. RF<481> Iron T-clamp (Fig 5.31)
[74]/[103], G813, OA3; PERIOD 3, PHASE 5
Incomplete. L 68mm, W 33+mm. Small T-clamp with rectangular cross section. Arms damaged.

NAILS

A total of 924 nails was covered from all the Roman phases. A single nail from period 2 gully [843] is intrusive. Of the nails, 346 can be identified as general purpose nails, but they are too fragmentary to make any further distinctions. Thirty-one nails are heavy duty, but cannot be further characterised. The remaining 547 nails were categorised into seven different types (Table 5.17; Fig 5.32), some of which are further subdivided. Here, types 1–3 correspond to Manning type 1 (Manning 1985, 135). However, subdivisions have been based on both head dimensions and nail length rather than on nail length alone. It should be noted that these categories are arbitrary and for classification purposes alone. Other Manning types found at this site are types 5, 9 and 10. Shanks are all square- to rectangular-sectioned. Hobnails are discussed above with other dress elements.

The majority of the assemblage, 583 nails, were found in demolition deposits. Other individual contexts containing large quantities of nails were ditches and refuse pits, but these are also likely to reflect the discard of demolition material.

Infant burials [383] and [825] each contained a single nail, although it is not clear whether these related to the burials or were simply present in the grave soil. Grave [268] contained a further four nails. Other adult burials containing nails include

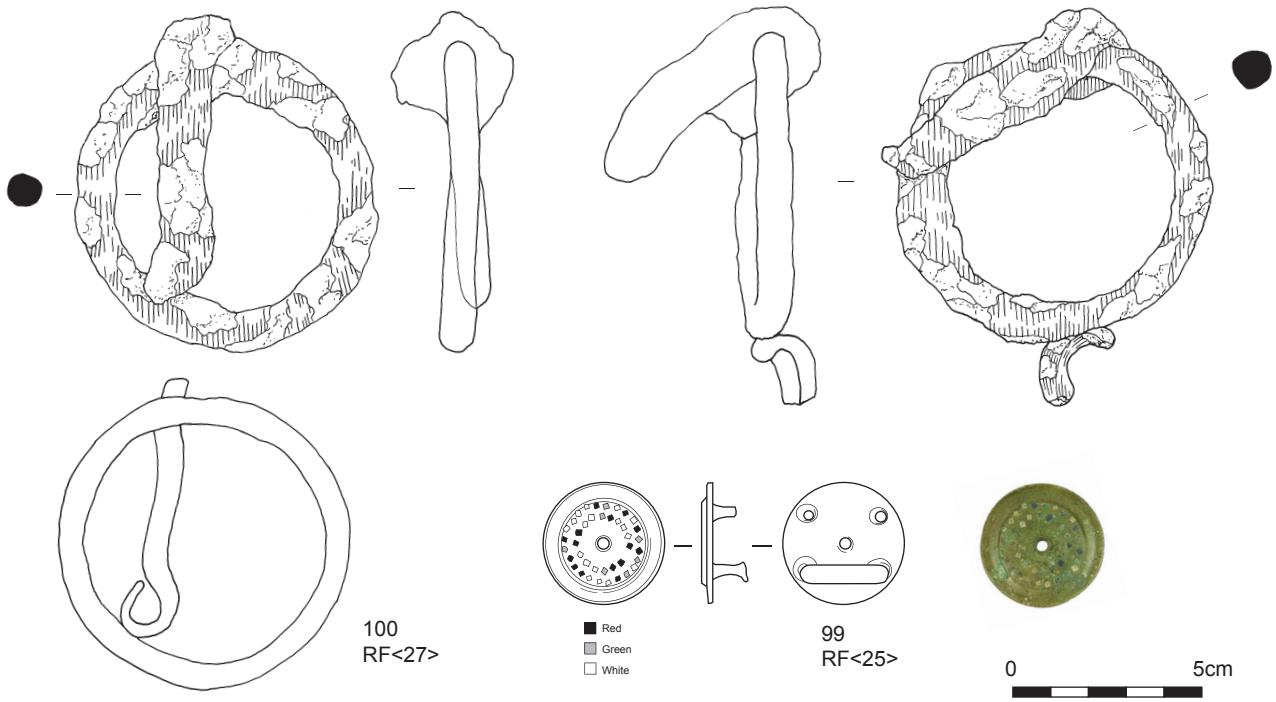

Fig 5.30 Registered finds: horse equipment nos 99–100

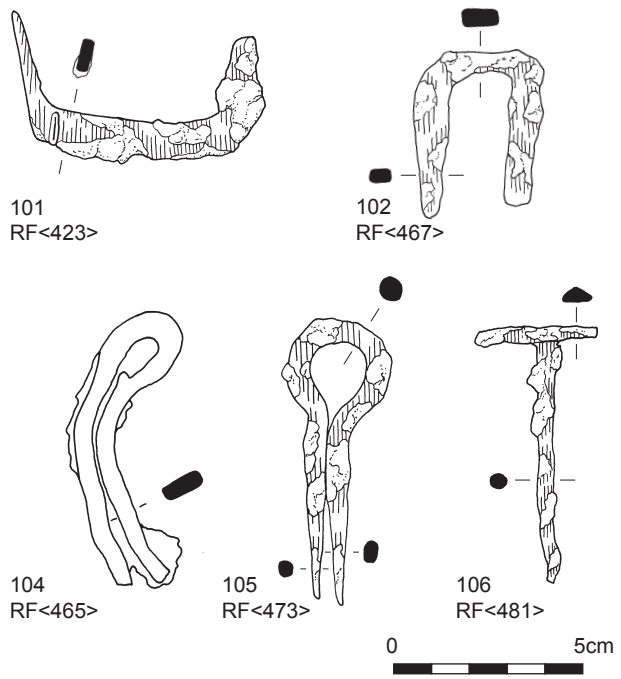

Fig 5.31 Registered finds: structural fittings nos 101–106

Nail type	Count	Description
1a	15	rounded to subrectangular head, Di 8–14mm; total L 26–44mm
1b	198	as above with similar head dimensions but total L 47–85mm
2a	5	oval to subrectangular head ranging in dimensions between 14mm and 19 mm; total L 27–45mm
2b	231	head as above but the total L 54–85mm
3a	44	heavy duty with rounded to sub-rectangular head ranging in dimensions from 20 × 18mm to 30 × 25mm; total L 84–130 mm
3b	17	as 3A but shorter; L 63–67mm
4	2	nail with only slightly protruding head and rectangular-sectioned shank; head dimensions vary from 14 × 7mm to 21 × 14mm; L 45–93mm (comparable to Manning 1985, type 5)
5	2	short, rectangular-sectioned nail shank with very small, farrier-like head; L 38–39mm; head H 5mm, head W 7–8mm (Manning 1985, type 5)
6	33	hobnails; head Di 3–7mm, head H 3–7mm; total L 15–23mm (Manning 1985, type 10)
7	1	globular head, Di 13mm; head H 11mm; total L 91mm (Manning 1985, type 9)

Table 5.17 Overview of the nail types (as illustrated in Fig 5.32)

grave [80], with just one nail, and grave [809], with two nails. Grave [86] contained ten nails and their location, spaced around the skeleton, provides better evidence that these are the remains of a coffin (see Fig 3.19). The small number of nails in the other graves makes it more difficult to be certain whether these represent coffins or not but this remains a possibility, given the clear evidence for their use in the cemetery.

LOCKS AND KEYS

Of interest is a possible padlock bar with decorative terminal (RF<220>), perhaps a fragment of a barb-spring padlock. An unprovenanced example with a similar decorative terminal on the bar can be found in Hattat (1989, 460, fig 23). Plainer iron examples have been recovered, for example from Vindolanda (Birley 1997, 37, fig 14), and have been classified by Manning (1985, 95–96). Previously excavated evidence from Snodland for locks and keys consists of an iron key handle with decorative copper-alloy head (Tilley 1967, 216, no 5).

107. RF<220> Copper-alloy ?padlock bar (Fig 5.33)
[572], G71, SG146, EN4; PERIOD 3, PHASE 4
Incomplete. Di 5mm, L 102+mm. Solid rod fragment with conical, decorative terminal. Also hollow rod fragment of same diameter (L 39+mm), not joining.

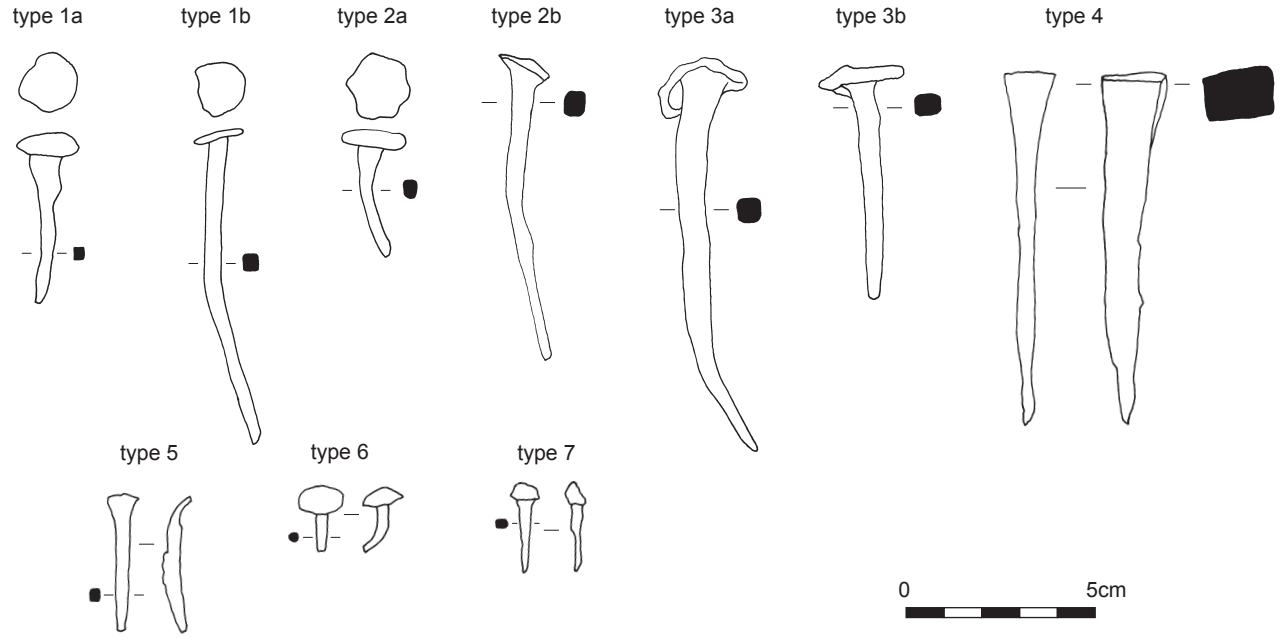

Fig 5.32 Nail types

MISCELLANEOUS FITTINGS

Sheet and strip fragments have not been included as they are usually not diagnostic of function, although they would often have strengthened wooden objects. A full overview can be found in the archive.

108. RF<104> Copper-alloy mount (Fig 5.33)
[2], G1000, SUBSOIL
Incomplete. Decorative suspension mount. Two fixing holes. Probably Roman.

109. RF<185> Iron ring (not illustrated)
[285], G75, B2; PERIOD 3, PHASE 4
Complete. Circular-sectioned. External Di 34.8mm, internal Di 22.73mm.

110. RF<521> Iron ring (not illustrated)
[572], G71, EN4; PERIOD 3, PHASE 4
Complete. Circular-sectioned. External Di 20mm, internal Di 12mm.

111. RF<400> Copper-alloy ring (Fig 5.33)
[763], G810, OA3; PERIOD 3, PHASE 5
Complete. Oval-sectioned. External Di 30.99mm, internal Di 19.93mm.

UNKNOWN FUNCTION

A number of pieces cannot be closely identified and include strip fragments likely to represent tools or implements.

112. RF<312> Iron ?hook (Fig 5.33)
[571], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Circular- to rectangular-sectioned. Attachment and tip missing.

113. RF<501> Iron ?hook (not illustrated)
[307], G84, OA3; PERIOD 3, PHASE 5
Incomplete. L 42.6+mm, cross section 3.6 × 7.6mm. Oval-sectioned strip fragment tapering into small, pointed hook.

114. RF<315> Iron ?tool (not illustrated)
[1109], G614, EN2; PERIOD 3, PHASE 3
Incomplete. Rod fragment. Di 10.6mm, L 134.5mm. One end slightly tapering.

115. RF<320> Iron ?rod (not illustrated)
[571], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Rectangular-sectioned rod fragment (5 × 5mm), bent at right angle. Total length 101+mm.

116. RF<356> Iron fitting (not illustrated)
[113], G89, OA3; PERIOD 3, PHASE 5
Incomplete. Folded, rectangular-sectioned strip. W 12.4mm, T 4mm. No nail holes visible on X-ray.

117. RF<446> Iron terminal (Fig 5.33)
[941], G613, FS4; PERIOD 3, PHASE 3
Incomplete. Rod fragment with circular cross section and triangular, pierced terminal with rectangular cross section. L 90+mm; rod Di 13.5mm; terminal cross section 16 × 39mm, H 41mm.

118. RF<528> Bone object (Fig 5.33)
[572], G71, EN4; PERIOD 3, PHASE 4
Incomplete. Pointed, polished bone fragment, with slight angle. Unidentified function; may have been used as punch.

Post-Roman small finds

As all the post-Roman registered finds were recovered from the subsoil they have been included in the catalogue only where they are of intrinsic interest.

Post-medieval finds consist of various late post-medieval dress accessories representing casual losses, such as copper- and mixed-alloy buttons, buckles, lockets and a finger ring.

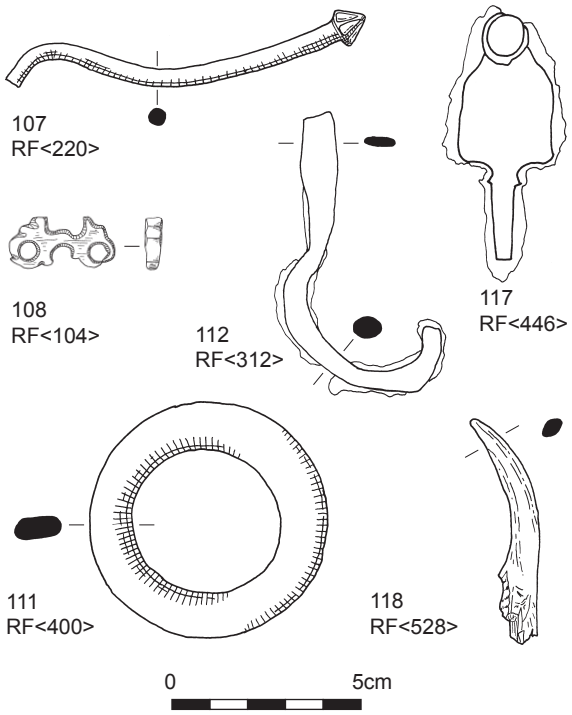

Fig 5.33 Miscellaneous registered finds nos 107–118

Other than the weights already described in the Roman weights section (above), a post-medieval coin weight (RF<373>) was recovered from the subsoil. Large buckles from a horse harness were also recovered (eg RF<483>).

In addition, a number of finds were intrusive in Roman contexts, including a lead rolled medieval fishnet sinker (RF<289>).

PERSONAL ADORNMENT

119. RF<15> Copper-alloy strap-end (Fig 5.34)
[2], G1000, SUBSOIL
Incomplete. Composite tongue-shaped piece with forked spacers. End missing, textile remains from strap/girdle *in situ*. 14th century AD.

120. RF<168> Copper-alloy stud (Fig 5.34)
[2], G1000, SUBSOIL
Complete. Square stud with Maltese cross cast in relief. Traces of silver inlay. Probably medieval.

121. RF<337> Copper-alloy stud (not illustrated)
[945], G1000, SUBSOIL
Complete. Small dome-headed stud. Di 10.5mm. Integral stud and traces of gilt. ?Medieval.

122. RF<334> Copper-alloy mount (Fig 5.34)
[2], G1000, SUBSOIL
Complete. Quatrefoil decorative leather mount. Central nail hole as well as two integral rivets. Medieval to early post-medieval.

123. RF<407> Copper-alloy mount (Fig 5.34)
[2], G1000, SUBSOIL
Incomplete. Diamond-shaped leather mount with incised line and rocker-arm decoration. Attachment missing. ?Medieval.

HORSE FURNITURE

Incorporating comments by Laura Burnett
124. RF<169> Copper-alloy strap-end (Fig 5.34)
[2], G1000, SUBSOIL

Complete. Made of two sheets, one with the end folded over the other; integral rivet. Compare Ashley 2002, 14, fig 14, nos 119–20. Shield cast in relief; traces of gilding. 12th to early 13th century AD. The shield appears to be that of Scotland (Or, a lion rampant Gules armed and langued Azure within a double tressure flory counter-flory of the second). Royal arms were often used by retainers to show support and the Scottish ones are borne by several families showing their descent or relationship to the Scottish crown (eg, Buchanan and Bowes-Lyon).

COMMUNICATION

Incorporating comments by Chris Whittick

125. RF<330> Lead seal matrix (Fig 5.34)
[945], G1000, SUBSOIL
Complete. Reverse undecorated and with lug as handle and orientation. S' PETRI D' SALTCOTE (the seal of Peter of Saltcote). Saltcote could refer either to Saltcote in Playden near Rye, Kent or Saltcote, Essex, both of which have a similar maritime history. The latter may be more likely considering that the Medway empties into the Thames.

Small finds of uncertain date

A number of finds from the subsoil cannot be dated with any certainty. Among them are fittings not intrinsically datable, such as copper-alloy rings (eg, RF<338>, RF<376>–RF<378>).

A number of lead objects could represent either spindle whorls or weights (eg, net sinkers), including both conical (eg, RF<279> and RF<408>) and annular examples (eg, RF<281> and RF<410>). The conical examples in particular could have been spindle whorls used for doubled yarn (Rees et al 2008, 244).

MISCELLANEOUS FITTINGS

126. RF<339> Copper-alloy ring and hook (Fig 5.35)
[945], G1000, SUBSOIL
Complete. Oval-sectioned ring with integral hook. An iron example, identified as a bag hook, was found in a medieval context in Norwich (Goodall 1993, 140, fig 105, no 949). Uncertain date.

127. RF<479> Iron chain (not illustrated)
[2], G1000, SUBSOIL
?Complete. Chain with oval links and ring terminal; folded (from X-ray plate). Folded L 240mm. Uncertain date.

TOOLS

Chisel RF<200> does not fit into Manning's typology (1985). Although this type of tool remained largely unchanged over time, this one may be post-Roman.

128. RF<200> Iron chisel (not illustrated)
[746], G1000, SUBSOIL
Incomplete. Straight blade with tang (broken). L 56.5mm, W 22mm, T 4.2mm. Uncertain date.

129. RF<202> Iron tool (not illustrated)
[746], G1000, SUBSOIL
Incomplete. Circular-sectioned whittle tang with part of tool blade. Blade rectangular-sectioned, 12 × 6mm. Uncertain function and date.

130. RF<456> Iron tool (not illustrated)
[2], G1000, SUBSOIL
Incomplete. L 176+mm. Tool with round-sectioned, broken stem and pyramidal head, resembling large awl. Unknown function.

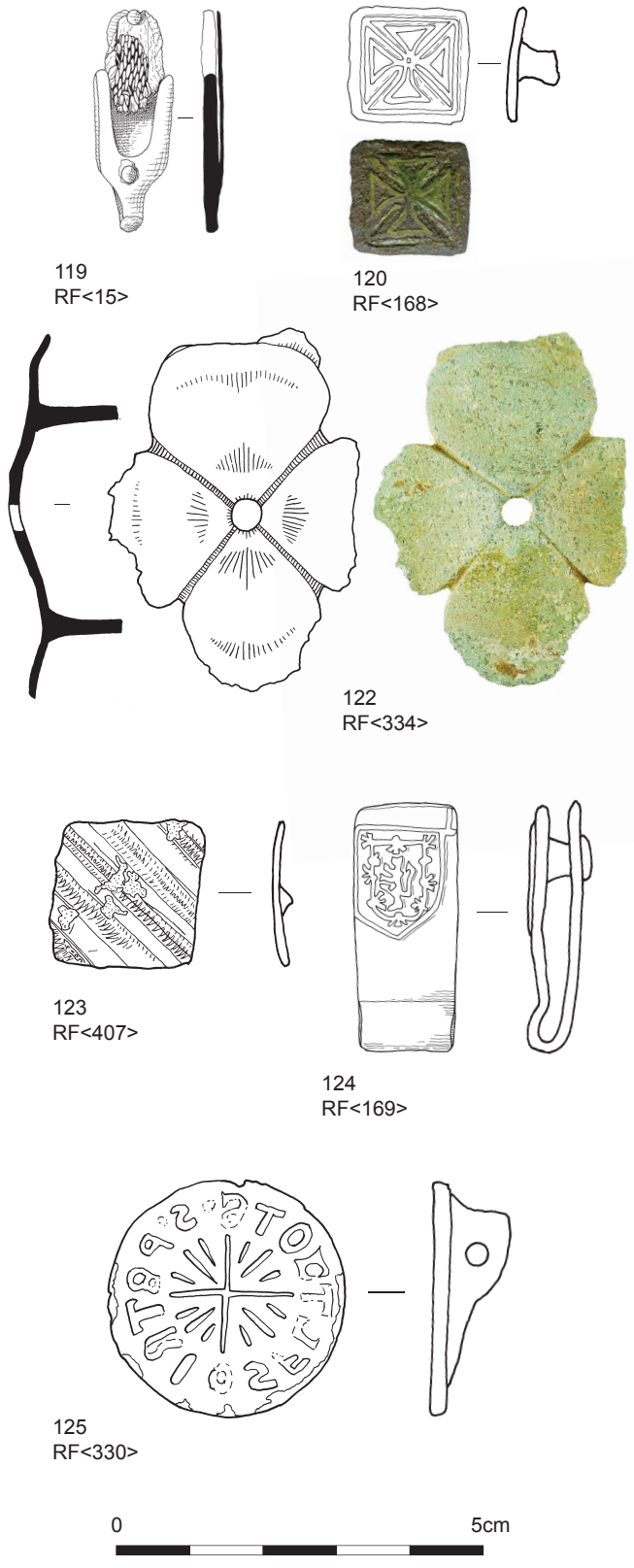

Fig 5.34 Post-Roman registered finds nos 119–125

DISCUSSION

None of the finds are of exceptional quality although they do indicate a relatively high standard of living. The range of domestic and personal items is comparable to those from other villas both in the region and elsewhere in the country. As the finds from the nearby Eccles villa have not been published, comparison cannot be made to this prosperous villa. However,

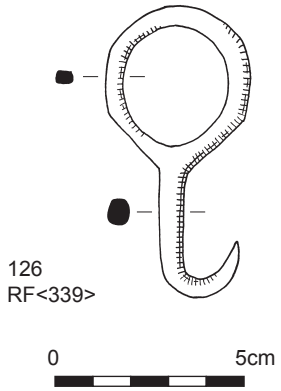

Fig 5.35 Miscellaneous post-Roman registered find no 126

the Mount Roman villa, some 5km to the south, contained a comparable assemblage, with fairly unremarkable objects including jewellery, toilet instruments, tools and domestic equipment in addition to evidence for bone working (Kelly 1992, 210–11). The small size of the Mount assemblage can be accounted for by the location of the excavations – in the actual building rather than on the periphery, which is more likely to contain refuse.

Other published finds assemblages are more difficult to compare. Villas such as Keston had a more significant pre-Conquest phase and a lack of masonry building until the 3rd century AD, but produced an assemblage of similar size and quality though with a much larger group of Iron Age finds (Philp et al 1991). In contrast, Lullingstone villa yielded an assemblage demonstrating the exceptionally high social status of the probably foreign owners (Meates 1987).

The dating evidence provided by the finds, namely the Bronze Age sword fragment and a Middle Iron Age brooch, suggests a minor pre-Roman presence somewhere near the site.

The closely datable Roman finds consist almost entirely of jewellery: the brooches all date to the 1st century AD, the finger rings to the 3rd century and the bracelets to the later 3rd–4th century. No finds typical of the second half of the 4th century AD, such as the military belt-plate recovered in the 1920s, were recovered in this excavation, which suggests that any occupation later than the mid 4th century AD is unlikely, although it must be remembered that the vast majority of finds are not intrinsically datable. The absence of early finger rings and late brooches may be due to their specific function in those phases. Finger rings of 1st- to 2nd-century AD date were primarily used as seals (via their intaglios), whereas late brooches may have acted as official insignia (Cool 1998, 224).

These finds do not provide much evidence for agricultural activities. Equally scarce is the evidence for textile production and working, although these activities would almost certainly have taken place on a domestic scale. A certain level of self-reliance is indicated by the piece of bone-working waste, although much was imported – all copper-alloy objects, for example. Other craft industries include metalworking, woodworking and leather working, all as part of the general workings of the villa estate, rather than representing any kind of specialised craft.

No items relating to recreational activities were recovered although a single bone gaming piece was recovered during previous excavations (Seager Smith 1995, 95). The presence of four styli demonstrates the presence of at least some literate individuals. In addition, equestrian equipment indicates the use of riding horses or, perhaps, casual losses from visitors on horseback.

Later activity is attested by the topsoil and subsoil finds, which range in date from the medieval period to the early 20th century. These are likely to have been largely spread through manuring, although, given the high proportion of jewellery and dress accessories, casual losses must also be represented.

5.7 GLASS

Elke Raemen

A small glass assemblage of 64 pieces (450g) was recovered. The majority of it is Roman and consists of 16 vessel fragments, 25 window glass pieces and one undiagnostic fragment. Most fragments are generally too small to be diagnostic and/or closely datable and, like the pottery and other finds, a large proportion is likely to have been residual. The assemblage is typical, however, for both the period and for a rural site.

Roman glass was recovered from 30 contexts, all associated with period 3 (all phases) with the exception of a single residual piece that came from a medieval ditch (period 4). Most fragments were from period 3, phase 4 (19 pieces), followed by period 3, phase 5 (17); as many of these were from demolition dumps, a significant proportion is likely to be residual.

Unsurprisingly, the vast majority of glass was recovered from in and around the buildings in the northern half of the site, which almost certainly had some form of glazed windows (Table 5.18).

The assemblage is small and although the excavations were on the periphery of the villa buildings, a similar paucity is not reflected in the other finds. Glass recycling was common during the Roman period, however, as may be seen at Basinghall Street, London, where a large dump of cullet was recovered (Shepherd & Wardle 2009). Excavations at Snodland during the 1990s revealed only four glass fragments, including a bead, two vessel fragments and a piece of cast window glass (Allan 1995, 95–6). As large parts of the villa assemblage still await

publication it is not known whether a similar scarcity was prevalent in other parts of the villa.

Comparison with other villas in Kent is also greatly hampered by the lack of published excavations. Some sites have been published only as interim reports (eg Eccles) and often the older articles lack reports on the glass finds. Still, a similar paucity of glass is apparent at the Mount Roman villa, where the assemblage consisted of only six fragments of window glass (Kelly 1992, 226), and no glass appears to have been recovered from Keston (Philp et al 1991).

The vessel glass assemblage does not include any high-quality tableware, nor any other material suggesting anything but a moderate status. Surprisingly this is often the case with assemblages from villas although high-quality glass pieces have been found at Lullingstone, also in Kent (Cool & Price 1987), and Kingscote, Gloucestershire (Shepherd 1998, 230).

Post-medieval glass fragments were found both intrusively in Roman contexts and in later features, and the assemblage is dominated by wine and mineral water bottles. The earliest piece consists of a clear glass base sherd from a cylindrical vessel of 16th- to 17th-century AD date, but the majority of the assemblage dates to the mid 19th–20th century. Detailed information on all glass including the post-Roman assemblage has been deposited for the archive. A summary of the Roman glass assemblage as well as a catalogue is included below.

OVERVIEW OF THE ROMAN ASSEMBLAGE

Vessel glass

The majority of the vessel assemblage is of mid 1st- to 2nd-century AD date. It consists predominantly of storage vessels, for example bottles and jars, while only a small proportion represents liquid consumption and food serving (Table 5.18). Fragment count can in this case be assumed identical to vessel count. Prismatic bottles/jars usually represent the most common form in any assemblage, although it is not often possible to distinguish between the body fragments from bottles and from jars. Eight bottle/jar fragments are represented, only two of which can positively be identified to a square-sectioned prismatic bottle.

The most diagnostic fragment (RF<461>) was recovered from ditch fill [77], a square bottle base exhibiting vertical scratches as well as two circles and a pontil mark on the concave base. The vertical scratches indicate that it was lifted in and out of a close-fitting container (Price & Cottam 1998, 194). Relief pattern designs are a common feature on bottles and are believed to be marks either for the bottle manufacturer or for the distributor of the bottle and/or

Period	Drinking	Serving	Storage	Undiagnostic	Window	Total
3.2			1		1	2
3.3				2	2	4
3.4	2	1	5	1	10	19
3.5		1	3	1	12	17
4					1	1
Total	**2**	**2**	**9**	**4**	**26**	**43**

Table 5.18 Quantification by fragment count of glass assemblage by period and function

contents. A colourless neck fragment from a flask (RF<437>) was recovered from layer [617].

Drinking vessels are represented by a simple cup base fragment dated to the mid 1st to 2nd century AD as well as by a cup or beaker rim fragment of uncertain date. Other tableware includes a colourless rim fragment (RF<235>) from a cast, wide-rimmed bowl or plate with base rim. The piece dates to the late 1st to the third quarter of the 2nd century AD (ibid, fig 13b, 57).

Only one vessel can positively be dated to the 4th century AD: layer [305] contained a colourless, yellow-tinged fragment from a shallow convex bowl with a free-hand incised figure (RF<57>). The fragment shows a male head and part of a second head (Fig 5.36). Fragments with a similar decorative technique have been found on both rural and urban sites across southern England, with examples from Chichester (Down 1979, fig 56, no 166) and London (Cowan et al 2009, 159). Common subjects include hunting and pagan and biblical scenes (Price & Cottam 1998, type c, 37). Too little survives of the current example to establish its scene with certainty.

Window glass

Twenty-six window glass fragments were recovered from 21 contexts. The majority of these (20) consist of matt-glossy cast fragments, including a few straight-edged pieces. Most of these are in natural blue-green, although a colourless and a light green fragment were observed as well. Cast window glass generally dates to the 1st–3rd century AD.

A further six pieces from [17], [647], [764] and [935] are cylinder-blown and are of 3rd- to 4th-century AD date.

CATALOGUE

Vessel glass

CAST
RF<235> Bowl
[812], G811, FS5; PERIOD 3, PHASE 4
Rim from cast, wide-rimmed bowl (Price & Cottam 1998, fig 13b, 57). Late 1st to 3rd quarter 2nd century AD.

FREE-BLOWN
NATURALLY COLOURED
RF<232> Vessel
[572], G71, EN4; PERIOD 3, PHASE 4
Natural blue-green. Small body fragment from cylindrical vessel.

RF<252> Bottle
[624], G535, FS3; PERIOD 3, PHASE 2
Natural blue-green. Neck fragment from bottle of undiagnostic form. Late 1st to 2nd century AD.

RF<262> Bottle/jar
[572], G71, EN4; PERIOD 3, PHASE 4
Natural blue-green. Body fragment, possibly from square bottle/jar. Late 1st to 2nd century AD.

RF<303> Bottle/jar
[763], G810, OA3; PERIOD 3, PHASE 5
Natural blue-green. Body fragment from prismatic bottle/jar. Late 1st to 2nd century AD.

RF<311> Vessel
[933], G613, FS4; PERIOD 3, PHASE 3
Natural blue-green. Body fragment from cylindrical to globular vessel.

RF<313> Bottle
[867], G61, B2; PERIOD 3, PHASE 4
Natural blue-green. Neck fragment from cylindrical or prismatic bottle with horizontal scratches, for example from a stopper. Late 1st to 2nd century AD.

RF<415> Cup
[477], G731, FS5; PERIOD 3, PHASE 4
Natural blue-green. Base fragment from cup.

RF<422> Bottle
[572], G71, EN4; PERIOD 3, PHASE 4
Natural blue-green. Folded rim with horizontal profile from bottle. Late 1st to 2nd century AD.

RF<424> Bottle/jar
[647], G810, OA3; PERIOD 3, PHASE 5
Natural blue-green. Body fragment from prismatic bottle/jar. Late 1st to 2nd century AD.

RF<439> Vessel
[765], G513, FS4; PERIOD 3, PHASE 3
Natural blue-green. Small body fragment.

RF<460> Beaker/cup
[571], G71, EN4; PERIOD 3, PHASE 4
Natural blue-green. Internally thickened rim from slightly convex beaker/cup.

RF<461> Bottle
[77], G711, EN4; PERIOD 3, PHASE 4
Natural blue-green. Base fragment from square bottle (Isings 1957, form 50) with vertical scratches indicating lifting in/out from a close-fitting container. Two relief circles on base. Late 1st to 2nd century AD.

RF<494> Bottle/jar
[74], G813, OA3; PERIOD 3, PHASE 5
Natural blue-green. Body fragment from prismatic bottle/jar. Late 1st to 2nd century AD.

RF<495> Bottle/jar
[542], G728, OA3; PERIOD 3, PHASE 5
Natural blue-green. Body fragment from prismatic bottle/jar. Late 1st to 2nd century AD.

COLOURLESS
RF<57> Bowl (Fig 5.36)
[305], G84, OA3; PERIOD 3, PHASE 5
Yellow tinge. Body fragment decorated with free-hand incised male head (Price & Cottam 1998, 37, type c). 4th century AD.

RF<437> Flask
[617], G731, FS5; PERIOD 3, PHASE 4
Cylindrical neck fragment. ?2nd to 3rd century AD.

Window glass
RF<421> Window glass
[611], G88, OA3; PERIOD 3, PHASE 5
Cast natural-coloured blue-green pane edge fragment. 1st to 3rd century AD.

Fig 5.36 Glass bowl with incised male head RF<57>

5.8 COINS

Trista Clifford

The finding of the large hoard of almost 3600 coins during geotechnical works in 2006 by Kent County Council archaeologists precipitated the archaeological excavation in the advance of the site redevelopment. The hoard (Treasure number 2008 T285) was initially reported on in the Kent Archaeological Newsletter (Richardson 2007) and was subsequently deposited with the British Museum for analysis and publication (Abdy et al in prep). The archaeological excavation recovered a further ten coins associated with the 2006 hoard and a second much smaller hoard of 16 4th-century AD *nummi* from fill [113] of pit [138] (Treasure number 2009 T94; Table 5.19). Both coin groups were deposited with the British Museum as part of the Treasure Act process with the former as addenda to the 2006 coin hoard. This report excludes all the above material as these coins will be published separately (ibid).

During the 2008 excavations 165 Roman coins were recovered, the majority being 3rd- and 4th-century AD denominations (Tables 5.20 and 5.21). Of these, 140 coins could be identified to ruler and 146 to Reece coin periods (Reece 1995; see Table 5.23), whilst the remaining coins could be identified to denomination only. The site also produced a further 12 post-Roman coins and tokens, which were either recovered from the topsoil or were unstratified and almost certainly represent casual losses (Table 5.22).

The coins were primarily recovered from topsoil or subsoil deposits using a metal detector, or were excavated by hand from stratified deposits. The large number of coins recovered is almost certainly the result of the systematic use of metal detectors during excavation of the site. As a comparison, the previous excavations on the main villa buildings in the 1960s produced only two coins of 4th-century AD date (Ocock & Syddell 1967, 216).

No	Reverse legend	Reverse type	Mint mark	Date (AD)	Emperor	Obverse legend	Obverse type	Reece coin period	Di (mm)	Die axis measurement	RF no	Context no	Notes	Wear
166	GLORIA EXERCITVS	two soldiers hdg 2std	Trier; TRS	330–35	House of Constantine	CONSTANTI[-------]		17	12.6	7	<183>	[113]		W/W
167	GLORIA EXERCITVS	two soldiers hdg 2std		330–35	House of Constantine	illegible		17	17.1	12	<488>	[113]		W/SW
168	GLORIA EXERCITVS	two soldiers hdg 2std		330–35	House of Constantine	illegible		17	13.6	7	<489>	[113]		VW/VW
169	illegible	wolf and twins	Trier; TRP	330–35	House of Constantine	VRBS ROMA		17	16.1		<172>	[113]		SW/SW
170	illegible	Victory on prow	Lyon; PLG	330–35	House of Constantine	CONSTAN[TINOPO]LIS	helmeted bust r	17	14.4	6	<52>	[113]		SW/SW
171	illegible	Victory on prow	Lyon; PLG	330–35	House of Constantine	CONSTAN[TINOPOLIS]	helmeted bust r	17	13.3	6	<53>	[113]		SW/SW
172	illegible	Victory on prow	Lyon; PLG	330–35	House of Constantine	[CONSTANTINOPOLIS]	helmeted bust r	17	12.5	12	<493>	[113]		W/W
173	illegible	Victory on prow		330–35	House of Constantine	CONSTANTINOPOLIS	helmeted bust r	17	7.7	6	<490>	[113]	contemporary copy?	VW/VW
174	illegible	Victory on prow		330–35	House of Constantine	[CONSTANTINOPOLIS]	helmeted bust r	17	13.3	12	<492>	[113]		VW/VW
175	illegible	Victory on prow		330–35	House of Constantine	CONSTANTINOPOLIS	helmeted bust r	17	12.5	6	<48>	[113]	contemporary copy?	VW/VW
176	FELICITAS REIPV[BLICAE]	emperor standing hdg standard and Victory	A	350–53	Magnentius	[DN MAGNEN]TIVS PF AVG	bust r	18	18.6	6	<46>	[113]		SW/SW
177	illegible	illegible		4th century	illegible				17.4		<47>	[113]		C/C
178	illegible	illegible		4th century	illegible				18.3		<50>	[113]		C/C
179	illegible	illegible		4th century	illegible				10.6		<173>	[113]	contemporary copy?	VW/W
180	illegible	illegible		4th century	illegible				7.4		<491>	[113]	contemporary copy?	C/C
181	illegible	illegible		4th century	illegible				22.9		<184>	[113]		C/C

C = corroded; EW = extremely worn; SW = slightly worn; VW = very worn; W = worn

Table 5.19 Preliminary catalogue of coins from pit fill [113]

No	Ruler	Date (AD)	Denomination	Mint	Reverse legend	Reverse type	Reference	Reece coin period	D (mm)	DAM	RF no	Context no	Notes
1	Nero, AD 54–68	64–8	*dupondius*	?Lyons	SECVRITAS AVGVSTI SC	Securitas seated r	*RIC* I p 157, type 29	3	29.5	12	<188>	[746]	
2	Vespasian	69–71	*sestertius*	probably Lyons		illegible		4	32.5		<21>	[385]	
3	Trajan	98–117	*dupondius*	Rome		illegible		5	25.7	3	<244>	[623]	
4	Trajan	99–100	*as*	Rome	TR POT COS III PP SC		*RIC* 2, 417	5	27.0	6	<23>	[7]	Fig 5.40
5	Trajan	99–100	*as*	Rome	[TR POT COS] III PP SC		*RIC* 2, 417	5	25.5	6	<135>	[2]	
6	Faustina Snr	138–61	*denarius*	Rome	[AV]GVSTA	Ceres stg l hdg dress	*RIC* 3, 362	7	16.8	6	<11>	[3]	
7	Marcus Aurelius as Augustus, AD 161–80	161–80	*sestertius*	Rome	?[TRP XVIII IMP II COS III] SC	Victory l hdg wreath and palm	*RIC* 3, cf 877	8	31.0	6	<187>	[746]	this coin appears not to have a recorded obverse legend for type: M ANTONINVS AVG [ ]
8	Marcus Aurelius as Augustus, AD 161–80	161–80	*as/dupondius*	Rome		illegible		8	23.0		<190>	[746]	
9	Commodus, AD 180–92	186–7	*dupondius*	Rome	PATER SENAT P M TRP XII IMP VIII COS V PP, SC	Commodus stg l hdg branch and sceptre	*BMCRE* IV p 812 ++	9	25.0	6	<121>	[2]	[M COMM ANT FELIX AVG…]
10	Severus Alexander	232	*sestertius*	Rome	[PR]O[V]ID[ENTIA AVG] SC	Providentia stg l	*BMCRE* VI, 883	12	30.5	12	<120>	[2]	
11	probably Gordian III	241–3	*sestertius*	Rome	LIBERTAS AVG SC		*RIC* 4(3), 418a	12	30.1	12	<340>	[945]	
12	Trajan Decius	249–51	radiate	Rome	D[ACIA]		*RIC* 4(3), 12b	12	21.0	7	<341>	[945]	
13	Salonina, joint reign, AD 253–60	253–60	radiate	Rome	IVNO RE[GINA]		Cunetio 651	12	19.7	6.5	<182>	[2]	
14	Gallienus, sole reign	260–8	radiate		PAX AVG	Pax stg l hdg transverse sceptre and branch	Cunetio 1009	13	16.0	12	<196>	[746]	
15	Gallienus, sole reign	260–8	radiate	Rome	MARTI PACIFERO A-//-		Cunetio 1149	13	19.5		<332>	[2]	
16	Gallienus, sole reign	260–8	radiate	Rome	ABVNDANTIA AVG -B//-		Cunetio 1159	13	18.5	2	<36>	[7]	
17	Gallienus, sole reign	260–8	radiate	Rome	[VER]ITAS AVG; -E//-		Cunetio 1200	13	20.0	6	<451>	[945]	
18	Gallienus, sole reign	260–8	radiate	Rome	SECVRIT PER PET		Cunetio cf 1258	13	20.0	6	<122>	[2]	
19	Salonina	260–8	radiate	Rome	[P]VDIC[ITIA]	Pudicita stg l	Cunetio 1110	13	20.0	12	<20>	[447]	
20	Claudius II, poss contemporary copy	275–85	radiate			illegible		13	20.4		<141>	[2]	
21	probably Posthumus	260–9	radiate	?Milan		illegible	Cunetio p 146, cf 2471ff	13	18.0		<105>	[2]	
22	Victorinus	269–71	radiate		PAX AVG;V*//-		Cunetio 2530	13	21.4	12	<242>	[647]	
23	Victorinus	268–71	radiate	Gaul mint I	PAX AVG;V *//-		Cunetio 2530	13	18.0	12	<42>	[77]	
24	Victorinus	268–71	radiate	Gaul mint I	INVICTVS	Sol stg l	Cunetio 2534	13	20.5		<41>	[74]	
25	Victorinus	269–71	radiate	Gaul mint I	SALVS AVG	Salus stg l, hdg sceptre and feeding serpant at altar	Cunetio 2552	13	18.9	1	<221>	[763]	
26	Victorinus	268–71	radiate	Gaul mint I	VIRTVS A[VG]		Cunetio 2553	13	18.5	6.5	<157>	[2]	
27	Tetricus I	271–4	radiate		VIRTVS [AVG]		Normanby 1485	13	21.0	12	<26>	[7]	
28	Tetricus I	271–4	radiate	Gaul mint I	HILARITAS AVGG		Normanby cf 1489	13	14.0	6	<295>	[945]	
29	Carausius	286–93	radiate	London	PAX AVG SP//MLXXI	Pax stg l hdg branch and (vertical) sceptre	*RIC* 5(2), p471 cf 98	14	22.8	6	<3>	[2]	IMP C CARAVSIVS PF AVG; rad, dr and cuir r; mint mark not recorded in *RIC*
30	Carausius	286–7	radiate	Rouen	[TVTE]LA AVG	Tutela stg l hdg [wreath] and cornucopiae	*RIC* 5(2), 684/6	14	13.5	6	<294>	[945]	[ ]ARAVSIVS AVG; rad, dr and cuir r
31	Carausius	286–93	radiate		PAX [AVG]			14	20.0	6	<270>	[746]	
32	Carausius	286–93	radiate		PA[X] AVG		*RIC* 5(2), p 535 no 880	14	20.0	8	<201>	[746]	
33	Carausius	286–93	radiate		?[PAX AVG]	Pax stg l hdg branch and vertical sceptre		14	20.0	10	<1>	[2]	
34	probably Carausius	286–93	radiate			illegible		14	21.5		<265>	[746]	

DAM = die axis measurement; D = di; adv = advancing; cuir = cuirassed; dr = draped; hdg = holding; l = left; laur = laureate bust; r = right; rad = radiate bust; stg = standing; 2std = two standards Cunetio = Besley & Bland 1973; Normanby = Bland & Burnett 1988

Table 5.20 Snodland Roman coin catalogue (1st- to 3rd-century AD coins); all coins are copper alloy unless otherwise stated

No	Ruler	Date (AD)	Denomination	Mint	Reverse legend	Reverse type	Reference	Reece coin period	D (mm)	DAM	RF no	Context no	Notes
35	Carausius, possibly contemporary copy	286–93	radiate		[PAX AVG]	Pax stg l hdg branch and transverse sceptre		14	19.0		<215>	[746]	radiate bust r
36	Allectus	293–6	radiate			illegible		14	20.0	6	<352>	[945]	
37	barbarous radiate copying Claudius II	275–85	radiate		IOVIS STATOR	type of Gallienus		14	16.9	5	<228>	[763]	
38	barbarous radiate copying Claudius II	275–85	radiate		[GENIVS EXERC]I		Cunetio 2821–2	14	18.5	12	<350>	[945]	
39	barbarous radiate copying Claudius II	275–85	radiate		[FELI]CITAS A[VG]		cf Cunetio 2831	14	17.4	11	<336>	[876]	Fig 5.40
40	Claudius II, contemporary copy	270–85	radiate		CONSE[CRATIO]	Altar 1b	Cunetio 2875	14	19.7	12	<251>	[6]	DIVVS CLAVDIVS
41	barbarous radiate copying Aurelian	270–75	radiate		ORIENS AVG; //XXIΓ	Sol with captive to l		14	22.9	6	<224>	[763]	IMP AVRELIANVS AVG; rad and cuir r; this type not recorded in *RIC*; Fig 5.40
42	barbarous radiate copying Victorinus	275–85	radiate		SPES PVBLICA	of Tetricus I	Normanby cf 1924	14	16.8	12	<249>	[3]	[ ]VICTORINVS[ ] ; Fig 5.40
43	barbarous radiate copying Tetricus I	275–85	radiate		COMES AVG	Victory stg l	Cunetio 2984	14	16.4	8	<197>	[746]	
44	barbarous radiate copying Tetricus I	275–85	radiate		HILARITAS AVGG		Cunetio 3000	14	19.0	2	<361>	[945]	
45	barbarous radiate copying Tetricus I	275–85	radiate		[S]A[LVS] AVG			14	16.3	4	<227>	[763]	
46	barbarous radiate copying Tetricus I or II	275–85	radiate			Spes adv l		14	17.5	3	<60>	[365]	clipped
47	barbarous radiate copying Tetricus II	275–85	radiate		INVICTVS	Sol of Victorinus		14	17.2	12	<195>	[746]	[TETRI]CVS CAES
48	barbarous radiate copying Laelian or Marius	275–85	radiate		blundered VICTORIA AVG	Victory running r hdg wreath and palm	Cunetio 2499/2507	14	17.8	6	<223>	[763]	
49	contemporary copy of Carausius	286–93	radiate		PAX AVG	Pax stg l hdg branch and vertical sceptre		14	20.0	12	<191>	[746]	IMP CARAVSIVS PF AVG
50	barbarous radiate	275–85	radiate			Victory adv l		14	16.3	12	<225>	[763]	
51	barbarous radiate	275–85	radiate		AVGG	female figure l hdg sceptre		14	15.0	10	<193>	[746]	
52	barbarous radiate	275–85	radiate					14	14.1	12	<194>	[746]	
53	barbarous radiate	275–85	radiate			illegible		14	17.9	12	<229>	[763]	?double struck
54	barbarous radiate	275–85	radiate			Salus l hdg sceptre		14	15.0	3	<231>	[763]	misstruck
55	barbarous radiate	275–85	radiate			figure unclear		14	12.4	9	<274>	[746]	
56	barbarous radiate	275–85	radiate			probably Salus stg l at alter		14	9.6		<16>	[479]	
57	barbarous radiate	275–85	radiate			female figure hldg sceptre		14	11.6	12	<17>	[479]	rad bust r
58	barbarous radiate	275–85	radiate			illegible		14	12.7		<28>	[313]	
59	barbarous radiate	275–85	radiate			Spes adv r		14	15.8	6	<151>	[2]	
60	illegible	c.41–250	*dupondius/as*			illegible			26.0		<189>	[746]	
61	illegible	c.41–250	*dupondius/as*			illegible			24.8		<19>	[2]	square piercing, probably from nail; possible this coin was nailed to a wall or post
62	illegible	2nd C	*sestertius*			illegible			30.6		<331>	[2]	
63	uncertain	260–75	radiate			illegible		13	16.8		<158>	[2]	
64	uncertain	260–75	radiate			illegible		13	16.7		<211>	[746]	
65	illegible	3rd C	?radiate			illegible			20.0		<403>	[763]	

DAM = die axis measurement; D = di; adv = advancing; cuir = cuirassed; dr = draped; hdg = holding; l = left; laur = laureate bust; r = right; rad = radiate bust; stg = standing; 2std = two standards Cunetio = Besley & Bland 1973; Normanby = Bland & Burnett 1988

Table 5.20 *continued*

No	Reverse legend	Reverse type	Mint mark	Date (AD)	Emperor	Obverse legend	Obverse type	Reference	Reece coin period	Di (mm)	DAM	RF no	Context no
66	SOLI INVICTO COMITI		London;TF//PLN	310	Constantine I			*RIC* 6, 121a	15	23.2	7	<119>	[2]
67	SOLI INVIC[TO COMITI]		London;TF//PLN	310	Constantine I			*RIC* 6, 121a	15	22.0	5	<198>	[746]
68	SOLI INVICTO COMITI		London; S[F]//MLN	315–16	Constantine I			*RIC* 7, p 100 no 43	15	19.9	6	<22>	[580]
69	SOLI INVICTO COMITI		London;TF//PLN	316–17	Constantine I			*RIC* 7, 93	15	20.5	6	<292>	[945]
70	SOLI INVICTO		Trier; -//PTR	310–13	Constantius	CONSTANTINVS AVG[1]	laur and cuir	*RIC* 6, 895var	15	18.7		<208>	[746]
71	GENIO [POP] ROM		Trier;TF//BTR	316	Licinius I/II			*RIC* 7, no 119	15	20.9	6	<34>	[623]
72	GENIO POPVLI ROMANI/II	Genius stg l, hdg cornucopiae and patera, alter to l	Lyons;A//PLC	301–3	Galerius as Caesar	MAXIMIANVS NOB C	laur and cuir r	*RIC* 6, p 252, no 164b	15	29.0	6	<33>	[7]
73	[VICTORI]AE LAET[AE PRINC PERP]		London; -//PLN	319	Constantine I			*RIC* 7, cf 154	16	17.2	6	<144>	[2]
74	BEATA TRANQVILLITAS VOTIS **		Trier	321	Constantine I			*RIC* 7, 303	16	20.0	6	<133>	[5]
75	BEATA TRANQVILLITAS VOTIS **		Trier; -//[•]PTR•	322–3	Constantine II as Caesar	CONSTANTINVS IVN NOB C	laur bust r wearing trabea, hdg eagle-tipped sceptre	*RIC* 7, p 198	16	19.0	11	<342>	[945]
76	CAESARVM NOSTRORVM	VOT X in wreath	London; -//PLON	323–4	Crispus			*RIC* 7, 291	16	20.6	6	<64>	[2]
77	CAESA[RVM NOSTRORV]M		London; -//PLON crescent	323–4	Crispus			*RIC* 7, 291	16	19.6	6	<138>	[2]
78	CAESARVM NOSTRO[R]VM VOT X		-//PLGC	323–4	Constantius II as Caesar			*RIC* 7, 217	16	18.0	1	<142>	[2]
79		unclear VOTA type		320–25	House of Constantine				16	19.3		<347>	[945]
80		unclear VOTA type		320–25	Constantine I, probably contemporary copy				16	18.3		<125>	[2]
81	PROVIDENTIAE AVGG		Trier; -//STR cresent and dot		Constantine I			*RIC* 7, 475	16	19.6	7	<146>	[2]
82	Illegible	illegible		*c* 320–25	Constantine I	CONSTAN….AVG	helmeted bust r		16	18.4	6	<44>	[2]
83	POP ROMANVS	bridge over river	Constantinople; CONS/(H)	*c* 330	House of Constantine		dr bust l of Genius hdg cornucopiae	*RIC* 8, 21	17	13.8	6	<67>	[17]
84	[GLORIA EXERCITVS]	two soldiers hdg two standards	Trier	330–31	Constantine II as Caesar			*RIC* 7, 527	17	17.9	7	<364>	[945]
85	GLORIA EXERCITVS	two soldiers hdg two standards	Trier; -//TR[ ]	330–35	Constantius II as Caesar				17	15.7	6	<192>	[746]
86	[G]LOR[IA EXERCITVS]	two soldiers hdg two standards	possibly Trier; -//[ ]P?	330–35	Constantius II as Caesar				17	17.6	12	<161>	[2]
87	GLORIA EXERCITVS	two soldiers hdg two standards	Lyon; -//•PLG	330–31	Constantius II as Caesar			*RIC* 7, 245	17	15.7	12	<132>	[2]
88	GLORIA EXERCITVS	two soldiers hdg two standards	Arles; branch//[ ]CONST	322–3	Constantine II as Caesar			*RIC* 7, 365	17	8.2	12	<293>	[945]
89	GLORIA EXERCITVS	two soldiers hdg two standards	Arles; -//PCONST	330–35	contemporary copy of House of Constantine				17	17.3	6	<335>	[9]
90	GLORIA EXERCITVS	two soldiers hdg ?two standards	Arles; -//.CONS	330–40	probably contemporary copy of House of Constantine				17	15.2	6	<154>	[2]
91	[GLORIA EXERCITVS]	two soldiers hdg two standards	Arles/Trier; branch//[ ]	330–35	Constantine I				17	15.7		<345>	[945]
92	[GLORIA EXERCITVS	two soldiers hdg two standards	-//TR[P]	*c* 330–35	House of Constantine				17	15.0	6	<362>	[945]
93	[GLORIA EXERCITVS]	two soldiers hdg two standards		*c* 330–35	House of Constantine				17	13.0		<127>	[2]
94	GLORIA EXERCITVS	two soldiers hdg two standards		330–35	Constantine I				17	17.7		<346>	[945]
95	[GLORIA EXERCITVS]	two soldiers hdg two standards		330–40	contemporary copy of House of Constantine				17	12.3	6	<213>	[746]

DAM = die axis measurement [1]: obverse legend not recorded in *RIC*; half *nummus*

Table 5.21 Snodland Roman coin catalogue (4th-century AD coins); all coins are copper alloy unless otherwise stated

No	Reverse legend	Reverse type	Mint mark	Date (AD)	Emperor	Obverse legend	Obverse type	Reference	Reece coin period	Di (mm)	DAM	RF no	Context no
96	[GLORIA EX]ERCITVS]	two soldiers hdg two standards		330–40	House of Constantine, possibly contemporary copy				17	13.0		<123>	[2]
97	[GLORIA EXERCITVS]	two soldiers hdg two standards			contemporary copy of House Constantine				17	12.0		<131>	[2]
98	GLORIA EXERCITVS	two soldiers hdg one standard	Trier; -//[TRP•]?	330–31?	Constantine II as Caesar			*RIC* 7, cf 527	17	17.0		<351>	[945]
99	[GLORIA EXERCITVS]	two soldiers hdg one standard	Trier; -//•T[ ]	335–40	House of Constantine				17	9.0	6	<266>	[746]
100	GLORIA EXERCITVS	two soldiers hdg one standard	Arles		Constantine II as Ceasar			*RIC* 7, 371	17	16.5	6	<348>	[945]
101	[GLORIA EXERCITVS]	two soldiers hdg one standard; chi-rho in banner	Arles		contemporary copy of Constantine I			*RIC* 7, cf 381 (Arles)	17	8.8		<299>	[945]
102	GLOR[IA EXERCITVS]	two soldiers hdg one standard		335–41	House of Constantine				17	14.4		<147>	[2]
103	GLORIA EXERCITVS	two soldiers hdg one standard		335–41	House of Constantine				17	13.2	1	<206>	[746]
104	GLORIA EXERCITVS	two soldiers hdg one standard		335–41	House of Constantine				17	14.0		<349>	[945]
105	[GLORIA] EXER[CITVS]	two soldiers hdg one standard	-//[ ]	337–41	Constantius I as Augustus				17	14.7	12	<155>	[2]
106	GLORIA EXERCITVS		Lyons; PLG	330–31	possibly contemporary copy of Constantine II as Caesar			*RIC* 7, 238	17	13.8	6	<67>	[17]
107	GLORIA EXERCITVS		Arles; ?*//CONST	330–31	Constantius II as Caesar			*RIC* 7 cf 348	17	17.0	12	<108>	[2]
108	[GLORIA EXERC]ITVS		Rome	337–40	Constans			*RIC* 8, 26	17	14.8	12	<245>	[623]
109	VRBS ROMA	wolf and twins	wreath//…	330–40	contemporary copy of House of Constantine				17	18.0	12	<149>	[2]
110	VRBS ROMA	wolf and twins		330–40	contemporary copy of House of Constantine				17	11.8	3	<203>	[746]
111	CONSTANTINOPOLIS	Victory on prow	Lyons; -//PLG	330–40	contemporary copy of House of Constantine				17	11.0	6	<271>	[746]
112	CONSTANTINOPOLIS	Victory on prow	Arles; chi-rho//SCONST	336	House of Constantine			*RIC* 7, 386/401	17	16.4	12	<363>	[945]
113	CONSTANTINOPOLIS	Victory on prow			contemporary copy of House of Constantine				17	12.0		<124>	[2]
114	CONSTANTINOPOLIS	Victory on prow			contemporary copy of House of Constantine; hybrid	VRBS ROMA			17	13.5	6	<126>	[2]
115	CONSTANTINOPOLIS	Victory on prow		330–40	contemporary copy of House of Constantine				17	10.8		<326>	[105][1]
116	PIETAS ROMANA	Pietas standing hdg infant	Trier; -//TRP branch	337–41	Theodora	FL MAX […]	dr bust r	*RIC* 8, no 91	17	14.3	12	<6>	[2]
117	[PIETAS ROMANA]			337–41	Theodora				17	14.0	12	<269>	[746]
118	PAX PVBLICA		Trier; -//TRP branch	337–41	Helena			*RIC* 8, 90	17	14.9		<129>	[2]
119	[PAX PVBLICA]			337–41	Helena				17	13.7	6	<163>	[2]
120	VICTORIAE [DD AVGG QNN]	two Victories	Trier; leaf//[ ]		Constans			*RIC* 8, 185	17	14.1	12	<343>	[945]
121	[VICTORIAE DD AVGGQ NN	two Victories	Trier; leaf//TR[ ]	347–8	Constans			*RIC* 8, 185-6	17	17.0	6	<139>	[2]
122	[VICTORIAE DD AVGGQ NN]		Trier; palm//TRS•	347–8	Constans			*RIC* 8, 210	17	15.0	6	<150>	[2]
123	VICTORI[AE DD AVG QNN]		Trier; palm//TRS•	347–8	Constans			*RIC* 8, 210	17	15.0	12	<35>	[7]
124	[VICTORIAE DD AVGGQ NN]	two Victories			House of Constantine				17	15.0		<130>	[2]
125		Victory on prow	Trier; -//TR•P	332–3	House of Constantine			*RIC* 7, 543	17	17.1	12	<137>	[2]
126	illegible			330–48	illegible				17	14.0		<273>	[746]
127	[FELICITAS REI PVBLICAE]	Emperor standing hdg standard and Victory		350–51	Magnentius				18	16.5		<209>	[746]

DAM = die axis measurement

Table 5.21 *continued*

No	Reverse legend	Reverse type	Mint mark	Date (AD)	Emperor	Obverse legend	Obverse type	Reference	Reece coin period	Di (mm)	DAM	RF no	Context no
128	VICTORIAE DD NN AVG [ET CAE]		Lyons; SV//[ ]	351–3	Decentius			RIC 8, 127/9	18	22.5	12	<250>	[6]
129	[FEL TEMP REPARATIO]	soldier adv l spearing fallen horseman		355–61	contemporary copy of Constantius II				18	11.0		<268>	[746]
130	FEL TEMP REPERATIO	soldier adv l spearing fallen horseman		355–61	contemporary copy of Constantius II		diademed bust r		18	13.2	12	<18>	[664]
131	[FEL TEMP REPARATIO]	soldier adv l spearing fallen horseman	-//..T		contemporary copy of Constantius II		diademed bust r		18	15.4	6	<5>	[2]
132	FEL TEMP REPARATIO	soldier adv l spearing fallen horseman	-//TP	355–61	contemporary copy of Constantius II				18	16.1	4	<128>	[2]
133	FEL TEMP REPARATIO	soldier adv l spearing fallen horseman			contemporary copy of Constantius II		diademed bust r		18	16.7	3	<30>	[17]
134	FEL TEMP REPARATIO	soldier adv l spearing fallen horseman [2]		355–61	contemporary copy of House of Constantine				18	17.7		<134>	[2]
135	FEL TEMP REPARATIO	soldier adv l spearing fallen horseman	Arles; -//[ ]ON	355–61	contemporary copy Constantius II				18	18.8		<136>	[2]
136	FEL TEMP REPARATIO	soldier adv l spearing fallen horseman	Trier	*c* 348–55	contemporary copy Constantius II				18	21.3		<106>	[2]
137	GLORIA ROMANORVM		possibly Aquileia-//..A	364–78	House of Valentinian				19	17.3	6	<74>	[890]
138	[GLORIA ROMANORVM]			364–78	House of Valentinian				19	16.4	12	<156>	[2]
139	SECVRITAS REI REPVBLICAE	Victory l	?Arles	364–78	probably contemporary copy of Valens				19	11.4	12	<296>	[945]
140	SECVRITAS REI REPVBLICAE	Victory l		364–78	House of Valentinian				19	16.4		<358>	[945]
141	SECVRITAS REI-PVBLICAE	Victory adv l, hdg wreath and palm		364–78	House of Valentinian				19	15.5		<160>	[2]
142	[SECVRITAS REI PVBLICAE]	?Victory l		364–78	probably House of Valentinian				19	15.4		<164>	[2]
143	GLORIA NOVI SAECVLI	Emperor standing hdg shield and standard	Arles	367–75	Gratian			RIC 9, 15	19	17.8	4	<159>	[2]
144	probably GLORIA NOVI SECVLAE		probably Arles		probably Gratian			prob RIC 9, 15	19	16.0		<267>	[746]
145	silver *siliqua*:VRBS ROMA		Trier; -//TRPS•	367–75	Gratian			RIC 9, 27c	19	17.5	6	<24>	[7]
146	illegible			364–78	House of Valentinian				19	17.0		<162>	[2]
147	VICTOR[IA AVGG]	Victory adv l, hdg wreath and palm	-//[ ]	388–402	Arcadius				21	12.9	6	<205>	[746]
148	VICTORIA AVGGG	Victory l		388–402	House of Theodosius				21	7.3		<298>	[945]
149	[SALVS REI PVBLICAE]	Victory adv l, hdg trophy and dragging captive; to r prob a barred rho	-//[ ]	388–402	House of Theodosius	[ ] AVG	pearl-diademed bust r		21	10.9		<61>	[7]
150	[SALVS REI PVBLICAE]	Victory adv l , hdg trophy and dragging captive		388–402	House of Theodosius[3]				21	12.2		<145>	[2]
151	illegible	illegible		260–402						10.0		<77>	[890]
152	illegible	illegible		260–402						15.9			
153	illegible	illegible		260–402						16.6		<148>	[2]
154	illegible	illegible		260–402						16.0		<152>	[2]
155	illegible	illegible		260–402						18.0		<153>	[2]
156	illegible	illegible		260–402						19.3		<199>	[746]
157	illegible	illegible		260–402						19.8		<207>	[746]
158	illegible	illegible		260–402						12.9		<233>	[763]
159	illegible	illegible		260–402						15.4		<234>	[763]
160	illegible	illegible		260–402						15.7		<272>	[746]
161	illegible	illegible		260–402						15.0		<344>	[945]
162	illegible	illegible		260–402						12.2		<359>	[945]
163	illegible	illegible		260–402						12.5	9?	<360>	[945]
164	illegible	illegible		260–402						12.8		<438>	[1]
165	illegible	illegible		260–402						7.3		<298>	[945]

DAM = die axis measurement [2]: overstruck on House of Constantine, GLORIA EXERCITAS, two soldiers and ?two standards, *c* 330-35; [3]: probably Arcadius or Honorius

Table 5.21 *continued*

Issuer	Denomination	Reverse	Mint	Date	Wear	DAM	Di (mm)	RF no	Context no	Feature type	Notes
Edward I	penny	CIVITAS LONDON	London	1279–1307	W/SW		18.8	<176>	u/s		class 10ab
Edward I–III	penny	CIVITAS LONDON	London	1279–1377	W/W		17	<103>	[2]	subsoil	
Edward I–III	penny	CIVITAS CANTOR	Canterbury	1279–1377	VW/W		18	<216>	[746]	subsoil deposit	
?Edward III	cut quarter penny	VND	?Bury	1327–35	SW/SW			<181>	u/s		class 15d
Illegible	penny	clipped		1279–1489	EW/EW		16.5	<178>	u/s		clipped
Henry V	penny	CIVITAS EBORACI, one annulet	York G	1413–22	SW/W		17	<177>	u/s		local die
Henry VI	penny	clipped	York	1470–71	W/W		14	<275>	[746]	subsoil deposit	clipped
James I	penny	TVEATVR VNITA DEVS, escallop		1606–7	W/W	9	13.8	<7>	[2]	subsoil	second coinage
Illegible	jetton	illegible		15th–17th century	C/C		24.7	<179>	u/s		
?Nuremburg	jetton	illegible		15th–17th century	C/C		22	<4>	[2]	subsoil	
?Hanns Krauwinkel	jetton	rose/orb type		16th–17th century	EW/EW		21	<180>	u/s		
N/a	lead token	grid		14th–18th century			20	<372>	[2]	subsoil	

DAM= die axis measurement; C = corroded; EW = extremely worn; SW = slightly worn; VW = very worn; W = worn

Table 5.22 Post-Roman coins

The chronological distribution of the coins spans almost the entirety of the Roman settlement of Britain, from a worn *dupondius* of Nero (AD 54–68) to bronze *nummi* of the House of Theodosius (AD 388–402); over half the coins (57%) were struck during the 4th century AD and approximately a third of the assemblage are 3rd-century AD radiate types (see full catalogues in Tables 5.20 and 5.21). All the coins are of base metal, apart from a single silver *siliqua* of Gratian.

A number of coins are of particular note as their context implies significance in terms of structured deposition. The sequence of possible Building 4 is also particularly well dated by coins: beneath post pad stone [376] was a barbarous radiate copying Claudius II (RF<336>), most likely as a votive offering, dating the construction to post-AD 275. The smaller of the two coin hoards in pit [138] cut the demolition deposits of the building, indicating a date of destruction around the mid 4th century AD.

One last coin of note is RF<19>, an extremely worn *as* or *dupondius* recovered from the subsoil. This coin exhibits a square nail hole, indicating that it may have been attached to a wall or post (Fig 5.37). This practice is believed to hold some ritual significance (Philippa Walton, pers comm) and it is especially unfortunate that this is an unstratified find.

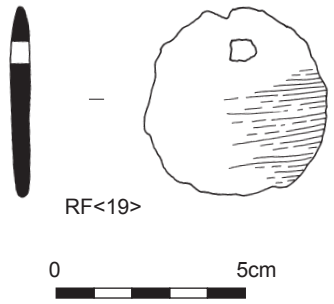

Fig 5.37 Registered find: coin with square nail hole RF<19>

REECE COIN PERIOD ANALYSIS

Use of coin periods, here the system and method as defined by Reece (1991), as a means to express the number of recovered coins from each issue period as a relative proportion of the assemblage as a whole, provides a method of comparative interpretation and allows the assemblage to be compared in a statistically meaningful way against the British mean of coin supply (Reece 1995) and the assemblages of other local sites. The coins of the various rulers have been assigned to a Reece coin period and coins which could not be identified to issuer but could nonetheless be assigned to the appropriate Reece coin period have also been included (Table 5.23). The number of coins for each Reece coin period is converted to a value of 'coins per thousand' (Table 5.24) and these values plotted together with the British mean (Fig 5.38).

Analysis shows the peak of coin loss at Snodland taking place between AD 260–96 (Reece coin periods 13 and 14) and AD 330–48 (Reece coin period 17), with far fewer losses during the 1st and 2nd centuries AD, a trend which broadly follows the British average (Reece 1995). There are considerably fewer losses during the 1st and 2nd centuries AD

in comparison with the British mean, probably reflecting the fact that the site was primarily agrarian during this phase and was occupied before the later 1st century AD.

Reece coin period	Ruler	Count	Total
3	Nero, AD 54–68	1	1
4	Vespasian, AD 69–79	1	1
5	Trajan, AD 98–117	3	3
7	Faustina Snr, AD 138–61	1	1
8	Marcus Aurelius as Augustus, AD 161–80	2	2
9	Commodus, AD 180–92	1	1
12	Severus Alexander, AD 222–35	1	
	Gordian III, AD 238–44	1	
	Trajan Decius, AD 249–51	1	
	Salonina, joint rein, AD 253–60	1	4
13	Gallienus, sole reign, AD 260–68	5	
	Salonina, AD 260–68	1	
	Claudius II, AD 268–70	1	
	Posthumus, AD 260–69	1	
	Victorinus, AD 269–71	5	
	Tetricus I, AD 271–4	2	17
14	Carausius, AD 286–93	7	
	Allectus, AD 293–6	1	
	contemporary copy of Claudius II	4	
	barbarous radiate copying Aurelian	1	
	barbarous radiate copying Victorinus	1	
	barbarous radiate copying Tetricus I	3	
	barbarous radiate copying Tetricus I or II	1	
	barbarous radiate copying Tetricus II	1	
	barbarous radiate copying Laelian or Marius	1	
	contemporary copy of Carausius	1	
	barbarous radiate	10	31
15	SOLI INVICTO COMITI	5	
	GENIO POP ROM	2	7
16	VICTORIAE LAETAE PRINC PERP	1	
	VOTA types	7	
	PROVIDENTIAE AVGG	1	10
17	POP ROMANVS	1	
	GLORIA EXERCITVS; two soldiers holding two standards	14	
	GLORIA EXERCITVS; two soldiers holding one standards	8	
	GLORIA EXERCITVS; unclear	3	
	VRBS ROMA	2	
	CONSTANTINOPOLIS	6	
	PIETAS ROMANA	2	
	PAX PVBLICA	2	
	VICTORIAE DD AVGGQ NN	5	44
18	FELICITAS REI PVBLICAE	1	
	VICTORIAE DD NN AVG ET CAE	1	
	FEL TEMP REPARATIO	7	10
19	GLORIA ROMANORVM	2	
	SECVRITAS REI PVBLICAE	4	
	GLORIA NOVI SAECVLI	2	
	silver *siliqua*: VRBS ROMA	1	10
21	VICTORIA AVGGG	2	
	SALVS REI PVBLICAE	2	4
Total		**140**	**146**

Table 5.23 Overview of the assemblage by Reece coin period and ruler/ reverse type

Reece coin period	Date (AD)	Snodland no of coins	Snodland coins per 1000	Lullingstone coins per 1000	Eccles coins per 1000	British mean coins per 1000
1	up to 41	0			32.79	6.47
2	41–54	0		3.06	16.39	11.73
3	54–63	1	6.84			5.90
4	69–96	1	6.84	3.06	10.93	30.85
5	96–117	3	20.54	12.23	21.86	19.90
6	117–38	0		12.23	16.39	15.79
7	138–61	1	6.84	9.17	38.25	18.67
8	161–80	2	13.69	3.06	16.39	11.52
9	180–92	1	6.84		10.93	4.66
10	193–222	0		3.12		15.18
11	222–35	0			5.46	7.29
12	235–60	4	27.39	9.17	60.11	8.08
13	260–75	17	116.43	45.87	120.22	144.30
14	275–96	31	212.32	51.99	218.58	121.24
15	296–318	7	47.94	6.12	5.46	17.49
16	318–30	10	68.49	100.92	32.79	44.13
17	330–48	44	301.36	342.51	245.90	245.54
18	348–64	10	68.49	217.13	71.04	98.22
19	364–78	10	68.49	113.15	54.64	118.00
20	378–88	0		3.06		4.80
21	388–402	4	27.39	61.16	21.86	50.25
Total	**146**	**999.89**	**997.01**	**999.99**	**1000.01**	

Table 5.24 Comparison of chronological distribution of coins from Snodland with local villa sites (Reece 1991; 1995)

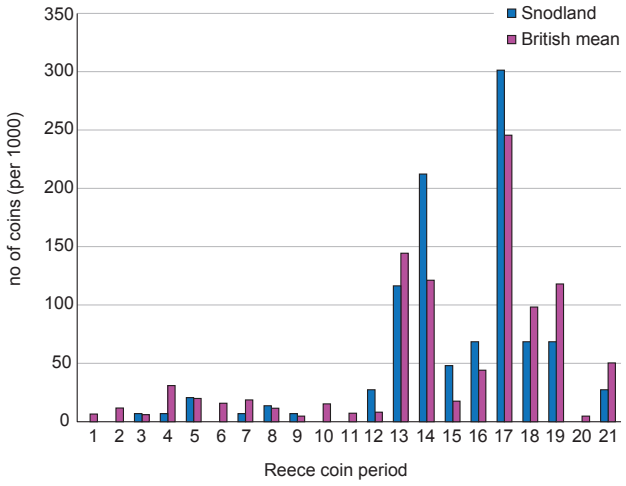

Fig 5.38 Bar chart comparing the number of coins (per 1000) by Reece coin period at Snodland against the British mean (Reece 1995)

Comparison with the neighbouring sites of Eccles and Lullingstone (Reece 1991, 25–36) shows that the overall profile for Snodland is generally comparable but that each of the three sites have distinctive characteristics (Fig 5.39). Eccles, a site of known early foundation, shows by far the highest losses in the 1st and 2nd centuries AD. Snodland and Lullingstone share sporadic coin loss in these periods, attesting to some activity. However, Snodland is the stronger of the two in the late 1st and early 2nd centuries. In the 3rd century Snodland and Eccles share notable peaks between AD 260 and AD 96 (ibid, 13–14), which is quite normal for sites in Britain (the peak during Reece coin periods 13–14 correlates with an increase in 'small change' denominations, the British-issued barbarous radiates that were minted to make up for a shortfall in regular coinage). Lullingstone, however, shows a clear lack of coins in this period, which is a phenomenon that requires explanation.

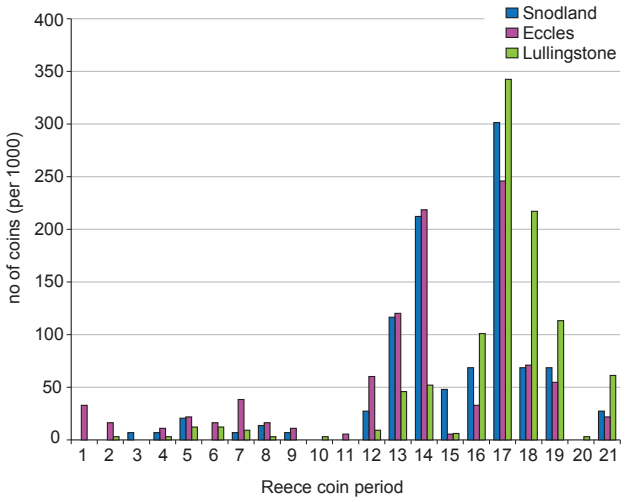

Fig 5.39 Bar chart comparing number of coins (per 1000) by period at Snodland, Lullingstone and Eccles

In the 4th century AD, all sites peak in the years AD 330–48 (Reece coin period 17), which is typical of rural sites in Britain. This reflects the widespread copying of the main types during a period when western mints ceased coinage production altogether (Reece 2002). It is Lullingstone, however, that has the highest coin loss in the late Roman period, with both Snodland and Eccles tailing off. In the Valentinianic period (AD 364–78, Reece coin period 19), all sites are below the national average, a feature typical of most sites in the south-east (Essex, Hertfordshire, Surrey, Sussex and Kent) (Moorhead 2001). The reasonable proportion of Theodosian coins from Reece coin period 21 (AD 388–402) is unexpected as there is no other evidence for occupation on site in the late 4th to early 5th centuries AD.

As well as being of regional significance in terms of fitting with the broad trends of coin loss, Snodland has provided an important new assemblage (selected examples shown in Fig 5.40) to add to the corpus of Roman site finds from Britain.

5.9 TEXTILES

Trista Clifford

Twenty-four fragments of charred woven textile were recovered from sample <9> from pit fill [113], period 3, phase 5. Of these fragments, 17 were sufficiently well preserved to provide some information regarding production process.

The largest of the fragments measures 7.90 × 6.07mm. The weave is a simple basket weave, a plain weave woven with a double warp and weft:

?Warp 10–11 pairs per 10mm;

?Weft 8–10 pairs per 10mm.

All fragments appear to be similar to this woven structure and are therefore likely to form part of the same piece of

Fig 5.40 Photographs of selected Roman coins

cloth. One fragment possibly exhibits a selvedge, although its structure is unclear and it may just be a folded edge.

The threads are loosely Z-spun single ply, with an angle of twist of between 20 and 30 degrees. A number of fragments exhibit a glassy, bubbled texture on one side of the fabric, which could be due to contact with the contents of the cloth or bag from which the fragments derive. Owing to the charred state of the fragments, fibre could not be identified, although this weave is most commonly associated with vegetable-derived fibres such as linen or flax.

The earliest evidence of basket-woven fabric originates from impressions on clay tablets from 7th-century BC Iraq (Barber 1991, 127). In northern Europe, basket weave appears from the Halstatt period onward (Wild 1970, 46). It appears less frequently in Roman Britain than the simpler plain weave and related weaves such as 2-over-2 twill. Parallels in vegetable fibres exist from a late Roman burial context at Cambridge and a post-Boudiccan context at Silchester (ibid).

5.10 MACROBOTANICAL REMAINS AND WOOD CHARCOAL

Lucy Allott

INTRODUCTION

Sixty-six bulk soil samples, totalling 2303 litres, were taken from the excavation and processed for botanical and faunal remains. Samples were extracted from features ranging in date from the early Roman (period 3, phase 1) to the late Roman (period 3, phase 5). Although there is significant evidence for demolition disturbance and robbing within deposits associated with the buildings, a programme of environmental sampling was employed targeting several areas of the site that were less impacted upon, as well as characterising the nature of the deposits associated with the demolition phases. Nevertheless, in almost all instances the remains derive from secondary (at least) deposits and do not provide primary data for activities. Therefore, although some of the assemblages are particularly rich in macrobotanical remains, the treatment and discussion regarding the proportions of plant parts remains cursory as the assemblages may represent amalgams of debris.

These assemblages presented the potential broadly to characterise components of agriculture, food resources, plant use and the vegetation environment of the site between the 1st and 4th centuries AD. Assessment determined that only 16 of the 66 samples contained macrobotanical assemblages with potential to provide further information. These samples span period 3, phases 2 to 5 and are from features associated with the building 1 (B1) and its later adaptations, two possible timber structures (B3 and B4), rubbish pits, a well, a pond and graves. In order to characterise use and management of fuel resource, analysis was also recommended for charcoal fragments in 14 of the bulk samples and these also span the Roman occupation of the site.

The samples were considered to be of particular importance for several reasons. No other botanical or environmental data exist for the main villa site 80m to the east, with which these buildings, field systems and cemetery are associated. The assemblages thus present the opportunity to fill this gap by providing information regarding activities that were almost certainly associated with the occupation of the villa. Assessment revealed deposits with moderate to rich samples dating from the early to the late Roman occupation. Both charred and waterlogged botanical remains are preserved at the site, providing the opportunity to examine a cross section of food resources and plants naturally occurring in the environment. It should be noted that the degree of preservation of different plant remains is often strongly correlated with modes of preservation and where, for instance, waterlogged deposits are absent remains of fruits may also be absent or poorly represented in the archaeobotanical data. In such instances it can also be difficult to obtain an indication of vegetation and ground conditions local to the site. Charred assemblages on the other hand are frequently skewed towards preservation of crops and associated weeds and in particular those that require close contact with fire during aspects of processing.

METHODOLOGY

Macrobotanical remains

Samples were processed in a flotation tank, the flots and residues being captured on 250µm and 500µm meshes and air-dried prior to sorting. The residues were sieved at 4mm and 2mm and all fractions were hand-sorted for environmental and artefact remains. Charcoal and macrobotanical remains recovered from the residues were incorporated with those present in the flots. Prior to analysis the flots were sieved through stacked geological sieves (4mm, 2mm, 1mm, 500µm and 250µm) and sorted under a stereozoom microscope at ×7–×45 magnifications. Identifications have been made using modern comparative material held at the UCL Institute of Archaeology and standard reference literature (eg Berggren 1969; 1981; Anderberg 1994; NIAB 2004; Cappers et al 2006; Jacomet 2006). Nomenclature and habitat information for the wild taxa follows Stace (1997) and Zohary & Hopf (2000) for economic crops. Samples varied in size and therefore a fragment per litre (fpl) measurement is

Feature types: D = ditch, gully, drain, sewer, culvert etc; DS = destruction debris (*in situ*); G = grave cut; P = pit (unspecified); SP = structural cut (posthole, stakehole); SU = sump/water collection pit; W = well

Habitat preferences: A = arable; B = river banks etc.; C = cultivated; D = disturbed/ wasteg round; E = heaths; F = fens; G = grassland; H = hedgerows; M = marsh/bog; P = ponds, rivers, ditches; S = scrub; W = woods; Y = waysides

Soil preferences: a = acidic; c = calcareous; d =dry; n = nutrient-rich; o = open; s = sandy; w = wet/damp

Preservation: u = uncharred/waterlogged

			Period	3.2	3.3	3.3	3.3
			Context no	[726]	[1014]	[1015]	[1109]
			Group	518	519	519	614
			Feature type	D	D	D	W
			Parent context no	[727]	[1016]	[1016]	[1278]
			Sample no	<30>	<46>	<47>	<58>
			Sample vol (l)	40	40	40	20
			Flot Wt (g)	12	4	6	62
			Flot vol (ml)	55	15	40	275
Taxonomic identifications	**English names**	**Habitat/soil preferences**	**Preservation**				
Crops							
Triticum spelta/dicoccum	spelt/emmer caryopses			2			3
T cf aestivum	free-threshing caryopses						1
Hordeum sp	hulled barley			1			
Hordeum sp	hulled or naked barley						2
Cerealia	cereal caryopses			6	1		8
Avena sp	oat caryopses			2 cf			
Chaff							
Triticum spelta	spelt spikelet forks						1
T spelta/dicoccum sp	spelt/emmer spikelet forks						2
T spelta	spelt glume base			4	1		92
T cf dicoccum	emmer glume bases						2 cf
T spelta/dicoccum	spelt/emmer glume base			3			
Triticum sp	wheat glume base frags						51
T cf *spelta*	spelt wheat glume frags			1 cf			11
Cerealia rachis frags	indeterminate rachis frags						3
Indet chaff frags	eg internode, node and spikelet base, rachis frags etc			1			47
Pisum sativum L	common pea				1		
Vicia/Pisum/Lathyrus sp	vetch/tare/pea fragments			1			
Fruits & nuts							
Sambucus nigra L	elder	HWD manured soils edible					>222 u
Vitis vinifera L	grape	I edible					7 u
Rubus fruticosus/idaeus	blackberry/raspberry	DHSW edible					>333 u
Malus/Pyrus sp	crab apple/pear pip	HSW edible					3 u
Ficus carica L	fig	I edible					24 u
Prunus domestica	wild plum/bullace	I DHS edible					15 u
P cf spinosa L	blackthorn/sloe stone	HSW edible					282 u
P cf avium L (L)	wild cherry	HW edible					7 u
P cf cerasus L	dwarf cherry	I H edible					1 u
Prunus sp	plum/cherry/sloe						12 u
cf *Sorbus* sp	whitebeam/service tree/rowan						37 u
Crataegus monogyna Jacq	hawthorn	WSH edible					3 (1 cf) u
Weeds & grasses							
Chenopodium sp	indet goosefoot	CDn			1	6	1
cf Bryonia dioica Jacq.	white bryony	HSn					1 u
Potentilla sp	cinquefoil						13 u
Urtica cf dioica	common nettle	ADHW edible	u				39 u
Fumaria officinalis L	common fumitory	CW					2 u
Rumex sp	dock/sorrel	AD	u				3 u
Rumex sp	dock/sorrel	AD	charred		1		1
cf Solanum sp	nightshade						2 u
Solanum dulcamara L	bittersweet	DHWP					1 u
Medicago sp	medicks				1		
Ranunculus acris/repens/bulbosus	meadow/creeping/bulbous buttercup	GWMc				1	8 u
Carduus sp	thistle						3 u
cf Anthemis cotula L	stinking mayweed/chamomile	Awh				1	
Alium sp	chive/onion				1		
cf Lolium perenne L	perennial rye-grass	GD			1		
Festuca/Lolium sp	fescue/rye-grasses						3
Poaceae caryopses	grass seed						2
CPR indet	indet charred plant remains			1			
Total fragments				**22**	**8**	**8**	**3060**
Fragment per litre				**0.55**	**0.2**	**0.2**	**153**

Table 5.25 Period 3, phases 2 and 3: macrobotanical remains – quantification and identifications

given for each sample. These measurements include all fragments of seeds or whole seeds recorded in Tables 5.25 and 5.26.

Wood charcoal

Charcoal fragments >2mm were extracted from the flots and residues of the 20 samples selected for analysis. Wherever possible up to 100 charcoal fragments from each sample were fractured for analysis although in many instances fewer fragments were suitable for identification. Following standardised procedures (Leney & Casteel 1975; Gale & Cutler 2000) charcoal fragments were fractured along three planes (transverse (TS), tangential longitudinal (TLS) and radial longitudinal (RLS) sections) to reveal anatomical structures required for identification. Specimens were viewed under a stereozoom microscope at ×7–×45 magnifications for initial sorting and under an incident light Olympus BHMJ microscope for identification purposes. Taxa were identified through reference to wood atlases and literature (Schweingruber 1990; Hather 2000; Schoch et al 2004) and where necessary to modern comparative slides and specimens held at the UCL Institute of Archaeology.

Owing to the complex series of taphonomic processes that wood undergoes from the point of collection to the point at which it is recovered as charcoal in the archaeological assemblage, quantification using fragment counts or weight can be misleading if trying to reconstruct patterns of fuel/wood acquisition or the vegetation environment/s from which wood was sourced. Presence/absence provides an alternative and preferable approach to interpreting charcoal data and is particularly informative when considered as ubiquity scores across feature types and occupation periods. This method is therefore used here although raw fragment counts are recorded in Table 5.27.

RESULTS

Results of the analysis of the macrobotanical remains are presented in Tables 5.25 and 5.26 and of the charcoal assemblages in Table 5.27.

Preservation

The majority of macrobotanical remains were preserved in a charred/carbonised state and many displayed variable levels of preservation. Although many of the remains were relatively intact, retaining overall form and surface morphology, several samples contained puffed, abraded and fragmented objects (cereal grains in particular). Variability in preservation may have resulted from exposure to different charring conditions such as temperature and oxygen. Where preservation was poor, charred remains tended to be less abundant.

Uncharred, waterlogged botanical remains were preserved in two features: fill [704] of pond [705] and well [1278]. The pond feature was filled by organic clay-rich layered deposits and was saturated at the time of excavation. Material within the well, although not waterlogged at the time of excavation, was almost certainly preserved in wet and anaerobic conditions. Uncharred archaeobotanical remains are relatively common occurrences in such features and for these reasons the rich uncharred assemblages are included in the analysis (Tables 5.25 and 5.26). No waterlogged deposits were encountered in other features from which samples were selected for analysis and therefore any other uncharred remains were excluded as potential modern intrusive contaminants.

Period 3, phase 2

Trackway ditch G518 (<30>) produced small assemblages of poorly preserved cereal caryopses, chaff and a single pea. No weed taxa were recorded in the sample from this feature. Oak (*Quercus*), wild cherry/blackthorn (*Prunus* sp), ash (*Fraxinus excelsior*), privet (*Ligustrum vulgare*), Maloideae group taxa and heather (*Calluna vulgaris*) are present in the small charcoal assemblage from the trackway ditch. A similar range of woody taxa were evident in the primary fill ([1162], <55>) of rubbish pit [1160], located in the same area of the site, and it has been possible to refine some of the cherry/blackthorn identifications to probable blackthorn (cf *Prunus spinosa*). Charcoal from elongated pit [252] (<13>, fill [253]) in FS3 consisted predominantly of oak, with cherry/blackthorn, privet and birch (*Betula*) also represented.

Period 3, phase 3

Samples <47> and <46>, taken from the primary and upper fills of enclosure ditch G519, produced infrequent charred macrobotanical remains although a small quantity of weeds common to arable land or disturbed/waste ground was present. Stinking mayweed (*Anthemis cotula*) is often associated with cultivation of heavy clay-rich soils, while goosefoot (*Chenopodium* sp), dock/sorrel (*Rumex* sp) and medick (*Medicago* sp) have less specific growth habitats. A possible perennial rye-grass (cf *Lolium perenne*) and buttercup (*Ranunculus acris/repens/bulbosus*) are perhaps more indicative of grassland vegetation although various buttercups can occur in woodlands, marshland and on calcareous soils. A single seed comparable with chives (cf *Alium* sp) is also present, possibly providing some indication of the presence of food plants.

			Period	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.5
			Context no	[572]	[720]	[812]	[906]	[704]	[383]	[139]	[266]	[266]	[800]	[113]	[254]
			Group	71	71		722	732	729	811	85	85	86	89	813
			Feature type	DS	DS	DS	P	SU	G	SP	G	G	G	P	D
			Parent context no	[728]	[728]	[728]	[903]	[705]	[383]	[152]	[268]	[268]	[801]	[138]	[75]
			Sample no	<50>	<51>	<49>	<42>	<48>	<21>	<10>	<16>	<17>	<33>	<9>	<14>
			Sample vol (l)	40	40	40	40	40	40	40	80	15	60	74	40
			Flot Wt (g)	66	38	18	84	70	148	8	140	110	36	298	106
			Flot vol (ml)	180	85	60	130	250	340	15	250	110	300	375	215
Taxonomic identifications	**English names**	**Habitat/soil preferences**	**Preservation**												
Cereal crops															
Triticum spelta/dicoccum	spelt/emmer caryopses			12	18	8	2	6		12	37	14	1	359 (incl 2 cf)	3
T cf aestivum	free-threshing caryopses			4	3	1	2	1		3	16	4 cf		2	1
Hordeum vulgare L emend	6-row hulled barley								1	1	1			73	
Hordeum sp	hulled barley			2	2	2				3	2	3		152	1
Hordeum sp	hulled or naked barley							1	1		6	1	1	10	2
Triticum sp	wheat caryopses			2	2	2		1	1	1	15			248	
Triticum/Hordeum sp	wheat/barley caryopses			3		1				4	25	8		11	
Cerealia	cereal caryopses			19	13	6	6	3	25	36	99	44	6	166	15
Avena sp	oat caryopses							1		1	15	2		2	1
Chaff															
Triticum spelta	spelt spikelet forks								3		3			7	
T spelta/dicoccum sp	spelt/emmer spikelet forks								6		5				
T spelta	spelt glume base			3	3	1	5	16	293	19	840	3	5	148	35
T cf *dicoccum*	emmer glume bases										1			3	2
T spelta/dicoccum	spelt/emmer glume base			3		1	1	35	118	15		27	1	78	
Triticum sp	wheat glume base frags				1		1		8	14	735	3		39	27
T cf *spelta*	spelt wheat glume frags							3	12		50	2		6	1
Triticum sp	wheat glume frags									4					
Avena sp	awn frag									1	25	2		4	
Cerealia rachis frags	indet rachis frags													3	
Internode frags											6			5	
Hordeum sp	barley rachis frags										1				
cf *Secale* cereale	rye rachis fragments										5			7	
Triticum aestivum sl	rachis frags										8				
Indet chaff frags	eg internode, node and spikelet base, rachis frags etc								97		122	35	3	48	
Non-cereal crops															
Vicia faba L	broad bean (lg)						1 cf			2				15 (halfs)	
cf *V faba* L	broad bean (lg)										1			7 frags	
Pisum sativum L	common pea													3 (1 cf)	
Vicia/Pisum/Lathyrus sp	vetch/tare/pea fragments			2 cf	2				1	34	6	1 cf	1	18 frags	
Fruits & nuts															
Corylus avellana L	hazelnut shell fragment	HSW													1
Sambucus nigra L	elder	HWD manured soils edible						117 u							
Rubus fruticosus/idaeus	blackberry/raspberry	DHSW edible						18 u							
Prunus cf *spinosa* L	blackthorn/sloe stone	HSW edible						1 u							
Crataegus monogyna Jacq	hawthorn	WSH edible				1 ch									
Oil-rich seeds															
Brassica nigra (L) Koch	black mustard	DP (river banks) poss native?								2					
Weeds & grasses															
Chenopodium sp	indet goosefoot	CDn			1	2		1							
Chenopodium album L	fat hen	CDn edible		1						1		1			
Vicia/Pisum/Lathyrus sp	small weed vetch/tare/wild pea	CD									3			2 (2 halfs)	
Vicia/Lathyrus sp	small weed vetch/tare/wild pea	CD												1	1
cf *Odontites* sp	bartsia	ADG						26 u							
Galeopsis sp	hemp-nettle	ADWw						30 u							
Lamium sp	dead-nettles	ADH						5 u							

For expansions of codes, see Table 5.25

Table 5.26 Period 3, phases 4 and 5: macrobotanical remains – quantification and identifications

Urtica cf dioica	common nettle	ADHW edible	u					54 u							
Urtica cf dioica	common nettle	ADHW edible	charred		1 cf										
Carex sp	sedges	MPw		2	1	5		11 u						3 (1 cf)	
Schoenoplectus sp	club-rushes	MPw shallow													1
Asteraceae	indet daisy family achene													1	
Rumex sp	dock/sorrel	AD	charred	11	5		3	2 u		2	2 cf	1		1	2
Fallopia convolvulus (L) Á. Löve	black bindweed	AD		1 cf						1					
Persicaria lapathifolium/maculosa	pale persicaria/redshank	CDow						35 u							
Polygonum sp	knotgrasses					6	1	21 u							
cf *Solanum* sp	nightshade										1				
cf *S nigrum* L	black nightshade	CD						4 u							
S dulcamara L	bittersweet	DHWP						33 u							
Plantago lanceolata	ribwort plantain	Go				2									
Veronica hederifolia L	Ivy-leaved speedwell	CDWH (open woods)					1								
Galium aparine L	cleavers	ACHSo								1	1				
Medicago sp	medicks			3	9	10									2
Trifolium/Medicago sp	clover/medick				3						1				
Ranunculus acris/repens/bulbosus	meadow/creeping/bulbous buttercup	GWMc				2		3 u							
Apiaceae	indet carrot family taxa							2 u							
Apium sp	marshworts	MPow						113 u							
cf Anthemis cotula L	stinking mayweed/chamomile	Awh		1 cf				1			1 cf				
cf Malva sp	mallow										1				
Alium sp	chive/onion			1 cf											
Avena/Bromus sp	oat/brome, chess				2			1			6	2			1
Poa sp	meadow grasses					3					20	1 cf			
cf Lolium perenne L	perennial rye-grass	GD				1					2	4		5	
Festuca/Lolium sp	fescue/rye-grasses									3 cf	29	1		9	2 cf
Festuca sp	fescues										10				
Vulpia sp	fescues										1				
Arrhenatherum eleatus (L) P Beauv Ex J & C Presl	false-oat grass caryopses	ADGH									1				
Glyceria sp	sweet-grasses	GMPw shallow												1	
Poaceae stem frag	grass stem frag						1				2				
Poaceae caryopses	grass seed			4	2	2	3	3	1	6	45	8			7
Tree bud	indet tree bud		charred				1								
CPR indet	indet charred plant remains			12	13	12	10		16	5	12	8	2		13
Total fragments				**86**	**81**	**68**	**38**	**548**	**583**	**171**	**2162**	**175**	**20**	**1437**	**118**
Fragment per litre				**2.15**	**2.025**	**1.7**	**0.95**	**13.7**	**14.575**	**4.275**	**27.025**	**11.6667**	**0.33333**	**19.4189**	**2.95**

For expansions of codes, see Table 5.25

Table 5.26 *continued*

	Period	3.2	3.2	3.2	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5
	Context no	[726]	[1162]	[253]	[1014]	[1015]	[145]	[572]	[572]	[720]	[906]	[139]	[113]	[254]	[266]
	Group	518	522	88	519	519	67	71	71	71	722	811	89	813	85
	Feature type	D	P	P	D	D	D	DS	DS	DS	P	SP	P	D	G
	Parent context no	[727]	[1160]	[252]	[1016]	[1016]	[144]	[728]	[728]	[728]	[903]	[152]	[138]	[75]	[268]
	Sample no	<30>	<55>	<13>	<46>	<47>	<12>	<31>	<50>	<51>	<42>	<10>	<9>	<14>	<16>
	Sample vol (l)	40	5	40	40	40	40	40	40	40	40	40	74	40	80
	Flot Wt (g)	12	6	182	4	6	8	20	66	38	84	8	298	106	140
	Flot vol (ml)	55	12	285	15	40	15	105	180	85	130	15	375	215	250
Taxonomic identifications	**English names**														
Quercus sp	deciduous oak	29	1	84 + 1 rw	49	31	41	38	50	17	4	12	28	7	15
Prunus sp	plum/wild cherry/ blackthorn	1	4	3	3	6		8	1	2	2	1	1 rw	3	
P cf spinosa	blackthorn		6	2	1	2								1	
Ulmus sp	elm								1				2		
Corylus avellana	hazel							1	4	3	16	3	2	3	
Fraxinus excelsior	ash	1					1	2				14		2	
Ligustrum vulgare	privet	1		1				6	1			3		1	
Betula sp	birch			1				2		1					
Alnus glutinosa	alder										1			5	
Maloideae	apple/pear/ whitebeam/rowan/ hawthorn	1	3		4	4			2	3	1 rw			1	
cf Fagus sylvaticus	beech													1	
Calluna vulgaris	heather	1	1						1						
cf Lonicera sp	honeysuckle							1							
cf Buxus sp	box								1						
Pinus sp	pine									1					
Total fragments		**34**	**15**	**92**	**57**	**43**	**42**	**58**	**61**	**27**	**24**	**33**	**33**	**24**	**15**

Table 5.27 Charcoal identification and quantification (rw = roundwood)

Wood charcoal fragments include oak, cherry/blackthorn and Maloideae taxa and, as noted above, these may represent remnants of fuel. A restricted assemblage of oak and ash wood charcoal was recorded in ditch G67 of Field System 4.

A rich assemblage of waterlogged fruit seeds, pips and stones was recovered from sample <58> from the primary fill of well [1278], which also contained a partially complete pottery beaker and an unguentarium (see Chapter 5.3). Remains of elder (*Sambucus nigra*), blackberry/raspberry (*Rubus fructicosus/ idaeus*), crab apple (*Malus/Pyrus* sp), sloe (*Prunus spinosa*), wild cherry (*P* cf *avium*), whitebeam/rowan (cf *Sorbus* sp) and hawthorn (*Crataegus monogyna*) represent fruits that might have been gathered from woodland and hedgerows in the vicinity. Figs (*Ficus carica*) and grapes (*Vitis vinifera*) are exotic to Britain and may have been imported at this time although other sites in Britain provide limited evidence for their small-scale cultivation (see discussion below). Uncharred weeds typical of disturbed, waste ground, grassland and some that might be considered arable weeds are moderately common and may have become naturally incorporated in the well. In addition to the uncharred, waterlogged remains this sample also contains a small quantity of charred cereal grains, chaff, grass seeds and other arable weeds. Much of the chaff consists of indeterminate wheat glume bases (*Triticum* sp) and spelt glume bases (*T spelta*).

Period 3, phase 4

Samples <50>, <51> and <49> from demolition dumps G71 contain small assemblages of glume wheat caryopses, and chaff as well as occasional caryopses of hulled barley (*Hordeum* sp) and free-threshing wheat (*Triticum* cf *aestivum*). The weed seed assemblages are also comparatively small, with various grasses including rye and meadow grass (*Poa* sp). Medick, clover (*Trifolium* sp), dock/sorrel, stinking mayweed and a fat hen seed (*Chenopodium album*) are typical components of arable, cultivated land as well as being prevalent on disturbed, waste ground. Although not common in this assemblage the achene of stinking mayweed may be indicative of cultivation of heavy clay soils. A charred hawthorn fruit stone provides the only indication of wild fruits in the macrobotanical assemblage. However, a broader range of taxa in the wood charcoal assemblage provides further evidence for fruiting trees such as cherry/blackthorn, hazel (*Corylus avellana*) and Maloideae taxa, as well as other examples, including oak, elm (*Ulmus*), ash, privet, birch, heather, honeysuckle (cf *Lonicera* sp), possible

box (cf *Buxus* sp) and pine (*Pinus* sp), which might have served other purposes.

Sample <42> from pit [903] (G722) associated with Field System 5 produced small assemblages of cereals, arable weed seeds and grasses similar to those recorded in the demolition deposits. Non-cereal crop remains are uncommon. A small charcoal assemblage comprising oak, cherry/blackthorn, hazel, alder (*Alnus glutinosa*) and a fragment of Maloideae taxa roundwood was also recorded.

The macrobotanical assemblages (<48>) from the basal, blue-grey-green clay-rich fill of pond [705] consist primarily of uncharred plant remains that have been preserved in waterlogged, anoxic conditions. Seeds of elder and blackberry/raspberry are common, but with the exception of a single sloe stone no other naturally occurring or imported edible fruits were recorded. Seeds of weeds common on disturbed ground such as stinging nettle (*Urtica dioica*), dead-nettle (*Lamium* sp), hemp-nettle (*Galeopsis* sp), bartsia (cf *Odontites* sp), black nightshade (cf *Solanum nigrum*), bittersweet (*Solanum dulcamara*), knotgrasses (*Polygonum* sp) and docks are also prominent. There is some overlap with these taxa and with plants that thrive on wet or damp ground conditions on mud around ponds, marshes and in shallow water. Such plants include hemp-nettle, sedges (*Carex* sp), pale persicaria/redshank (*Persicaria lapathifolium/maculosa*), bittersweet, buttercup and marshworts (*Apium* sp). Many of the weed taxa indicated are also often recorded on arable, cultivated ground, but given their uncharred preservation and location in pond deposits they are perhaps more likely in this instance to be indicative of disturbed ground and wet ground as discussed than to have been brought to the site with crops. The pond deposit also contained a small quantity of charred cereal grains and chaff characteristic of those recorded in other deposits at the site. These remains are almost certainly associated with domestic debris, such as the large animal bone assemblage deposited in the pond.

The richest assemblage of charred macrobotanical remains from this phase is from the fill of infant burial [383] (<21>) located within Building 2. The assemblage is dominated by charred glume bases and in particular by spelt wheat glume bases. Infrequent and poorly preserved barley and wheat cereal grains and a single possible broad bean (*Vicia faba*) are the only crop seeds present. The absence of weed seeds is particularly interesting given the prominence of chaff, and is considered below with reference to assemblages from the later period 3, phase 5 grave deposits.

The single burnt fill of posthole [152] (<10>) of possible building 4 (B4) produced cereal grains (glume wheat, hulled barley and free-threshing wheat) and grass seed (oat/brome (*Avena/Bromus* sp) and fescue/rye (*Festuca/Lolium* sp)); these are poorly preserved and often abraded and puffed, suggesting they may have been charred either at high temperatures or in a relatively oxygen-rich environment. Glume bases are not abundant, although they are somewhat better preserved than the grains and confirm the presence of spelt wheat. This sample also contained two black mustard seeds (*Brassica nigra*), their only recorded occurrence at the site. These are oil-rich seeds that may have been imported but could also represent a possible native form of this plant that grows on river banks. The charcoal assemblage from this posthole produced oak, cherry/blackthorn, hazel, ash and privet.

Period 3, phase 5

Pit [138] (<9>) was cut through the southern portion of possible Building 4 (B4). The fill of this pit ([113]) contained a small coin hoard (see Chapter 5.8) and also produced one of the largest assemblages of charred crop remains at the site. Spelt/emmer wheat (*Triticum spelta/dicoccum*) caryopses and glume bases are abundant. Many of the glume bases are well preserved with features characteristic of spelt wheat while only three are considered more diagnostic of emmer wheat. Unlike many of the other assemblages, charred peas (*Pisum sativum*) and beans are also moderately well represented. A small assemblage of weed seeds indicative of grass or arable land demonstrates the presence of perennial rye-grass, fescue (*Festuca* sp), sweet-grasses (*Glyceria* sp) and dock. Sedges and sweet-grasses may also indicate wet or damp ground conditions. Several fragments of charred textile were found too (see Chapter 5.9). Although spelt wheat grain and chaff were prominent in this pit fill, it is highly unlikely that this feature was used for storage, considering the damp, low-lying ground conditions at the site. The fill of this pit appeared to contain redeposited charred plant remains that related to the possible crop-processing undertaken in the vicinity, perhaps within Enclosure 4. Such material would be in addition to any waste or other deposits that accumulated during the use (in period 3, phase 5) of the pit feature. Given the large quantities of charred macrobotanicals in this feature, charcoal fragments were comparatively infrequent. Woody taxa noted in the charcoal assemblage include oak, elm, hazel and cherry/blackthorn roundwood.

Two samples (<16> and <17>) taken from the fill of grave [268] produced broadly similar assemblages to each other and to the assemblage from pit [138]. The samples are

dominated by cereal remains with spelt glume bases particularly abundant although emmer wheat is possibly also indicated. Other elements of chaff such as spikelet forks, internodes and rachis fragments provide further evidence that crop-processing waste makes up a large component of the assemblages. Cereal caryopses are less abundant although a range of glume and free-threshing wheat types and a small quantity of barley as well as a few remains of non-cereal crops such as peas and beans are evident. Seeds of wild grasses, meadow grass and fescue/rye-grass in particular, are moderately common. Other weeds indicative of arable or cultivated land include medicks, clover, stinking mayweed and dock/sorrel. Oak wood charcoal was also recorded in the backfill of the grave.

A small assemblage of charred macrobotanical remains was recovered from the upper fill ([254], <14>) of enclosure ditch G711, located immediately to the south of the earlier period 3, phase 4 building 4 (B4). A small quantity of arable weed seeds, including medicks, dock/sorrel and wild grasses, and a fragment of charred hazelnut shell were also present. The small charcoal assemblage from this ditch produced a broad array of woody taxa consisting of oak, cherry/blackthorn, hazel, ash, privet, alder, Maloideae taxa and beech (*Fagus sylvaticus*).

In the south-east in Cemetery 1, grave [801] (<33>) produced a markedly smaller assemblage of charred plant remains than was recorded in outlying grave [268]. Elements present such as spelt/emmer wheat caryopses and glume bases, barley and arable weeds are broadly similar to those recorded in grave [268] though they are characteristic also of many other assemblages on the site.

DISCUSSION

Crops and crop processing

The majority of assemblages analysed were dominated by remains such as grains and chaff of cereal crops. Grains of wheat, including emmer/spelt (*Triticum diccocum/spelta*), are particularly common. Although none of these grains have been identified to species level because of the inherent difficulties in separating the crops on the basis of the caryopses alone, the abundance of spelt wheat glume bases makes it probable that spelt is the dominant cereal grain represented. Hulled barley (*Hordeum vulgare*) is also prominent and the assemblage includes twisted lateral caryopses that clearly indicate the presence of six-row hulled barley. Across all the periods analysed free-threshing wheat (*Triticum aestivum* sl) and wild or cultivated oats (*Avena* sp) form lesser components of these wheat- and barley-dominated assemblages.

Elements of cereal chaff are represented in samples from each of the Roman occupation phases, with somewhat richer assemblages in samples from period 3, phases 4 and 5. Glume bases are particularly abundant with occasional spikelet forks, internodes and rachis fragments. Chaff-rich assemblages were predominantly recovered from the grave fills [363] and [268] and from the small coin hoard pit [138].

Many of the glume bases were sufficiently intact to enable identification and of the 1474 identifiable to species 1468 were grouped as spelt wheat with only six considered to be more consistent in form with emmer. Although 1161 of the remaining glume bases could not be identified to species it is reasonable to assume that many of these are also spelt wheat. Chaff of other taxa is very limited, with only a few poorly preserved rachis fragments of barley, free-threshing wheat and rye (*Secale cereale*). Stem fragments of wild or cultivated grasses are almost completely absent. Abundant glume bases and occasional spikelet forks, together with the scarcity of stem fragments, indicate that spelt wheat was brought to the site in a semi-processed state.

Experiments have shown that grain is less prone to fungal attack when stored within spikelets (Hillman 1981) and although there is no direct evidence for storage of grain at Snodland it could have been brought to the site for the final stages of processing, involving parching and pounding to aid dehusking and sieving to remove the chaff and weeds. Aspects of this process may have been undertaken in Enclosure 4 (EN4) and possibly stored in Buildings 2 and 4 (B2, B4). Similar assemblages were recorded at Thurnham villa, although this site also had a corn-dryer and oven structures and provided limited evidence for malting (Smith & Davis 2006). With the exception of a few deposits, grains are comparatively less well represented at Snodland and much of the grain may have been removed for consumption elsewhere. Sprouted grains or detached sprouts are also absent, providing no indication that malting took place at the site – perhaps unsurprising given the absence in this part of the villa estate of features such as corn-dryers that are often associated with aspects of the malting process.

Non-cereal, leguminous crops such as broad bean (*Vicia faba*) and pea (*Pisum sativum*) are also indicated. These remains are present in smaller quantities than the cereals, but this is most likely owing to methods of processing rather than necessarily being an indication that legumes were a lesser component of the economy or diet. There is also evidence for other legumes such as vetches, tares and wild peas (*Vicia/Lathyrus/Pisum* spp), medicks (*Medicago* sp) and clover (*Trifolium* sp). These are common arable weeds that may also

have been used or cultivated for animal fodder together with some of the cereal crop remains. Remains of vetch/tare and wild pea are very fragmentary, retaining few if any securely identifiable features.

Diet and economy

While there were very few grape seeds (*Vitis vinifera*) or remains of other imported food plants recorded at Snodland this cannot automatically be considered indicative of limited access to imported foods as conditions suitable for preservation of uncharred fruit stones are limited. Many of the remains from possible imported plants may in fact derive from local sources. Brown et al (2001), for example, showed conclusive evidence from both palynological and stratigraphic data at Wollaston in the Nene valley, Northamptonshire for vineyards. Viticulture may have been more widespread in Roman Britain than is currently understood. Figs (*Ficus carica*) and plum/damson (*Prunus* sp) may also represent imported fruits but could equally derive from trees cultivated following their introduction to Britain during the Roman period. In either case they are relatively infrequent occurrences on rurally located Roman sites (van der Veen 2008), such as Snodland, and are only a little more common in major towns and military settlements. Remains of domesticated plum become more frequent in medieval sites and both plum and plum/bullace (*P domestica*) have been recorded at Mersham (Stevens 2006) and Northumberland Bottom, Southfleet, both in Kent (Davis 2006). Black mustard (*Brassica nigra*) is a moderately common condiment during the Roman period in north-west Europe and is found equally in samples from urban, military and rural sites (Livarda & van der Veen 2008). Other condiments, such as celery and coriander, that are common at Roman sites are not evident at Snodland; this may be a result of preservation conditions and the types of feature encountered during the excavation but it could equally indicate limited access to these items or it may reflect taste.

Cultivation conditions and vegetation

Given that cereals and cereal-processing waste make up a large portion of the assemblage it is probable that many of the weed seeds became charred during processing and were deposited with the processing waste. They would also become charred if the waste was deposited in fires. These seeds are almost certainly indicative of vegetation present on the cultivated land or in the near vicinity. Although the comparatively chaff-rich deposits provide the best opportunity for examining the ground conditions of the cultivated land many of the wild/weed plants that are represented occur in a range of habitats whether on arable land, disturbed ground or more open grassland. More habitat-specific taxa such as stinking mayweed (*Anthemis cotula*), which is indicative of heavy clay soils, or plants such as fat hen (*Chenopodium album*), which prefers nutrient-rich soil, are infrequent. There is a small amount of evidence for plants more common to wet or damp ground, some of which may reflect vegetation around the pond feature

Foods as a part of structured deposition

The association of local and imported fruit remains, a moderately rich assemblage of cereal-processing waste and an almost complete poppy-head beaker and unguentarium in the basal fill of the well feature is interesting. While fruit stones, pips and other food remains have been interpreted as incidental inclusions in well deposits elsewhere, as in a Roman well at Thurnham (Giorgi 2006), their occurrence in association with the vessels at Snodland may hold more significance. Unguentaria are often associated with votive offerings (see Chapter 5.3) as are natural bodies of water and man-made features such as wells (Fulford 2001). As unguentaria are thought to have been used for drinking or for liquids, it is possible that the fruits and other food remains formed part of a structured deposit, though it is of course also possible that many of the fruit stones were natural inclusions, having fallen into the well from overhanging fruit trees or been deposited by birds and humans.

The importance of crop-processing activities either at this site or in the near vicinity is clear considering the prominence of cereal chaff in the majority of assemblages, particularly from samples dating to the later Roman occupation from the 3rd to the mid 4th centuries (period 3, phases 4 and 5). Several of the richer assemblages occurred with other significant deposits such as two of the grave fills as well as the small coin hoard in pit [138]. It is tempting to think that these assemblages may have held significance in funerary processes or in activities that were culturally significant to the occupants of the site. However, as grave deposits rich in chaff were confined to the burials in EN4 ([268]) and B2 ([383]) and contained markedly similar charred assemblages to those in pit [138], it is likely that their residual charred botanicals related to nearby crop-processing activities (see also Chapter 3.5). Indeed, there is no clear evidence for the locations in which crop-processing waste became charred, and there is no evidence to suggest that these activities were associated with the burials in any way other than becoming incorporated in the grave backfills.

Fuel and woodland resources

Woody taxa present in the charcoal assemblage derive from a range of different vegetation habitats. This is perhaps unsurprising as the assemblage is likely to reflect the variety of purposes for which wood was used, whether in building structures, for fuel or in artefacts. High diversity in turn suggests access to resources from several woodland habitats. Taxa such as oak (*Quercus*), hazel (*Corylus avellana*), ash (*Fraxinus excelsior*) and beech (*Fagus sylvaticus*) are common components of deciduous woodland. Blackthorn (*Prunus* cf *spinosa*) may have grown at woodland margins or equally in hedgerows and scrub habitats with taxa such as hawthorn (*Crataegus monogyna*). Such scrub could be supported on the chalk geology to the north and east (BGS sheet 272). Heather (*Calluna vulgaris*) is restricted to acid soils, an environment supported locally on the Folkestone sandstone beds (BGS sheets 271 and 272). Box (*Buxus* sp), privet (*Ligustrum vulgare*) and perhaps pine (*Pinus* sp) are more likely to have been grown ornamentally, as part of the villa gardens. Honeysuckle (cf *Lonicera* sp) is a climber and therefore an unlikely fuel though it may have been attached to wood collected for fuel.

The broad range of taxa indicated in demolition deposits clearly supports the archaeological evidence for amalgamated deposits. A fairly diverse array of woody shrubs and trees was also present in ditches running from the bath house to the pond feature, almost certainly reflecting the extended time over which charcoal may have accumulated there. Although a range of taxa is indicated, oak is present in all the features analysed. High demand must have been placed on oak woodland as oak provides both an efficient source of fuel and a valuable wood for timber construction. While individual charcoal fragments do not provide conclusive evidence for woodland management the almost ubiquitous presence of oak in the Snodland assemblages and its importance at other sites in the region such as Thurnham villa (Challinor 2006) implies that the resource was being sustained to meet the demands of the population for domestic and industrial purposes.

5.11 THE ANIMAL BONE

Gemma Ayton

A medium-sized animal bone assemblage of 3262 fragments was recovered through hand collection and environmental bulk soil samples (Table 5.28).

Following an initial assessment, the animal bone from the Roman period (period 3, phases 2 to 5) was selected for detailed study. Only a small assemblage of just 76 identifiable fragments was recovered from period 3, phase 3 features, so it was considered along with the assemblage from period 3, phase 2, which consisted of 153 identifiable fragments, in order to produce a large enough assemblage to warrant further analysis. The pottery assemblage from period 3, phase 3 contains a high proportion of residual material pre-dating the mid 2nd century AD and it is likely that a proportion of the animal bone from period 3, phase 3 also derives from the earlier phase. By combining the two assemblages the issues of sample size and residuality are overcome.

Period	Date (AD)	No of fragments
Unphased		58
3.2	late 1st to early 2nd century	262
3.3	2nd century	113
3.4	3rd to 4th century	1571
3.5	early/mid 4th century	1227
4	medieval	31
Total	**3262**	

Table 5.28 Number of fragments of animal bone per period

Features in period 3, phases 4 and 5 produced the largest quantities of animal bone, although analysis of the contemporary pottery assemblage reveals that these later phases also contain residual material from the 1st to the mid 2nd centuries AD. These features included demolition dumps G71 and G731, both period 3, phase 4, which produced 362 and 228 fragments of animal bone respectively. Demolition dump G282 (period 3, phase 5) also contained a high level of residual pottery alongside 282 fragments of animal bone.

As a result of the mixed state of many of these context groups, any changes that occurred in the animal husbandry regime during the Roman occupation, in relation to species abundance, element representation and age at death, are unlikely to be reflected in the animal bone assemblages. However, the analysis of these assemblages will provide a general insight into animal husbandry during this phase, which will help to address a number of key questions relating to function, trade and status.

The medieval (period 4) assemblage has been recorded and comments can be made regarding species representation. The unstratified material has not been considered for analysis.

PRESERVATION

The preservation of the assemblage ranged from poor to medium. It contains a number of highly fragmented elements, including long bones and scapulae. A large number of fragments show signs of root etching and erosion, and parts of the bone surface have been destroyed. Evidence of gnawing has been noted on a small number of cattle, sheep and pig bones,

suggesting that they may have been left lying on the ground sometime before burial.

METHODOLOGY

The assemblage was recorded directly on to a spreadsheet and wherever possible bone fragments were identified to species and the skeletal element represented. The bone was identified using the in-house reference collection and Schmid (1972). Elements that could not be confidently identified to species, such as long-bone and vertebra fragments, were recorded according to their size, with the larger fragments recorded as cattle-sized, the medium-sized fragments as sheep-sized and the small fragments as small mammals. To assist with the minimum number of elements (MNE) calculations and in an attempt to avoid the distortion caused by differing fragmentation rates, the elements were recorded according to the part and proportion of the bone present. The minimum number of individuals (MNI) ws calculated from the most common element according to the MNE, by taking sides into consideration. Each fragment was also studied for signs of butchery, burning, gnawing and pathology.

In order to distinguish between sheep and goat, measurements of the distal metapodials were taken in accordance with Payne (1969); the distinction criteria outlined by Prummel & Frisch (1986) were taken into consideration.

The state of fusion was noted and tooth wear recorded using Grant (1982). The mandibular wear stages were converted to age ranges using Hambleton (1999).

Where measurements were possible they were taken using methods outlined by von den Driesch (1976). Digital callipers were used for the smaller fragments and an osteometric board for complete long bones. Pig teeth were measured in accordance with Payne & Bull (1988)

Pigs were sexed using canines as indicators and domestic fowl by noting the presence of spurs on the metatarsus.

Small mammals have been identified according to the shape of the mandibles and the mandibular and maxillary teeth with reference to Hillson (2005) and Lawrence & Brown (1974). All other elements were identified to taxa/taxonomic group or recorded according to their size with reference to the animal bone reference collection held at Fort Cumberland. The majority of elements were recorded as mouse/shrew-sized and both mouse and shrew have been positively identified with reference to the mandibles.

RESULTS

Species representation

The number of identified specimens (NISP) count was calculated and included all elements (Table 5.29). The majority of the cattle-sized and sheep-sized assemblage consist of rib, vertebra and small long-bone fragments that are difficult to identify to species.

Species	Period 3.2/3.3		Period 3.4		Period 3.5	
	N	%	N	%	N	%
Cattle	54	23	219	23	178	21
Cattle-sized	91	39	370	39	319	37
Sheep/goat	28	12	88	9	54	6
Sheep-sized	27	12	121	13	90	11
Pig	6	3	31	3	24	3
Horse	9	4	41	4	25	3
Red deer	5	2	8	1	17	2
Dog	2	1	15	2	12	1
Cat			2		1	
Badger			1			
Hare			1		7	1
Small mammal	10	4	17	2	98	11
Bird			5	2	7	1
Chicken			1		8	1
Goose			3		1	
Anuran			2		12	1
Total	**232**		**925**		**853**	

Table 5.29 Number of identified specimens (NISP) and percentage by phase in period 3

The taxa identified within the assemblage include cattle (*Bos taurus*), sheep (*Ovis*), pig (*Sus scrofa*), equid (*Equus*), red deer (*Cervus elaphus*), dog (*Canis familiaris*), cat (*Felis catus*), badger (*Meles meles*), hare (*Lepus* sp), chicken (*Gallus gallus*), goose (*Anser* sp), shrew (*Sorex* sp), mouse (*Mus* sp) and anuran (frog/toad).

Using the sheep/goat distinction criteria outlined by Prummel & Frisch (1986) and measurements of the distal metapodials according to Payne (1969), sheep were positively identified within the assemblage. No evidence of goat was found though it may still be possible that a small goat population was present on the site. In order to avoid confusion, the sheep/goat (*Ovis/Capra*) assemblage will be referred to as 'sheep'.

In all phases, cattle dominate the assemblage, followed by sheep and pig respectively (Table 5.30).

Species	Period 3.2/3.3	Period 3.4	Period 3.5
	%	%	%
Cattle	70	71	75
Sheep	27	25	22
Pig	3	4	4

Table 5.30 The relative percentages of the three main domesticates by phase in period 3

MINIMUM NUMBER OF INDIVIDUALS (MNI)

The MNI has been calculated using the most common element and taking sides into consideration. The most common elements in the majority of cases were the teeth, which, owing to their hard enamel surface, tend to have a better survival rate.

Species	Period 3.2/3.3	Period 3.4	Period 3.5
Cattle	2	6	6
Sheep	1	4	3
Pig	1	3	2
Horse	1	3	2
Deer	1	1	2

Table 5.31 Minimum number of individuals (MNI) by phase in period 3

The MNI and NISP counts produced corresponding results and Tables 5.30 and 5.31 indicate that, of the three main domesticates, cattle were the most abundant species followed by sheep and pig respectively.

MINIMUM NUMBER OF ELEMENTS (MNE)

MNE calculations included all parts of the bone with the exception of scapulae, cranial fragments and pelves, where only the glenoid cavity, occipital condyles and acetabulum were counted. This was in an attempt to avoid distortion as a result of fragmentation.

All parts of the cattle carcass were represented in period 3, phases 2–5 with the exception of horn cores (Figs 5.41–5.43). No horn cores were recovered from the period 3, phases 2 and 3 or period 3, phase 5 assemblages and only 14 fragments were recovered from the period 3, phase 4 assemblage, nine of which derived from demolition dump [812].

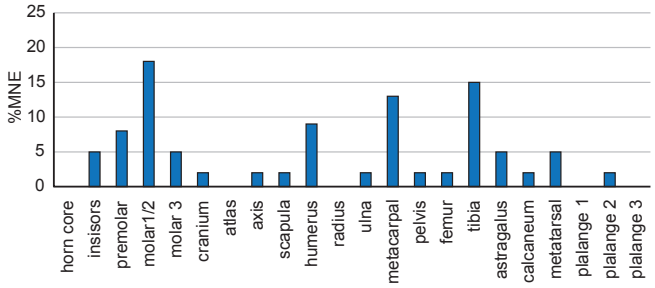

Fig 5.41 Element analysis for cattle in period 3, phases 2 and 3

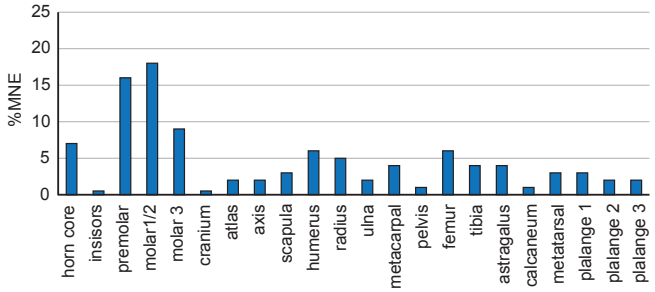

Fig 5.42 Element analysis for cattle in period 3, phase 4

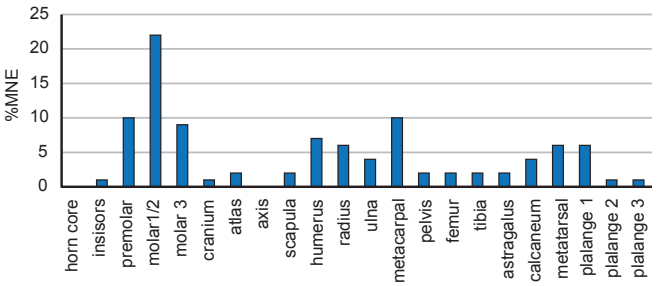

Fig 5.43 Element analysis for cattle in period 3, phase 5

The period 3, phases 2 and 3 sheep bone assemblage is too small to make any significant comments regarding element analysis though both meat-bearing and non-meat-bearing elements are represented, a pattern also reflected in the period 3, phase 4 and period 3, phase 5 sheep bone assemblages (Figs 5.44–5.45). The smaller, more fragile elements are under-represented in all phases, probably as a result of taphonomic processes.

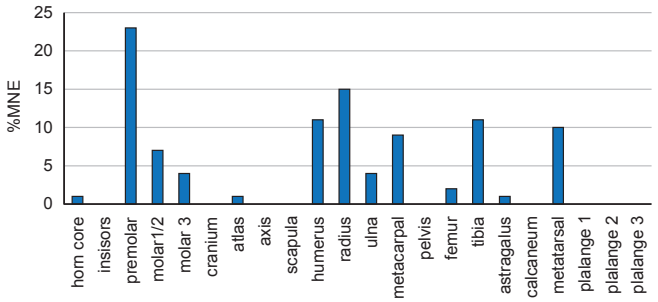

Fig 5.44 Element analysis for sheep in period 3, phase 4

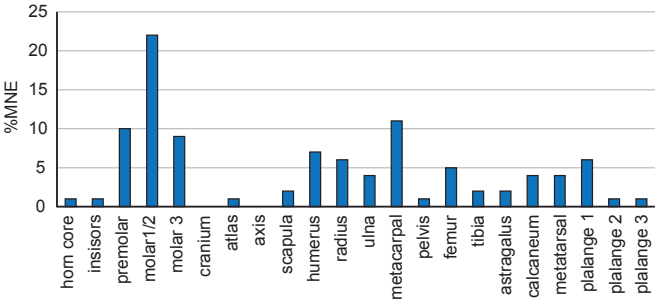

Fig 5.45 Element analysis for sheep in period 3, phase 5

The pig assemblage from all phases is relatively small but appears to be lacking in a number of elements, including the hind limbs and pelvis. The absence of these elements may suggest that not all parts of the carcass were consumed on site. The pig assemblages consist of teeth and mandible fragments with a small number of scapula, humerus and radius fragments.

Age at death

Age at death has been calculated through the analysis of dental eruption, tooth wear and epiphyseal fusion.

Cattle epiphyseal fusion and tooth-wear data (Tables 5.32–5.34 and 5.37) are similar throughout all three phases. The evidence suggests that the majority of the herd survived into adulthood with a small population being culled around 2–3 years to provide beef. Very few juvenile cattle bones were recovered, which suggests that cattle were not utilised for milk.

Sheep epiphyseal fusion and tooth-wear data (Tables 5.35–5.37) reveal that the majority of the population were culled before they reached the age of 4 years, with a high proportion being culled before the age of 2 years. This suggests that sheep were utilised as a meat supply although the presence of neonatal and juvenile bones also suggests that they may have been utilised for their milk. The relative absence of older animals implies that wool production was of little importance, although the recovery of possible shear blade fragments (RF<71>) may contradict this.

Age	Skeletal part	Fused	Unfused	Total	% Fused
7–18 months	scapula				
	radius, proximal				
	humerus, distal	3			
	phalange 1				
Total		**3**	**0**	**3**	**100**
2–3 years	tibia, distal	2	1		
	metapodial, distal	1	1		
Total		**3**	**2**	**5**	**60**
3.5–4 years	ulna, proximal				
	humerus, proximal				
	femur, proximal	2			
	femur, distal				
	radius, distal	1			
	tibia, proximal	1	2		
	calcaneum	1			
Total		**5**	**2**	**7**	**71**

Table 5.32 Cattle epiphyseal fusion data, period 3, phases 2 and 3

Age	Skeletal part	Fused	Unfused	Total	% Fused
7–18 months	scapula	4			
	radius, proximal	5			
	humerus, distal				
	phalange 1	4			
Total		**13**	**0**	**13**	**100**
2–3 years	tibia, distal	3			
	metapodial, distal	5	4		
Total		**8**	**4**	**12**	**67**
3.5–4 years	ulna, proximal				
	humerus, proximal		1		
	femur, proximal		2		
	femur, distal	4			
	radius, distal				
	tibia, proximal	4	1		
	calcaneum	1			
Total		**9**	**4**	**13**	**60**

Table 5.33 Cattle epiphyseal fusion data, period 3, phase 4

Age	Skeletal part	Fused	Unfused	Total	% Fused
7–18 months	scapula	3			
	radius, proximal	4			
	humerus, distal	2	1		
	phalange 1	6			
Total		**15**	**1**	**16**	**94**
2–3 years	tibia, distal				
	metapodial, distal	4	1		
Total		**4**	**1**	**5**	**80**
3.5–4 years	ulna, proximal				
	humerus, proximal	2			
	femur, proximal	2	1		
	femur, distal				
	radius, distal		1		
	tibia, proximal	1			
	calcaneum		1		
Total		**5**	**3**	**8**	**63**

Table 5.34 Cattle epiphyseal fusion data, period 3, phase 5

Age	Skeletal part	Fused	Unfused	Total	% Fused
7–18 months	scapula	2	1		
	humerus, distal		3		
	radius, proximal	1	3		
	phalange				
Total		**3**	**7**	**10**	**30**
2–3 years	ulna, proximal		2		
	radius, distal	1	3		
	metapodial, distal	1	4		
	femur, proximal		1		
	tibia, distal	2	2		
	calcaneum				
Total		**4**	**12**	**16**	**25**
3.5–4 years	humerus, proximal		6		
	femur, distal		1		
	tibia, proximal		2		
Total			**9**	**9**	**0**

Table 5.35 Sheep epiphyseal fusion data, period 3, phase 4

Age	Skeletal part	Fused	Unfused	Total	% Fused
7–18 months	scapula				
	humerus, distal	1			
	radius, proximal		1		
	phalange				
Total		**1**	**1**	**2**	**50**
2–3 years	ulna, proximal	1			
	radius, distal		1		
	metapodial, distal	1	1		
	femur, proximal				
	tibia, distal				
	calcaneum				
Total		**2**	**2**		**50**
3.5–4 years	humerus, proximal				
	femur, distal	1			
	tibia, proximal				
Total		**1**		**1**	**100**

Table 5.36 Sheep epiphyseal fusion data, period 3, phase 5

Period	Species	Tooth-wear stage	Age range
3.4	cattle	32	30–36 months
3.4	cattle	39	young adult
3.4	cattle	40	young adult
3.4	cattle	46	old adult
3.4	cattle	46	old adult
3.5	cattle	31	30–36 months
3.5	cattle	31	30–36 months
3.5	cattle	43	adult
3.5	cattle	43	adult
3.5	cattle	43	adult
3.5	cattle	46	senile
3.2/3.3	sheep	33	2–3 years
3.4	sheep	33	2–3 years
3.4	sheep	35	3–4 years
3.4	sheep	36	3–4 years
3.5	sheep	30	2–3 years
3.5	sheep	34	3-4 years
3.2/3.3	pig	21	14–21 months

Table 5.37 Tooth-wear stages after Grant (1982) and Hambleton (1999)

The pig assemblage from all three phases is relatively small and consequently very little data regarding epiphyseal fusion have been gathered. A number of fragmented mandibles containing molars in the early wear stage were recovered. As pigs provide no secondary products, they are generally culled at a relatively young age to provide pork.

Biometry

Owing to the poor condition of the assemblage only a minimal amount of metrical data was obtainable. There are insufficient measurements of any one element to allow any detailed work. A complete list of the measurements is available in the archive

Butchery

Butchery marks on cattle specimens from all phases were noted. The majority are indicative of dismemberment and include chop marks on the distal ends of the humerus and tibia. A large fragment of cattle cranium was recovered from ditch fill [741] (period 3, phase 4). Both horn cores have been 'hacked' off rather than sawn, leaving irregular stumps. The horn cores may have been removed for further working or remained attached to the hide to aid transportation to a tannery.

Very few butchery marks were noted on the sheep and pig assemblages. Butchery marks in the sheep assemblage are limited to cut marks that have been noted on a proximal tibia from pit fill [77], perhaps indicative of skinning. Just three fragments of pig bone displayed signs of butchery. These fragments derive from demolition dumps G71 (period 3, phase 4) and include cut marks on a distal humerus and on two phalanges.

Unusually, knife and chop marks have been recorded on two horse metapodials. The knife marks may be indicative of skinning and the sawn-off ends may indicate that these bones were the waste products of bone working. Little evidence has been found to suggest that the Romans ate horse meat though it may have been fed to dogs (Lauwerier 1988).

Sexing

Eight pig canines were recovered, all from contexts dating to period 3, phases 4 and 5. The canines were sexed and it was found that six were male and two were female. Just one chicken tarsometatarsus was recovered and a spur was noted, indicating that the bone derives from a male bird. The sample size is too small to make any inference.

Horse

The MNI and NISP values suggest that horses were present during all phases of Roman occupation. The relative percentage of horse stays constant between the three phases at around 4% of the total NISP (Table 5.29).

Deer

The presence of red deer remains suggests that hunting formed part of the lifestyle adopted by the inhabitants. Red deer was recovered in small quantities from all Roman phases of occupation although this may be a result of the problems with residuality, as discussed above. The skeletal element distribution suggests that the animals were eaten elsewhere as the assemblage contains no meat-bearing bones but consists of elements generally removed during the primary butchery process, including teeth, metapodials and butchered and worked antler fragments. The skeletal element distribution may indicate that the excavated area of the site was used as a dumping ground for primary butchery waste from the processing of the deer carcass, with the kitchen waste being deposited elsewhere.

Eleven fragments of butchered antler were recovered from the site, seven of which came from pond fill [764] (G513; period 3, phase 5). The antler fragments may represent butchery waste or they may have resulted from antler working – it is generally thought that antler replaced bone as the main raw material from the late Roman period onwards (MacGregor 1985).

Medium-sized mammals

Dog was present in small numbers and all parts of the skeleton were represented. Very small quantities of cat and hare remains were recovered from period 3, phases 4 and 5. The presence of hare may be indicative of hunting. Badger is represented in the period 3, phase 4 assemblage by a single tooth.

Small mammals

The majority of the small mammal remains have been identified as mouse and shrew but the fragmentary nature of the remains has hindered further species identification. Some of these animals may have burrowed into the archaeological layers without causing sufficient disturbance to be recognised during excavation (Grant 1971). The largest deposit of small mammal remains was recovered from sample <9>, [113] (period 3, phase 4), a burnt pit found within the southern timber Building 4 (B4). The pit contained an abundance of redeposited charred plant remains which may have related to the function and use of B4. The botanical evidence suggests that the building was utilised for agricultural storage, which would have provided a rich food resource for small rodents and could explain the abundance of small mammal remains recovered from sample <9>.

Birds

The bird bone assemblage is surprisingly small given that an environmental sampling strategy was employed and all samples were sieved and carefully sorted to retrieve environmental evidence. Only 25 fragments of bird bone were recovered. The identifiable bones represent chicken (*Gallus gallus*) and goose (*Anser* sp) and were recovered from period 3, phases 4 and 5.

Fish

A very small quantity of fish bone was recovered through bulk sample flotation. A fragment of roach pharyngeal was recovered from [720], the basal layer of dumps G71 (period 3, phase 4). Some contents of the fill may have been residual. Roach are freshwater fish native to south-east Britain and suggest that the nearby River Medway was utilised as a food resource.

DISCUSSION

The analysis of the Roman animal bone assemblages from Snodland indicates that cattle were most abundant, followed by sheep and pig. The majority of the cattle skeletal elements were represented though only a small number of horn cores were present. This suggests either that the species present were a hornless variety or that the horn cores were disposed of or utilised elsewhere. The dump of horn cores recovered from demolition dump [812] suggests that they were disposed of separately.

Although age-at-death data indicate that the majority of the cattle population reached adulthood, beef may still have been the most commonly consumed meat since the quantity of beef from one carcass is much greater than that from either sheep or pig. The consumption of beef is supported by butchery evidence on cattle bones. The absence of neonatal and juvenile bones indicates that cattle were not utilised for milk though these younger, more fragile bones may have been lost or destroyed in the archaeological record.

The juvenile and subadult sheep remains recovered from period 3, phases 4 and 5 suggest that lamb was a popular meat. All elements of the sheep carcass were recovered, indicating that the animals were butchered and eaten on site though the sheep assemblage showed very little evidence of butchery; this may have been due to the condition of the assemblage or the presence of a skilled butcher. A number of older animals would have been retained for breeding purposes and accounts for the small, more mature population.

The presence of skeletal extremities suggests that primary butchery was carried out on site. The majority of the pig remains derive from juvenile animals and although the assemblages are quite small, there is a clear absence of hind limbs. The hind limb of the carcass provides a high meat yield but the element distribution suggests that they were not consumed on site but were perhaps eaten elsewhere or possibly traded. If this was the case, pigs may have played a much more vital role at the villa than is suggested by the NISP and MNI counts.

As discussed above, the features in period 3, phases 3, 4 and 5 contained a large quantity of residual pottery. It is likely, therefore, that a proportion of the animal bone assemblage is also residual, which would account for the apparent relative uniformity in husbandry practices throughout the Roman occupation.

SITE COMPARISONS

The excavated area lies on the periphery of a Roman villa and the animal bone assemblages are assumed to have been related to the activities associated with the villa.

Previous excavations at Snodland Roman villa (Hamilton-Dyer 1995) produced a small animal bone assemblage of just 188 fragments. The majority of these were identified as cattle though sheep/goat, pig and dog were also present. The cattle assemblage displayed chop marks associated with dismemberment. The assemblage contained both kitchen and slaughter waste and it was concluded that the animals were probably slaughtered on site when required (ibid).

The nearby Roman villa at Lullingstone produced a bone assemblage with a similar species representation to Snodland (Howard 1987). Large quantities of cattle, sheep and pig were recovered along with smaller quantities of horse, dog, cat and hare. The Lullingstone assemblage also contained fragments of worked and butchered deer antler.

The evidence from Fishbourne Roman palace (Grant 1971) also shows a similar species representation though a

relatively large and diverse bird bone assemblage was recovered that included both wild and captive species (Eastham 1971). The lack of bird bone at Snodland suggests that the inhabitants did not capture wild birds and that hunting practices focused on red deer and the occasional hare, which is surprising considering that the excavation revealed the presence of ponds and that the site lies close to the River Medway.

The cattle age-at-death data from Fishbourne (period 1 and periods 2–3) correlate well with the data from the Roman data from Snodland with the majority of the herd reaching adulthood. At Fishbourne, the age-at-death of sheep decreases during the Roman period though it is still slightly higher than at Snodland. This may suggest that the inhabitants of Fishbourne had a more efficient animal husbandry regime with better overwintering food supplies allowing them to retain the animals for a longer period, or it may reflect a difference in dietary preference.

CONCLUSIONS

The relative abundance of domestic species suggests that the assemblage may have derived from domestic activities associated with the villa. King (1978) notes that the more 'Romanised deposits' tended to be less in favour of sheep than the native sites. The comparative levels of cattle, sheep and pig, the assemblage being high in cattle and low in sheep, suggest a Romanised rather than a 'native' site.

King (ibid) points out that the occurrence of deer remains from Roman sites increased from the 1st to the 4th century AD, which suggests that woodland areas were being exploited more in late Roman times. The analysis of the Snodland assemblage reveals that the deer remains contribute to approximately 2% of the assemblage in all period 3 phases, indicating that large-scale hunting was not undertaken. King suggests that an absence of wild animals may be a reflection of a farming community who would have had little time for hunting. It is possible that deer may have been butchered and eaten at the cull site though it seem unlikely that no part of the carcass was retained, as antlers were often kept as useful secondary products or even as trophies.

The element representation for pig may indicate that parts of the carcass were traded. No particular areas of activity were highlighted though the animal bone assemblage may include evidence of antler working.

THE PERIOD 4 ASSEMBLAGE

The medieval assemblage contains 19 identifiable fragments obtained from the land boundary ditch. The assemblage contains cattle and horse bone as well as a fragment of deer antler. No evidence of butchery was noted on the bones though saw marks were noted on the antler fragment.

5.12 HUMAN BONE

Lucy Sibun

The excavations uncovered the remains of seven *in situ* burials and additional human remains from four disturbed contexts. With the exception of a few residual fragments of bone recovered from modern service trench [806], three contexts ([383], [572] and [830]) date to the 3rd to early 4th century AD (period 3, phase 4) and seven ([79], [85], [258], [267], [535], [799] and [807]) to the early to mid 4th century AD (period 3, phase 5). The preservation of the skeletal material varied from moderate to poor with some of the graves having been heavily disturbed or truncated.

METHODOLOGY

A complete skeletal and dental inventory was produced for each skeleton. Age estimates were attempted based on evidence for epiphyseal fusion (Bass 1987; Buikstra & Ubelaker 1994), tooth development and eruption (Gustafson & Koch 1974), tooth-wear analysis (Miles 1963) and an examination of the auricular surface where present (Lovejoy et al 1985). All sexually dimorphic traits were recorded and combined where possible with additional post-cranial measurements with the aim of achieving sex estimates (Bass 1987; Buikstra & Ubelaker 1994).

RESULTS

The results of the analysis of human bone from graves are shown in Table 5.38. The bone recovered from disturbed contexts is considered separately below. Adult remains were assigned to a broad age category, while juvenile remains were given a more precise age. Sex estimations were not been attempted on infant or juvenile remains.

Period	Context no	Age	Sex
3.4	[383]	0–6 months	
	[830]	0–6 months	
3.5	grave [268] skeleton [267]	8–12 yrs	
	grave [80] skeleton [79]	adult	M?
	grave [86] skeleton [85]	6–8 years	
	grave [801] skeleton [799]	mature adult	M
	grave [809] skeleton [807]	3–7 years	

Table 5.38 Summary of analysis results for inhumations

The period 3, phase 4 inhumations were both baby burials of newborn to 6 months in age. The right clavicle of infant [830] is slightly wider than normal at the mid shaft but this

appears to be a minor skeletal defect not associated with any trauma or other pathological condition.

The period 3, phase 5 inhumations consisted of an outlying burial, grave [268], and a cemetery enclosed by a ditch containing four graves and one possible further infant burial. Individual [267] appears to be of young juvenile age. No pathology was noted on the bones. The remaining inhumations consisted of two infants at 6–8 years ([85]) and at 3–7 years ([807]), and two adults ([79] and [799]). Whilst [799] has been identified as male, [79] is tentatively considered a probable male, based on a single characteristic. Similarly, whilst [799] has been identified as a mature adult, the poor preservation on [79] has resulted in its being placed in a broad adult age category. The only pathology evident was dental disease in [799], in the form of dental caries evident at the enamel–root junction between the lower right 1st and 2nd molars.

DISARTICLATED/DISTURBED HUMAN REMAINS

Human remains were recovered from four additional contexts, [572] in period 3, phase 4, [258] and [535] in period 3, phase 5 and modern service trench [806]. The period 3, phase 4 demolition layer [572] contained a single tooth crown from an infant of newborn to 6 months in age. The right humerus of a newborn to 6-month-old baby ([258]) and an infant long bone fragment ([535]) were both in the backfills of robber trenches (period 3, phase 5). The residual bone recovered from modern service trench [806] consisted of a fragment of humerus, radius, ulna and a cranial fragment from an adult-sized individual. It is possible these are the disturbed remains of [799].

DISCUSSION

The Snodland cemetery population is too small to enable meaningful statistical analysis to be undertaken or, therefore, to make statistical comparisons with other similar populations. However, some generalised observations have been made.

Although the presence of burials at villa sites is relatively rare (Roberts 2009), some examples have been found elsewhere in Kent, for example at Lullingstone villa (Meates 1979) and the villa at Keston (Philp 1999). However, unlike the apparently enclosed Snodland cemetery, the two adult inhumations at Lullingstone were buried in a tomb beneath a Romano-Celtic temple (Meates 1979, 123). At Keston, an early Roman cemetery was located on the western side of the villa (Philp et al 1991). Despite its earlier date, the similarities with Snodland lie in the fact that it appears to have been deliberately placed centrally within an enclosure which, although disused, is thought to have remained visible as an enclosure since the ditches were only partially in filled (ibid, 49). The Keston cemetery was moved to the north of the site in the 3rd century AD and was centred on three large Roman tombs. At this stage, although closer to Snodland in date, the only inhumations present were infants, alongside three adult cremations. By the time the Snodland cemetery was established in the 3rd–4th century AD, inhumation was the more common choice for burial and cremation was rare (Roberts 2009, 46–7). The late date of the Snodland cemetery also explains the presence of the infants within the adult cemetery, a practice which appeared in the 4th century AD and marked a change from the previous disposal of infants under floors or in pits or ditch fills (Philpott 1991).

Perhaps the most comparable aspect of the later Keston cemetery is the burial of an infant on a roofing tile (Philp 1999, 52), with two of the Snodland burials found in similar circumstances (infant [825] and juvenile [267]).

5.13 MARINE MOLLUSCS

David Dunkin

Fifty-six contexts from the excavation produced marine molluscs with a total weight of 9.609kg. The assemblage was dominated by oyster (*Ostrea edulis*) (96%) with very small fragmentary quantities of common cockle (*Cerastoderma edule*), the common whelk (*Buccinum undatum*), the common mussel (*Mytilus edulis*) and the great topshell (*Gibbula magus*).

The majority of the contexts had only small assemblages and, in terms of weight, only seven produced in excess of 200g (Table 5.39). Forty-one contexts produced less than 100g of marine molluscs and 38 of these were from period 3, phases 3 and 4. The majority of the molluscs were recovered from demolition deposits containing significant amounts of residual pottery, and it is highly likely the molluscs are also largely residual.

The largest individual assemblage, from pit fill [572] of dumps G71, contained over 98% oyster remains and weighed 4.810kg, just over half the weight of the total assemblage. The oyster assemblage from [572] contained 129 complete left or lower valves of oyster where the umbone is intact and 138 right or upper valves. All these shells fell within the range of 4–12 years old and were therefore of an edible/mature age. In this large assemblage, only ten valves produced evidence for infestation, mostly the polychaete worm. Other individual assemblages ([603] and [811]) had higher proportions, up to almost 50% of distorted shells. Distortion is usually a reflection of overcrowding and may be reduced or eradicated in healthy farmed or cultivated colonies. In the overall assemblage there was a relatively high infestation rate of polychaete worm, with nearly half the valves displaying evidence for this from [815].

The burrowing sponge (eg *Cliona celata*) was seen in only one oyster valve, from [603].

Analysis by estimated ages of all the contexts studied indicates that all collected oyster was in the range of 3–12 years or more. It is probable, therefore, that most or all would have been utilised as a food resource. The variation in size and age together with the degree of distortion and infestation suggests that all the oysters from Snodland were from wild colonies. They are not considered to have been harvested from 'cultivated' colonies. Another parameter, the ratio of left to right valves, is within the normal range of disposal of everyday domestic rubbish.

It is not possible to identify the source of the oysters. The lower reaches of the Medway, the Thames, and the north Kent coast all provide appropriate habitats for oyster beds with a sandy foreshore prevalent across much of the area and there must have been many suitable locations for oyster exploitation within range of the site in the Roman period. The quantities recovered suggest that oyster was only a secondary food resource and that the other shell types were utilised only on rare occasions.

Context no	Type/Period	Total Wt	Species	Quantity/Age	Evidence of encrustation (*Ostrea edulis* only)
571	dumps G71, period 3.4	434g	*Ostrea edulis* (oyster); *Mytilus edulis* (mussel)	oyster: 11 left valves (lower): 7–12 years+; 10 right valves (upper): 5–10 years; common mussel: no complete shells/ umbones – small trace	7 x valves show evidence for Polychaete worm infestation (*Polydora ciliate/P Hoplura)*; c 40% of valves show distortion; 2 x adhering shells
572	dumps G71, period 3.4	4.810kg	*Ostrea edulis*; *Mytilus edulis*; *Cerastoderma edule* (cockle); *Buccinum undatum* (whelk)	oyster: 129 left valves (lower): 5-12 years+; 138 right valves (upper): 4–10 years; common whelk: 1in flots traces of common mussel/ common cockle	c 10 x valves show evidence for Polychaete worm infestation; c 15% of valves show distortion; 35 x adhering shells
603	dumps G71, period 3.4	216g	*Ostrea edulis*	oyster: 12 left valves (lower): 4–8 years; 6 right valves (upper): 5–7 years	4 x valves show evidence for Polychaete worm infestation; 1 x valve has evidence of burrowing sponge (eg *Cliona celata*); c 45% of valves show distortion; 1 x adhering shell
617	dumps G71, period 3.4	564g	*Ostrea edulis*; *Mytilus edulis*	oyster: 10 left valves (lower): 7–10 years+; 23 right valves (upper): 3–10 years 10 complete common mussel shells + fragments	7 x valves show evidence for Polychaete worm infestation; c 10% of valves show distortion
811	demolition layer, period 3.5	202g	*Ostrea edulis*	oyster: 6 left valves (lower): 3–7 years; 8 right valves (upper): 3–6 years	7 x valves show evidence for Polychaete worm infestation; c 45% of valves show distortion
812	demolition layer, period 3.4	242g	*Ostrea edulis*; *Mytilus edulis*; *Cerastoderma edule*	oyster: 5 left valves (lower): 5–9 years; 6 right valves (upper): 6–10 years+ 2 mature common mussel shells; 2 common cockle shells	5 x valves show evidence for Polychaete worm infestation; c 25% of valves show distortion
815	enclosure wall, footing G62, period 3.3	730g	*Ostrea edulis*	23 left valves (lower): 5–12 years; 27 right valves (upper): 3–10 years	21 x valves show evidence for Polychaete worm infestation; c 15% of valves show distortion; 6 x adhering shells

Table 5.39 Quantification and identification of marine molluscs from the seven largest individual assemblages

CHAPTER 6 DISCUSSION

6.1 INTRODUCTION

This chapter discusses the wider story of the villa: its origins and likely ownership, its construction, evolution over time and eventual demise, as well as other aspects of villa life, such as the evidence for burial practices, consumption and craftworking. An attempt is then made to place the villa in its regional context, by considering the wider landscape and its relationship with other sites in the Medway valley during the Roman period (Fig 6.1 with gazetteer of sites and corresponding numbers shown in Table 6.1). The discussion ends with a number of suggested research priorities for future archaeological work.

6.2 THE NERONIAN FOUNDATION OF THE VILLA

There is no evidence for any Late Iron Age settlement on or near the site although the area had been used for agriculture at some point in the late prehistoric period. Black suggests that the founding of the villas in west Kent may have been accompanied by an agrarian reorganisation, and changes to the late prehistoric field systems are known from Eccles (Fig 6.1, no 9) and East Malling (Fig 6.1, no 13) (Black 1987, 22). At Snodland, the earliest Roman field divisions respected the same general alignments as the earlier prehistoric ones, with fields set out broadly respecting the river course, perhaps indicating a local reorganisation.

The earliest Roman activity at Snodland, represented by field boundary ditch G41 and the residual pre-Flavian bath house building material (period 3, phase 1), is the first evidence to hint that this villa may have been founded at a near-contemporary date to the adjacent Eccles villa, *c* AD 55–65 (Detsicas 1983, 120). However, the pottery evidence for this early period was almost entirely lacking, and while there seems to have been a Neronian bath house somewhere at Snodland, the nature of the rest of occupation is almost completely unknown.

6.3 VILLA ORIGINS AND OWNERSHIP

There has been much conjecture about the ownership of the early villas in the south-east of England and it has been suggested that some could have been built by *negotiatores*, agents or merchants from the Continent who often supplied the army, particularly on the Sussex coastal plain (Todd 1978, 201–2; Black 1987, 13–14).

However, that does not seem to be the case at the lower Medway villas of Snodland and Eccles. At the latter, the identification of on-site pottery manufacture and a circular military-style *laconicum* in the early baths persuaded many to conclude that the villa owner was likely to have been someone with connections to the army (Percival 1976, 94; Detsicas 1983, 124–5; Black 1987, 25; Pollard 1988, 188–9).

The evidence for the potential residents of Snodland is limited to the findings from a nearby excavation in the 1950s at Holborough Quarry, namely, of a late 1st- to early 2nd-century AD Roman barrow burial (Fig 6.1, no 33). Beneath the mound were the cremated remains of a middle-aged man in a wooden casket with an early 3rd-century AD burial of a young child interred in a scallop-decorated lead sarcophagus inserted later (Jessup et al 1954, 9–29). Abundant evidence of graveside ritual and votive offerings was preserved beneath the mound, including a spread of five deliberately burnt and smashed amphorae, a pit with the remains of a folding bronze-mounted chair and a second pit with the cremated remains of sheep and birds (ibid). The villa at Snodland is the only known high-status Roman building anywhere near this unusual elite burial and it is by far the most likely candidate for the residence of the interred individuals.

Barrow burials associated with villas have been identified elsewhere, notably at Bartlow in Cambridgeshire, where the intervisibility between the mounds and the villa buildings has been demonstrated (Eckardt et al 2009). A similar situation is evident at Snodland, where the barrow is located just below the brow of a chalk hill, Holborough Knob, which affords wide views of both the Medway and the villa to the south-east (Jessup et al 1954, 2). The barrow mound was originally capped with white puddled chalk (ibid, 11) and would have created a considerable visual impact in the landscape. Understandably, Roman barrow-building has been seen as a form of conspicuous display by elites in order literally to monumentalise their claim to the land and to communicate power and status (Eckardt et al 2009, 91).

By far the most significant find from the Holborough Quarry burial is the folding chair (*sella curulis* or *sella castrensis*). Creighton has pointed out that folding chairs, sceptres and robes were once part of the regalia of the early Roman kings and they remained potent symbols of power throughout the Roman period (2000, 182–3). The chair in particular was

No	Site	Description	Location	Pre-Roman evidence	Start date (AD)	End date (AD)	Industry	Agriculture	Funerary	Excavation date	Reference
1	Quarry House, Frindsbury	building; hypocaust	riverside; Watling Street	-	50–100	330	-	ploughshare	lead coffin inhumation	1887–9	Page 1974, 115; Archaeol Cantiana, 17, 169–80
2	Amherst Redoubt, Chatham	building; painted wall plaster; carved ivory	riverside; Watling Street	-	50–100	300–50	-	-	inhumation cemetery	1779	Page 1974, 110
3	Cuxton	wall footing (chalk)	hillside	-	-	-	-	-	burials found nearby	1901	Page 1974, 111; Archaeol Cantiana, 62
4	Luton	building	Watling Street	-	100–200	?	-	-	-	-	Detsicas 1983, 94
5	Borstal	probable building	riverside; roadside	-	-	-	-	-	-	-	Detsicas 1983, 95
6	Cobham Park, Cobham	winged corridor villa; hypocaust	Watling Street	-	50–100	300–50; hoard 354+	-	-	-	1960	Archaeol Cantiana, 76, 88–108
7	Wouldham, Burham	subterranean building (chalk) with spring; shrine/storage	riverside	-	?	300–400/500	-	-	-	1893	Page 1974, 109
8	Snodland	villa complex	riverside	LIA fields	70–100	350	-	?barns	inhumation cemetery	1930s; 1960s–1980s; 1992; 2008	Archaeol Cantiana, 82, 192–217; 115, 71–120
9	Eccles	large villa complex	riverside; roadside	LIA settlement	55–65	300+	tiles, pottery	granary	-	1960s–1970s	Archaeol Cantiana, 1960s–1970s; Detsicas 1983
10	Burham	building (flint); hypocaust; painted wall plaster	riverside; roadside	-	?	?	-	-	-	1896	Page 1974, 109
11	Boxley Hill	?temple; hoard mid 4th century	roadside	LIA coins	50–100	350–400	-	-	disarticulated human bone	1850s	Page 1974, 104
12	Allington	building; hypocaust; wall plaster; hoard of Tetricus, AD 270-73	riverside	LIA? grave	50–100?	250–300	stone quarry?	-	-	1844; 1902	Page 1974, 103
13	East Malling	building; painted wall plaster	3km from river	LIA enclosure	50–100	300–50	-	-	-	1965	Archaeol Cantiana, 80, 257–8
14	Little Buckland Farm, Maidstone	building foundations	riverside	-	?	?	-	-	-	1835	Page 1974, 99; Archaeol Cantiana, 15
15	The Mount, Maidstone	villa complex (rag); hypocaust	riverside; roadside	-	150–200	350+	-	-	-	1970s; 1990s	Archaeol Cantiana, 110, 177–235; 119, 71–172
16	Combe Farm, Maidstone	building foundations	riverside; roadside	-	?	280	-	-	-	1830s	Page 1974, 99
17	Florence Road, Maidstone	villa with bath suite	riverside	LIA ditch	?	?	-	-	-	2005	CAT 2004–5, 39–40
18	Loose Road, Maidstone	villa with mosaics and tower	roadside	-	?	?	-	-	-	1870	Archaeol Cantiana, 10, 163–72
19	Thurnham	villa complex	roadside?	LIA roundhouses	50–100	275–325	-	corn-dryer, malting kiln, barns, fields	infant burial	1998	Oxford Archaeological Unit 1999; Booth et al 2011
20	East Farleigh	house	riverside	-	-	-	-	-	cremation cemetery	1845	Page 1974, 153; Daniels 2008, 2009

CAT = Shand, G, Florence Road, Maidstone, in Canterbury Archaeological Trust, Annual Reports, 29 (2004–2005), 39–40, available online at http://www.canterburytrust.co.uk/old-site/annreps/pdfs/2005/003.pdf (accessed 22 October 2014)
HER = Kent's Historic Environment Record
LIA = Late Iron Age
MIA = Middle Iron Age

Table 6.1 Gazetteer of Roman settlement sites in the Medway valley (see Fig 6.1)

No	Site	Description	Location	Pre-Roman evidence	Start date (AD)	End date (AD)	Industry	Agriculture	Funerary	Excavation date	Reference
21	Boughton Monchelsea	bath house (rag); destroyed and burnt; enclosure	roadside	LIA coins; enclosure	50–100	150	pottery kilns?	barns, corn-dryer or malting oven	-	1841; 2005	Page 1974, 105; HER TQ 75 SE 141; MacKinder 2005
22	Chart Sutton	corridor villa; hypocaust	roadside	-	?	200–300?	-	-	cremations	1950s	Detsicas 1983, 96
23	East Barming 1	wall footings	riverside	-	150	330	-	-	walled cemetery nearby	1797	Page 1974, 104
24	East Barming 2	two wall footings (rag and tufa); tiled floor	riverside	-	?	?	-	-	cremation cemetery nearby	1879	Page 1974, 104
25	Teston	baths	riverside	-	?	?	-	-	-	1872	Page 1974, 125
26	Plaxtol	house; baths	7km from river	-	?	?	-	-	nearby cemetery; road? with cremations	1857–58; 1980s	Page 1974, 122–3; Archaeol Cantiana, 2, 1–6
27	Aylesford	Roman farmstead	riverside	LIA occupation	LIA	75?	-	-	-	1999	HER TQ 76 SE 86
28	Boxley	possible villa; ceramic building material scatter including box-flue tile	riverside	-	-	-	-	-	-	1898; not excavated	HER TQ 75 NE 17
29	Mereworth	possible villa; ceramic building material scatter	2km from river	-	?	?	-	-	-	not excavated	HER TQ 65 SW 46
30	Pimp's Court	possible villa; masonry wall footings	roadside	-	?	?	-	-	-	1892; 1932	HER TQ 75 SE 23
31	Leeds	possible villa	2km from road	-	?	?	watermill	millstone	-	1961	HER 85 SW 35; HER TQ 85 SW 20
32	Queen Elizabeth Square	Roman farmstead	roadside	continuity from MIA	MIA	150–200	metalworking	abundant pulses	-	1998–9	HER TQ 75 SE 128
33	Holborough Quarry	barrow burial	0.5km from river	-	75	125	-	-	cremation; later lead coffin inhumation	1954	Archaeol Cantiana, 68, 1–62

CAT = Shand, G, Florence Road, Maidstone, in Canterbury Archaeological Trust, Annual Reports, 29 (2004–2005), 39–40, available online at http://www.canterburytrust.co.uk/old-site/annreps/pdfs/2005/003.pdf (accessed 22 October 2014)
HER = Kent's Historic Environment Record
LIA = Late Iron Age
MIA = Middle Iron Age

Table 6.1 *continued*

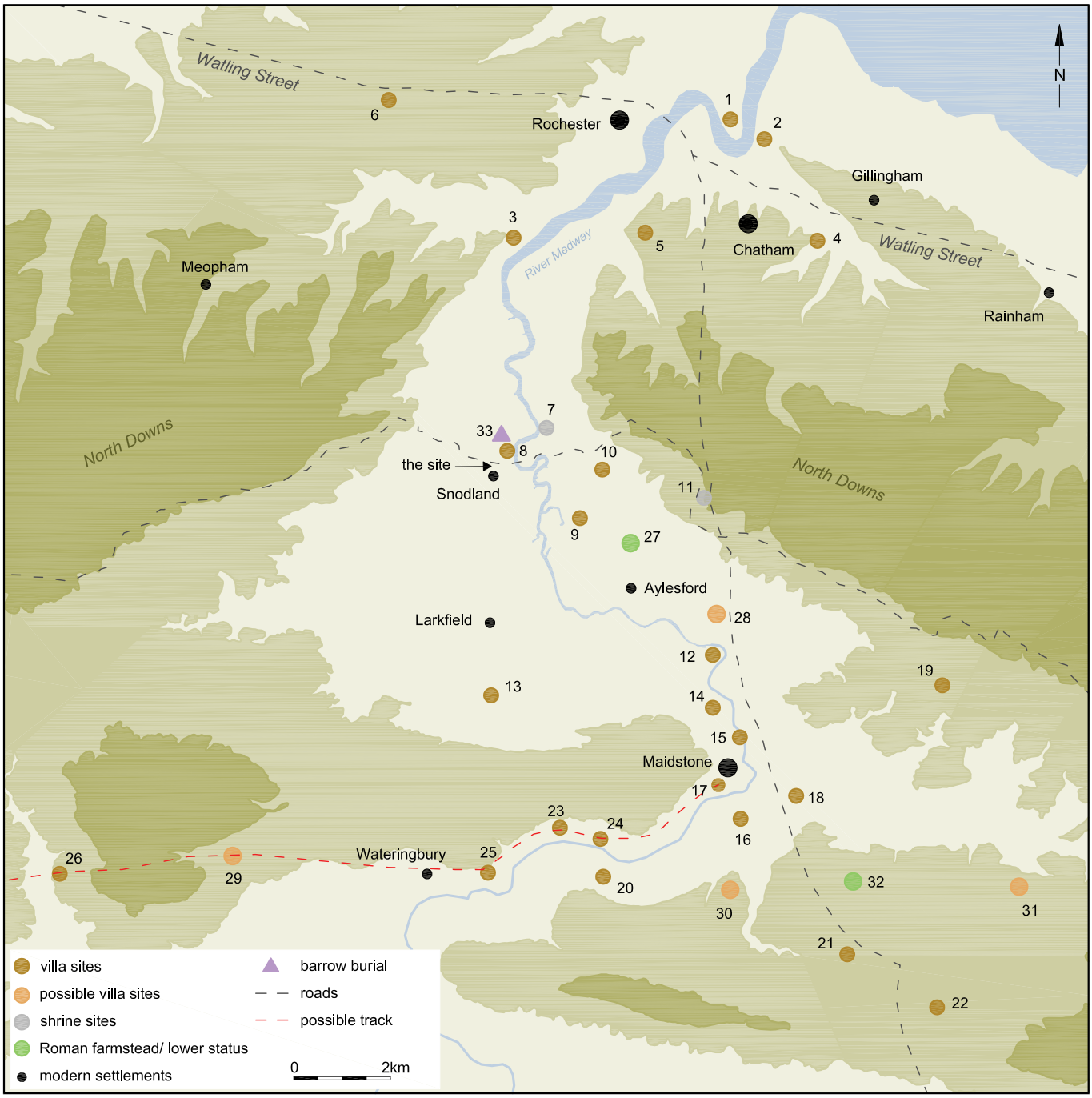

Fig 6.1 Map of the Medway valley showing location of Roman sites (see Table 6.1)

exclusive to magistrates, consuls, generals and the *princeps* himself (ibid). It would seem reasonable to assume, therefore, from the Holborough Quarry evidence, that the creators and owners of the Snodland villa may have served or have had links with the magistracy of the local *civitas*.

6.4 CONCENTRIC BUILDINGS 1 AND 2 (B1 AND B2)

Building 1 (B1) and its direct successor Building 2 (B2) were in use from the late 1st century AD until at least the early 4th century and, although in each case only a portion was seen, both seem to have had essentially the same layout: a central room surrounded by concentric corridor (Fig 6.2). There were differences – the corridor was open in B1, while in the later, enlarged B2 it was divided into small, cellular rooms – but overall these buildings probably looked and functioned in similar ways. In addition, another detached building previously excavated to the south of the Snodland main villa residence (see Fig 1.2, marked 'southern building') has a marked similarity to the plan of B2 and this appears to be a fully excavated example of a concentric building. The excavation of the 'southern building' has never been fully published, however, and its date and stratigraphic circumstances are unknown.

These concentric buildings are unconventional and relatively few are known, although the recent work on the High Speed 1 rail scheme (HS1) project has offered the most in-depth appraisal to date (Booth et al 2011). The majority of the other examples are also found in Kent, with others known from further afield (Table 6.2; Fig 6.2). The nearest example to Snodland is at Thurnham villa, also in the Medway valley (Booth 2011, 282–8); others known from Kent include Keston (Philp et al 1991, 120–25), Horton Kirby (Philp & Mills 1991), Darenth (Black 1981) and Minster-in-Thanet (Parfitt 2006).

The ground plans of the buildings at Snodland bear an especially strong resemblance to the structures excavated at Keston, Horton Kirby and Darenth (Fig 6.2), and two of these examples have a similar chronology of the initially open corridor being later subdivided into small rooms (Table 6.2).

Nevertheless, as Booth has pointed out (2011, 284), the key question is whether the similarity in building layout translates into having the same type of general function, or whether the concentric corridors have been used in a variety of ways. At present, there is no clear understanding of the function of these buildings, mainly because of the lack of associated finds assemblages and of diagnostic features. The concentric form is characteristic of Romano-British temples, and while a religious function cannot be entirely ruled out, most of the previously excavated examples have been interpreted as domestic residences (see Table 6.2). The best evidence for a domestic use is the hypocausts at Darenth and Minster-in-Thanet, as well as an oven in the former. Like Snodland, Minster-in-Thanet and Keston produced evidence of painted wall plaster, albeit from later demolition deposits, and Darenth had tessellated floors. The function of the open concentric corridors remains unknown, but the subdivision of this corridor into small rooms, usually at a later phase, seems to indicate domestic residences, possibly secondary to the main villa residence in terms of chronology and architectural appointment.

One of the most extensively excavated and perhaps the best understood structures, however, Building A at Horton Kirby, clearly functioned as a granary. While at other sites the function of the large central room was unknown, or it was interpreted as a dining room (Darenth: Black 1981, 171), at Horton Kirby the large central room contained numerous masonry sleeper walls to support a massive load on the raised wooden floor. The function of the surrounding corridor was not certain, but it was suggested that the subdivision was accompanied by a domestic occupation in this area, evidenced by the insertion of hearths and a tessellated floor (Philp & Mills 1991, 14). The apparent domestic use of parts of a granary is highly unusual, and a single, simple interpretation of these buildings may not be possible.

The function of the Snodland concentric buildings is unclear, but in B2 there is a potential crop store parallel with Horton Kirby. The infant burials, and the associated macrobotanical assemblage from burial [363], suggest that at least one of the rooms may have been used as a kitchen or storeroom for agricultural products. While a kitchen associated with domestic residence was also identified in Block A at the Darenth villa (Black 1981, 182), too little was seen of the rest of B2 to be certain of the nature of its use.

In summary, while some of these buildings were clearly domestic residences, others were not, and it does seem that Booth's concern that a similarity in form does not necessarily equate to a similarity in function is valid. These buildings are complex, apparently multifunctional (both spatially and chronologically) and, as yet still not completely understood.

6.5 THE EVOLUTION OF THE ROMAN VILLA AT SNODLAND

As with the preceding Neronian period, this is the first time evidence of Flavian occupation has been uncovered at Snodland and villa buildings were identifiable *in situ* for the first time in the excavation area. Currently, there is no evidence available for where the main Flavian villa residence was located, but the most likely place is beneath the 2nd-century AD buildings to the east. The future publication of the results of the extensive excavations in the 1980s by MAAG may well identify elements of this and perhaps even of the earlier Neronian phase of buildings. What does seem likely is that the villa grew progressively larger and that the earlier Neronian and Flavian buildings were less extensive than the Antonine and later phases. As this excavation has shown, particularly from the ceramic building material assemblage, material from earlier buildings was regularly cannibalised for use in the later ones, so that the original buildings are identifiable only by residual finds and fragmentary foundations.

From the Flavian period onwards, villas became increasingly concentrated in west Kent along the Darenth and Medway rivers, and to a lesser degree the Cray valley. This trend has long merited comment, especially when contrasted with the apparent absence to the east around Canterbury. The west Kent location has been considered significant, with Black suggesting that it is unlikely the villa owners were engaged in administration of their *civitas* but, rather, were economically linked to London, providing amongst other things, foodstuffs

Site	Situation	Approximate size	Initial phase	Later phases	Approximate dating (AD)	Interpretation
Snodland (Buildings 1 and 2; south building)	80m to the west of the main residence	south building is 25m long × 15m wide; corridor 3.5m wide	open corridor	subdivided corridor	80–120 to 200–320	domestic
Thurnham	50m south-east of main residence, within enclosure ditch	uncertain length × 12m wide; corridor 2m wide	open corridor	-	100–200	uncertain: domestic or religious
Minster-in- Thanet (Building 4)	80m south of main residence, outside villa enclosure wall	20m long × 15m wide; corridor 2.5m wide, (later 3m)	open corridor; ?painted plaster; ?tessellated floor	insertion of a hypocaust; corridor widened and subdivided	broad occupation 100–250	entirely built in stone; two storeys; domestic, but lower status than main residence
Darenth (Block A)	abutting ?main villa residence to east; later outside enclosure wall	24m long × 15m wide; corridor 3m wide	subdivided corridor; hypocausts and 'concrete' floors; kitchen with oven	tessellated floors	225–75 to 350–400	two storeys; possible principal domestic residence
Keston (south masonry building)	south side of villa enclosure	21m long × 13m wide; corridor 2.2m wide	open corridor; ?painted plaster	subdivided corridor	275–350	domestic
Horton Kirby (Building A)	uncertain	32m long × 16.5m wide; corridor 3m wide	open corridor	subdivided corridor; tessellated floors and hearths in rooms	175–225	granary

Table 6.2 Comparative characteristics of concentric Roman buildings in Kent

and ragstone building stone via the rivers (Black 1987, 19, 32). A fuller discussion of Snodland within the Roman Medway valley may be found below.

The smaller amount of pottery recovered from the 2nd century AD, particularly the latter half of that century, and the relatively minor changes to B1 contrast with the evidence for the main villa buildings to the east, which were constructed (or rebuilt) and enlarged throughout the 2nd century (Ocock & Syddell 1967, 195–202; Birbeck 1995, 81–5). This reduction in contemporary pottery therefore appears to be localised to the western edge of the site and may relate to changing disposal patterns, as much as to patterns of consumption. The refurbishment of B1 during this period should be seen in the context of the wider expansion and growing sophistication of the villa complex.

Compared to the 2nd century AD, the 3rd to early 4th centuries were a time of intensive pottery usage at the site, and although it is difficult to draw firm conclusions about supply and consumption, this does seem to have been the most affluent time in the life of the villa. Currently available data about the nature of the main villa during this period are limited at present, but it is known that hypocausts were added to some rooms and more external surfaces were constructed in the western range during the mid 3rd century AD (Birbeck 1995, 88–90; period 3). Full publication of the MAAG excavations, in conjunction with the present report, will undoubtedly offer a better chronology for the prosperity and modification of the villa as a whole throughout the Roman period.

LATE 3RD AND EARLY 4TH CENTURY AD: LOCAL PROSPERITY IN A TURBULENT TIME?

The late 3rd and early 4th centuries AD were a period of well-documented trouble in Roman Britain with the British rule of the usurper Gallic emperors and increasingly frequent coastal attacks by Frankish and Saxon pirates (Salway 1981, 239–321). Indeed, Black went so far as to say that 'in the south-east the general upheaval in the period 260–310 should not be underestimated' (1987, 40). He identified numerous villa sites with evidence for abandonment, often permanent, along the Thames coast, the Darenth valley and particularly along the Sussex coastal plain (ibid, 216).

Notably, Black could find no evidence for disruption in the Medway valley and something different seems to have been happening here. As discussed above, the evidence from this excavation is one of expansion and development during this period. The 3rd- and early 4th-century AD building programme probably continued in fits and starts for decades and the best-dated structure is possible Building 4, which produced a worn coin dated to AD 275–85 under a post pad, indicating a construction date no earlier than AD 275 and likely to be some years later (Fig 6.3). In the main villa buildings a similar story is apparent. Here building expansion and the better appointment of rooms continued into the middle of the 3rd century AD, if not later (Birbeck 1995, 88–90).

The pottery assemblage also reflects increased prosperity during this period, with a greatly increased level of consumption and the presence of amphorae from the eastern Mediterranean and North Africa. Although other high-status

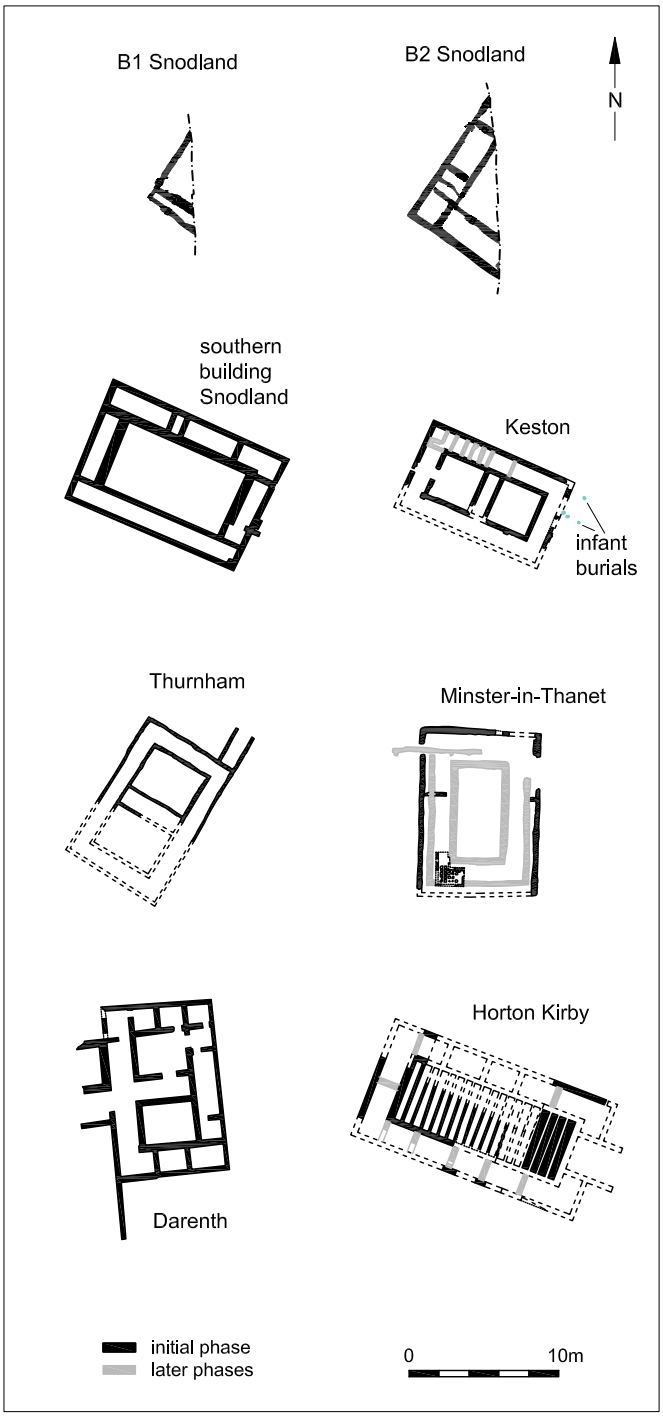

Fig 6.2 Plans of comparative concentric Roman buildings in Kent

vessels were largely absent, these late Roman amphorae, often used for the transportation of olive oil, are more commonly found in urban centres and are unusual on a rural villa site (see Chapter 5.3).

A similar picture of continued prosperity seems to be evident at Eccles (Detsicas 1983, 120–26) and there is very little concrete evidence for any of the Medway villas suffering during this period, apart from Thurnham (Booth et al 2011). This is in direct contrast to much of the rest of Kent, where rural settlements, both villas and non-villas, were in rapid decline by the middle of the 3rd century AD (ibid; Holbrook 2013, 403). This decline is particularly evident to the east in the adjacent Darenth valley, where at least three villas (Black 1987, 216), including Lullingstone (Meates 1979, 24), suffered. Why the Medway valley appears to have been spared is perplexing, but at least part of the answer may have been the protective presence of Rochester at the mouth of the River Medway. The river was bridged here and the town was walled, and this would not only have protected the inland riverside villas of the Medway from waterborne raiders but also have provided a handy local market for their goods (Burnham & Wacher 1990, 76–81).

6.6 THE END OF THE VILLA

All buildings were abandoned and/or destroyed by the latter half of the 4th century AD. The pottery assemblage suggests very little domestic activity was occurring after *c* AD 350. The upper portions of the ditches and ponds around the villa did not silt up but were filled with large deposits of demolition rubble, especially ceramic building material, indicating that Building 2 (B2) was deliberately levelled when the features were still open. A coin of Constantius II (AD 355–61) from demolition deposit [17] of B2 was slightly worn, suggesting that the destruction took place around AD 360/70.

It is also worth recounting here the sequence of possible B4, based on the coin dates. The coin beneath the post pad suggests the structure was built *c* AD 300 and had an associated fence respecting the corner of the masonry B2, demonstrating that it was still standing. As interpreted, B4 lasted for around 50 years before being demolished or possibly burned down. The latest coin of the small hoard cutting through a posthole was dated to AD 350–53 and, as it was slightly worn, suggests the building was gone by *c* AD 360.

Some sort of late 4th- to early 5th-century AD presence at Snodland is, however, suggested by four Theodosian coins (AD 388–402) and a late 4th-century AD military buckle-plate found in the 1920s (Cook 1928, 79). There is nothing, though, to suggest the nature of this occupation, which may have been limited, and sustained life at the villa does seem to have ended well before this period.

The apparent end date of the buildings at Snodland fits well into the orthodox view of villa decline in Britain. Faulkner sees the peak of villa building at around AD 300, followed by a sharp decline with the rate of construction down by two thirds within 50 years; this was accompanied by a lack of renovation of existing villas and an overall decline in villa numbers, so that by *c* AD 350–400 villas had virtually ceased to exist (Faulkner 2000, 142–3).

Fig 6.3 Reconstruction showing Snodland during the 3rd–early 4th century AD (period 3, phase 4) © Andy Gammon Art & Design 2014

Some areas of Britain, however, such as Gloucestershire and the south-western counties, were generally exempt from this trend of 4th-century AD decline, and the reasons for this disparity are not fully understood. Black has suggested that the prolonged presence of the Roman army in the south-east retarded the fortunes of the local villas (1987, 41–2). In addition, the coastal or riverside location of most of the south-eastern villas would inevitably have left them vulnerable to the effects of seaborne raiders (Mattingly 2007, 388).

6.7 GRAVESIDE RITUAL, BURIAL OFFERINGS AND VOTIVE DEPOSITS

Evidence of ritual structured deposition could be found both with the inhumation burials (period 3, phase 5) and the votive foundation deposits (mostly period 3, phases 3 and 4). Two of the seven graves, juvenile burial [79] and adult burial [86], were accompanied by pottery vessels: a disc-necked flagon and a grey ware dish in the former and an unusual small jar in the latter. These had not been simply placed in the graves but had all three been deliberately smashed before being interred; the jar was also visibly burnt and sooted.

The condition of these vessels strongly suggests graveside ceremony, possibly involving the burning of scented oils or a combustible offering in the jar, before the vessels were ritually 'killed', a practice which was also seen with five amphorae at the nearby Holborough burial mound (Jessup et al 1954, 12) and is well known in burials across Roman Britain. It has been considered that the deliberate smashing of pots ensured the cancelling of the life-force of the object and enabled it to enter the next world (Bagnall-Smith 2008, 165) and can be seen as a change in focus, from the contents of the vessel to the vessel itself as being the offering to the gods (Philpott 1991, 112).

The use of pottery vessels in graves as funerary accessories is common in the 2nd and 3rd centuries AD in the south-east of England and these have often been found to contain the remains of food and drink offerings. The number of funerary vessels interred generally decreased in the 3th century AD and by the 4th century AD examples such as these are rare (Philpott 1991, 103–4).

It has been suggested that this change in burial practice, to more symbolic token offerings, marks the beginning of a change in belief, with the dead no longer requiring food because they journeyed to another world in the afterlife rather than simply residing in the grave (Philpott 1991, 112–13). On the other hand, the belief in nourishment for the dead may have remained popular, with its apparent decline perhaps reflecting the fact that pottery vessels were no longer being placed in the grave, but were instead incorporated into memorial funerary feasts (ibid).

Evidence of ritual structured deposition can also be seen in the construction of the villa and the enclosure of the surrounding environment, which was often accompanied by votive offerings (Table 6.2). These were found in a wide variety of contexts including not only building foundations, but also ditches and a yard surface, demonstrating that ritual was involved in the creation of even the most mundane of features. Indeed, it is being increasingly shown that religion and ritual were interwoven into the fabric of day-to-day Roman life (Fulford 2001, 199–218; Black 2008, 1–26). Gods and lesser spirits were believed to be everywhere in the Roman world, in the home and in the fields, and they clearly needed regular appeasement (ibid).

Feature	Votive items	Condition	Period
Masonry wall G51	poppy-head pottery beaker	upper profile only	3.2
Drainage ditch G518	stamped samian platter; fine pottery jar	half complete; near complete	3.2
Yard floor G520	copper-alloy mirror (RF<258>)	incomplete	3.2
?Stock enclosure G517	bead-rimmed pottery jar	smashed in base of cut	3.2
Field boundary ditch G533	carinated pottery beaker	upper profile only	3.2
Pit [1215] in field boundary ditch	Patch Grove storage jar	missing rim and base; vessel set upright	3.2
Enclosure wall G62	poppy-head pottery beaker	upper profile only	3.3
Well [1278]	poppy-head pottery beaker; unguentarium; food remains?	both near complete	3.3
Outbuilding B4	coin, worn, AD 275–85	placed under stone post pad	3.4

Table 6.3 Votive foundation deposits

Table 6.3 includes all the potential votive deposits found on the site. Because of the difficulty in distinguishing deliberately structured deposition from other forms of disposal, the list may well include some items of domestic waste that merely happened to find their way into the construction features. Indeed, the interpretational problems involved in identifying the difference between 'rubbish' and 'ritual' deposition have been widely acknowledged (SERF 2008) and there may be other, more prosaic explanations for their presence, such as the upright storage jar in pit [1215] dug in the end of a field boundary ditch, which might simply have been for collecting water.

Votive foundation deposits were thought to ensure the fortune and successful functioning of the feature, be it a building or a well. Of the nine deposits, eight were dated to the 1st and 2nd centuries AD (period 3, phases 2 and 3), and

perhaps the popularity of votive deposition declined in the late Roman period at Snodland. As to the offerings themselves, pottery vessels dominate and there is a notable absence of the animal bone and carcasses which are often found in votive contexts on other sites.

The frequent occurrence of incomplete pottery vessels may mean that although they had lost their practical use, they were still considered appropriate as symbolic offerings. Vessels deposited in the base of ditches may have been offerings to promote the prosperity of the enclosed field rather than of the ditch itself or they may have been a part of an end-of-use termination ritual before the infilling of the ditch (Merrifield 1987, 40). The offering in the ditch draining water from the bath house is more unusual and there is no obvious explanation. The broken copper-alloy mirror was the only item of a personal nature used although items such as brooches are often found in votive contexts (ibid, 26).

Votive offerings are frequently found in Roman wells with beakers and unguentaria, like the ones from well [1278], being especially common, perhaps because of their use in libations (ibid, 45–8). Ritual depositions seem to occur typically at the beginning and at the end of a well's life: when they were initially dug below the water table and when they finally became silted up, ceasing to function properly and often being reused for cess and rubbish disposal (Graham & Millet 1980, 37). The two vessels from well [1278] were from the primary silting of the well, suggesting that they were an initial offering intended to ensure the healthiness of the water. The remains of fruit and other food stuffs were also recovered from the primary silting and these may have been associated with the vessels, although in this case it is impossible to distinguish between deliberate offerings and domestic rubbish.

Five of the nine deposits can be confidently interpreted as foundation offerings, and these were found in both timber and masonry buildings as well as an external yard surface. This rite of structural commencement was a common practice in the Roman world and appears to have continued from the Late Iron Age (Merrifield 1987, 47–51). Similar votive pottery deposits in the foundations of villa buildings were found at Eccles (Detsicas 1963, 132).

Another possible votive item was the Bronze Age sword pommel and handle from Roman demolition dumps G71. The general absence of other prehistoric material in the deposits suggests that the pommel and handle were unlikely to be simply a residual find. It is becoming more widely recognised that prehistoric weapons and artefacts recovered from Roman deposits, especially stone hand-axes, were often in fact curated finds that became specially placed votive offerings. Notable instances of this practice include the Palaeolithic hand-axe from a building foundation trench at Barcombe villa, West Sussex, a scatter of early prehistoric hand-axes from within and around the Roman shrine at the Swan Valley Community School, Swanscombe, Kent (Matthew Pope, pers comm) and a Neolithic stone hammer-head and hand-axe from Beddington villa, Surrey (Howell 2005, 58). These items were probably regarded as more than mere curios and were likely to have been imbued with a magical or religious significance. This belief can be traced well into the post-medieval period (Merrifield 1987, 9–12).

Unlike at Eccles and other large villas, there was no evidence of an associated temple at Snodland, although clearly much of the site has yet to be investigated. However, a cellar on the other side of the river at Wouldham, only *c* 800m to the east, possibly functioned as a riverside shrine (see below) and may been part of the religious and ritual life of the Medway inhabitants.

6.8 CONSUMPTION, CRAFT AND ECONOMY

The following section provides a brief overview of evidence for the consumption of food and materials, and for crafts and the domestic economy. Generally, there was no evidence for anything other than a domestic level of production, in contrast to the adjacent Eccles villa with its associated pottery and tile production (the latter being the largest civilian tile kiln found in Britain) working at levels geared vastly above its own needs (Detsicas 1983, 125–6). This is not to say that such industries did not take place at Snodland, which had the same access to resources and to the river as Eccles, but rather that there has been no evidence found so far.

It must be borne in mind that the location of the excavation area on the periphery of the villa complex, some 80m away from the main residences, is inevitably reflected in the size and the nature of the finds assemblages and these can serve only as a tentative glimpse of the economic activities ahead of the full publication of the excavations on the main buildings.

Unsurprisingly, the vast majority of building materials used were those available close to the site, including chalk, flint, ragstone and tufa. Reliance on non-local stone was very minor and that which was found included sandstones from the north Kent coast and ironstone from the Weald. The diversity of woodland habitats locally was also fully exploited, for both fuel and construction, and there was no evidence of any imported timbers.

Most of the ceramic building material in the orange-red fabrics (fabrics 1, 1b, 3, F1 and F3) was probably made in the

vicinity of the villa. Additional material was brought in from other sources, including tile almost certainly made at the Eccles villa, a smaller amount of tile in fabrics similar to those of the Thames Valley brickearth of London and Canterbury and flue tile possibly made at the kilns at Hartfield, East Sussex (see Chapter 5.4).

The metal finds provided evidence for a range of small-scale domestic crafts and activities including textile production, bone and antler working, leather working and wood- and metalworking. Tools possibly related to agriculture were scarcer but included a pruning hook (RF<472>) and possible iron wool shears (RF<71>). Many tools were recovered from demolition dumps G71 and although it is tempting to associate these tools with the extensive period 3, phase 5 construction works, the large amount of residual pottery from the pit suggests that waste material had been amassed from numerous long-lived midden sources.

The animal bone assemblage showed a usual villa consumption pattern dominated by cattle followed by sheep and pig. Eaten in lesser amounts were domesticated birds, such as goose and chicken, and hare and deer, which were presumably hunted. The only fish remains found were of roach. Considering the riverside location the absence of wild fowl and greater quantities of fish bone is surprising and must be due to the rare survival of such small bones.

Other than cereals, there was some limited evidence for other plant foodstuffs, which are likely to have formed only a lesser component of the diet. These include broad bean (*Vicia faba*), pea (*Pisum sativum*) and black mustard (*Brassica nigra*), as well as foods that may have been imported, such as grapes (*Vitis vinifera*), figs (*Ficus carica*) and plum/damson (*Prunus domestica*).

The evidence for crop processing and the possible stock enclosures suggests that Snodland operated a mixed-farming regime, which has been claimed for nearly every other excavated villa in Britain since the advent of modern archaeology (Percival 1976, 145–66; Black 1987, 56–72; Rudling 1998, 51; Johnston 2004, 45–51). Even Branigan, in his essay exploring specialisation in villa economies, concluded that where instances of specialism were found, they were specific opportunities that could be undertaken without disrupting the broad base of mixed farming on the villa estate (Branigan 1988, 42–50). Nevertheless, compelling evidence for specialist industries at villas has been found, such as salt production at Bays Meadow in Worcestershire (Hurst 2006) and tile production at Ashstead, Surrey (Bird 1987, 184–6).

There is no evidence for any specialism at Snodland, although the question of how to identify the significant and profitable economies rather than just the range of activities has never been properly resolved (Branigan 1988, 42). Villas did not exist in isolation: they produced surpluses for selling to markets and they themselves consumed goods, often luxuries which could not be produced on the estate, and this is, in essence, the nature of the interdependence between villas and towns. With this in mind, Snodland in particular, and the Medway valley in general, must have had an essential two-way economic relationship with both Rochester and London. However, identifying the evidence for this is difficult and even the presence of imported late Roman amphorae is ambiguous (see Chapter 5.3).

Snodland's location gave it excellent communication links, situated as it was both on the bank of the river and on a long-lived east–west land route, and these would have given the villa other economic opportunities, such as fulfilling a possible *mansio*-like function. This form of service specialism is only conjecture but the provision of discrete accommodation for paying guests in villas has been long suspected (Branigan 1988, 49) although it has always proved exceptionally difficult to find compelling evidence for it. Snodland, however, was ideally located for the numerous travellers along the Medway: it was less than a day's river boat journey upstream from Rochester, and seemed to be adequately provisioned with accommodation suites, such as the concentric building (Buildings 1 and 2). It was also convenient for travellers heading along the North Downs route, located *c* 20km from the cluster of villas on the Cray valley to the west and *c* 25km from the three villas in the Stour valley to the east. An *ad hoc mansio*-like service was perhaps more commonly practised by villas than has previously been suspected, especially by those located on roads and rivers, or those by popular shrines, where they could have accommodated the worshippers, as at Islip, Oxfordshire (ibid).

6.9 SNODLAND VILLA AND THE ROMAN MEDWAY VALLEY

It has long been appreciated that during the Roman period the Medway and Darenth valleys in west Kent were the most densely populated rural areas in the south-east, and were home to several very important villa sites, such as Darenth, Lullingstone and Eccles (Page 1974; Meates 1979; Detsicas 1983).

The proliferation of sites here compared to the apparent paucity to the east around the *civitas* capital, Canterbury, has drawn much comment since the 1980s. Blagg suggested the owners of the surrounding land preferred to live in Canterbury itself (1982, 56) while Detsicas believed that this absence was only apparent and that villa sites would eventually be found

around Canterbury (1983, 97), although in the 30 years since he wrote this relative absence has stubbornly persisted. More recently, Millet concluded that villa clusters reflect different valley-based Iron Age communities, suggesting a strong continuity of social patterns (2007, 152). Mattingly, on the other hand suggested a different landownership rationale, with the limits of the *civitas* of the Cantiaci restricted to around Canterbury, north-west Kent sold off or leased as private land and the resource-rich Weald under some form of Imperial control (2007, 386).

Conversely, the South-East Research Framework (SERF) research agenda (2008) suggested that geology and topography may well have been a strong underlying influence on Roman rural settlement patterns and that villas may have targeted particular areas in north Kent. Although this seems to be a simple reaffirmation of a more traditional view, the influence of geology appears persuasive.

In comparing the Medway and Stour valleys, two major differences are particularly noticeable: navigability and fertility of adjoining land. The Medway would have been easily navigable to beyond Maidstone, allowing good communication and the ready transportation of nearby resources, such as timber from the adjacent Weald and building stone, to the markets of Rochester and London. The valley had also been consistently attractive throughout prehistoric, Roman and later periods because of its fertile, calcareous, free-draining soils, situated on sheltered and relatively flat lowland with little forest cover. These soils are seated over a large bed of Lower Greensand in the middle and upper valley. Over three quarters of the villas in the Medway valley were clustered on this geology and there was a particular concentration around modern-day Maidstone (see below). Similarly, the high concentration of villas in the Darenth valley to the west can be attributed to the fertile, well-draining Thanet Sands (Bird 1996, 220). The Stour by contrast is a smaller river, limiting the access upstream, and the geology of its valley is less fertile than that of the Medway (Matthew Pope, pers comm).

6.10 THE NATURE OF THE DATA

From the published literature and Historic Environment Record, 33 major Roman sites are known in the Medway valley including buildings, settlements and military camps. (Fig 6.1; Table 6.1).

Of the 33 sites, 28 are likely to have been villas; only two sites, Aylesford (Fig 6.1, no 9) and Queen Elizabeth Square (Fig 6.1, no 32), are known settlements lacking masonry structures. Antiquarian work focused almost exclusively on masonry buildings, inevitably because of their inherent robustness and high visibility in the archaeological record, and this set the trend for a significant bias in Roman rural archaeology towards villa sites (Drewett et al 1988, 180; Mattingly 2007, 367; SERF 2008). As villas were likely to have been outnumbered, by at least 25 to 1, by other forms of settlement (Mattingly 2007, 368), the Medway sample is evidently heavily skewed towards high-status landowning residences. It must be appreciated that the vast majority of the lower-status timber-built settlements at the bottom of the hierarchy are largely unknown despite the recent High Speed 1 route following the eastern side of the Medway valley, although much of the route was at higher elevations where settlement would not be expected (Booth 2011, 259–63).

Problems with published accounts arise also from the elderly nature of the data set: the fieldwork on 15 of the 33 sites was undertaken before 1902 and precise locations are often vague. Only the recent investigation of six sites, including this one at Snodland, undertook machine-stripped open-area excavation, employing systematic artefact recovery and environmental sampling strategies. A further recurrent problem with the data is the amount of excavations from the latter half of the 20th century that are unpublished, including Plaxtol (Fig 6.1, no 26), the majority of the Snodland main residence and the final reporting on Eccles (Fig 6.1, no 9).

6.11 ROMAN SETTLEMENT IN THE MEDWAY

The importance of transport in the valley is abundantly clear. Sixteen known sites are located close to the river, and all but two of the rest are near known roads. Only Plaxtol (Fig 6.1, no 26) and East Malling (Fig 6.1, no 13) are apparently isolated although these were presumably connected by local trackways to the river. A river ford at or near Snodland seems highly likely for the trackway running east to west along the North Downs, and access to this lesser route must have been important to the cluster of settlements in the lower Medway.

In the Late Iron Age the Medway valley was clearly a settled and exploited landscape, with major settlements known at Bougton Monchelsea (Mackinder 2005), Loose (Kelly 1971) and West Malling as well as an important cemetery at Aylesford (Lawson & Killingray 2004, 16–18). Late Iron Age finds and features are also known from eight of the sites, mostly in the form of residual finds and field boundary ditches (see Table 6.1). The best evidence for a precursor settlement is at Thurnham, where roundhouses were found adjacent to the 1st-century AD villa building (Lawrence 2006), and at Boughton

Monchelsea (Fig 6.1, no 21), where recent excavations have identified a Late Iron Age enclosure pre-dating the villa (Mackinder 2005).

The dating of the Roman settlements is problematic owing to the lack of modern excavations at the majority of the sites and most dates are based on unstratified coins. Only four sites have a definite 1st-century AD foundation date attested by excavation: Snodland, Eccles (Detsicas 1983, 120), Thurnham (Booth et al 2011) and East Malling (Wacher 1965, 257–8), while another six sites produced stray finds of this date. Of these four, the lower valley development at Eccles and Snodland seem to have been the initial pioneer settlements in the Neronian period (AD 54–68).

Despite Kent being amongst the earliest areas to come under direct Roman control, there are still relatively few sites with good evidence for 1st-century AD buildings. Millet believes that the fashion for a rural aristocratic retreat was slow to catch on in Kent, taking at least two or three generations after the Conquest, although he admits the exact reasons for this are not clear (Millett 2007, 152). However, as this excavation at Snodland has shown, 1st-century AD building phases can lie undiscovered on sites, masked by later foundations, or unidentified because of the lack of adequate dating. Perhaps it is more a reflection of a failure to identify earlier periods at villa sites than a real absence of occupation.

The pinnacle of high-status residences in the valley was the impressive villa at Eccles with its *piscina* (Detsicas 1983, 124), perhaps rivalled only by the villa at Loose Road, Maidstone (Fig 6.1, no 18) with its tower and huge mosaics (Roach Smith 1876, 163–72). Snodland has produced little in the way of high-status architectural appointments, such as mosaics, and does appear to have belonged to a secondary tier of affluence along with the villas at the Mount, Maidstone (Fig 6.1, no 15) and Thurnham. However, these recent excavations have demonstrated that the Snodland villa may have covered a far greater area than hitherto suspected, possibly equalling Eccles in size (with both around 1.2ha and over 30 rooms), and that the nature of the occupation was far more complex than previously thought.

One of the most noticeable aspects of the Roman Medway valley is the cluster of six known masonry buildings in and around the modern town of Maidstone (Fig 6.1, nos 12, 14–18). The location of Maidstone was highly attractive, with the exceptional circumstance of the Roman road passing within a few hundred metres of the river offering excellent connections as well as a scenic location of a bend in the river with steep, flat-topped, valley sides. The six sites were without exception high-status residences showing evidence of hypocausts and baths, and they would surely be considered by any excavator to represent villas. The full extent of these villa complexes is unknown, but they must have been substantial, and the nature of Roman Maidstone has elicited debate for well over a century.

The idea that Roman Maidstone was an urban, or proto-urban, settlement was first formally proposed by Canon Robertson in 1883 (Robertson 1883, 68–80), and since then it has been alternately denied (Mortimer Wheeler, in Page 1974, 98–9; Desticas 1983, 78–9) and supported (Wacher 1974, 23; Mattingly 2007, 264; Biddulph, in Andrews et al 2011, 247). Biddulph recently postulated that Rochester was too distant for day-to-day connections with the Medway villas and Maidstone may have served this need, although a full understanding of its nature is still yet to be reached (Andrews et al 2011, 247).

Taylor, in his national survey of Roman rural sites, has pointed out that there were plentiful settlement forms in the wider south-east area other than villas, and that it was a landscape of dispersed farmsteads interspersed with larger linear farm clusters or villages. This diverse range of rural settlements was linked by a network of roads and trackways, enabling the redistribution of large quantities of agricultural and industrial goods (Taylor 2007, 51–2).

Villas were in essence high-status farms and agriculture was clearly their economic basis. It is therefore surprising how little has been found that can be directly associated with farming practice. In the Medway valley the evidence is limited to a granary at Eccles (Detsicas 1983, 124), corn-dryers and barns at Thurnham (Booth et al 2011) and Boughton Monchelsea (Mackinder 2005), stone querns and possible corn-dryers at East Farleigh (Daniels 2010, 12–13; Fig 6.1, no 20) and a ploughshare at Frindsbury (Arnold 1887, 169–80; Fig 6.1, no 1). To this list may be added the evidence of fields and potentially barns from this excavation at Snodland. This problem is not just confined to Medway valley sites but to Roman rural archaeology in the south-east as a whole (SERF 2008).

Equally, little evidence has been identified for industry at villa sites. Although pottery and tile manufacture has been clearly demonstrated at Eccles, its scale and circumstance is clearly exceptional compared to the rest of the valley. Another instance of possible pottery manufacture was identified adjacent to the Boughton Monchelsea villa, where dumps of pottery may have originated from a nearby kiln (Mackinder 2005). Stone quarries, which supplied London and Rochester with ragstone, are believed to have been located in the Maidstone area, possibly at Allington (Page 1974, 103; Fig 6.1, no 12), and these may well have been under the ownership

of one or more of the villas. Limited evidence for malting was found at Thurnham (Smith & Davies 2006) and beer production is known to have been important from the evidence of other villas in Kent, for instance at Northfleet on the Thames (Andrews et al 2011, 222–41).

There is little evidence of ironworking sites in the Medway valley, in comparison to the abundance in the Weald to the immediate south. However, some of the villas in the Medway may have been involved in the movement of goods, such as stone and iron, between the Weald and the Thames, acting in an official capacity and serving in effect as gatekeepers for government trade (Biddulph, in Andrews et al 2011, 247).

It is clear that there are many Roman burial sites in the Medway and although much of the information is poor, most having been excavated before 1900, it seems that they took a variety of forms, including high-status walled enclosures. The valley clearly displays a palimpsest of burial practices from throughout the Roman period and trends are not readily apparent from this brief survey of the literature. Nevertheless, what does seem clear is that burials were usually located close to settlements, often no more than *c* 200m away, and where burials are found in seeming isolation there is a strong likelihood of an associated building in the vicinity.

Only two possible temple or shrine sites have been identified in the valley, at Wouldham, Burham (Fig 6.1, no 7) on the river bank (Page 1974, 108–9) and at Boxley Hill (Fig 6.1, no 11) near the crest of Blue Bell Hill (ibid), both in the lower Medway and near Eccles. The Wouldham site was found during aggregate extraction in the 19th century and was destroyed after being recorded. It was a vaulted chalk-block subterranean cellar, 40 feet long and 19 feet wide with three niches in the wall at the far end. The presence of a spring, bubbling up from under the floor of the room, was undoubtedly a significant part of the reason for siting the structure here. Other above-ground buildings were found nearby and the entrance of the chamber led to a possible timber wharf on the river by means of a ramp (ibid).

The chamber was originally interpreted as a Mithraeum but it was later argued that it was nothing more than a cellar for storing the produce transported on the Medway (Jessup 1956, 168–9). However, this purely functionalist view itself needs readdressing as there are strong reasons for believing this cellar was more than just for storage. Although there is no evidence for this being a Mithraeum, it has recently been appreciated that cellars often had dual functions as both stores and cult rooms, and these uses were complementary as fertility cults were directly linked to agricultural surplus (Perring 2002, 212). The importance of the spring emanating from the chamber should not be overlooked, as the presence of running water was important in many fertility and mystery cults, as well as in the worship of Isis (ibid). Water in general and rivers in particular were venerated as sacred from at least the Middle Bronze Age, and watery places remained important into the Roman period. Testament to this are the numerous votive offerings recovered from the Thames and Walbrook, and the concentration of religious structures found along the banks of the latter (Merrifield 1987, 24–7; Mattingly 2007, 315). The Medway river-bank cellar may have been dedicated to the cult of a local river god and, because of its close proximity to Snodland, is likely to have been well known and frequented by the villa inhabitants.

Boxley Hill, overlooking the lower Medway valley, was also considered to be a possible temple by Detsicas (1983, 144) altogether it has never been formally excavated. The site is an oval mound and Roman buildings are said to have been found there in the 19th century. Numerous finds have been recovered, including a small hoard of 100 coins dating to the mid 4th century AD (Page 1974, 104).

The dating for the abandonment of Roman settlements in the valley, like the evidence for the foundations, is generally poor. However, the majority of sites appear to have been in decline, if not actually abandoned, by the early 4th century AD, with all of them abandoned by the middle of the century; there is no late 4th-century habitation attested anywhere by excavation. The Medway valley evidence is not dissimilar to that from further afield, where a general decline in rural settlement is seen across Kent in the 3rd century AD, but the causes are still little understood (SERF 2008).

This may well represent a lacuna in the settlement of the Medway, although some sites do appear to have Anglo-Saxon successors in the near vicinity, such as the cemeteries at Eccles (Detsicas 1977b, 56) and Snodland (Boden 2005, 41), and place-name evidence at sites such as Cuxton and Teston (Everitt 1986, 99–100; Fig 6.1, nos 3 and 25).

6.12 FUTURE RESEARCH

A number of research priorities for future archaeological work in the Medway can be suggested, based on this brief overview:

What was the nature of the settlement transition between the Late Iron Age and Roman periods?

Can the Neronian settlement of the lower Medway valley be better understood?

Where are the lower-status, non-villa settlements and what form do they take?

Is there any other evidence of pre-Flavian occupation in the lower Medway valley? What is the earliest occupation in the upper Medway valley?

Detailed examination of the nature and relationships of the Maidstone villa cluster – were these villas all contemporary and how did they interact economically and socially?

What evidence is there for agricultural practices, or of Roman field systems with good macrobotanical preservation?

Is there any evidence of 2nd-century AD decline and/or change in the Medway valley?

Are any ragstone stone quarries identifiable, and with which villa estate are they likely to have been associated? Is there any other evidence of industry or of economic specialisms?

Can the economic relationship with London and Rochester be better defined?

Can the likely location of the system of local tracks connecting the settlements be identified?

What are the nature, status and distribution of burials?

Is the apparent absence of settlement in the Yalding, Nettlestead Green and Mereworth areas genuine?

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SyAS Surrey Archaeological Society

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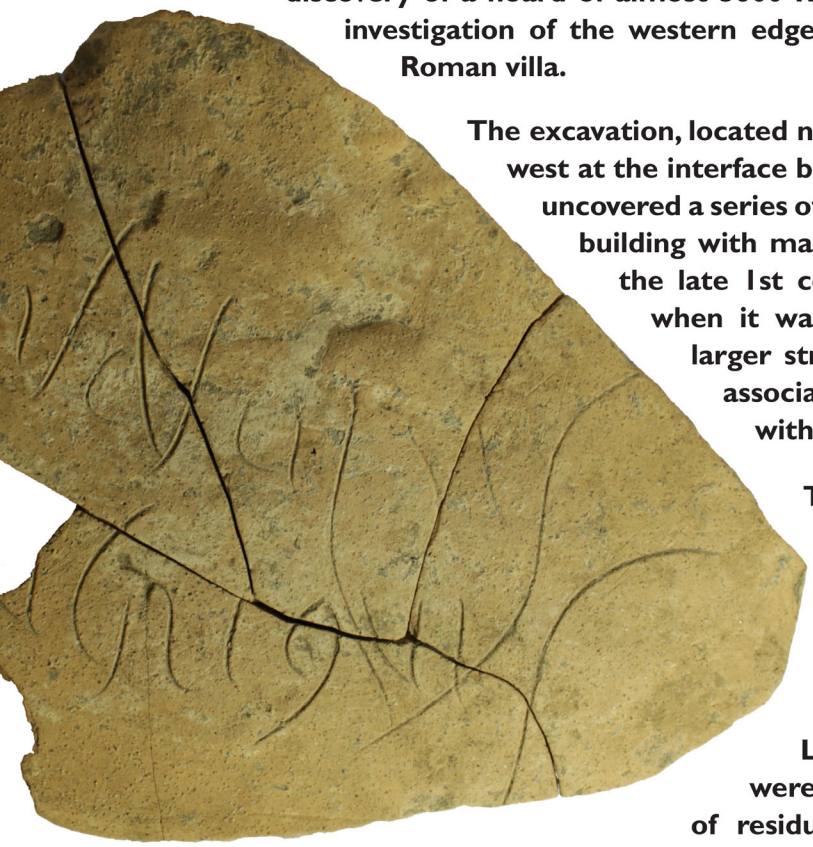
In the summer of 2006, during the digging of geotechnical test pits on the site of a former sports field, workmen heard a sound 'like breaking glass' as hundreds of copper-alloy coins fell out of the JCB bucket. This dramatic discovery of a hoard of almost 3600 Roman coins was the precursor to an archaeological investigation of the western edge of the scheduled ancient monument of Snodland Roman villa.



The excavation, located not in the main villa residences, but some 80m to the west at the interface between the outer buildings and the agricultural land, uncovered a series of ditched field systems and pits, as well as a concentric building with masonry foundations. This building was constructed in the late 1st century AD and survived until the 3rd century AD, when it was at least partially demolished and replaced by a larger structure. Two possible timber buildings, one possibly associated with crop-processing, were also constructed set within the surrounding field system.

The 4th century AD saw significant decline and a change in the nature of the activity, as buildings fell out of use and a small enclosed inhumation cemetery was established. A second 4th century coin hoard was uncovered, buried in the demolition of a building.

Large assemblages of material culture and ecofacts were recovered including a significant assemblage of residual Neronian ceramic building material, from an unlocated bath house.

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