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# EXCAVATIONS ON A ROMANO-BRITISH VILLA AT CHURCHFIELDS, SNODLAND, 1992-94\*

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During September and October 1992 a team from Wessex Archaeology, assisted by members of the Maidstone Area Archaeological Group, excavated, in advance of building work, two trenches over the western range of a Romano-British villa (SAM 398). Previous excavations by local societies had established the basic ground plan and state of preservation of the monument. During the 1992 work the area of the western range of the villa was re-excavated, deposits being removed to the base of the planned construction disturbance. During August 1994 two further areas were excavated following an alteration to the sewer design and a watching brief was conducted during the initial construction work. Evidence of prehistoric and Romano-British phases were identified on the site.

## INTRODUCTION

### *Project Background*

In July 1992, Wessex Archaeology was commissioned by Wards Construction (Medway) Limited to undertake excavation work on the site of a proposed housing development at Churchfields, Snodland (see Fig. 1). The work was designed to mitigate the impact of an area of deep foundations and of storm-sewer construction, both part of a housing development, on the site of a Scheduled Monument (SAM 398), a Romano-British villa. The affected area covered a total of 800 square metres which was to be archaeologically excavated to the base of the proposed construction disturbance. The ground plan of the villa was known from excavations conducted by the Maidstone Area

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Archaeological Group over the last three decades, the latest excavations were to be undertaken over the western range of the villa. Before archaeological work began the surface of the site comprised a combination of concrete surfaces and air raid shelters, remnants of the now demolished Lead Wool Company Works, and partially backfilled Maidstone Archaeological Group excavation trenches. The Wessex Archaeology excavations commenced 1st September, 1992, and continued until 2nd October, 1992, comprising five weeks in the field, during which time all threatened deposits were removed in a controlled manner.

Following alterations to the sewer design, in 1994 Wessex Archaeology was commissioned by Hall and Tawse of Wateringbury, to undertake a second stage of excavation and recording in two further trenches; a man-hole duct and an area of foul and storm sewer, (Areas C and D, see Fig. 2). This work commenced on 15th August, 1994, and continued until 18th August, 1994, comprising four days in the field, during which time all threatened deposits were recorded and removed by hand.

The final stage of work comprised a watching brief, undertaken by Wessex Archaeology between 22nd and 26th August, 1994, during the flyte augering operation over the scheduled area. A total of 82 augered piles were sunk at pre-determined points for the ground beam foundations; these auger holes had a maximum bore of 0.35 m. attaining depths of between 8.50 m. and 16.00 m., and drilled through modern made-up ground, subsoils, alluvial gravels, and bedrock clays. Although machine trenching between auger points was carried out, this was not of sufficient depth to disturb any archaeological deposits.

### *Archaeological Background*

The existence of a Romano-British building at Churchfields, Snodland, has been known for many years. The first reference to its discovery was by C. Roach Smith,<sup>1</sup> who noted in 1844 that '*tesserae* of Roman pavements and fragments of roof and flue tiles and pottery' were scattered about the field. He also recorded the remains of walls and a floor exposed in the river bank. The second recorded observations were made in the same year (1844) by Thomas Wright and published in his *Wanderings of an Antiquary* (1854). Wright noted that the field adjoining Churchfields was named 'Stone Grave Field' (in the 1840 Tithe Apportionment map the area is called simply 'Stone Quarries'). He excavated a small area and uncovered 'part of a floor of large tiles about a foot below the surface'. Wright also received information that 'a bath

<sup>1</sup> C. Roach Smith, *Arch. Journ.*, 1 (1845), 164.

[was] discovered in this field about forty years before and [had been] filled up without further enquiry.' At the beginning of the twentieth century a gasworks was built on the northern part of the site, however, no record of any discoveries during this work has been located. Extensions to these works in 1927 resulted in a number of finds, which were reported by N.C. Cook in *Archaeologia Cantiana* (1928).

In 1933–35, the Lead Wool Company Limited constructed a factory on the southern part of the site. During this construction several wall foundations were exposed, though no records of these survive. Two stone coffins were also found, one containing a complete skeleton.<sup>2</sup> In 1964–65 the Lower Medway Archaeological Research Group undertook a rescue excavation on the site, following site clearance operations by the South-Eastern Gas Board which had revealed structural remains.<sup>3</sup> Further work has been carried out on the site by the Maidstone Area Archaeological Group over a number of years to ascertain the full extent of the remains, and to attempt to reconstruct the ground plan of the principal masonry structures (see Fig. 2). These records are currently awaiting publication. The villa was comprised of three, or possibly four, ranges set around a central courtyard, together with at least one free-standing ancillary structure. The long axis of the main body of the villa, which comprised the north-west range, lay at roughly 25° east of grid north, so that it lay with its frontage facing south-east.

This is one of several known villa sites in and around the Medway Valley (see Fig. 1), the majority of which, like the Snodland villa, are situated on, or very near to the river itself. This riverside position would have provided easy communications with nearby *Durobrivae* (Rochester) and the remainder of the valley by way of the navigable river. The quadrangular or courtyard form of the Snodland villa, a relatively common form throughout southern England,<sup>4</sup> is similar to at least three of the nearby villas: the recent excavations at the Mount uncovered parts of three wings of the villa complex,<sup>5</sup> the villa at Loose Road, excavated in 1870 is described as a 'courtyard type villa' and the extensive Romano-British buildings at the Coombes, East Farleigh were 'in a quadrangular shape'.<sup>6</sup>

<sup>2</sup> Anon, *Arch. Cant.*, xlvi (1934), 202.

<sup>3</sup> M.A. Ocock and M.J.E. Syddell, 'The Romano-British Buildings in Church Field, Snodland', *Arch. Cant.*, lxxxvii (1967), 192–217.

<sup>4</sup> J. Percival, *The Roman Villa*, London, 1976, 51–117.

<sup>5</sup> D.B. Kelly, 'The Mount Roman Villa, Maidstone', *Arch. Cant.*, cx (1992), 177–235.

<sup>6</sup> E. Scott, *A Gazetteer of Roman Villas in Britain*, Leicester University Archaeological Monograph, 1 (1993), Leicester, 102–9.

*Topographical and Geological Background*

The site (centred on N.G.R. TQ 7075 6201) is located in an area known as 'the Church Field' or Churchfields approximately 200 m. north of All Saints Church, on the west bank of the River Medway, to the east of Snodland (Fig. 1). The village of Snodland is situated on a spur of chalky brickearth and gravelly loam, overlying low terrace gravels, which extend down to the River Medway. The villa site lies on an east-facing slope at the edge of this relatively higher ground as it drops towards the river bank. In the area of the excavations the immediate subsoil was a sandy alluvial deposit of variable depth overlying coarse sandy gravels. The gravels where encountered lay at between 5.45 m. O.D. and 6.60 m. O.D.

*Methods*

Four areas where archaeological deposits would be disturbed were thoroughly investigated prior to construction work (Fig. 2). Area A, which comprised approximately 700 square metres where trenching for site ground beams was to take place; Area B, of approximately 100 square metres, where trenching was for the laying of a foul sewer; Area C, 20 square metres, where a foul and storm sewer was to be laid; and Area D, 18 square metres. Areas A, B, and C lay over the known western range of the villa, including an area of hypocaust, and Area D slightly to the west of the known building.

In all areas the archaeological deposits were excavated to the base of the projected construction disturbance. Remains in Area A were removed down to a level of 6.425 m. O.D. to allow the siting of the ground beam and Area B down to the base of the foul sewer pipe trench at 5.40 m. O.D. In Areas C and D, to allow the siting of a deep foul and storm sewer and deep man-hole duct, all archaeological deposits were removed and the surface of natural gravels exposed.

*The Excavations*

Area A contained the backfilled trenches of parts of two previous excavations, that of Ocock and Syddell of 1964–65<sup>7</sup> and the later Maidstone Area Archaeological Group's (in prep.), and three further areas of modern truncation (see Fig. 3). In the north-western corner of the area the remains of a twentieth-century building (No. 2 Churchfield) had removed all archaeological deposits to below

<sup>7</sup> *Op. cit.* in note 3.

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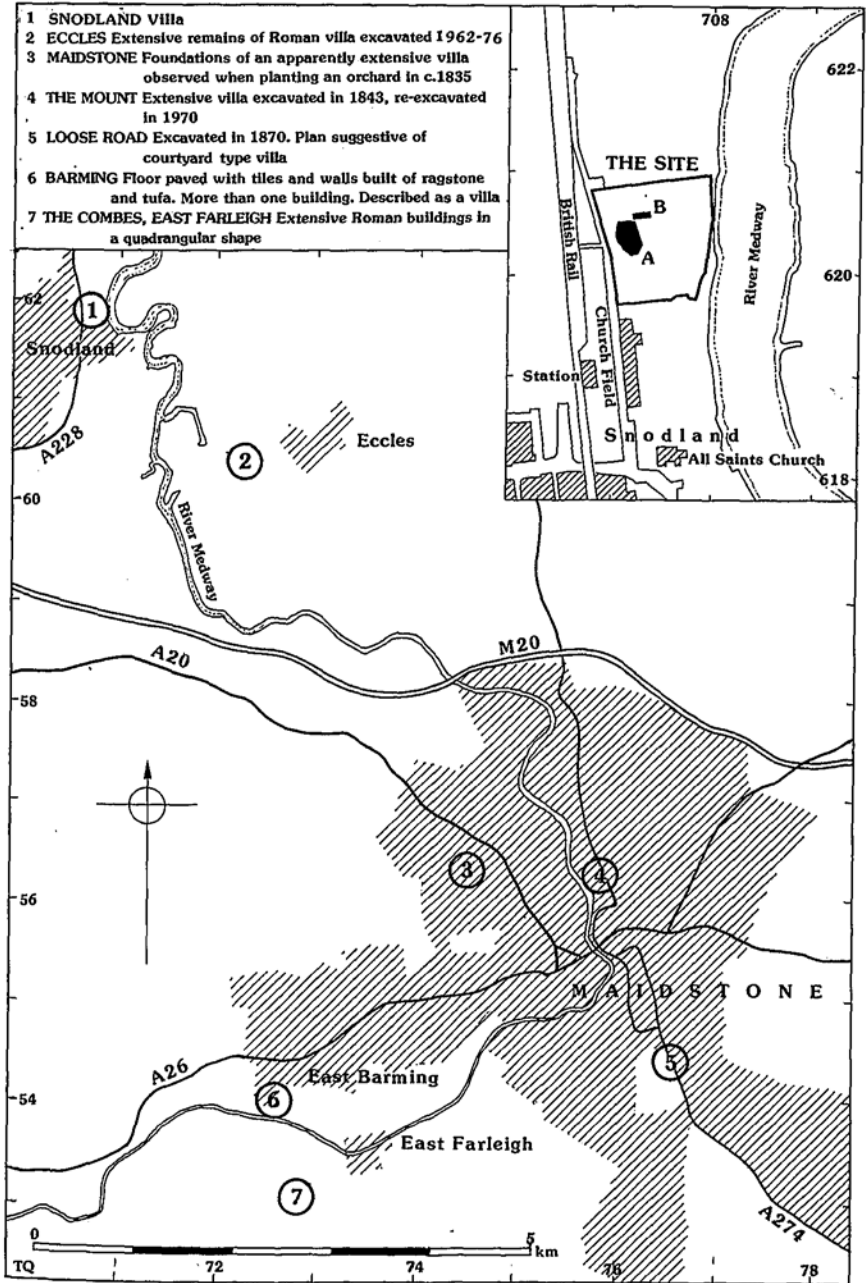


Fig. 1. Site location

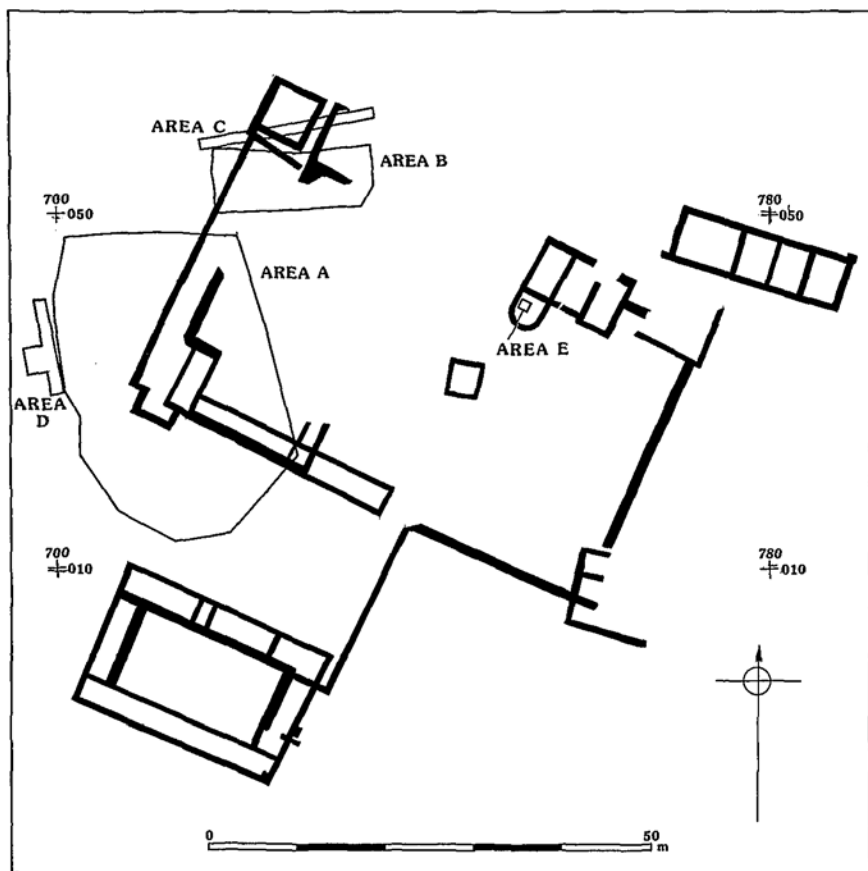


Fig. 2. Ground plan of principal masonry structures found by Maidstone Archaeological Group. Areas A and B were those excavated in 1992

6.425 m. O.D., as had a twentieth-century concrete yard, which had been terraced into the hillside in the north-eastern corner. The area between these truncations was reduced to 6.425 m. O.D. by machine, but no archaeology was encountered, although the earlier archaeological investigations by the Maidstone Archaeological Group had shown that archaeological deposits survive below this level. Finally the remains of a World War II air raid shelter truncated part of the archaeological deposits.

Area B was situated below the twentieth-century concrete yard surface that truncated the north-eastern corner of Area A. Below this

was approximately 0.50 m. of modern hard-core bedding, which directly overlay archaeological deposits to a level of 5.45 m. O.D.

Area C, to the north of Area B, was an area that had been truncated by several gas pipes and conduits associated with the former gas works. Archaeological deposits were encountered at a level of 5.40 m. O.D. sealed below *c.* 1 m. of modern made ground.

Area D lay to the west of Area A, approximately 7.50 m. west of the known western range. Archaeological deposits were encountered at a level of 6.80 m. O.D. sealed below *c.* 0.60 m. of modern made ground.

### *The Watching Brief*

During the watching brief, a small area, 1.80 m. by 1.60 m., was excavated to a maximum depth of 1.70 m. within part of the northern range of the villa (Area E, see Fig. 2) in order to remove an obstruction to the flyte auger.

### *Results*

To avoid repetitious descriptions, all masonry walls excavated within Area A are described in detail in Appendix 1. Only stratigraphic relationships and other pertinent details are noted in the stratigraphic analysis.

### *Deposits*

In Area A, after the removal by machine of approximately 0.40 m. of modern overburden and the re-excavation by hand of previously backfilled trenches, the western corner of the Romano-British villa was revealed. Several walls and an area of hypocaust, previously excavated by the Maidstone Area Archaeological Group, were uncovered (see Fig. 4). Within the building a small area of flooring was exposed, as were a number of chalk surfaces, some with signs of repair, outside the building.

In Area B, several robbed-out wall trenches and severely truncated wall footings were exposed after the removal of the overburden (Fig. 4). These were on very similar alignments to the walls revealed in Area A; however, as a result of modern disturbance and earlier masonry robbing, it was not possible to relate these features with those identified in Area A. Two short lengths of ditch recorded in Area B perhaps indicate a period of activity prior to the construction of the masonry buildings.

In Area C, after the removal of the modern made ground layer, a single robbed-out wall trench was exposed (Fig. 8). The majority of the



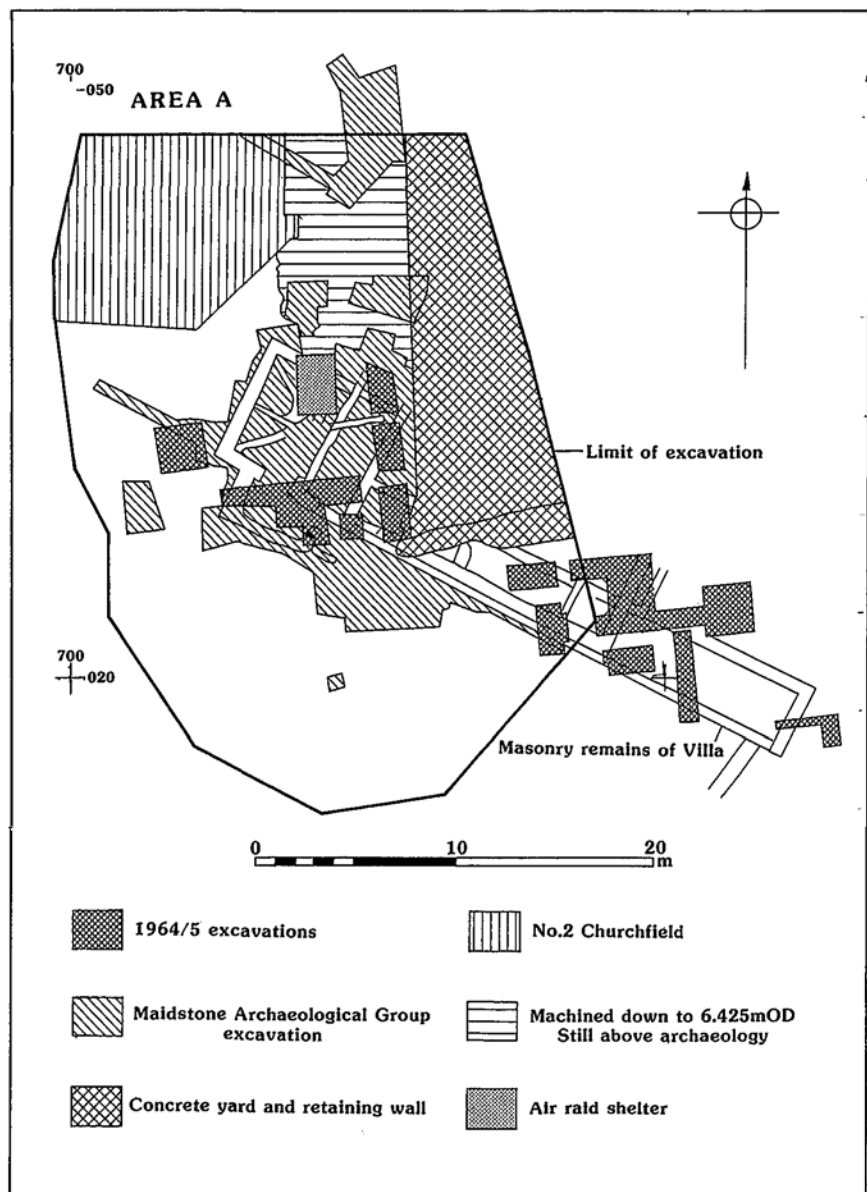


Fig. 3. Modern truncations and areas of previous archaeological excavations

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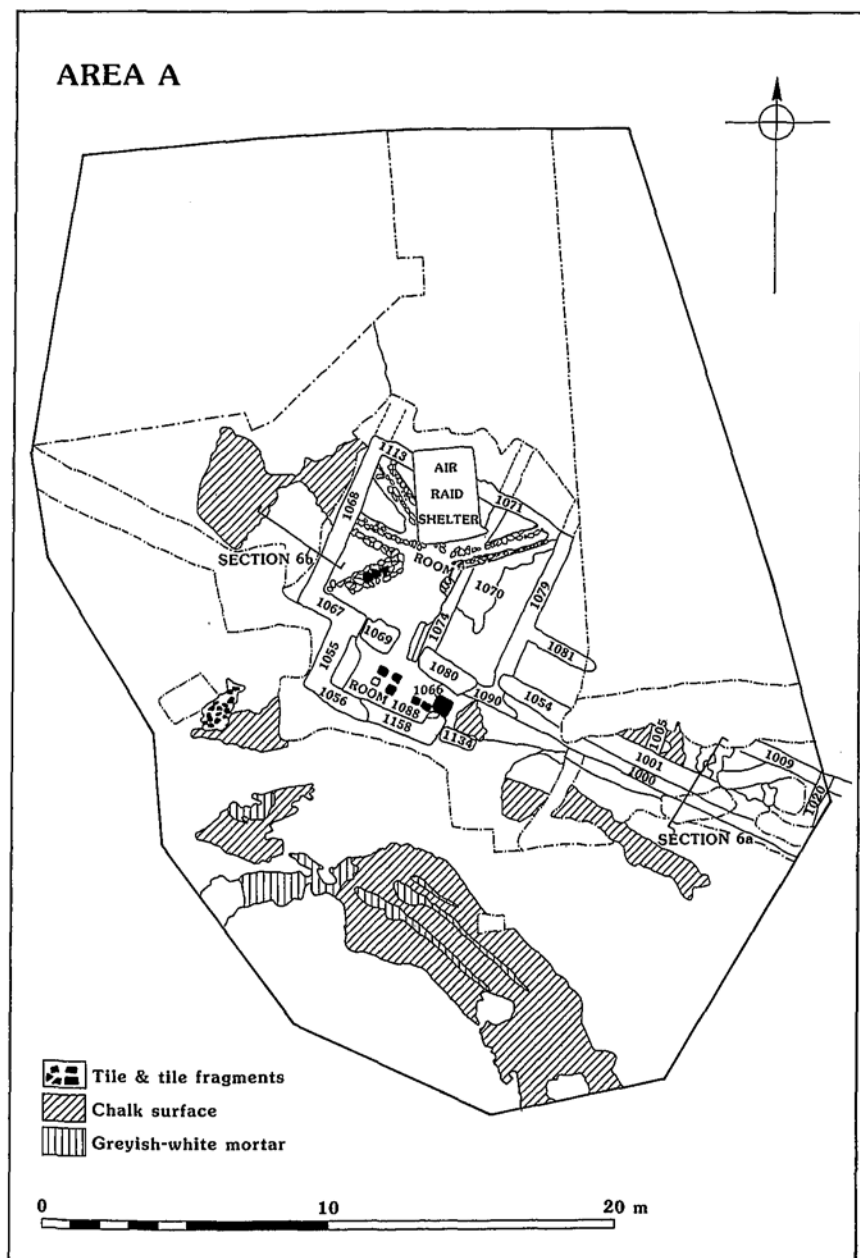


Fig. 4. Pre-excitation plan of Areas A and B

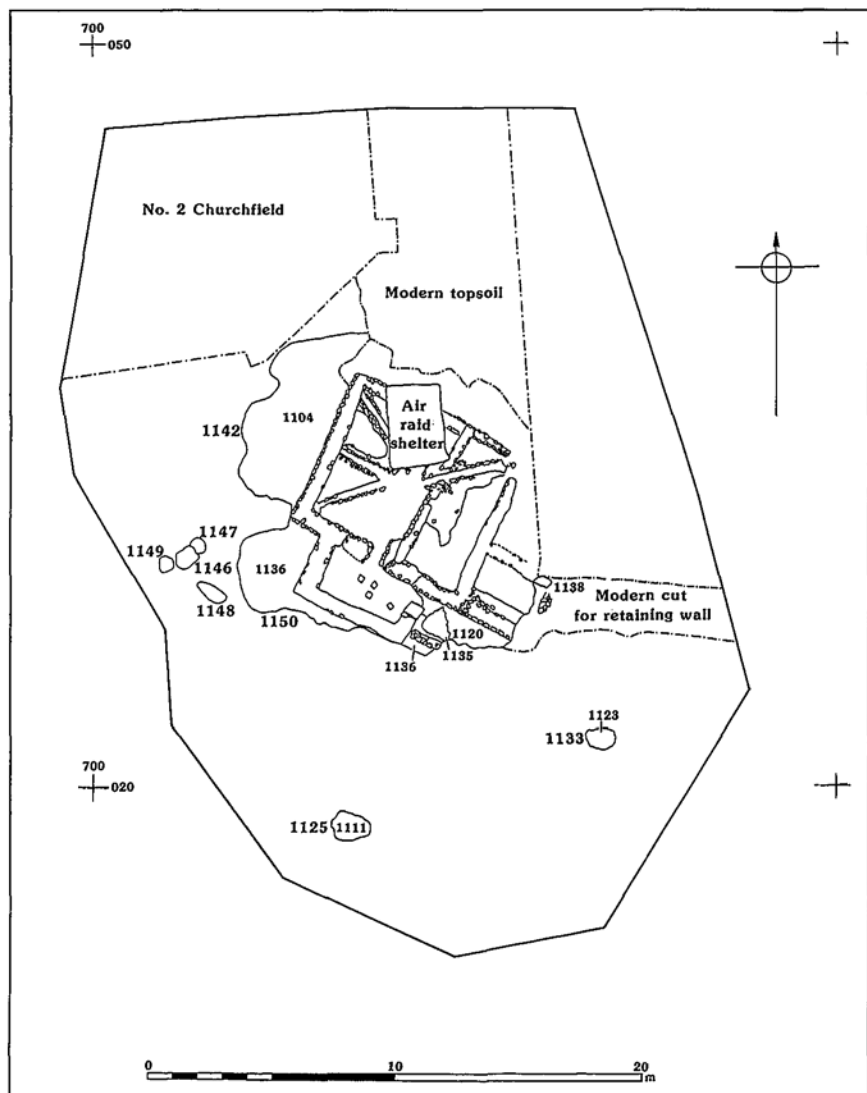


Fig. 5. Post-excitation plan of Area A

area was heavily disturbed, especially towards the eastern end, presumably during the demolition of the former gas works. Natural alluvium occurred at c. 5.40 m. O.D. in the western end of the trench, with natural gravels at c. 5.03 m. O.D. in the eastern end.

A small area of a chalk surface was encountered at 6.66 m. O.D., after the removal of the modern made ground layer in Area D (see Fig. 8); this directly overlay alluvium. The western side of the area was truncated by a modern pipe trench which still contained a large cast iron pipe.

In Area E (see Fig. 2), below c. 0.75 m. of made ground, a heavily compacted layer of sandy gravel was encountered at 5.40 m. O.D. This overlay a deposit of greyish white mortar, which in turn overlay natural gravels.

### *Stratigraphic Analysis*

Four phases of occupation of the site can be postulated; one prehistoric, of which little evidence survives, and three Romano-British. A later post-medieval phase is represented by the robbed out wall trenches in Areas B and C.

#### *Prehistoric*

Worked flint was recovered from a number of contexts. Although this was of undoubted prehistoric origin, all was redeposited in Romano-British contexts. Undiagnostic waste from flint-working of Neolithic-Bronze Age date is represented and indicates prehistoric activity within the general area. It is interesting that wall 1090 contained two flint cores (which were left *in situ*), within its foundations. Both were heavily patinated and one appeared to have been roughly trimmed before being built in to the wall. Both were probably of Bronze Age date. It was noted that the natural alluvial subsoil encountered in Area B (1043), contained several pieces of worked flint probably of Mesolithic or Neolithic date; these were again left *in situ*.

#### *Romano-British: Phase 1 (second century A.D.)*

This comprised the construction of the western corner of the main body of the villa, consisting of four ragstone and flint walls (see Appendix 1 for detailed wall descriptions) forming two long narrow corridors along the north-west and south-west sides of a larger room or rooms. A crushed chalk floor paved at least part of the south-western corridor (Fig. 7).

Phase 1 comprised walls 1000, 1009, 1074, 1079, 1081, and 1090

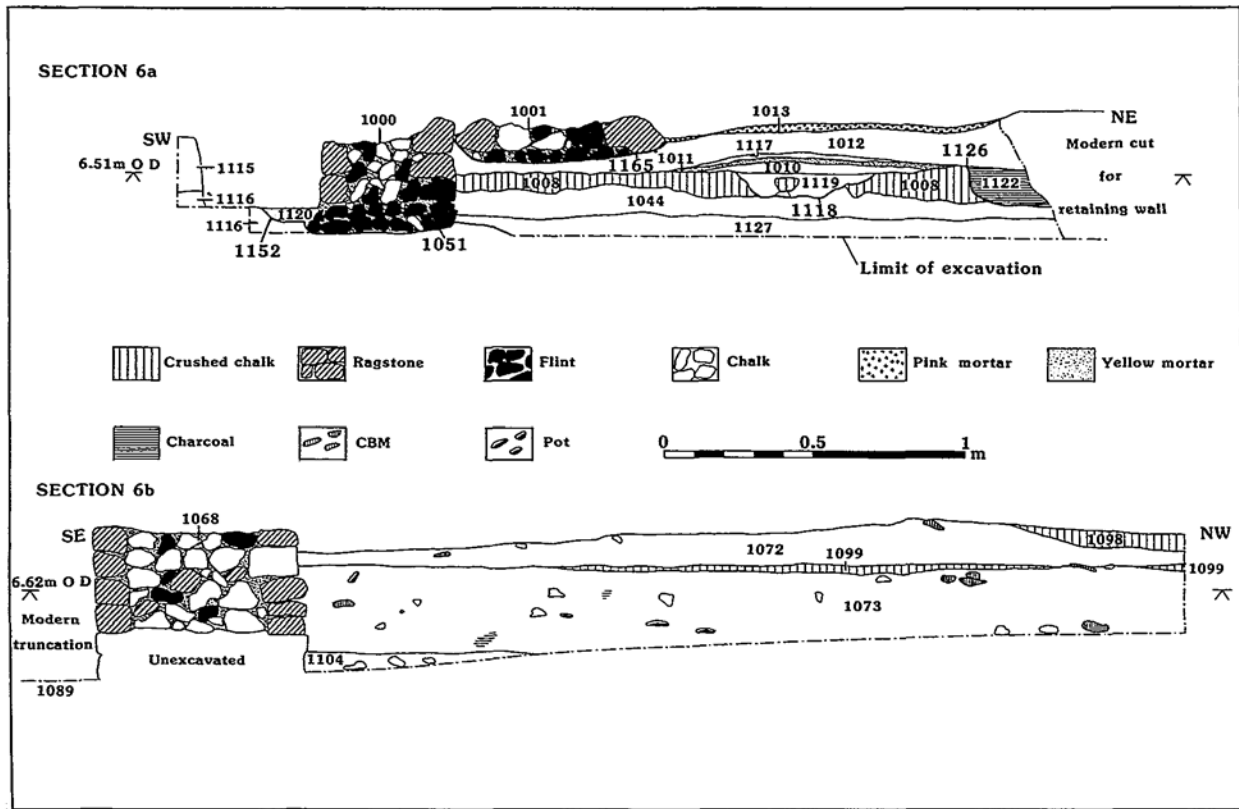


Fig. 6. Sections 6a and 6b

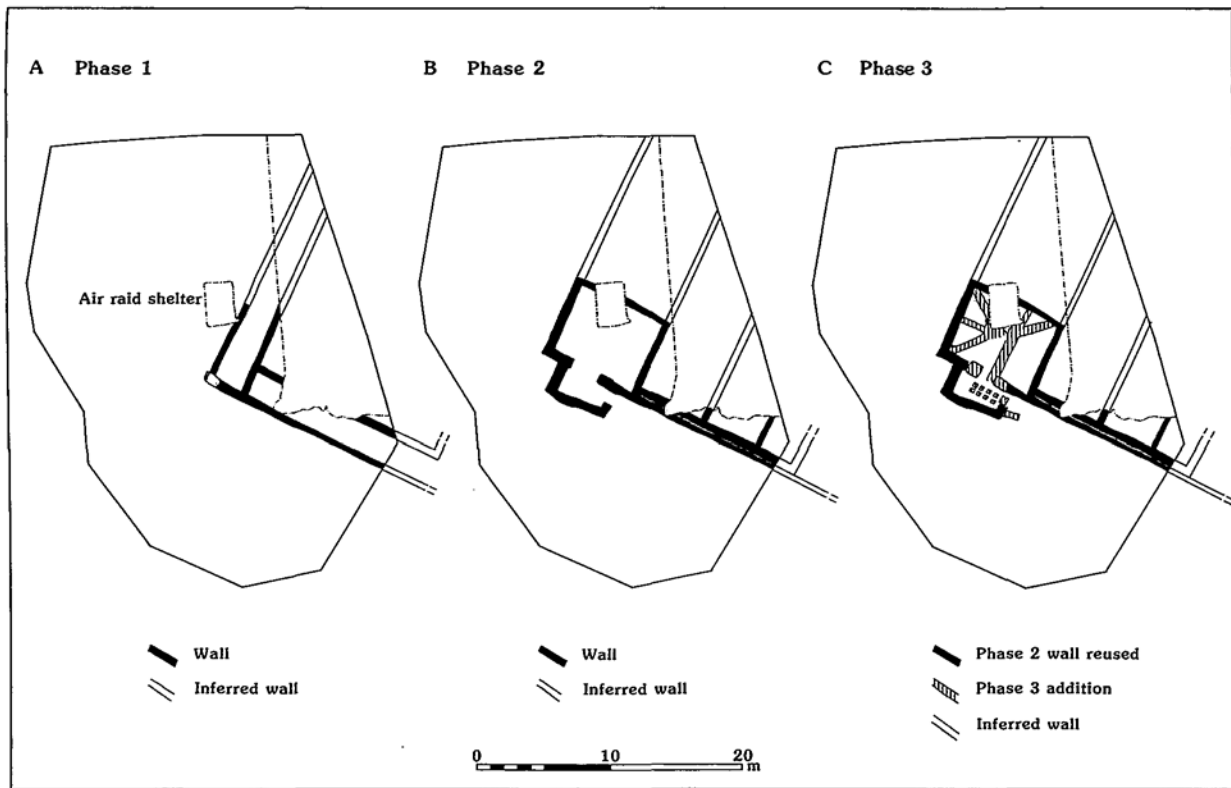


Fig. 7. Phase plans of Villa

(Fig. 4). Wall 1000 lay within a shallow construction cut (1051) which was seen to continue beyond the modern disturbance which truncates wall 1000 at its north-western end. To the north-west of this the cut contained wall 1090 and lay within a larger cut (1152). The depth and extents of this could not be defined because of later Roman and modern disturbances, but it appeared to be the remains of a large terrace cut into the gently sloping hillside, upon which the western corner of the phase 1 building was constructed. Outside the building, the terrace cut 1152 had been backfilled with a light yellowish-brown clay (1120). The internal level was made up by a very similar light yellowish-brown clay dump layer, 1127, from which 28 pottery sherds of second century A.D. date were recovered.

Wall 1090 was bonded to wall 1074 forming a right angle. On a parallel alignment, 2.20 m. to the south-east, also bonded to wall 1090 was wall 1079. This was also bonded to wall 1081, which was truncated at its south-eastern end by modern disturbances. Wall 1009 was on an identical alignment, *c.* 6.50 m. to the south-east. Walls 1081 and 1009 are assumed to be the truncated remains of the same wall, although modern disturbances had removed all physical links. This was on a parallel alignment to wall 1090/1000, 2.00 m. to the north-east.

These walls formed two long narrow rooms, or corridors, on the north-west and south-west sides of the main body of the building (Fig. 7a). The room or corridor formed by walls 1074 and 1079 would have been 2.20 m. wide and more than 6 m. long and ran along the north-west side (or rear) of the building. The corridor formed by walls 1000/1090 and 1009/1081 was 2 m. wide and more than 12 m. long and ran along the south-west side of the building. Excavations in 1964/65 show that the main body of the building was 15 m. wide.<sup>8</sup>

Although later phases of building and modern disturbances had destroyed most of the phase 1 internal surfaces, a small area of flooring, within the narrow room or corridor formed by walls 1009 and 1000, was found sealed below a later phase 2 floor and its associated bedding layer (Fig. 6, section 6a). This flooring comprised layer 1008, a 0.10 m. thick beaten chalk surface, consisting of chalk fragments with *c.* 10 per cent very small tile/brick fragments. This floor was seen to continue as 1007, and possibly as 1006, which was separated from 1007 by the construction cut of a later wall (Fig. 4). The floor abutted walls 1000 and 1009, and lay upon a 0.10 m. thick yellowish-brown sand bedding layer (1044) which was found to contain relatively large quantities of pottery, all of second-century date. This in turn overlay 1127, the internal backfill of terracing cut 1152.

<sup>8</sup> *Op. cit.* in note 3, 192–217.

Two post-holes cut the chalk surface within the south-western corridor; both were approximately 0.45 m. in diameter and 0.10 m. deep. As one of these (1018, Fig. 4) was partly below a phase 2 or later wall and the other, (1118, Fig. 6, section 6a) was sealed by later phase 2 deposits; they are assumed to relate to the first phase of activity, and the few sherds of pottery found in their fills were of second-century date. Overlying the fill of post-hole 1118 was a thin layer of sand bedding (1010) and a very thin (25 mm.) layer of yellowish-red mortar (1011), possibly an attempt to repair the chalk surface after a post had been removed. This was partly below a thin layer of dark greyish-brown silty loam, (1117), which was confined to the area of possible repairs. Also cutting the chalk surface was a small, possibly circular or subcircular cut (1126) 0.10 m. deep, filled with charcoal (Fig. 6a). This was heavily truncated by modern disturbances and its original dimensions could not be ascertained. It may, however, have been a small hearth. The chalk surface 1008 and the features cut into it were all sealed by a later layer of brownish-yellow sandy clay, (1012), into which the phase 2 wall 1001 was cut. This was assumed to be associated with the partial demolition of the phase 1 building, or the result of deliberate dumping.

All relationships between the phase 1 walls and external deposits and features had been destroyed by later construction and disturbances; however, when external deposits associated with phases 2 and 3 were removed, a number of features cut into the alluvium were noted (Fig. 5). These features were left unexcavated, or were only excavated to a depth of 6.425 m. O.D., and cannot, therefore, be definitely assigned to phase 1, but they can be proven to pre-date phase 2. The few finds recovered from these features were consistent with this. Cuts 1107 and 1125 were partly excavated and, because of their irregular form, were assumed to be tree throws. Cut 1133 was also partly excavated, this was a regular oval-shaped pit with very steep sides, filled with a dark yellowish-brown sandy clay, (1123). This cut through an earlier layer (1115), which directly overlay natural alluvium and was assumed to be the original topsoil, or an early dump layer. An intercutting group of four fairly regularly shaped features, 1146, 1147, 1148, and 1149, possibly storage or rubbish pits, was left unexcavated.

#### *Romano-British: Phase 2 (early-mid third century)*

In summary, this phase saw a considerable amount of new building and modification (Fig. 7). Partial demolition and widening of the north-western corridor was undertaken and construction of internal partition walls to form a large rectangular room (1070) with a doorway in the south-western wall (Appendix 1). In addition, a small room (1088) with



external doorway was built on the south-western side. The internal wall in the south-western corridor was demolished and the room or rooms to the north-east extended by the construction of internal partition walls. The south-western wall was partially demolished where it formed the inner wall of the new vestibule and thickened elsewhere. Dump layers were used to raise the height of internal surfaces and a tessellated surface laid within one of the south-western rooms. External chalk surfaces were laid directly onto the original topsoil or dump layer around the north-west side of the building (Figs 4 and 7b).

The phase 2 building was built over and beyond the area covered by the phase 1 structure. Wall 1067 formed a right angle with wall 1068 to enclose an area originally outside that covered by the building during the previous phase. It terminated 2 m. north-west of wall 1080, forming an internal doorway. Walls 1067 and 1068 formed the external walls of the western room (1070), added to the north-west side of the phase 1 building. The north-eastern side of room 1070 was formed by an internal partition wall 1071/1113. This butted wall 1079, a phase 1 wall retained within the phase 2 building. Wall 1071 was constructed partly over the stub of wall 1074, a phase 1 wall that had been demolished down to floor level. A modern truncation (air raid shelter) cut 1071, however, wall 1113, which was bonded to wall 1068, was on the same alignment and of similar construction to 1071, and is assumed to be a continuation of the same wall. Together these walls formed a rectangular room (1070), the internal dimensions of which were 6.50 x 5.50 m.

Bonded to wall 1067 was wall 1055 which formed a right angle with this and with wall 1056, which only survived for a length of 2.50 m. However, the construction cut (1158) survived beyond this length, where it had been disturbed by a modern disturbance and could be traced to a point where it met with cut 1168, the construction cut for wall 1052, which formed a right angle with it and terminated 1 m. to the south-west of wall 1080 forming a small external entrance. Walls 1052, 1055 and 1056 formed a small room or annex (1088), on the south-western side of the building, the internal dimensions of which were 1.80 x 3.50 m. A later hypocaust (phase 3) had destroyed all internal deposits within this room. Modern truncations had removed all but a small (0.85 x 0.60 m.) isolated patch (1057) of any external deposit. This butted against wall 1056 and overlay layer 1136, the backfill of the phase 2 terracing cut 1150 (see below). Unfortunately, all other relationships had been destroyed by modern disturbances.

Rooms 1070 and 1088 form the western corner of the phase 2 building, and were constructed within a large irregular cut, 1142/1150 (Fig. 5). This was not fully excavated as it continued below 6.425 m. O.D. the base of excavation; however, it could be seen that walls 1052

and 1056, component walls of room 1088, were constructed within very shallow construction cuts on the negative terrace formed by cut 1142/1150. The external parts of terracing cut 1142/1150 had then been backfilled with 1136/1104 a dark yellowish-brown silty clay loam. This was sealed below a 0.25 m. thick external dump layer (1073) of phase 2.

The northern end of phase 1 wall 1090 was demolished and wall 1080 built over the earlier footings. Wall 1080 was 0.80 m. wide, 0.35 m. wider than the phase 1 footings on which it was built and was cut away at its southern end by modern truncations.

It is uncertain how far this phase 2 rebuild extended to the south-east; however, wall 1054 had been keyed into wall 1079 immediately to the north-east of the junction between phase 1 walls 1090 and 1079. Wall 1054 abutted the phase 1 external wall 1090, presumably in order to thicken and strengthen it. This was on the same alignment and of a similar construction to wall 1001 and they were assumed to be parts of the same wall. Wall 1001 was seen to butt wall 1000 and was within a shallow construction cut (1165) which was cut into a dump or demolition layer (1012). This overlay the phase 1 chalk surface within the south-western corridor (Fig. 6, section 6a).

Two further internal partition walls (1005 and 1020) are tentatively included in the phase 2 construction, although stratigraphically they can only be said to post-date the partial demolition of the phase 1 structure. Both were built within construction trenches which cut the phase 1 chalk surface (1006/1007/1008). Wall 1005 abutted wall 1001. Wall 1020 was constructed over the footings left after the demolition of the phase 1 wall 1009, its relationship with wall 1001 had been destroyed.

Within the possible room formed by walls 1001/1000, 1005, and 1020 were the truncated remains of a phase 2 internal surface (Fig. 6a). This consisted of a layer of pinkish mortar or *opus signinum* (1013), laid directly onto the earlier dump or demolition layer, 1012 (into which wall 1001 was cut). Small angular depressions, presumably where *tesserae* had once been set, were noted in the surface of layer 1013. Although many loose *tesserae* were found in this area, none was found *in situ*.

Immediately to the north-west of the building, sealing the backfill of the large terracing cut, and butting against wall 1068 (Fig. 6, section 6b), was a 0.25 m. thick layer of dark greyish-brown sandy loam, possibly a relict topsoil, or deliberate dumping, that extended around the north and west of the building (1073/1103/1105). This contained a large assemblage of finds, including animal bones, pottery, and ceramic tiles. The 417 potsherds are of first-third century A.D. date, and an unusual rim fragment of greenish glass from a flask or bottle-jug is

dated to the third or fourth century A.D. Laid directly above this was a surface of rammed or crushed chalk fragments (1099). Unfortunately, this surface only survived as isolated fragments, most of which could not be related directly to any of the phases of construction. However, on the basis of similar levels and similar thicknesses, they are assumed to be, if not a single layer, then at least broadly contemporaneous, and if not associated with the second phase of construction, then certainly no earlier.

Within room 1070 were the very disturbed remains of a single dump layer. This only survived in a few isolated patches around the remains of a phase 3 flue hypocaust that had presumably been cut through it. Small patches of this layer could be seen against wall 1068. This layer cannot be definitely assigned to phase 2; however, it does appear to pre-date the construction of the hypocaust.

### *Romano-British: Phase 3 (mid third century)*

Phase 3 saw the adaptation of the phase 2 structure. Hypocaust channels were cut into the floor of room 1070, lined with chalk blocks and capped with tiles, and the south-western doorway was narrowed to form a flue. A pillared hypocaust was constructed inside room 1088 and the external doorway partially blocked to form a flue. A small wall was constructed to form a fire box (Appendix 1). External chalk surfaces were laid over earlier surfaces to the north-west and directly onto the original topsoil or dump layer around the south-western side of the building (Fig. 7c).

Wall 1134, was constructed parallel to the phase 2 wall 1080, 1.45 m. to the south-west, within a shallow construction cut (1167), which was cut into the top of layer 1120, the backfill of the phase 1 terracing cut (Fig. 3). The relationship between wall 1134 and wall 1052 had been destroyed; however, it is assumed that 1134 would have abutted 1052, as there was only a 0.05 m. gap between their respective construction cuts. Between walls 1134 and 1080 was an isolated irregular shaped patch of crushed chalk surface (1135) which showed a slight discoloration, possibly as a result of heating. This surface measured  $1.20 \times 1.10$  m. and lay directly above the backfill of the phase 1 terracing cut; although no other relationships were discernible, from its position and level this is assumed to be associated with the construction of wall 1134.

Butting against the north-east end of wall 1052, and partly blocking the external entrance, was a masonry and tile structure (1066). This survived to a height of 0.50 m. and measured  $0.60 \times 0.65$  m. It comprised four courses of roughly-shaped ragstone footings with four courses of tiles above, all bonded with a pinkish-white sandy mortar.

This formed the south-western side of a 0.35 m. wide hypocaust flue leading into room 1088. Walls 1066 and 1134, along with the phase 2 wall 1080 and the chalk surface 1135, possibly represent the remains of a fire box used to heat the adjacent hypocaust. Within room 1088 a crudely constructed hypocaust was found, the base of which was composed of yellowish-brown clay with chalk and tile fragment inclusions. Built directly onto this rather uneven surface were a number of *pilae*, the tallest of which survived to a height of 0.27 m., roughly constructed of a mixture of complete *pila* tiles and fragments of broken bonding- or roofing-tiles, bonded with a mixture of clay and pinkish-white powdery mortar. The complete *pila* tiles measured 280 × 240 mm. and were 50 mm. thick. From their surviving positions and slight depressions in the clay under the floor, which presumably marked former positions of others, it can be seen that they were arranged at 0.45 m. centres in an almost symmetrical pattern.

A second blocking structure (1069) was constructed inside the internal doorway between rooms 1070 and 1088 (Fig. 4). This was composed of roughly-shaped chalk and flint blocks and tile fragments crudely bonded with a yellowish-brown sandy clay, which survived to a height of 0.37 m. and measured 1.20 × 0.80 m. It formed the north-west side of a 0.45 m. wide flue leading into room 1070. Within room 1070 were the remains of five hypocaust channels radiating outwards from the approximate centre of the room. These were presumably constructed by cutting channels into an existing floor or dump layer within the room. These channels would then have been lined with roughly hewn chalk blocks and capped with tiles. However, previous excavations had removed almost all the dump layer, leaving the chalk flue linings and the tile capping free-standing. The channels were on average 0.30 m. high and 0.60 m. wide with an internal flue width of 0.25 m. Built into these linings was a number of sandy grey ware pottery sherds dated to the late second century or later.

No connections could be made between the phase 3 adaptations to the building and external activities. However, overlying the phase 2 external chalk surfaces was a dump or made ground layer (1072), of dark greyish-brown silty loam, (Fig. 6, section 6b), which varied in depth between 0.15 and 0.25 m. Layer 1072 contained a large quantity of finds, including sherds of a Trier-type Rhenish ware beaker dated to the late second to mid third century A.D. This, like the phase 2 surfaces, was confined to the north and west of the building. Overlying this dump layer were two chalk surfaces, 1098 and 1093 (Fig. 4). Again, it is uncertain whether these are remnants of a single surface. However, levels taken on these surfaces were found to vary by less than 0.12 m. over the entire area. The surfaces were generally more robust than the phase 2 surfaces, varying in thickness from 0.10–0.20 m.

To the west and south of the building were further chalk surfaces, 1014, 1016, and 1053 in Area A, and 2004 in Area D. The lack of dating evidence and of stratigraphic relationships, means that these cannot be assigned to any of the phases recognised; however, on the basis of broadly similar levels, they are assumed to be contemporary with the latter phases of occupation. These surfaces showed signs of heavy use and, in several places, had been crudely repaired with mortar and tile fragments (Fig. 4). Cutting into surface 1016, to the south of the building, were two linear grooves running roughly parallel. These were approximately 1 m. apart, each being 0.15 m. wide, 0.05 m. deep, and 6 m. long.

### *Unphased*

In Area A, within the construction cut of the modern retaining wall, a short stub of wall (1138) was identified (Fig. 5). Unfortunately, all relationships between this and other deposits had been destroyed. Wall 1138 did not respect the alignment of any dated walls so cannot, therefore, be assigned to any of the identified phases.

Area B was cleared of the concrete surface and hard-core bedding overburden, revealing a number of features cut into the natural subsoil. These could not be associated with any of the phases identified in Area A. The earliest feature in the area appeared to be cut 1042, a linear cut filled with a brown loamy sand. This was 0.60 m. wide extending northwards from the southern limit of excavation for 3.50 m., where it was cut by a later feature (1036). Its relationship with cut 1040, a 0.40 m. wide linear feature with a very similar fill, had been destroyed by a modern concrete piling. Cut 1040 was traced south-eastwards from the piling for 2.00 m. where it terminated.

Cut 1022, in Area B, was a linear feature 1 m. wide which extended for 6 m. between the western and northern edges of excavation, on an alignment roughly 25° east of grid north. It was filled with a mixture of broken masonry and mortar fragments in a sandy loam matrix (1021). Although this feature cannot be associated with any of the phases identified in Area A, it is interesting to note that it is on the same alignment as the phase 2 wall 1068. A similar feature on the same alignment was encountered in Area C (2009, Fig. 8); this was assumed to be a continuation of the same feature. A single large fragment of a post-medieval tile was recovered during the excavation of this feature, along with a small quantity of redeposited Romano-British material. Running parallel to cut 1022, 2.10 m. to the south-east, was another linear feature, 1026, also filled with a mixture of broken building materials and mortar fragments in a sandy loam matrix. It was 1.50 m. wide and extended for 7.50 m. between the southern and northern

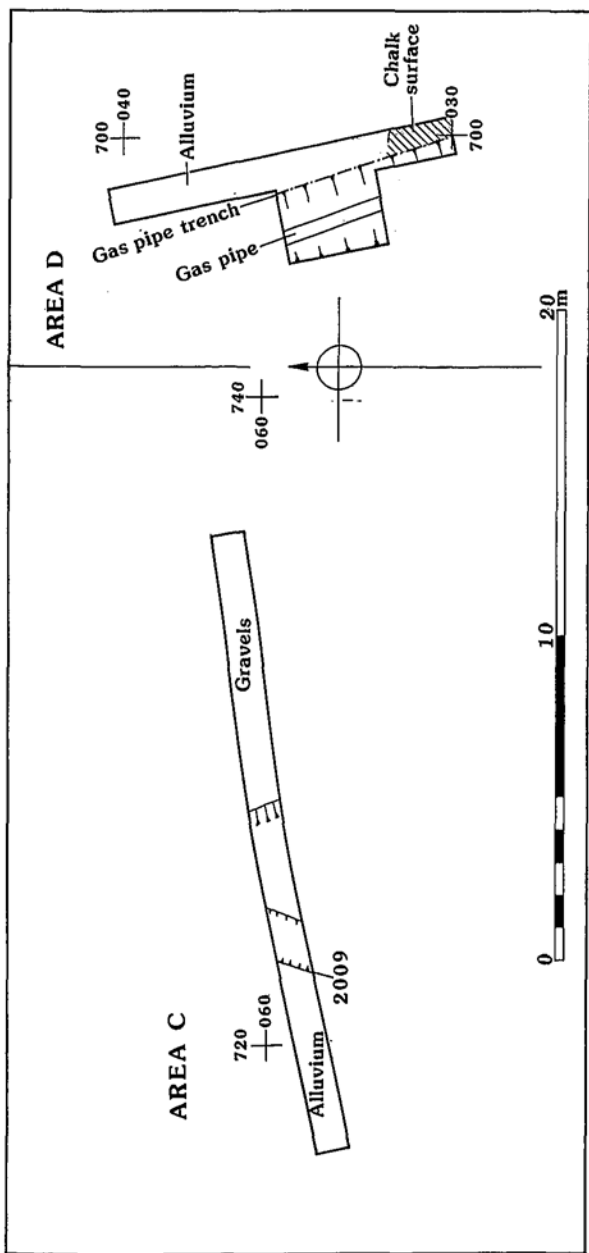


Fig. 8. Post-excavation plan of Areas C and D

limits of excavation. This formed a right angle with cut 1036, the fill of which was indistinguishable from that of 1026. Cut 1036 varied in width between 1.00 and 1.25 m. and extended from its junction with 1026 for 9.00 m. until it terminated. Situated between cuts 1022 and 1026 was feature 1024, which consisted of an irregular shaped patch of charcoal and ash and scorched natural 0.60 m. long and 0.40 m. wide, possibly the very truncated remains of a hearth.

Running parallel and immediately adjacent to cut 1036 was cut 1034. This was 1.00 m. wide, narrowing to 0.50 m. at the western edge of excavation, and 8.00 m. long. This too was filled with masonry debris and mortar fragments but contained noticeably less flint rubble than did the fill of 1036. Forming a right angle with 1034, at its north-western end, was linear cut 1032, 0.60 m. wide filled with building rubble and mortar fragments. This extended for 1.00 m. between the northern limit of excavation and its intersection with cut 1034. Also forming a right angle with cut 1034 towards its south-eastern end was cut 1038. This was another linear cut, filled with flint nodules and occasional chalk fragments in a loamy sand matrix, possibly the remains of a wall footing. This extended for 2.50 m. between the southern limit of excavation and its junction with cut 1034. Although no connection can be made, it is interesting to note that this feature is on the same alignment as the phase 2 wall 1005 in Area A.

Forming a right angle with 1036 roughly half way along its length was cut 1028. This extended south-westwards from its junction with 1036 for 1.40 m. where it terminated; it was 0.60 m. wide. It was filled with roughly equal sized flint nodules set in a sand matrix, possibly the truncated remains of wall footings. It is of note that this feature is on a very similar alignment to the phase 1 wall 1079 in Area A. Feature 1030 was 0.50 m. to the south-west of the end of 1028. This consisted of a well defined, irregular shaped cut measuring 0.60 × 0.40 m. and containing a very dark brown ashy deposit, possibly the remains of a hearth.

The large quantities of masonry and mortar fragments within the linear features 1022, 1026, 1032, 1034, and 1036, together with their alignment with, or perpendicularly to, masonry walls in Area A, suggest that these are robber trenches. Whilst these features could not be associated with any of the phases identified in Area A, they do indicate the probable extents of the north-western range.

### *The Watching Brief*

A total of 82 augered piles were sunk at pre-determined points for the ground beam foundations. These auger holes had a maximum bore of 0.35 m. attaining depths between 8.50 m. and 16.00 m., and were

drilled through modern made-up ground, subsoils, alluvial gravels, and bedrock clays.

Archaeological deposits were noted at only one of the above 82 points (Area E, Fig. 2), where the auger hit an impenetrable obstruction. A JCB excavator fitted with a 1.8 m. toothless grading bucket was then employed to excavate down to the obstruction, resulting in a trench 1.80 m. long, 1.60 m. wide with a maximum depth of 1.70 m. This revealed 0.75 m. of modern made-up ground overlying a very compacted layer of brown sandy gravel at 5.40 m. O.D., with a maximum depth of 0.65 m. This was the cause of the obstruction. This sealed a 0.30 m. thick greyish-white deposit of limey mortar with occasional flint nodules, which in turn overlay natural gravels. Both of these deposits were archaeologically sterile and truncated by a large modern feature, probably associated with the demolition of the former gas works.

## FINDS

### *Copper Alloy Objects*

Rachael Seager Smith

Four copper alloy objects, comprising one brooch, a complete, decorated pin, a round-headed stud, and a possible belt or harness fitting, were recovered and retained (Fig. 9, 1-4).

The brooch (Fig. 9, 1), a Nauheim Derivative with narrow, flat wire bow with a reverse curve and a three-turn spring, can be dated to the first century A.D. and is probably residual in the phase 2 context in which it was found (internal dump/bedding layer 1077 within room 1070).

The pin (Fig. 9, 2) was also found in a phase 2 context (the dump or original topsoil layer 1103). It is complete (103 mm. long) and has a gently tapering stem with a circular cross-section. The head has a flat lower half while the upper half is conical and decorated with eight evenly-spaced incised lines spiralling out from the centre. The remains of casting flash lines are visible along the length of the pin shaft with small horizontal striations possibly indicating work done to smooth off the original flash lines. The pin seems to be of an uncommon type but, by association with pottery from the same context, a second to third century A.D. date seems likely.

The belt or harness fitting (Fig. 9, 3) is probably also of Romano-British date. It is made from a single strip of metal, the two ends meet on the underside of the object but are not joined together. It was found



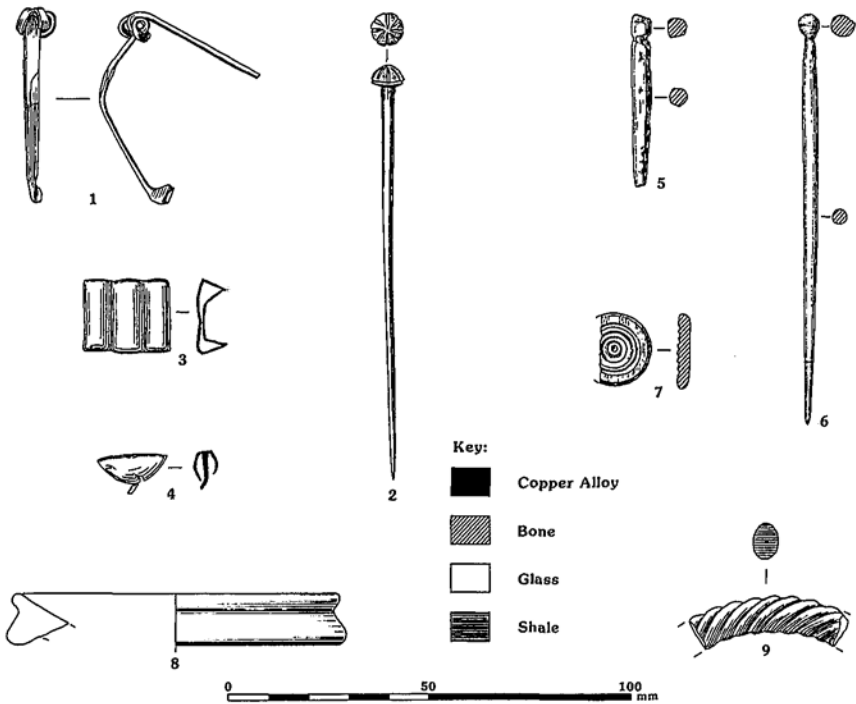


Fig. 9. The small finds

in the phase 2 layer 1073 (dump/original topsoil) in association with considerable quantities of pottery dating from the late first to third century A.D.

The round-headed stud, now bent (Fig. 9, 4), found in the phase 3 layer 1072, is of a class of object frequently found on sites in Roman Britain,<sup>9,10</sup> although their precise function is uncertain. A similar stud, filled internally with lead, is already known from the Snodland villa site.<sup>11</sup>

<sup>9</sup> N. Crummy, *The Roman small finds from excavations in Colchester, 1971-9*, Colchester Archaeol. Rep. 2 (1983), Colchester, fig. 120.

<sup>10</sup> C.W. Meates, *The Lullingstone Roman Villa Volume II - The Wall Paintings and Finds*, Kent Archaeological Society, Monograph Series, iii (1987), Maidstone, fig. 31, 165-70.

<sup>11</sup> E.W. Tilley, 'The small finds', in Ocock, M.A. and Syddell, M.J.E., 1967, 216, no. 11.

*Iron Objects*

Rachael Seager Smith

Thirty-three iron nails or nail shank fragments were found, all in the dump/original topsoil layers of phases 1 (4 examples, 22 g and 2 examples, 29/250 g). All were discarded after being counted and weighed by context.

*Worked Bone Objects*

Rachael Seager Smith

Three worked bone objects were found, two pins (Fig. 9, 5, and 6) and a gaming counter (Fig. 9, 7). The counter is certainly made from a fragment of a long bone and it is likely that both pins were, too, but the extensive working of all three objects has removed all elements diagnostic of particular species (S. Hamilton-Dyer, pers. comm.).

Both pins are Colchester type 3B pins,<sup>12</sup> dated c. A.D. 200 onwards. Both are from phase 2 contexts. One (Fig. 9, 5), roughly made and incomplete (43 mm. long) with a slight neck at the base of the head (most similar to fig. 19, 288),<sup>12</sup> was found in the dump or original topsoil layer 1073. A complete, beautifully made, highly polished pin (Fig. 9, 6), was found in a small lens of silty loam and charcoal (context 1117). Parallels for this pin are known from Colchester, Essex (fig. 19, 275) and Lullingstone.<sup>13</sup>

The gaming counter (Fig. 9, 7), also of Romano-British date, was found in the phase 3 dump or bedding layer 1072. It is a circular lathe-turned face-plate counter, decorated on the obverse with two incised concentric circles surrounding the indentation of the lathe centre.<sup>14</sup>

*Glass*

Denise Allen

Four fragments of glass were recovered, one body fragment, one rim (Fig. 9, 8), one fragment of window glass and one end segment of a segmented bead.

<sup>12</sup> *Op. cit.* in note 9, 21, fig. 19.

<sup>13</sup> *Op. cit.* in note 10, fig. 59, 418.

<sup>14</sup> *Op. cit.* in note 9, 91, type 2 counter, 2264–2279.

The body fragment, of blue-green glass, almost certainly derives from one of the forms of prismatic bottle in common circulation from c. A.D. 40–200 and was recovered from a phase 3 dump layer (context 1072).

The rim fragment (rim diam. 80 mm.; Fig. 9, 8) came from a phase 2 context, the dump or original topsoil layer 1073. This is an unusual fragment of greenish-colourless glass, with a fire rounded rim, curving immediately into a shallow body, which had been folded to form a ridge beneath. This may be the rim of a flask or bottle-jug, a form which occurs often in third- and fourth-century contexts, with a ridge immediately beneath. However, these are usually formed from applied coils of glass and the flared angle of the neck is flatter than might be expected. No other sensible identification can be suggested.

The fragment of blue-green, cast window glass, with one surface matt from contact with the tray, the other glossy, was also recovered from the phase 2 dump or original topsoil layer 1073. This variety of Roman window glass was quite common until c. A.D. 300.

The end segment of a segmented bead of blue-green glass, (diam. 7 mm.; length 7 mm.), was found within a phase 3 crushed chalk surface (context 1093). This is probably of the Roman period, but cannot be dated more closely since beads of this general type were long-lived.<sup>15</sup>

### *Shale or Jet*

Rachael Seager Smith

Two fragments of a shale or jet armband were found. One represents approximately 15 per cent of an armband with an internal diameter of 70 mm. and is decorated with grooves forming a continuous spiral (Fig. 9, 9). A close parallel for this armband was found in a late third- to fourth-century A.D. context at Colchester.<sup>16</sup> A second, very small fragment, possibly also from an armband, although the material is an uncharacteristic blue-grey colour, was found in the phase 2 dump/original topsoil layer 1073. This fragment also has very closely-spaced incised grooves.<sup>17</sup>

<sup>15</sup> M. Guido, *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*, Rep. Res. Comm. Soc. Antiq. London, xxxv (1978), London, 91–3, fig. 37, no. 2.

<sup>16</sup> *Op. cit.* in note 9, fig. 38, 1556.

<sup>17</sup> *Op. cit.* in note 9, 37.

Cable decorated armlets appear to imitate the twisted appearance of copper alloy armlets, the majority of which are of late third to fourth century A.D. date (*ibid.*, in note 9, 37) and occur widely across southern England.<sup>18, 19</sup>

### *Worked Flint*

W.A. Boismier

Five fragments (42 g) of worked flint were recovered, comprising four flakes and a possible broken scraper. The scraper comes from the phase 1 (dump/original topsoil) layer 1105. The flakes were all redeposited in Romano-British contexts, three in phase 2 contexts (the mortar spread 1114, and the dump/original topsoil layers 1073 and 1103) and the fourth from the scoop or lens 1102 within the phase 3 dump/original topsoil layer 1072. The phase 1 wall 1090 contained two flint cores within its foundations (see above). Both were heavily patinated and one appeared to have been roughly trimmed before being built in to the wall. Both were probably of Bronze Age date. It was noted that the natural alluvial subsoil encountered in Area B (1043), contained several pieces of worked flint probably of Mesolithic or Neolithic date, these were again left *in situ*. These all represent undiagnostic waste from flintworking of Mesolithic to Early or Middle Bronze Age date and indicate prehistoric activity within the general area of the site.

### *Pottery*

Rachael Seager Smith

The pottery assemblage comprises 1024 sherds (8713 g) and is predominantly of second- to third-century A.D. date.

The assemblage has been analysed in accordance with the standard Wessex Archaeology recording system for pottery.<sup>20</sup> It was divided into six broad fabric groups on the basis of dominant inclusion types: grog-

<sup>18</sup> A.J. Lawson, 'Jet and shale objects from Silchester', *Archaeologia*, cv, (1976), fig. 5, 34, and 35.

<sup>19</sup> M. Mills and P.J. Woodward, 'Shale and jet', in P.J. Woodward, S.M. Davies, and A.H. Graham, *Excavations at the Old Methodist Chapel and Greyhound Yard, Dorchester, 1981-4*, Dorset Nat. Hist. Arch. Soc., Monograph 12 (1993), Dorchester, fig. 76, 4.

<sup>20</sup> E.L. Morris, *Guidelines for the Analysis of Pottery*, Wessex Archaeology Guidelines no. 4 (1991), Salisbury.

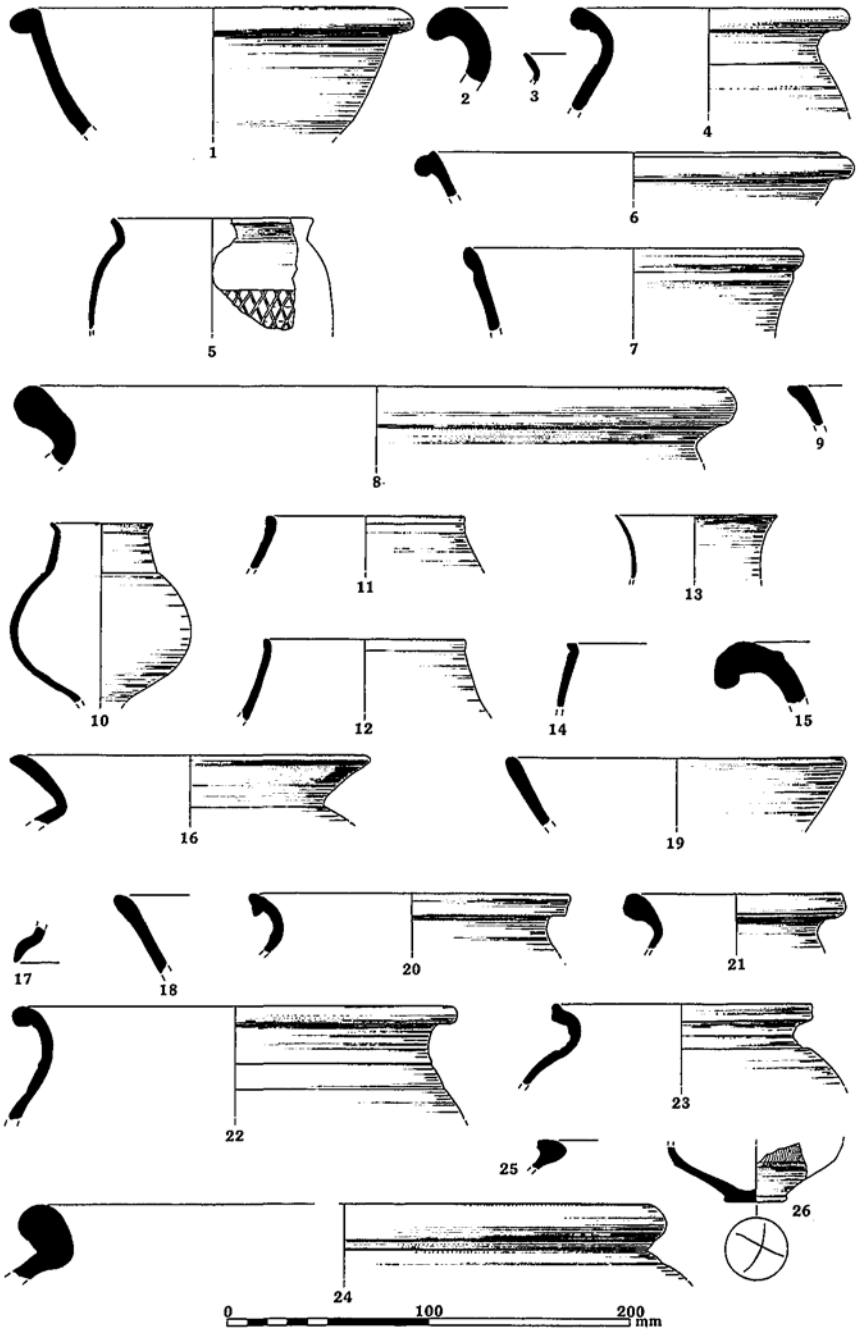


Fig. 10. The pottery

tempered wares (Group G), micaceous wares (Group M), non-calcareous rock-tempered wares (Group R), sandy fabrics (Group Q), shell-tempered fabrics (Group S), and fabrics of known type or source (Group E). These were then further subdivided into 23 fabric types based on the range and coarseness of inclusions present and each assigned a unique fabric code. The following terms have been used to describe the quantity of inclusions present: rare – less than 2 per cent; sparse – 3–7 per cent; moderate – 10–15 per cent; common – 20–25 per cent; abundant – 30 per cent plus.

The pottery has been quantified using both the number and weight of sherds by fabric type for each context and details of vessel form, surface treatment, decoration, and manufacturing technique have also been recorded. Pottery fabric totals by context are given in Appendix 2, and Appendix 3 summarises the vessel forms present in each fabric type. Full details can be found in the archive.

Although few of the sherds recovered show any degree of abrasion, all are comparatively small (average sherd weight for the whole assemblage is 8.5 g). Few refits could be made and the majority of rims were broken at the critical junction between rim and neck or shoulder and neck, hampering the recognition of specific vessel forms. For this reason, a site-specific vessel type series has been constructed (Fig. 10, 1–26), where possible tied-in with larger, more complete collections from the region, in particular that from the Lullingstone villa.<sup>21</sup>

#### Fine wares

Samian: Twenty sherds (114 g), of samian were recovered. Sherds from each of the three main production zones, South (Fabric E301), Central (Fabric E304), and East (Fabric E308) Gaul were recognised (Table 1), but no attempt was made to assign sherds to particular production centres within these areas. A Central Gaulish body sherd from a closed form, possibly a Drag. 67/68 or 72 beaker is decorated with 'cut-glass' leaf motifs. No detailed descriptions of the decoration on the Drag. 37 sherds have been undertaken as the decorated surfaces of both sherds are abraded. The samian fits a date bracket of the late first to the late second century A.D., although Drag. 45 mortaria from East Gaul continued to reach Britain until the middle of the third century.

Other fine wares: Two Continental imports, comprising Trier-type Rhenish ware (Fabric E121) and the Lower Rhineland fabric 1 (Fabric E132),<sup>22</sup> were recognised. Sherds of both these fabrics occur in small

<sup>21</sup> R.J. Pollard, 'The other pottery', in Meates, 1987, 164–282.

<sup>22</sup> A.C. Anderson, *A Guide to Roman Fine Wares*, VORDA 1 (1980), 14–20.

V. BIRBECK

TABLE 1. SUMMARY OF SAMIAN VESSEL FORMS RECOVERED – NUMBER OF EXAMPLES SHOWN

Form	South Gaul	Central Gaul	East Gaul
Dr. 18	1	1	
Dr. 18/31		1	
Dr. 38		1	
Dr. 45			1
Dr. 67/68 or 72		1	
Dr. 37		2	
Curle 35	1		
Unassigned body sherds	1	5	

quantities in phase 2 and 3 contexts. Rough-cast and rouletted sherds from beaker forms occur in the Lower Rhineland fabric which, as Pollard notes,<sup>23</sup> is perhaps the primary supplier of colour-coated wares to Kent from the Hadrianic period until c. A.D. 165/70 when exports to Britain appear to have ceased.<sup>24</sup> The Trier-type Rhenish wares include the body sherd of a white 'barbotine' decorated beaker and an undiagnostic beaker rim. These wares may not have reached Kent until the late second century A.D., importation lasting until the mid third century.<sup>25</sup>

In addition five fine wares of unknown provenance have been identified:

Q105 Hard or very hard, fine-grained; moderate well-sorted quartz, rare iron oxides, soft, non-calcareous white particles all <0.25 mm. across. Oxidised throughout, reddish-orange or brown colour-coat on both surfaces. Wheel-made.

M100 Hard or very hard fine-grained; common white mica flecks <0.125 mm., sparse iron oxides <0.5 mm. across. Unoxidised, generally grey or black, occasional dark brown examples, often tonal sandwich firing. Wheel-made. Surfaces smoothed or burnished to gloss finish; sometimes with self-coloured slip. A 'catch-all' fabric group for fine micaceous grey wares without quartz.

<sup>23</sup> R.J. Pollard, *The Roman Pottery of Kent*, Kent Archaeological Society, Monograph Series, v (1988), Maidstone, 81.

<sup>24</sup> *Op. cit.* in note 22, 20.

<sup>25</sup> *Op. cit.* in note 23, 82.

M101 Hard, fine-grained; common to abundant quartz <0.25 mm., common white mica flecks <0.125 mm., sparse iron oxides <0.5 mm. Unoxidised or irregularly fired, varying from dark grey to reddish-brown, often tonal sandwich firing. Wheel-made. Surfaces smoothed or burnished. A 'catch-all' fabric group for fine, sandy, micaceous grey wares.

M102 Hard; moderate mica flecks <0.125 mm., sparse to moderate quartz <0.25 mm., rare iron oxides <0.25 mm. Oxidised throughout. Wheel-made. Exterior and upper part of interior coated with thin biotite mica-rich slurry. Mica-dusted ware.

M103 Hard; common white mica <0.25 mm., rare to sparse quartz, rare iron oxides, both <0.5 mm. Generally brick-red with grey core. Wheel-made. Light-coloured slip, cream to pinkish-orange, slip on exterior surface and sometimes interior. White-slipped red ware.

It is uncertain whether the colour-coated fine ware (Fabric Q105) is derived from an European or a British source, although the Nene Valley or the Colchester area are possibilities. All the sherds of this fabric are from beaker forms and include two sherds of an indented, rouletted vessel from the phase 2 dump/original topsoil layer 1073. The single sherd of mica-dusted ware (Fabric M102) is also from a beaker. This form of decoration occurs widely in Britain from the pre-Flavian period into the mid late second century<sup>26</sup> with production occurring in a variety of locations including the London area and, on a limited scale, at Colchester and Canterbury during the late second century.<sup>27</sup>

The use of a white slip to disguise an otherwise red-firing fabric is a common feature of late first- to second-century A.D. assemblages across southern England, although the production centres remain largely unknown. No recognisable vessel forms were present among the 15 sherds of Fabric M103 (Appendix 2) recovered, although it is likely that the majority are from flagons, the most common vessel type produced in these wares.

As over much of west Kent in the Hadrianic to Severan period (A.D. 120–220), the fine ware assemblage is dominated by fine reduced wares (Fabrics M100 and M101). Many of the fine sandy grey ware fabrics, especially Fabric Q103, probably also belong within this group,

<sup>26</sup> G. Marsh, 'Early second century fine wares in the London area', in (Eds.) P. Arthur and G. Marsh, *Early Fine Wares in Roman Britain*, BAR, no. 57, Oxford, 1981, 122.

<sup>27</sup> *Op. cit.* in note 23, 93.



although in the absence of easily recognisable vessel forms these have been quantified with the coarser sandy fabrics. One example of this blurred distinction between 'coarse wares' and 'fine wares' is the rouletted beaker with a scratched cross on the underside of the base (Fig. 10, 26) which occurs in the finest sandy fabric (Fabric Q103), here considered amongst the 'coarse ware' fabric types. Beaker forms predominate in these fabrics, although in only one case does sufficient survive to determine body profile (Fig. 10, 10). Other fine ware rim forms are shown in Fig. 10, (3, 11–13). Sherds decorated with panels of barbotine comb-applied dots indicate the presence of 'poppy-head' beakers and occur in both the fine micaceous (Fabrics M100 and M101) and sandy (Fabric Q103) reduced wares. Indeed, one sherd with this decoration, from the phase 1 or earlier pit 1133, was noted in the coarsest sandy fabric (Fabric Q100). Plain and rouletted beaker sherds also occur. This group probably includes the products of several centres, including those of the London area<sup>28, 29</sup> and the Thames-side kilns, especially perhaps those of Upchurch area on the north Kent marshes.<sup>30, 31</sup>

#### Coarse wares

Ten coarse ware fabrics, including one mortarium fabric, were identified. Four of the fabrics are 'catch-all' groups and probably contain the products of more than one source. The correlation between fabric types and vessel forms is given in Appendix 3.

G100 Soft to hard, irregular, soapy; moderate grog <2 mm., sparse white mica <0.25 mm., rare to sparse carbonaceous material <1 mm., rare quartz, <1 mm. Red iron oxides, occasional flint and chalk. Irregularly fired, from partially or wholly brown to greyish-orange often with bluish-grey core. Hand-made. Surfaces smoothed.

R100 Very hard, gritty; moderate to common angular, unidentified non-calcareous rock fragments <1.5 mm., sparse to moderate white mica <0.25 mm., rare iron oxides <0.5 mm. Unoxidised, very dark greyish-brown throughout. Hand-made. Exterior surface roughly smoothed.

<sup>28</sup> *Op. cit.* in note 26.

<sup>29</sup> A.E. Brown and H.L. Sheldon, 'Highgate Wood: the pottery and its production', *London Archaeologist*, 2 (1974), 222–31.

<sup>30</sup> J. Monaghan, *Upchurch and Thameside Roman Pottery*, BAR, no. 173, Oxford, 1987.

<sup>31</sup> *Op. cit.* in note 23, 83.

S100 Soft to fairly hard, laminar; moderate to common shell fragments <5 mm., white mica flecks <0.25 mm. with rare iron oxides <0.5 mm. Irregularly fired, range of colours through very dark grey to brown to purple, orange, and buff. Hand-made. Exterior surface generally smoothed, at least one example (Fig. 10, 24) of a thick black flaking coating, possibly a pitch sealing.

S101 Soft to fairly hard; sparse shell <3 mm., sparse carbonaceous material <2 mm., rare dark grey grog <2 mm., moderate white mica flecks <0.25 mm., rare quartz and iron oxides, both <0.5 mm. Irregularly fired, generally orange/brown exterior, grey/brown interior, grey core. Hand-made. Exterior surface roughly smoothed.

Q100 Hard to very hard; moderate to common sub-rounded quartz <0.5 mm., rare iron oxides <0.5 mm. Very rare white mica, occasional chalk, carbonaceous material, soft, white non-calcareous particles and flint generally <1 mm. Unoxidised, grey or greyish-brown. Wheel-made but occasional hand-made sherds. Surface treatments include smoothing, burnishing, and slipping, often in combination. A 'catch-all' group for coarse grey sandy wares.

Q101 Hard to very hard; sparse to common quartz 0.25–0.5 mm., rare iron oxides <0.5 mm. Occasional white mica, chalk, soft, white non-calcareous particles, and carbonaceous material. Unoxidised, grey to greyish-brown, often tonal sandwich firing. Wheel-made. Surface treatments include smoothing, burnishing, and slipping, often in combination. A 'catch-all' group for medium-grained sandy grey wares.

Q102 Smooth, hard to very hard; rare to sparse sub-angular quartz <0.5 mm., moderate to common white mica <0.125 mm., rare red iron oxides, <1 mm., and soft, white non-calcareous particles <0.25 mm. Oxidised, bright orange, sometimes with paler orangey-yellow surfaces. Wheel-made.

Q103 Hard to very hard; moderate to abundant quartz <0.25 mm., rare iron oxides <0.25 mm. Occasionally also rare white mica, soft white non-calcareous particles, and carbonaceous material. Unoxidised, pale grey to very dark grey-brown, common tonal sandwich firing. Wheel-made. Surface treatments include smoothing, burnishing and slipping, often in combination. A 'catch-all' group for very fine sandy grey wares.

Q104 Hard to very hard; sparse to common quartz <0.75 mm., sparse to moderate white mica <0.25 mm., rare to sparse iron oxides <0.5 mm.

Oxidised. Wheel-made. Surface treatments include smoothing, burnishing and slipping, often in combination. A 'catch-all' group for various oxidised sandy coarse ware fabrics, each represented by less than three undiagnostic sherds.

E200 Very hard, slightly laminar; rare to sparse quartz <0.5 mm., moderate poorly sorted red and black iron oxides <0.5 mm., sparse white mica flecks <0.25 mm. Very calcareous matrix. Flint trituration grits visible on flange. Oxidised, off-white. Wheel-made.

The coarse ware assemblage is dominated by sandy grey wares which form 61.4 per cent of the total number of sherds present. The problems of differentiating the products of the numerous sandy grey ware industries of Roman Britain are well-known and here the sandy grey coarse wares have been broadly divided into three groups on the basis of texture (Fabrics Q100, Q101, and Q103). The boundaries between these coarse, medium, and fine textured groups are blurred and the attribution of a particular sherd to one group or another somewhat arbitrary, but the groups serve to convey the range of products represented within the assemblage. Likewise, the distinction between the fine-grained sandy coarse wares (Fabric Q103) and the grey fine wares discussed above is also arbitrary, especially in the absence of diagnostic sherds indicative of vessel form. These groups are likely to include products from the London area and the lower Thames valley industry,<sup>32</sup> including north Kent reduced wares and Black Burnished Ware Category 2 (BB2)<sup>33</sup> as well as local hand-made copies. Alice Holt grey wares have been identified at Lullingstone<sup>34</sup> and may, therefore, occur at this site, too, while even smaller quantities of Dorset Black Burnished ware (BB1) may be present as body sherds amongst the coarsest sandy grey wares (Fabric Q100). Vessel forms present (Fig. 10, 1, 2, 4-7, 16-23, 25) indicate a second to early-mid third-century date for the assemblage; the 'typical' BB2 products, everted rim jars (Types 8 and 15), pie-dishes (Type 1), and dog-dishes (Types 7, 17 and 18) being especially numerous (Appendix 3).

The grog-tempered wares (Fabric G100) probably belong to the group known in this area as 'Patch Grove' ware,<sup>35</sup> while the five shell and grog-

<sup>32</sup> *Op. cit.* in note 30.

<sup>33</sup> J.P. Gillam, 'The Coarse Pottery', in K.A. Steer, 'Excavations at Mumrills Roman Fort, 1958-1960', *PSAS*, xciv (1960-61), 113-29.

<sup>34</sup> *Op. cit.* in note 23, fabrics 61 and 62.

<sup>35</sup> J.B. Ward-Perkins, 'Excavations on Oldbury Hill, Ightham, 1938', *Arch. Cant.*, li (1939), 176-8.

tempered body sherds (Fabric S101) are likely to be a sub-group of these wares which may also contain shell.<sup>36</sup> Although of mid first century A.D. origin, 'Patch Grove' wares are most numerous and achieved their widest distribution in the late first to early second century A.D., declining thereafter with only necked and storage jars continuing into the third century (210, fabric 73).<sup>36</sup> In total these fabrics represent 17 per cent of the sherds in the present assemblage and are most numerous in phase 1 contexts (24 per cent, falling to 15 per cent in phase 2, and 7 per cent in phase 3). Rim forms (Fig. 10, 8) and the wall thickness of the body and base sherds present suggest that the majority are likely to be from storage jar forms, although other, smaller jars (Fig. 10, 9) may also occur. The high proportion of these wares (43 out of 73 sherds; 59 per cent), together with first to early second-century A.D. samian, recovered from the phase 1 or earlier pit 1133 indicates the position of this feature in the early part of the stratigraphic sequence of this site, although all these sherds could be from a single vessel.

The shelly wares (Fabric S100) probably also belong to the local tradition of early Roman shell-tempered fabrics in the area (fabric 70).<sup>36</sup> Although these fabrics generally contain quartz and are of late first century B.C. to the late first century A.D. or, in some areas, the early second century A.D. date, Pollard (208)<sup>36</sup> notes that storage jars in a quartz-free, micaceous shell-tempered fabric were produced up to the later second or early third century, probably on Thames-side sites in west Kent and Essex. The one recognisable rim (Fig. 10, 24) in Fabric S100 is broadly comparable with vessels of this class at Lullingstone (type IV N.3, fig. 75, 153)<sup>36</sup> and the many large body sherds exhibiting very little curve are also likely to be from storage jar forms. Shell-tempered wares are also most common in phase 1 (38 per cent of the sherds) rapidly declining to 3.5 per cent in phase 2, and only 1 per cent in phase 3.

The two rock-tempered sherds (Fabric R100) from the phase 2 dump or original topsoil layer 1073 are both plain bodies; their source is unknown. The mortaria (Fabric E200) and the various orange and buff coarse wares (Fabrics Q102 and Q104) form part of the standard range of products found on most Roman sites, although little is known about their sources. The miscellaneous group (Fabric Q104) includes two sherds of a fine, burnished, red-surfaced sandy fabric of a type possibly produced on the Upchurch marshes or the Swale area in the early to mid third century.<sup>37</sup> All the sherds of Fabric Q102 are likely to be from large storage jar forms (Fig. 10, 2).

<sup>36</sup> *Op. cit.* in note 21, 210.

<sup>37</sup> *Op. cit.* in note 30.

### *Amphora*

A total of nine sherds (275 g) of amphora was found (Appendix 2). Two sherds, both from phase 2 contexts, are from Dressel 20 amphorae (Fabric E256), olive oil carrying vessels imported from southern Spain from the first to early third century A.D.<sup>38</sup> and perhaps the most common amphora type to have reached Roman Britain. Dressel 20 sherds have also been identified at the Mount villa, Maidstone.<sup>39</sup> Sherds probably from a Gallic wine-carrying amphora,<sup>40</sup> also imported from the first to third century A.D., together with an unprovenanced sherd (Fabric E250) were recovered from Pit 1133.

### *Conclusions*

The assemblage recovered from the Church Field villa in 1992 is consistently second to early mid third century A.D. in date and broadly corresponds with the material recovered during earlier excavations at this site,<sup>41, 42</sup> although these sherds could not be re-examined because of damage suffered during a fire at Maidstone Museum. The assemblage comprises the usual range of fabrics and vessel forms typical of second- to third-century sites in west Kent.<sup>43</sup> It is dominated by sandy grey wares, probably products of the industry in the north-west Kent and south Essex areas of the Thames valley, where production was peaking at about this time,<sup>44, 45</sup> and the easily navigable Medway river providing a direct link between producer and consumer. Snodland is located on the eastern edge of the distribution of 'Patch Grove' ware and well within that of the shell-tempered storage jars in the second century (fig. 31). Imported and local fine wares together represent 13 per cent of the total number of sherds and a higher figure would be achieved if the finer grey sandy wares were included in this group. This corresponds well with the proportions of fine wares from other sites of a similar date range in west Kent.<sup>46</sup>

<sup>38</sup> D.P.S. Peacock and D.F. Williams, *Amphorae and the Roman Economy: an Introductory Guide*, London, 1986, 136, class 25.

<sup>39</sup> *Op. cit.* in note 5.

<sup>40</sup> *Op. cit.* in note 38, 142, class 27, fabric E259.

<sup>41</sup> C. Cook, 'A Roman Site in the Church Field at Snodland', *Arch. Cant.*, xl (1928), 79-83, fig. 1.

<sup>42</sup> *Op. cit.* in note 3, figs 2 and 3.

<sup>43</sup> *Op. cit.* in note 23.

<sup>44</sup> *Op. cit.* in note 30.

<sup>45</sup> *Op. cit.* in note 23.

<sup>46</sup> R.J. Pollard, 'The Mount Villa, Maidstone; the evidence of the Roman pottery for trade and the economy', in Kelly 1992, 233.

## Illustrated Sherds (Fig. 10)

1. Bowl/dish. Flat, rounded flange, Type 1. Comparable with Lullingstone type VII C.3,<sup>47</sup> late second to third century. Similar vessels also recovered during earlier excavations at Church Field<sup>48</sup> and the Mount, Maidstone.<sup>49</sup> Fabric Q103. Phase III, dump/bedding layer 1072.
2. Large, upright necked jar. Curved rim, Type 3. Fabric Q102. Phase I, dump layer/original topsoil 1105.
3. Everted, 'pulled' rim of beaker, possibly poppy-head form, Type 4. Fabric M100. Phase I, fill of tree-throw/pit 1107.
4. Necked jar. Upright rim, Type 5. Fabric Q101. Phase III, hypocaust flue lining 1082.
5. Necked jar. Upright rim, Type 5. Fabric Q100. Phase I, fill of construction cut 1152.
6. Bowl/dish. Incipient dropped flange, Type 6. Comparable with Lullingstone type VII D.1,<sup>50</sup> mid to late third century. Fabric Q103. Phase III, dump/original topsoil layer 1073.
7. Shallow, straight-sided dish. Groove defining lip externally, Type 7. Comparable with Lullingstone type VII A.2 (*ibid.*, fig. 81, 271-5), a form introduced in the Hadrianic period and continuing into the fourth century. Also known from previous excavations at Church Field<sup>51</sup> and the Mount, Maidstone.<sup>52</sup> Fabric Q103. Phase III, dump/bedding layer 1072.
8. Much thickened, everted rim, slightly lid-seated, Type 9. Fabric G100. Phase II dump/original topsoil layer 1073.
9. Everted rim, flat top, Type 10. Fabric G100. Phase II dump/original topsoil layer 1073.
10. Small globular-bodied beaker. Short neck, Type 11. Fabric M100. Phase II dump/original topsoil layer 1073.
11. Beaker rim, Type 12. Fabric M101. Phase III, dump/bedding layer 1072.
12. Beaker rim, Type 12. Fabric M101. Phase II dump/original topsoil layer 1073.
13. Beaker rim, Type 12. Fabric M100. Phase II dump/original topsoil layer 1103.

<sup>47</sup> *Op. cit.* in note 21, fig. 82, 293 and 294.

<sup>48</sup> *Op. cit.* in note 3, fig. 3, 26.

<sup>49</sup> *Op. cit.* in note 5, fig. 13, 13-15.

<sup>50</sup> *Op. cit.* in note 21, fig. 82, 298.

<sup>51</sup> *Op. cit.* in note 3, fig. 3, 30.

<sup>52</sup> *Op. cit.* in note 5, fig. 13, 1.

14. Cornice rim beaker, Type 13. Fabric M102. Phase II dump/original topsoil layer 1073.
15. Mortarium rim. Rounded, out-curving flange, small upright bead, Type 14. Variant of Bushe-Fox 26–30,<sup>53</sup> c. A.D. 80–150. Source uncertain, although Gallia Belgica and the Rhineland have been suggested. Fabric E200. Phase II dump/original topsoil layer 1073.
16. Everted rim jar, Type 15. Comparable with Lullingstone Type IV O.4.<sup>54</sup> Fabric Q100. Phase II dump/original topsoil layer 1073.
17. Lid, Type 16, Fabric Q100. Phase II dump/original topsoil layer 1073.
18. Shallow, straight-sided bowl/dish. Lip defined by external thickening, Type 17. Comparable with Lullingstone type VII B.1 (fig. 82, 281), later second to third century. Fabric Q101.<sup>54</sup> Phase II dump/original topsoil layer 1073.
19. Shallow, straight-sided bowl/dish. No elaboration to define lip, Type 18. Comparable with Lullingstone type VII A.1 (*ibid.*, 263–70),<sup>54</sup> Hadrianic to late Roman. Fabric Q100. Phase II dump/bedding layer 1077.
20. Jar. Slightly everted, hooked rim, Type 19. Similar vessel already known from Church Field,<sup>55</sup> second century. Fabric Q101. Phase II dump/original topsoil layer 1073.
21. Narrow-necked jar. Thickened, slightly everted rim, Type 20. Fabric Q103. Phase II dump/original topsoil layer 1073.
22. Wide-mouthed jar. Long sloping neck and slightly everted rim; slight cordon halfway up neck with burnished wavy line beneath, Type 21. Similar to Lullingstone type IV C.2,<sup>56</sup> characteristic product of lower Thames industry, developed mid to late second century and continuing into fourth century. Example also known from the Mount, Maidstone.<sup>57</sup> Fabric Q100. Phase II dump/bedding layer 1077.
23. Necked jar. Lid-seated rim, Type 22. Broadly similar vessels from Lullingstone<sup>58</sup> dated later second century to early fifth century.

<sup>53</sup> J.P. Bushe-Fox, *Excavations on the Site of the Roman Town at Wroxeter, Shropshire in 1912*, Rep. Res. Comm. Soc. Antiq. London, i, London, 1913, 77, fig. 19, 26–30.

<sup>54</sup> *Op. cit.* in note 21, fig. 76, 163, and 164.

<sup>55</sup> *Op. cit.* in note 3, fig. 3, 27.

<sup>56</sup> *Op. cit.* in note 21, fig. 70, 79.

<sup>57</sup> *Op. cit.* in note 5, fig. 14, 22.

<sup>58</sup> *Op. cit.* in note 21, type IV D.7, fig. 72, 94.

Comparable vessels also found during earlier excavations at this site.<sup>59</sup> Fabric Q100. Phase II dump/bedding layer 1078.

24. Rolled rim from large storage jar. Type 23. Comparable with storage jars of type IV N.3 at Lullingstone,<sup>60</sup> mid first to late second century. Fabric S100. Phase II mortar spread/surface 1114.
25. Neckless jar. Flattened, inturned bead rim, Type 24. Comparable with Lullingstone type IV B.6 (*ibid.*, fig. 69, 62 and 63) where dated early/mid second century to third quarter third century at the latest. Fabric Q100. Phase III dump layer 1110.
26. Rouletted beaker base. Cross scratched on underside of base (?maker's mark). Fabric Q103. Phase II dump/original topsoil layer 1073.

### *Ceramic Building Material*

Rachael Seager Smith

All brick and tile fragments recovered during the excavation were counted and weighed by context. This information is summarised in Table 2. With the exception of three fragments of post-medieval date recovered from cut 2009 during the work undertaken in August 1994, all the pieces were Romano-British. Only complete lengths/widths were retained in accordance with the discard policy adopted for this site. Three such fragments were recovered and are briefly described in Table 2.

The three retained fragments were all built into wall 1066, forming part of an *in situ* tile course. The size of these fragments conforms to that given by Brodrigg<sup>61</sup> for the *lydion*, the brick form most suitable for and most commonly found in the bonding or lacing course of walls, although other uses such as flooring or the capping of hypocaust *pilae* are not unknown (*ibid.*, 40).<sup>61</sup> The most complete fragment has a curving, roughly m-shaped finger-smear signature, drawn with two fingers held together, towards one of its shorter ends. A second of the fragments bears traces of a finger-smear signature but further details are obscured by mortar adhering to the surface of the brick. All three fragments are of the same well-wedged fabric containing quartz and iron oxide inclusions and fired to a uniform oxidation throughout.

<sup>59</sup> *Op. cit.* in note 3, fig. 2, 3, and 9.

<sup>60</sup> *Op. cit.* in note 21, fig. 75, 153.

<sup>61</sup> G. Brodrigg, *Roman Brick and Tile*, Gloucester, 1987, 40.



## V. BIRBECK

TABLE 2. NUMBER AND WEIGHT OF CERAMIC BUILDING MATERIALS BY CONTEXT AND PHASE

Phase	Context	Number	Weight	Comments
Phase 1	Dump/original topsoil 1105	19	3456 g	
Phase 1	Fill of pit 1107	1	3 g	
Total		20	3459 g	
Phase 2	Wall 1001	1	26 g	
Phase 2	Dump/bedding layer 1010	2	98 g	
Phase 2	Construction layer 1011	1	8 g	
Phase 2	Wall 1056	1	2552 g	Part of <i>in situ</i> tile course
Phase 2	Wall 1066	6	14992 g	Part of <i>in situ</i> tile course
Phase 2	Dump/original topsoil 1073	326	34868 g	
Phase 2	Dump/bedding layer 1078	1	204 g	
Phase 2	Chalk surface 1102	3	246 g	
Phase 2	Dump/original topsoil 1103	29	2275 g	
Total		370	55269 g	
Phase 3	Dump/tile surface 1015	37	3846	
Phase 3	Repair to chalk surface 1014	9	438 g	
Phase 3	Lining of hypocaust flues – 1084	2	2800 g	Some tile capping <i>in situ</i>
Phase 3	Lining of hypocaust flues – 1085	15	34547 g	Some tile capping <i>in situ</i>
Phase 3	Chalk and mortar surface 1098	4	424 g	
Phase 3	Fill of 'scoop' or lens within 1072	73	4199 g	
Phase 3	Dump layer 1109	5	494 g	
Phase 3	Dump layer 1110	9	438 g	
Total		154	47186 g	
Poss. Ph. 1	Fill of pit 1133	36	6656 g	
Poss. Ph. 1	Dump/made-ground/original topsoil 1115	8	516 g	
Poss. Ph. 1	Possible hearth 1122	1	55 g	
Phase 1 or 2	Fill of post-hole 1018	3	74 g	
Phase 1 or 2	Fill of 1118	2	162 g	
Poss. Ph. 2	Fill of 1125	10	438 g	
Post Ph 3	Fill of 2009	3	200 g	
OVERALL TOTAL		607	114015 g	

*Painted Wall-Plaster*

Rachael Seager Smith

A total of 115 fragments of painted wall-plaster (10781 g) was recovered from the site. Nearly half the fragments were monochrome, red being the most common colour. All the wall-plaster came from phase 2 contexts, the majority (110 pieces) being built into the foundations of wall 1001. None of the wall-plaster was found either *in situ* or on collapsed areas of wall.

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TABLE 3. QUANTIFICATION OF WALL PLASTER TYPES (ALL PHASE 2 CONTEXTS)

Wall 1001				Layer 1073		Layer 1103	
Plaster Type	No.	Wt.	Est. Surface Area	No.	Wt.	No.	Wt.
1	1	116 g	30 mm <sup>2</sup>				
2	14	2552 g	71710 mm <sup>2</sup>				
3	4	466 g	3285 mm <sup>2</sup>				
4	19	940 g	25525 mm <sup>2</sup>				
5	32	1824 g	52205 mm <sup>2</sup>	3	396 g	2	46 g
6	6	1634 g	38675 mm <sup>2</sup>				
7	2	26 g	1000 mm <sup>2</sup>				
8	8	765 g	20300 mm <sup>2</sup>				
9	1	116 g	4550 mm <sup>2</sup>				
10	1	2552 g	4220 mm <sup>2</sup>				
11	10	466 g	16875 mm <sup>2</sup>				
12	5	940 g	15000 mm <sup>2</sup>				
13	1	1824 g	7200 mm <sup>2</sup>				
14	2	1634 g	2300 mm <sup>2</sup>				
15	1	128 g	3200 mm <sup>2</sup>				
16	1	11 g	600 mm <sup>2</sup>				
17	2	45 g	1835 mm <sup>2</sup>				
TOTAL	110	16039 g	268510 mm <sup>2</sup>	3	396 g	2	46 g

A type series for the painted wall-plaster was established based on the different colours and colour combinations used. The distribution and quantification of wall-plaster types are summarised in Table 3.

- Type 1 Monochrome yellow
- Type 2 Monochrome white
- Type 3 Red background, traces of overpainted straight white and blue stripes
- Type 4 Red background, traces of blue overpainting
- Type 5 Monochrome red
- Type 6 A broad blue stripe between narrow white stripes on a red background
- Type 7 Red background roughly overpainted with yellow
- Type 8 White background roughly and unevenly overpainted with red
- Type 9 Red stripe overpainted with a narrow blue stripe on a white background
- Type 10 Narrow white stripe with white dots to one side of it, on a red background

- Type 11 Narrow white stripe on a red background
- Type 12 Red stripe on a white background
- Type 13 Narrow red, broad blue and a narrow white stripe dividing a white and red background
- Type 14 Narrow red stripe and traces of blue on a white background. Possibly part of Type 13
- Type 15 Broad blue stripe dividing white and red backgrounds. The white background is overpainted with a narrow red stripe which extends under the blue stripe at right-angles to it
- Type 16 Red 'marbling' overpainted with a blue stripe on a white background
- Type 17 Red background overpainted with traces of yellow and blue, possibly adjacent stripes

Given the highly fragmentary nature of the assemblage, little can be said about the styles and patterns it represents. Types 7, 8, and 16 may represent rough attempts at the imitation marble typical of the dado while the many striped fragments are probably derived from panel borders, panel-schemes being the simplest and by far the most common form of wall-painting throughout the Roman period.<sup>62</sup> No naturalistic or geometric designs were recognised.

One monochrome white fragment has one rounded edge, the paint continuing across the curving surface. This fragment may be part of the moulding surrounding a window or door. Two pieces have had their surfaces relaid and repainted. Both fragments were originally white and were subsequently repainted the same colour after being resurfaced with 11 mm. of fresh plaster. All three of these fragments were found built into wall 1001.

The reverse surface of many of the wall-plaster fragments indicates the use of straw or reeds in the plaster aggregate. None of the fragments show any clear traces of the 'pecking' of the surface necessary to ensure the adhesion of the plaster to a masonry wall or the impressed or incised keying applied to a clay or *pisé* wall (*ibid.*, 55).<sup>62</sup> This may imply that the wall or walls from which this plaster was derived were of timber-framed construction, infilled with wattle and daub or other largely organic materials, which itself would provide an adequate bond for the plaster (*ibid.*, 55). However, sections of masonry wall surviving above foundation level have very rough, uneven faces which may have obviated the need for 'pecking' and thus the possibility of all stone-built structures cannot be excluded.

<sup>62</sup> N. Davey and R. Ling, *Wall-Painting in Roman Britain*, Britannia Monograph 3, London, 1982, 31.

The wall plaster from wall 1001 covers an estimated surface area of 0.268 square metres. The five monochrome red pieces found in the dump or original topsoil layers 1073 and 1103 were discarded at an early stage of post-excavation and no estimate of surface area is available for these.

### *Animal Bones*

S. Hamilton-Dyer

The amount of animal bone recovered was very small, only 188 fragments. Worked bone objects accounted for three of these (see above). After amalgamating some fragments which had been broken during excavation, the number of bones available for study was 102. The condition of the bones is good to excellent, apart from those with canid teeth marks (see below), enabling the observation of fine surface details and aiding identification.

The bulk of the material is from phase 2, layer 1073, and phase 3, layer 1072. In view of the small sample size, phase and feature differences have not been examined and the material has been analysed in text as a single group. Full details of each bone are recorded in archive. A summary of species and anatomical elements is given in Table 4.

Cattle bones formed the bulk of the material with 37 positively identified fragments and a further 26 large mammal limb shaft and rib fragments which are probably also of cattle. Foot bones accounted for 15 of the cattle bones.

There were 11 fragments of pig bone. These were a mixture of anatomical elements and included three lower canines, all from male animals. One bone, a distal humerus fragment, is sufficiently large that wild boar should not be ruled out. This bone has a distal trochlea width of 35.6 mm. and a greatest distal width of 47.8 mm. (measurements follow Von den Driesch).<sup>63</sup>

Sheep bones (possibly including goat) numbered only nine. These included leg and foot bones and a sheep jaw. A number of fragments (17) were identified only as sheep/pig size. Another small bone fragment which could not be identified is perhaps the fibula of a young pig.

An incomplete femur of a 'medium' sized dog was also identified. The presence of dog was further evidenced by the marks of canid teeth

<sup>63</sup> A. Von den Driesch, 'A guide to the measurement of animal bones from archaeological sites', *Peabody Mus. Bull.*, 1 (1976), Harvard.

TABLE 4. ANIMAL BONE: SPECIES AND ANATOMICAL ELEMENTS

	Cattle	sheep/ goat	pig	dog	cattle sized	sheep/ pig sized	Total
skull fragments	1	-	-	-	1	-	2
maxilla/premaxilla	-	-	-	-	-	-	0
jaw	-	1	1	-	1	-	3
loose teeth	4	1	5	-	-	-	10
atlas	-	-	-	-	-	-	0
axis	-	1	-	-	-	-	1
other vertebrae	1	-	-	-	1	-	2
ribs	5	-	1	-	12	5	23
scapula	1	-	1	-	-	-	2
pelvis	2	-	-	-	1	-	3
humerus	1	-	1	-	-	-	2
radius	2	2	-	-	-	-	4
ulna	2	-	-	-	-	-	2
femur	1	-	-	1	-	1	3
tibia	2	2	-	-	-	1	5
astragalus	1	-	-	-	-	-	1
calcaneum	1	-	-	-	-	-	1
other carpal/tarsal	2	-	-	-	-	-	2
metacarpus	3	1	1	-	-	-	5
metatarsus	6	-	-	-	-	-	6
phalanges	2	1	1	-	-	-	4
shaft fragments	-	-	-	-	10	10	20
other	-	-	-	-	-	1	1
TOTALS	37	9	11	1	26	18	102

on many of the fragments (30 per cent). This action had often destroyed epiphysal surfaces, and, therefore, most of the ageing information.

Most bones, especially those of cattle, had been broken. Fragment sizes were mainly below 100 mm. The type of fractures and, on some, presence of chop marks indicated that this was deliberate rather than a result of burial. Joint articulations seemed to have been chopped to separate the bones rather than the more precise use of knives. Also of interest are small 'shave' marks on the calcaneum and two tibia shaft fragments. This style of butchery has been noted on several military and urban sites but is not usually found on rural sites.<sup>64</sup> This may imply

<sup>64</sup> J.M. Maltby, 'Urban-rural variations in the butchering of cattle in Romano-British Hampshire', in D. Serjeanston and T. Waldron, *Diet and Crafts in Towns*, BAR, no. 199, Oxford, 1989, 75-106.

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TABLE 5. MEASUREMENTS OF CATTLE BONES (IN MM)

Element	Bp	Bd	SD	Bd	Dd
metacarpus	63.5	40.4	—	—	—
metatarsus	52.4	—	29.4	—	—
metatarsus	54.1	49.8	—	—	—
metatarsus	—	—	—	69.9	34.6

that the butcher was non-native or had been taught the Roman style. The mixture of anatomical elements indicates the presence of slaughter and kitchen waste, implying that animals were probably slaughtered on site when required.

Although few bones were sufficiently intact for measurements, the cattle bones were large (Table 5). In Europe, the presence of large cattle within the boundaries of the Empire has been noted. In Britain this is less clear, although large cattle measurements do seem to be concentrated in the south and east with cattle measurements from the west and north changing little from the pre-Conquest sizes.<sup>65,66</sup> Although it should be stressed that this is an extremely small sample, the presence of both the large cattle and the butchery style may indicate considerable, direct, Roman influence at this site.

### Oysters

Rachael Seager Smith

A total of 77 oyster shell fragments (859 g) was found, one (44 g) from a phase 1 context, 68 (698 g) from phase 2 contexts, and three (19 g) from a phase 3 context, were all from dump/natural topsoil levels, and five (98 g) are possibly of phase 1, from the fill of pit 1133. All were discarded after being quantified. Oysters were a common food resource, often transported considerable distances inland, from the Roman period onwards.

<sup>65</sup> J.M. Maltby, 'Iron Age, Romano-British and Anglo-Saxon animal husbandry - a review of the faunal evidence', in M. Jones and G. Dimbleby, *The Environment of Man: the Iron Age to the Anglo-Saxon Period*, BAR, no. 87, Oxford, 1981, 155-204.

<sup>66</sup> R.M. Luff, 1982, *A Zooarchaeological Study of the Roman North-western Provinces*, BAR, no. S137, Oxford, 1982.

## DISCUSSION

The earliest phase of activity recognised on the site was prehistoric. This was represented by a number of pieces of worked flint of Neolithic to Early or Middle Bronze Age date redeposited within Romano-British contexts and a few pieces of worked flint of Mesolithic or Neolithic date within the alluvium in Area B. These indicate prehistoric activity within the general area.

The earliest Romano-British phase of construction identified within the areas excavated, although not necessarily within the whole villa complex, was represented by four masonry walls that formed two corridors along the north-western and south-western sides of the north-western range of the villa complex (Fig. 2). The sparse dating evidence recovered indicates a second century A.D. date for the initial construction. Finds of mid late first century A.D. date were recovered from several of the phase 1 or earlier deposits, suggesting that there was occupation on or near the site prior to the construction of the phase 1 building.

The western corner of this phase 1 building was built on a deliberately constructed terrace cut into the hillside in order to counteract the gentle slope, as was the subsequent phase 2 building. This was a common practice throughout the Roman world; besides this example several other sites, such as Witcombe (Glos.), Seaton (Devon), Ditchley (Oxon.), Ickleton (Cams.), and Hartlip were built on terraces, or on artificially levelled ground.<sup>67</sup>

Assumptions about the internal decoration of the phase 1 building can be drawn from an examination of the wall construction. The two exterior walls, 1000 and 1074, were both externally faced with regularly-coursed ragstone blocks, whilst the interior faces were composed of irregular courses of roughly-shaped ragstone and flint. The south-east face of wall 1079 was similarly constructed. The interior faces of the corridor walls were, therefore, roughly-faced. During the 1964–65 excavations patches of *in situ* wall plaster were found on 'the south, or inside face' of wall 1080.<sup>68</sup> The *in situ* plaster showed no trace of colouring. Built into the foundations of wall 1001, a later wall that was constructed immediately adjacent to wall 1000, were large quantities of wall-plaster fragments, which can be assumed to be derived from a phase 1 context. Although the plaster recovered from these foundations was all painted to some degree, and the *in situ* plaster

<sup>67</sup> J. Liversidge, *Britain in the Roman Empire*, London, 1970, 236–67.

<sup>68</sup> *Op. cit.* in note 3.

was not, possibly because of its position at or just above floor-level, it could be implied that the interior walls of the south-western corridor were plastered, possibly with polychrome designs. The very similar nature of the interior facing of the north-western corridor perhaps suggests that this, too, was plastered. It was noted that the plaster fragments from wall 1001 had no traces of 'pecking' necessary to ensure the adhesion of the plaster to masonry and so may have been derived from a timber-framed construction infilled with daub or other largely organic materials. Given the rough nature of the interior walls 'pecking' would not have been necessary for plaster cohesion. However, two post-holes found cutting the chalk surface within the south-western corridor may represent some form of internal timber partition. If the exterior walls were plastered, it would also be likely that these would have been, too.

A thick dump or demolition layer (1012), into which the phase 2 wall 1001 was cut, was noted in the south-western corridor overlying the phase 1 chalk floor. This can, therefore, be seen to predate the phase 2 construction and to post-date the phase 1 occupation and is probably the result of the partial demolition of the phase 1 structure, or possibly of deliberate dumping, though the purpose of such dumping is unclear.

The second phase of construction was typified by thicker exterior walls, neatly faced on both sides, and the thickening of existing exterior walls. Internal partition walls were also constructed and the south-western corridor of the phase 1 building was incorporated into the main body of the building. The building was also extended at this time and tessellated floors laid within at least one of the rooms.

The construction of thick external walls and the thickening of the existing external walls could perhaps imply that a second storey was added at this time. In general, the phase 2 building is larger and more substantial than its predecessor. The tessellated flooring, which appears to replace the more basic phase 1 crushed chalk floor, indicates that it was probably also better appointed. So, although it was constructed on a similar rectangular design to the phase 1 building, it probably represents an increase of wealth and presumably status of the Snodland villa. Most villas show similar successive enlargements, often until well into the fourth century, indicating that the agriculture that supported them was a continuously thriving and, therefore, wealth-creating industry.<sup>69</sup>

Of the animal bones found in the phase 2 and 3 dump layers, the presence of relatively large cattle bones and the distinctive butchery

<sup>69</sup> P. Salway, *Roman Britain*, Oxford, 1981, 596–609, 618–628.



style employed, indicates a considerable Roman influence at the site. However, given the very early date of the nearby villa at Eccles and its undoubted wealth, together with the relatively high density of villas in the Medway Valley, all of which indicate an exceptional Romanisation of the area,<sup>70</sup> this is perhaps to be expected.

The third phase of occupation is represented by the construction of a pillared hypocaust in room 1088 and a channelled hypocaust within room 1070. A short wall, presumably to form part of the fire-box was built against the south east facing wall of room 1088, and the external doorway in the same wall was narrowed to form a flue. The doorway between the two rooms was also partially blocked to form a flue. Room 1070 was a rectangular room 6.50 by 5.50 m. and room 1088, also rectangular, measured only 3.50 by 1.80 m. The very small size of room 1088, and the rather crude construction of the pillared hypocaust within it, together with the asymmetrical arrangement of the channels in room 1070, which would have left the southern corner of the room unheated, perhaps indicate that these hypocausts were not for domestic use but served some other purpose. In both size and shape these rooms are very similar to a room (room 121, once two rooms) with a channelled hypocaust excavated at the nearby Eccles villa in 1970.<sup>71</sup> The stokehole was differently positioned and the small room or alcove did not contain a pillared hypocaust (although the excavation showed that this may originally have been intended), but in many ways it was similar to the Snodland example. It was suggested by the excavator that this could have been a corn-drier.

Several channelled corn-driers are known, almost exclusively in the south-east of England and particularly in Kent, where the majority is to be found.<sup>72</sup> The form of these is very variable and only the example at Eccles bears a strong similarity to the Snodland example. It has been suggested that these more elaborate examples of corn-driers were built to treat grain before transport in quantity (*ibid.*). However, experiments have shown that the temperatures that could have been achieved over the floor of similar structures could average some 60–70° Centigrade, which would have been ideal for malting.<sup>73</sup> This could explain why the hypocaust channels did not extend into the southern corner of room

<sup>70</sup> S. Frere, *Britannia, A History of Roman Britain*, London, 1974, 301–19.

<sup>71</sup> A.P. Detsicas, 'Excavations at Eccles, 1970', *Arch. Cant.*, lxxxvi (1971), 25–34.

<sup>72</sup> P. Morris, *Agricultural Buildings in Roman Britain*, BAR, no. 70, Oxford, 1979, 5–222.

<sup>73</sup> J.P. Reynolds and J.K. Langley, 'Romano-British Corn-Drying Oven: an Experiment', *Arch. Journ.*, cxxxvi (1979), 27–42.

1070; if this was a malting oven, then the grain could have been laid in the cooler area to sprout or 'chit' before roasting.

The ground plan of the villa produced by the Maidstone Area Archaeological Group (Fig. 2) shows that the substantial chalk surfaces to the south-west of the main building lay within an outer courtyard bounded by the main building and an 'aisled barn' type of building to the south-west. These surfaces could not be definitely assigned to any of the phases recognised within the building; however, the heavy wear these appear to have received and the repairs made to these would indicate that they were in use for a long period of time. The 'aisled barn' type of building is common in the countryside of Roman Britain, as a farmhouse or barn, often as part of a larger villa complex where it may have been used to house workers as well as animals and farm equipment.<sup>74</sup>

The third phase of occupation represents a change of function, at least within rooms 1070 and 1088, from domestic uses, represented by such features as the tessellated pavement, to an agricultural function. It could be that the outer courtyard, with its substantial chalk surfaces, could have functioned as a farmyard, which would imply that the larger main courtyard, located between the ranges of the main buildings, served a different function.

The dump or bedding layer upon which the phase 3 external chalk surfaces were laid can be dated to the early-mid third century by the sherds of Trier-type Rhenish ware recovered from it, quantities of earlier material were also recovered from the same layer. Although this excavation produced no datable evidence of occupation after this date, the overlying chalk surfaces were heavily worn and had been repaired in places, implying that occupation continued for some time after the surfaces were laid. During the 1964-65 excavations, a coin dated to c. A.D. 355 was recovered from an unstratified deposit above 'courtyard paving' to the west of the building,<sup>75</sup> this paving, from the position of the 1964-65 excavations, can be proven to be the phase 3 external chalk surface 1098 or 1093. This would suggest that at least part of the site was occupied into the fourth century, but evidence of this later occupation has been destroyed or obscured. However, it is possible that the coin was lost when the site was already in ruins.

Earlier excavations by the Maidstone Area Archaeological Group have shown that this was a large courtyard type villa, with a secondary

<sup>74</sup> *Op. cit.* in note 70.

<sup>75</sup> *Op. cit.* in note 3.

courtyard and ancillary buildings, presumably of agricultural use. Whilst this was a large building, it would certainly not have been as impressive as the nearby villa at Eccles. As so little of the building has remained relatively undisturbed, little can be deduced about the nature of the occupation, its economic and domestic life, or about its wider implications. The dates of the three phases recognised correspond broadly with those of other villa complexes in south-east England, notably the nearby villa at the Mount, Maidstone.<sup>76</sup>

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<sup>76</sup> *Op. cit.* in note 5.