

New evidence for the origins, development and internal morphology of the Roman roadside settlement at Alfoldean

by Mike Luke &
Jackie Wells

with contributions by
Kay Hartley
Joanna Bird
Jeremy Hodgkinson
Joanna Richards
Mike Trevarthen

Fieldwork undertaken over the past two decades has provided new insights into the Roman roadside settlement at Alfoldean. The results are significant for the interpretation not only of Alfoldean but also of similar sites within Sussex and lowland Britain as a whole. Intermittent investigation by Luke and others has included earthwork survey, field artefact collection, aerial photograph analysis and the salvage recording of a roadside trench dug through the site. Prior to this, work had focused on the mansio enclosure immediately south of the River Arun. The new evidence demonstrates that this is only a small part of a much larger settlement that originated in 1st century AD, possibly as one of a chain of deliberately planned settlements on the Chichester to London road (Stane Street). At its greatest extent it covered an area of over nine hectares.

INTRODUCTION (Fig. 1)

Roman remains (Puttock 1841, 262) were first identified adjacent to the River Arun in 1809–10 during highway restoration work. The new bridge (originally known as Aldfoldean (*sic.*) Bridge) lent its name to the Roman remains. All subsequent fieldwork until the 1980s concentrated on the earthwork enclosure immediately south of the river. The study area reported here covers 35 ha in the four fields south of the river.

The Roman site is located approximately 6 km west of Horsham within the parish of Slinfold in north-west Sussex (TQ117328). The modern A29 road bisects the study area and partially overlies the Roman road from Chichester to London known as Stane Street.

Alfoldean is situated approximately equidistant (18 km) between the roadside settlement at Hardham (Winbolt 1927), near Pulborough, and the presumed roadside settlement at Dorking (Hayman 1998, 92). A branch road is believed (Harrison 1874, 9) to diverge from Stane Street one kilometre to the north and may continue at least as far as the Farley Heath temple complex. This road passes close to the villa and tile kiln at Rapsley (Goodchild 1937; Hanworth 1968), 9 km north-west of Alfoldean. The tileworks at Itchingfield (Green 1970) situated 4 km to the south-east is the nearest known Roman site.

TOPOGRAPHY AND GEOLOGY

The study area is situated within a large meander of the River Arun immediately west of the confluence with North River. The land slopes down to the floodplain of the river and its tributary from all directions from c. 31.6 m OD.

The underlying solid geology is Wealden Clay, overlain by river gravels of the fourth terrace of the Arun and alluvial clays.

SUMMARY OF PREVIOUS ARCHAEOLOGICAL WORK (a detailed account is on microfiche)

According to Martin (1859, 144), it was the restoration of Alfoldean Bridge in 1810 that led to the discovery of Roman remains. Piecemeal investigations continued throughout the 19th and early 20th centuries and a mosaic pavement was discovered in 1912 (Belloc 1913, 250). The only systematic excavation of the site took place in 1922 and 1923, conducted by Samuel Winbolt (1923; 1924). In places the original excavation reports are inconsistent and difficult to follow, but they do contain a wealth of information and Black (1987, 120–23) has produced a useful summary.

Winbolt's excavations concentrated within the interior enclosure that was clearly visible immediately

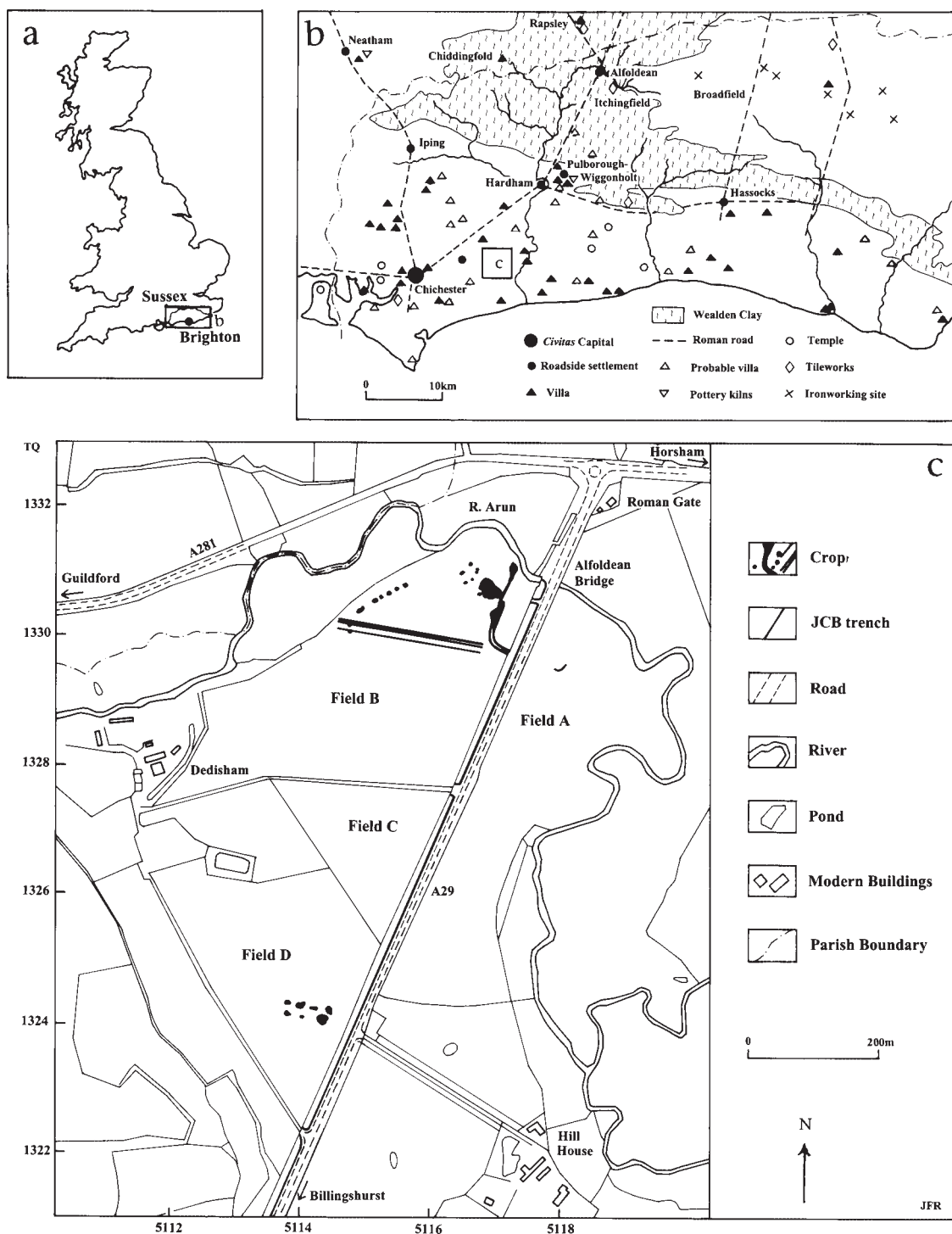


Fig. 1. Site location (a–c). Roman sites in Sussex (a).

south of the river. The discovery of the eastern edge of Stane Street indicated that it lay centrally within the enclosure. Partial investigation of the bank and ditch was undertaken and an associated feature, the '*intravallum* road' was identified. Its relationship with the bank and ditch is uncertain, although the published plans indicate that it was inside the bank and may have been truncated by the ditch (Winbolt 1923, pl. II; 1924, 113).

Winbolt identified and named a number of buildings he located within the enclosure. Although there is little dating evidence, it is unlikely that all of these were contemporary so all of the major buildings identified by Winbolt are shown on Figures 2, 3 and 7.

In the north-east corner of the enclosure Winbolt (1923, 91–2) located various elements of a building that he called the 'officer's quarters'. These included stone/brick walls, a plain tessellated floor (possibly the same as that located in 1912) and a pink mortar corridor (identified by Winbolt as a 'path'). If this building extended further south to include Winbolt's 'long corridor', it would have been of substantial size. Immediately to the north of the mortar corridor was a 'disturbed' area of 'thin pink-mortar floors' associated with 'two layers of big tiles' (Winbolt 1924, 119). This may be evidence of at least one hypocaust associated with the substantial building to the south or even a bath house. In the remainder of the eastern interior of the enclosure, only buildings with clay floors were identified. In 1963 the enclosure investigated by Winbolt was scheduled as an ancient monument (SAM 222).

Winbolt's limited investigations to the south of the enclosure suggested that settlement extended for half a mile, although he identified only one possible building (Winbolt 1924, 122). After the main excavations were complete he continued to work in the Alfoldean area. Immediately north of the Arun (Winbolt 1929) investigations suggested that Stane Street had an iron slag make-up. In 1934 rows of large timber stakes were discovered in the river bed which Winbolt believed were the foundations for the Roman bridge across the River Arun (Winbolt 1935).

During the 1970s, probe hole and fieldwalking exercises are believed to have been undertaken (Marley 1975, 2) although the results of these are unknown. During lay-by construction in 1998 a watching brief was undertaken by West Sussex County Council Planning Department (John Mills pers. comm.).

EARTHWORKS AND SOILMARKS

In the 1920s the enclosure bank and ditch was intermittently visible on all four sides (Winbolt 1923, 86), but only the western earthwork is clearly visible today. This comprises a north-east to south-west hollow 20 m wide and 1 m deep, associated with a more ephemeral internal bank. The southern ditch and bank is traceable as a slight dip and rise in the ground within Field B (Fig. 1) and the road verge.

After ploughing, the inside of the enclosure is noticeably darker in colour. This is especially clear in Field B where the change coincides with a c. 6 m wide yellow soilmark indicating the underlying bank. During field artefact collection numerous large flint nodules were observed in the presumed north-west corner but their significance is uncertain.

CROPMARKS (Fig. 1)

The enclosure is clearly visible as a cropmark on aerial photographs held by the National Monuments Record (NMR). Photographs taken by David Graham in 1984 reveal that the enclosure is more sub-rectangular in shape than Winbolt (1924, 113) suggested. Two parallel ditches, the inner slightly wider, define the south-west side of the enclosure. Although these can be observed turning the corner to the west, they become confused within a wider dark cropmark, which presumably reflects the hollow (described above). Apart from 19th-century field ditches no other linear cropmarks are visible. However, a photograph taken in 1980 by the author from ground level shows three parallel linear cropmarks, apparently aligned west to east commencing just south-west of the enclosure.

The 1984 aerial photographs reveal three discrete concentrations of pit-type cropmarks in Fields B and D (Fig. 1). Their size (over 8 m in diameter) is suggestive of quarrying.

FIELD ARTEFACT COLLECTION

This section summarizes the results of collection over Fields A, B, C and D during the early 1980s by Luke and in 1989 by Judie English. The results of a more recent survey over Fields B and C (Elliott 1994) are mentioned only where they provide additional information.

DISTRIBUTION OF THE ARTEFACTS (Figs 2a & 2b) Pottery (Fig. 2b)

The distribution of Roman pottery is concentrated adjacent to Stane Street extending for 600 m south

of the River Arun, with none recovered from Field D. The quantities recovered from inside the enclosure and up to c. 100 m to its south were very small. Generally there was a reduction in quantity away from Stane Street, most noticeable at c. 40 m except in two areas.

The survey undertaken by Elliott (1994, 12a) suggests that the quantity remains high for c. 130 m from Stane Street immediately to the south-west of the enclosure. Within Field A recovery was at a significant level for 80 m from the road over an area of c. 140 m (north–south).

Roman tile and other building material

Considerable quantities of Roman tile were observed within all the fields adjacent to Stane Street and it occurred in exceptional quantities within the eastern half of the enclosure. Further concentrations were identified in the south-east corner of Field B and north-east corner of Field C.

A large quantity of flue tile (Fig. 2a) was recovered from the north-east quadrant of the enclosure, in the same area that Winbolt located the ‘officer’s quarters’ (see above). In contrast, a single fragment of flue tile was found within the western half of the enclosure. A significant concentration of flue tile was located c. 260 m west of the enclosure in Field B, within an area of c. 20 m by 20 m which contained no pottery. It was situated on the break in slope above the floodplain.

Three fragments of *tegulae mammatae* were recovered from the eastern half of the enclosure, in the vicinity of the flue tile concentration. Of the other artefacts collected, it is perhaps significant that fragments of *opus signinum* were observed within the north-east quadrant of the enclosure.

THE ROADSIDE TRENCH

INTRODUCTION

In August 1983 Sussex County Council Surveyors Department commissioned a trench to be dug by the roadside, c. 0.8 m wide and c. 0.8 m deep. This was located parallel to, and c. 2–5 m west of the A29 and extended for over 1 km south of the river (Fig. 1). At the major field entrances the trench turned westwards and continued up to the field boundary. Although it passed through a known Roman settlement, part of which was scheduled, no prior consultation with regard to its impact on archaeological remains is evident. The trench was

apparently dug to prevent gypsies from camping on the verge.

FIELDWORK METHODOLOGY

Initial observations within the trench revealed a large area of modern disturbance, extending for 60 m south of the river and almost up to the field hedge. This probably relates to the course of the early 19th-century road and bridge. However, archaeological remains survived *in situ*, for over 600 m south of this disturbance. The west-facing side of the trench was recorded for a distance of 650 m. The east-facing side was recorded for 260 m, through the scheduled area and beyond. Recording was undertaken between September 1983 and May 1985, by English and Luke (English & Gower 1985, 456–7). The trench sides were drawn in units of 5 to 6 m and deposits were given a unique letter specific to each section drawing.

The sides of the trench were cleaned but no excavation was undertaken. All deposits/features were, therefore, only visible in two dimensions, inevitably resulting in an under-representation of smaller features such as postholes. The distinction between a pit and a ditch was based on the presence of the feature in both sides of the trench. The approximate alignment of ditches was deduced from the position in both sides of the trench.

Artefacts were retrieved from the trench sides and spoil heaps leading to a collection bias towards the more easily visible types.

POST-RECORDING ANALYSIS

The initial recording system was not conducive to analysis. Therefore, the 243 deposits and 283 ‘cuts’ were assigned more conventional, individual context numbers.

During analysis 329 contexts were assigned to more meaningful groups based on their interpretation (Table 1). In the group plans (Figs 2, 3 & 7) the position and north–south extent of each group is shown accurately. The west–east extent has been schematically projected to aid clarity. The remaining 197 contexts were unallocated and mainly represent natural or modern deposits/features.

A stratigraphic sequence was established for all the contexts and this formed the basis of the phased sequence. Owing to the limited number of stratigraphic relationships over the southern part of the trench, assignment relied more on spatial locations.

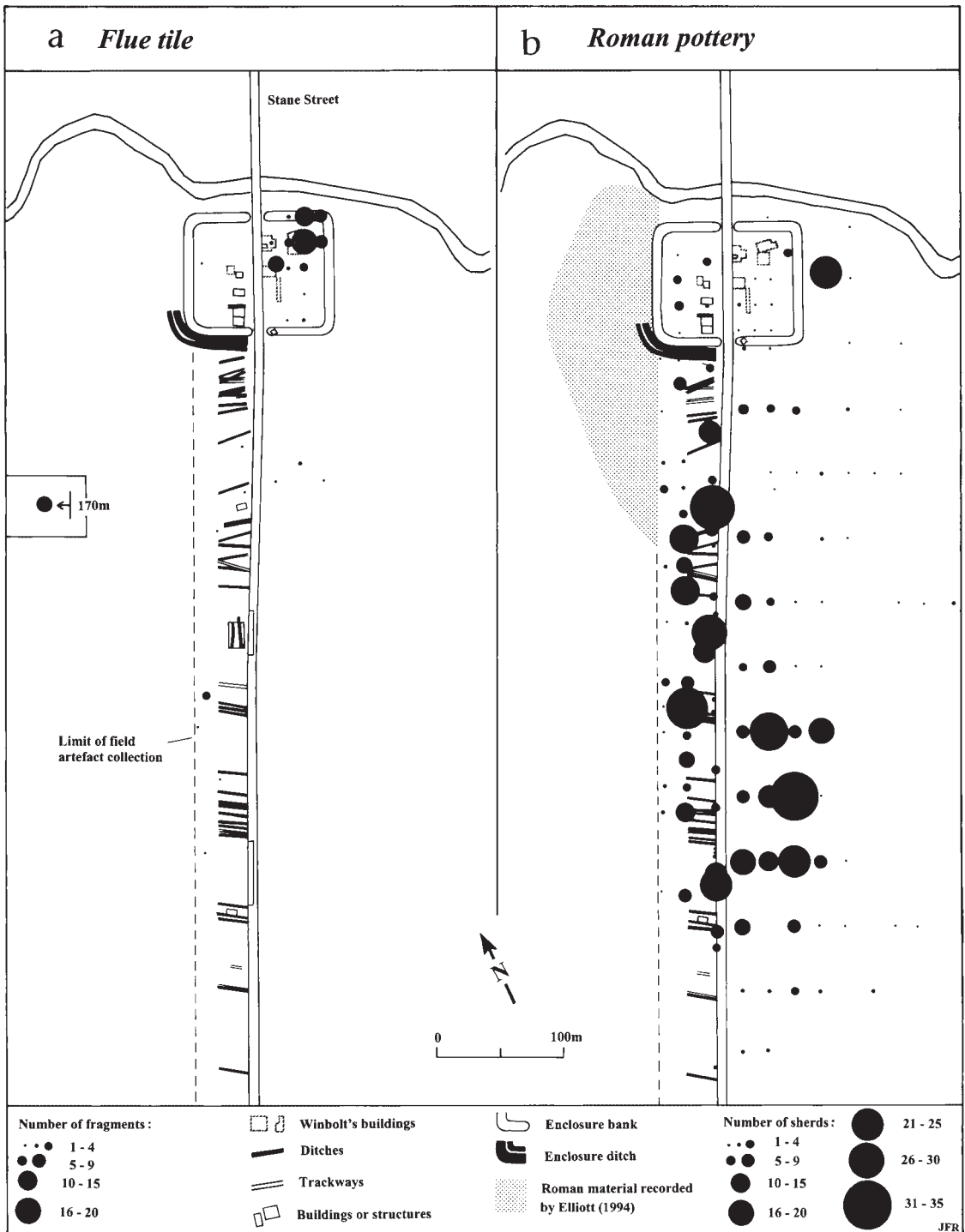


Fig. 2. Distribution of flue tile (a) and pottery (b) from field artefact collection and the roadside trench.

Table 1. Types of settlement components identified during post-recording analysis.

Type	Description	No.
Building (B)	Evidence for floor/makeup deposits and/or wall lines (Table 5 on microfiche)	7
Structure (S)	Less definite evidence for buildings, or hearths (Table 6 on microfiche)	18
Boundary (D)	Ditches	37
Tracks (T)	Linear stone surfaces	10
Pits (P)	Larger features which appeared not to be linear	7
Earthwork	Deposits suggestive of bank material	1

THE PHASED SEQUENCE (Figs 3a & 3b)

Twelve phasing units, numbered from 1 (natural clay and gravel) to 12 (modern disturbance) have been assigned.

Phase 2: Construction of Stane Street, 1st century AD (Fig. 3a)

In the absence of evidence for Iron Age activity, it is presumed that Stane Street was constructed through unsettled land in this area. The date of construction is discussed in greater detail in the synthesis (*see below*). Two extensive stony deposits (T09 and T10) may be related to the western edge of Stane Street as they were only observed in the west-facing section of the trench. These deposits contained pottery of the Hardham and Wiggonholt kilns, and their mixed nature suggests they are not of one single phase. The absence of later features truncating these deposits suggests that they continued to function as surfaces throughout the Roman period. Parallel to and 2 m west of T10 was a ditch, D18 which may have defined the limit of the road zone (Fig. 6c).

Dark layers with charcoal flecks and occasional artefacts also occurred directly over the natural clay and gravel. One of these (568) was sealed by the Phase 4 bank and contained an undiagnostic sherd of pottery. It is uncertain if these deposits represent activity purely associated with the construction of Stane Street or whether they could indicate roadside settlement.

Phase 3: Establishment of the first settlement, late 1st-century AD (Fig. 3a)

The land to the west of Stane Street south of the River Arun was divided into six plots with frontages of between 68 m and 131 m (Table 2 on microfiche). A number of the plots were similar in size. All plots were defined by stone boundaries interpreted as tracks orientated perpendicular to Stane Street. The plots contained settlement evidence including possible buildings, hearths and one pit.

Tracks

Stone boundaries T01–06 (Figs 4d & 6a) are interpreted as

trackways rather than as bases for banks due to their slight camber and a width of between 1.4 and 2.6 m. Only T05 was associated with a ditch (D30). Only T03 contained pottery, a sherd of undiagnostic East Sussex grog-tempered ware.

Possible buildings (Table 6 on microfiche)

There was no compelling evidence for buildings within this phase. However, it is possible that compacted clay deposits S11, S16 (containing a central Gaulish Dr 31 bowl dated *c.* AD 138–192) and S17 represent the floors of timber buildings (Fig. 4e & f). The two concentrations of post-holes S10 and S12 (Fig. 4d) may indicate timber walls. The two gullies of S09 are unusual in that they were spaced wider apart in the east-facing section than the west (Fig. 4c). It is possible that they represented a single curving gully surrounding a circular building. The pottery recovered from these comprised mainly undiagnostic grey wares, Wiggonholt white wares and BB1.

Hearths (Fig. 4a & b)

All four hearths were isolated and of simple construction comprising a shallow pit with evidence of *in situ* burning and charcoal-rich fills. Three (S01, S02 & S04) were situated in adjacent plots within 10 m of T01. The other (S13) was located to the south of the settlement and was situated very close to Stane Street T09. Only S01 produced dating evidence, a 2nd-century AD poppyhead beaker.

Phase 4: Construction of the earthwork enclosure, later 2nd century AD (Fig. 3b)

Only the southern elements (a bank, berm and two ditches) of the earthwork enclosure identified by Winbolt (*see above*) survive. These appear to enclose the existing *mansio* complex. Modern disturbance immediately south of the river prevented the identification of the northern elements. The southern earthwork was stratigraphically later than the Phase 2 layers (for example 568) and trackway T01. All six pottery sherds from the bank were undiagnostic coarse buff and grey wares in the Hardham tradition. The enclosure does not fit neatly into the Phase 3 or subsequent land parcels. No boundary ditches were identified within the enclosure and therefore its construction is likely to pre-date the Phase 6 settlement layout. Consequently, its construction has been assigned a unique phase (for fuller discussion *see the earthwork enclosure*). Although

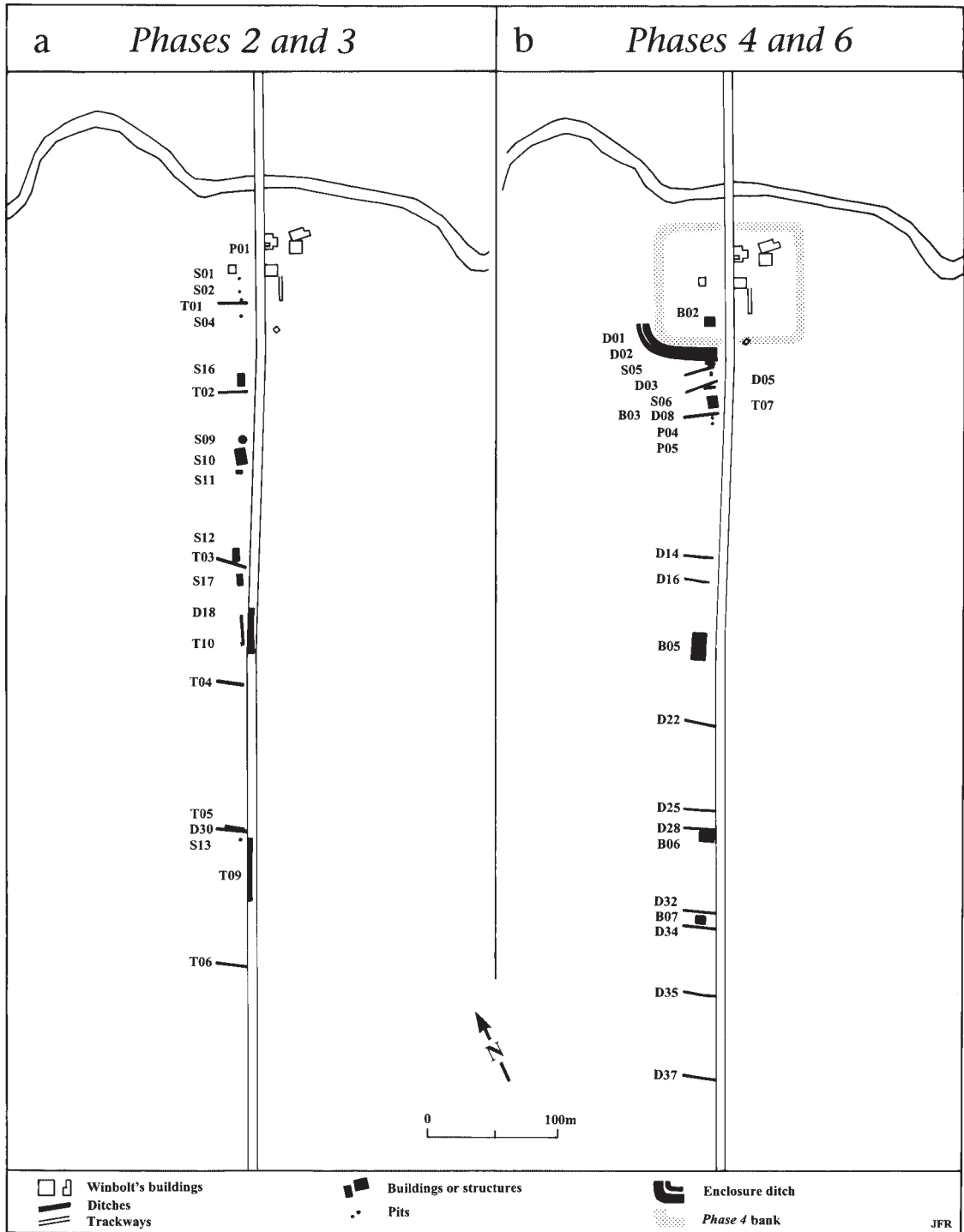


Fig. 3. Overall plans of Phases 3 and 6 (with 4).

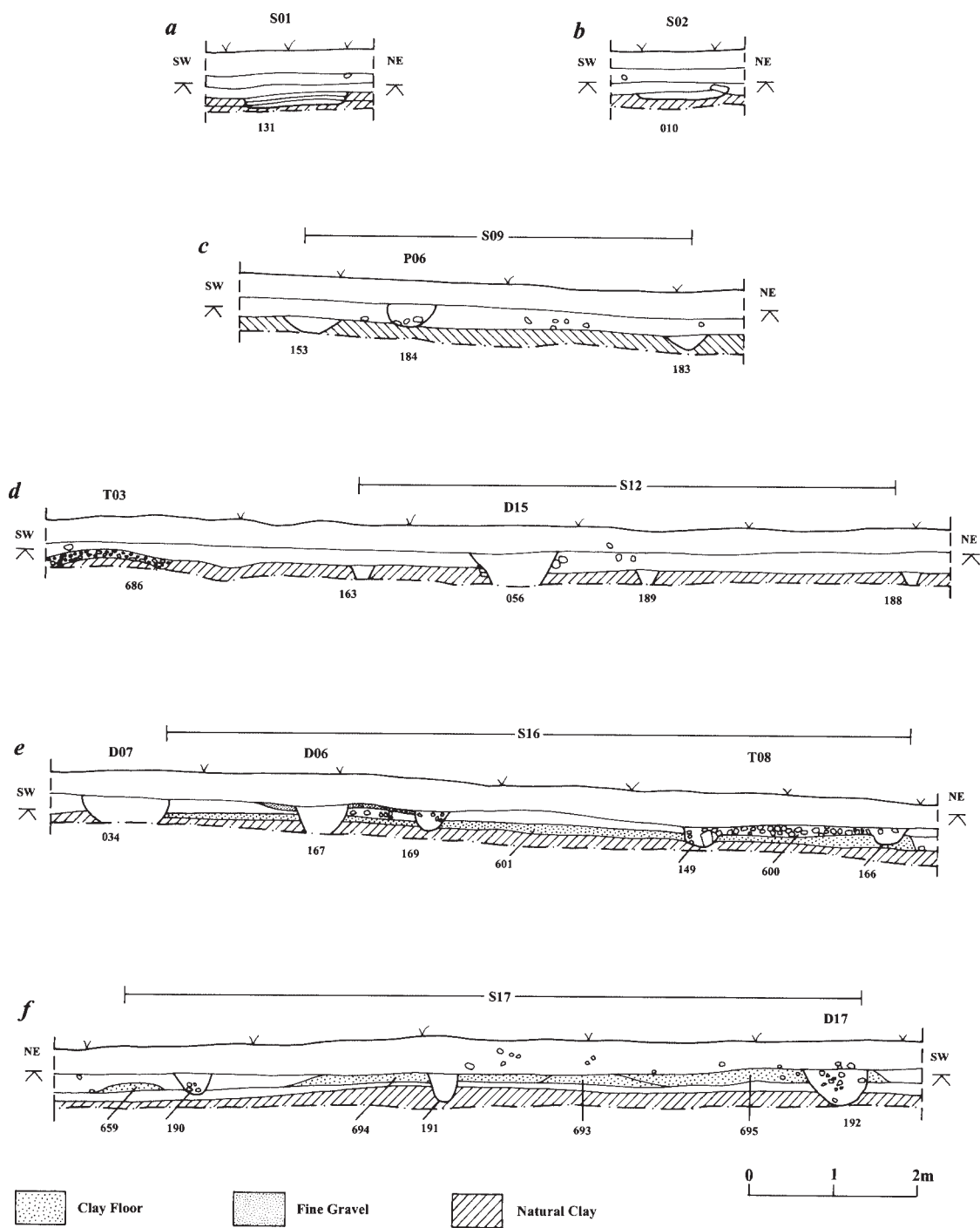


Fig. 4. Phase 3 selected sections.

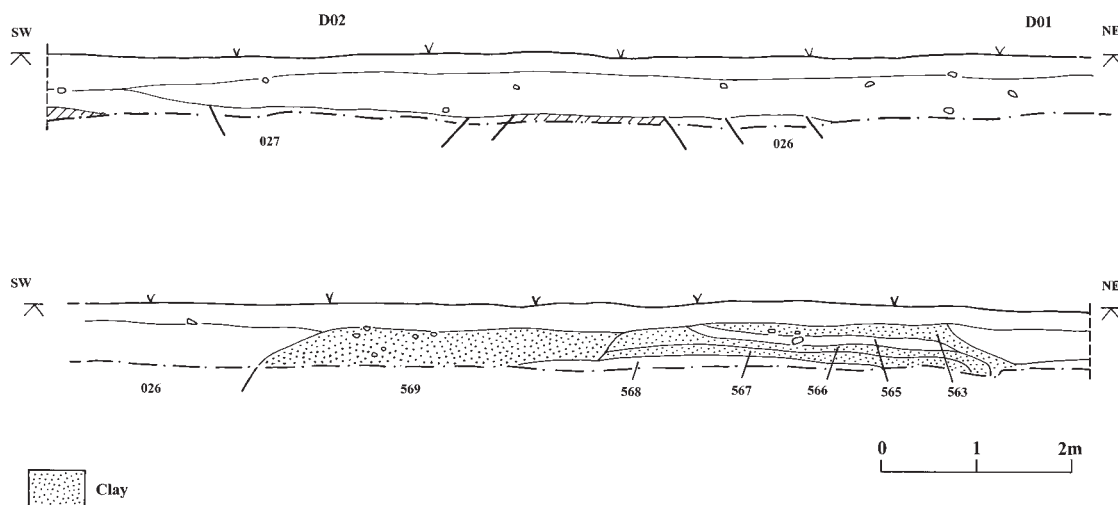


Fig. 5. Section through the southern earthwork of the enclosure.

there is evidence the earthworks were redefined on a number of occasions, these could not be accurately dated so they are discussed here. There is no evidence for slighting of the earthworks and they were not built over.

Bank (Fig. 5)

The original bank was 4.3 m wide and survived up to 0.5 m in height. It comprised three deposits, two layers of white/yellow clays (566 & 567), sealed by a darker deposit (565). It is uncertain if the latter represented humic soil. Originally there appears to have been a berm 4 m wide separating the bank from the inner ditch.

It is possible that the mixed clay deposit (569) was deposited onto the berm (enlarging the bank to 8 m) at the same time as clay (563) was added to the original bank. A posthole observed in the west-facing section at the northern edge of the bank may be part of a revetment. No evidence for a wall or robber trench was observed, although a group of large stones 1.3 m from the inner ditch could represent an internal revetment on the south side.

Ditches (Fig. 5)

It is uncertain whether the two ditches are contemporary. The inner ditch (D01) was 6 m wide. The 2.8 m wide outer ditch (D02) was situated 1.6 m south of the inner ditch. Variations in the upper fills of both ditches suggest they were recut on a number of occasions.

Phase 5: Unspecific activity, earlier 3rd century

A number of layers generally dark in colour with high charcoal content and occasional iron slag fragments are assigned to this phase. The pottery assemblage comprised finewares including late 1st

to late 2nd century AD Samian (including imitations by the Aldgate-Pulborough potter). Coarsewares included *mortaria* dated to c. 140–200 AD, grey wares, BB2, grog-tempered and buff and white wares in the Wiggonholt/Pulborough tradition. The interpretation of these layers is uncertain.

Phase 6: Redefinition of settlement, earlier 3rd century (Fig. 3b)

The land plots were redefined by ditches during this phase. The enclosure to the north continued with no obvious internal divisions. In three instances the new boundaries (D08, D16 & D28) were located within 3 m of Phase 3 boundaries (T02, T03 & T04). Only the Phase 3 plot bounded by T03 and T04 may have continued unaltered in size. The plots varied between 6 and 109 m (Table 3 on microfiche). Two were comparable in size to the *mansio* complex. The plots at the south of the settlement exhibit some regularity in their widths between 50 and 60 m.

Although it is possible that not all of the narrow plots (many c. 23 m) functioned as properties, at least two contained buildings (B03 & B07). Others may have functioned as routeways, although a stony surface only survived in one instance (T07).

One building (B02) was identified within the *mansio* complex. Four other buildings were located within the other land plots, along with a number of structures and two small pits.

As in the preceding phase, pottery fabrics

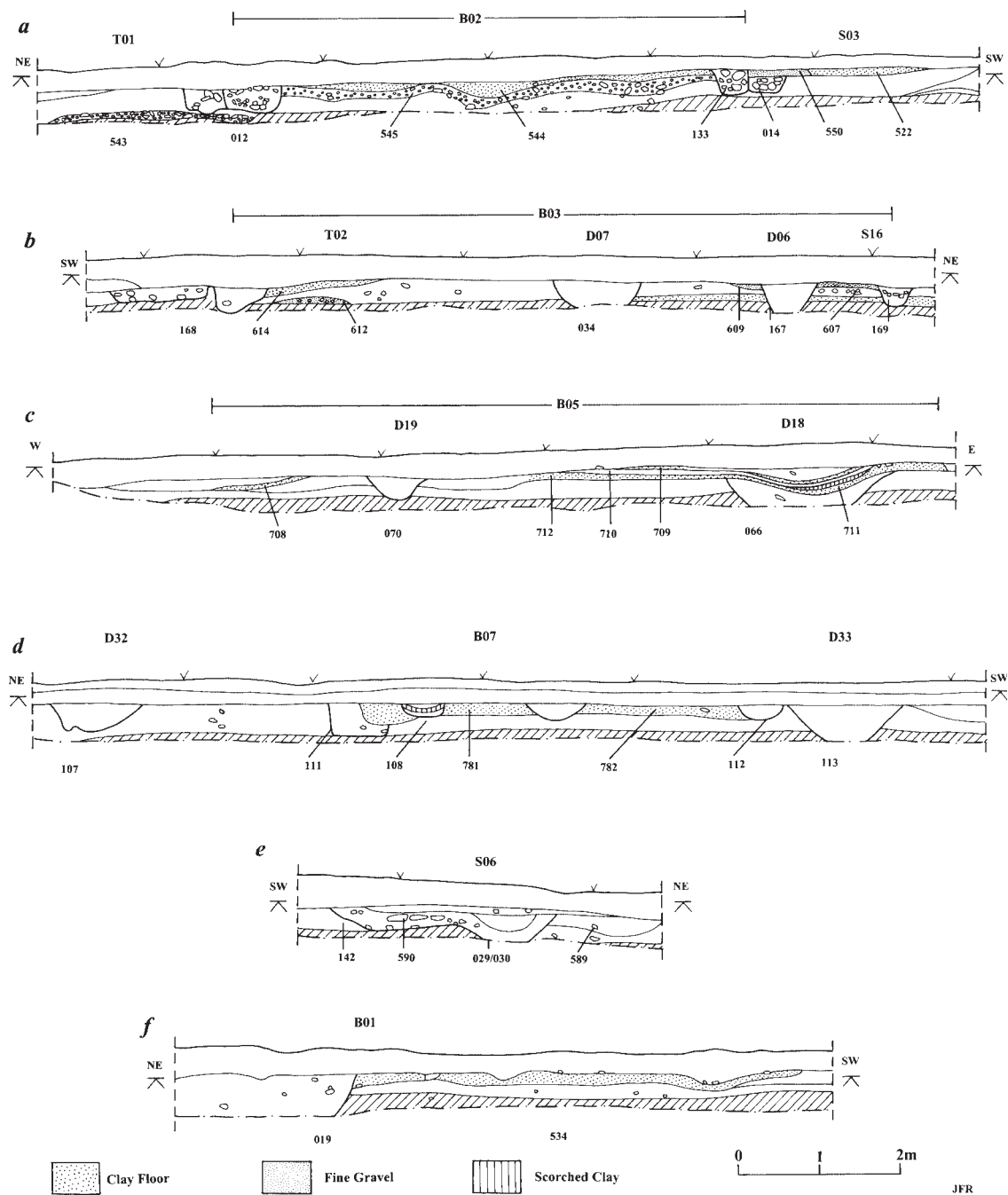


Fig. 6. Phase 6 and 8 selected sections. See Figure 4 for full key.

included undiagnostic coarse and fine grey wares, BB2 and buff and white gritty Wiggonholt wares.

Ditches

Generally the ditches were over 1 m wide and usually continued below the base of the trench. An exception was D32, which was only 0.3 m deep and may have been recut (Fig. 6d).

Trackway

Trackway T07 was situated adjacent to D05. Although located within 10 m of a Phase 3 track, it was distinct in its construction with larger stones forming a flat surface 2.5 m wide.

Buildings (Table 5 on microfiche)

The five buildings were identified mainly by the presence of make-up or floor deposits. Few exhibited evidence of wall-lines. Buildings B02 and B03 shared similar construction with a stony make-up layer underlying a clay floor defined by wall trenches (containing large flint nodules) possibly representing robbing (Fig. 6a & b). The wall trenches of B02 suggest it was rebuilt on at least one occasion.

The three other buildings (B05, B06 & B07) were situated over 200 m south of the *mansio* complex. These comprised clay floors with no convincing evidence for wall-lines. It is therefore presumed that these had timber walls. B05 was observed within the two trenches defining the access into the south-east corner of Field B. This is the only building where orientation and overall dimensions are known with any degree of certainty. It was orientated parallel to Stane Street, which may have been only 2 m to the east, was at least 13 m in length and 8.5 m wide. Like B06 to the south it contained evidence of internal hearths in the form of scorched clay (Fig. 6c). Building B07 contained a hearth only 0.5 m from its presumed timber north wall. This comprised a deep cut with *in-situ* burning; its lower fills were very charcoal-rich (Fig. 6d).

Furnace S06 (Table 6 on microfiche and Fig. 6e)

Ten metres south of the southern enclosure ditch within one of the narrow plots was a feature interpreted as a furnace. It comprised a stoke-hole (029/030) and possibly two chambers (142). The arrangement of brick, stones and iron slag fragments visible in the east-facing trench side probably represents the chamber lining (S90). All the fills were very dark and contained frequent charcoal flecks, occasional vitrified clay, bog iron and iron slag. This material would have been deposited after the furnace had gone out of use, possibly from a dump of the raked out debris.

Miscellaneous structures S05 and S14

The stony nature of the fills of gullies associated with S05 and S14 suggest these may relate to a building or trackway.

Pits

Pits P04 and P05 were located within 3 m of each other to the south of boundary ditch D08. They were both 1 m in diameter, over 0.3 m deep and had similar steep-sided profiles. The fills contained tile fragments but were otherwise unremarkable.

Phase 7: Unspecific activity, later 3rd century

A number of deposits, generally dark with high charcoal content, have been assigned to this phase.

Several (521, 523 & 526) located centrally within the *mansio* complex contained small quantities of iron slag and vitrified clay. The pottery assemblage is mixed but predominantly late 2nd to 3rd century AD. The interpretation of these layers is uncertain.

Phase 8: Redefinition of the settlement, late 3rd century (Fig. 7a)

The absence of activity infilling the *mansio* complex ditches, suggests that they continued to function. The majority of the Phase 6 plot boundaries to the south were redefined by new ditches, but closer to the *mansio* complex the earlier plots appear to have been sub-divided. Again the plots immediately south of the *mansio* complex are narrower (between 13 m and 38 m) than those to the south which, as in Phase 6, remained generally between 50 m and 70 m wide (Table 4 on microfiche). The boundaries nearer to the enclosure do not appear to have been laid out perpendicular to Stane Street.

It is conceivable that some of the narrower plots represent routeways, although the only track clearly identified (T08) comprised a stony surface. Significantly, this was immediately adjacent to the Phase 6 track.

Only one building and two pits were identified outside the *mansio* complex. This may indicate a trend in building away from the Stane Street frontage.

Ditches

The boundary ditches were usually over 0.8 m wide and often not bottomed (Figs 4e, f & 6d). The ditches within 100 m of the enclosure tended to contain tile fragments. D04 and D15 were significant in containing up to four tile fragments each, including flue tile (Fig. 4d).

Trackway T08 (Fig. 4e)

T08 comprised moderately sized gravel, which contained some iron slag and frequent tile fragments (600). It extended for 2 m and was defined by two slots (166) and (149) within which the arrangement of stones suggests they may have held timbers.

Buildings (Table 5 on microfiche)

Building B01 comprised a clay floor which was truncated to the north by a feature interpreted as one of Winbolt's trenches (Fig. 6f). There was no evidence for wall-lines although the clay ended abruptly to the south. Winbolt's (1924, 92) only trench west of the road identified a building he named the 'canteen' and it is possible this is related to B01. The rebuilt B02 (Phase 6) may have continued to function in this phase and S03, which sealed the earlier wall trench, may represent an extension of this building. To the south of the enclosure, B04 comprised a number of stone filled trenches or post pits.

Possible buildings (Table 6 on microfiche)

It is unclear what S15 and S18 represent. S18's location at the

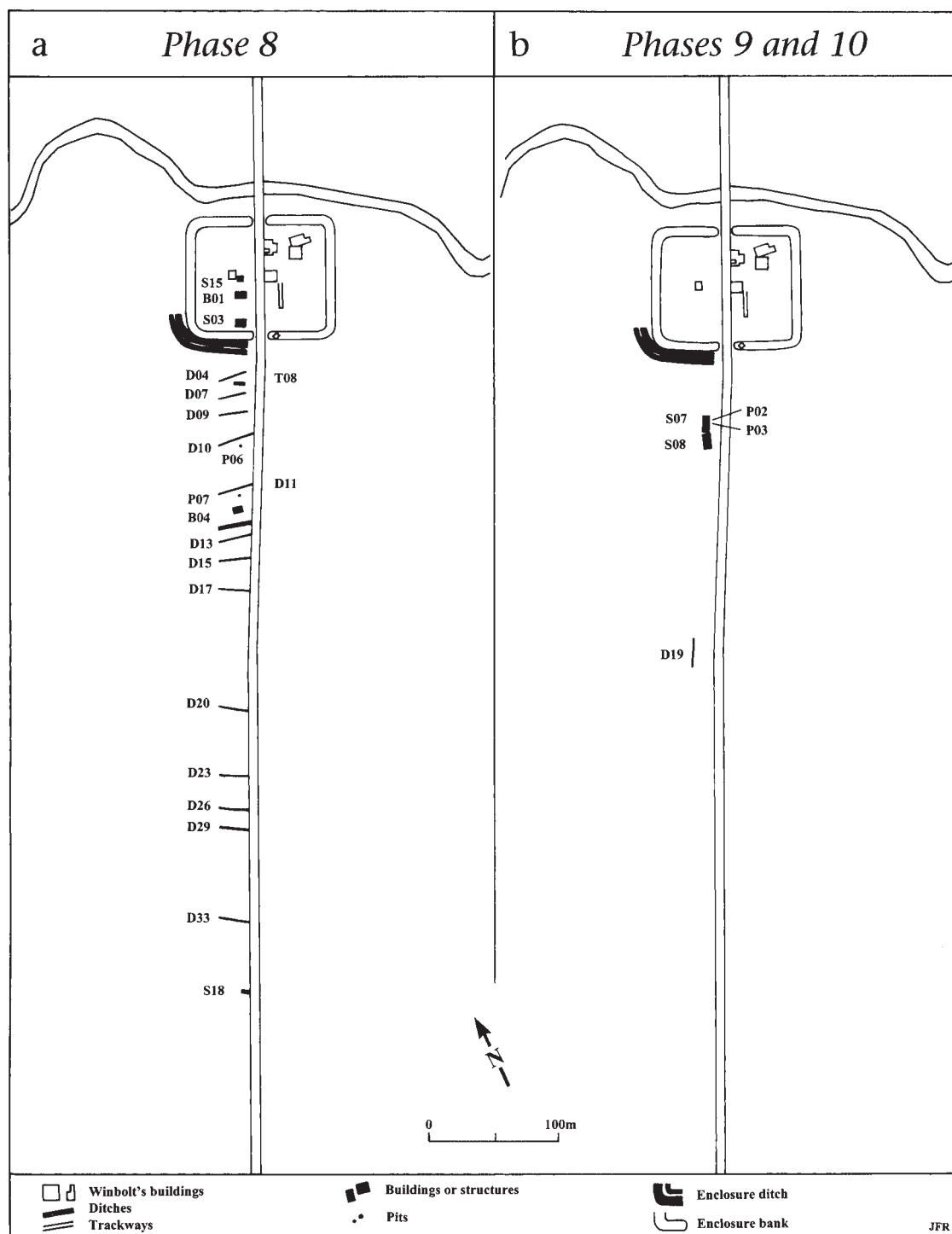


Fig. 7. Overall plans of Phases 8 (a) and 9/10 (b).

southern extent of the settlement suggests it may represent a settlement boundary feature.

Pits

The two pits assigned to this phase were located in adjacent land parcels. Both were less than 1 m in diameter and of varying depths (Fig. 4c).

Phase 9/10: Final evidence for occupation, 4th century (Fig. 7b)

There is only limited evidence for settlement activity in this phase. Two adjacent structures (S07 & S08) were situated 60 m south of the *mansio* complex. Their stony deposits may represent building makeup material. One (S07) was constructed over a Phase 8

boundary. Two pits (P02 & 03) truncated this structure and are presumed not to have been contemporary so were assigned to Phase 10. The only boundary feature (D19) was a ditch (Fig. 6c) parallel to Stane Street which truncated B05 (Phase 6).

Phase 11

The uniform nature of the fill over both of the *mansio* complex's southern ditches suggests these remained as extant hollows for a considerable period of time.

The majority of the features assigned to this phase represent land drains and recent field boundaries visible on historical maps.

THE ARTEFACT ASSEMBLAGE

INTRODUCTION

The artefact assemblage from both field artefact collection and the roadside trench comprised pottery, ceramic building material, and negligible quantities of other finds.

POTTERY

Introduction and methodology

A total of 1185 vessels, represented by 1597 sherds weighing 21.04 kg were recovered from the roadside trench. Field artefact collection yielded a further 961 sherds, weighing 10.1 kg. The assemblage was quantified by minimum vessel and sherd count, estimated vessel equivalent, and weight. Examination of attributes including extent of abrasion, presence of residues, sooting and wear marks was undertaken to provide an indication of the function of the pottery. This information is detailed in the site archive.

A sample of the pottery has been illustrated (Figs 8, 9 & 10). The pie diagram at the base of each pottery illustration indicates the proportion of the vessel recovered. Illustrated vessels are numbered sequentially and catalogued below.

Summarized type series

Twenty-five fabric groups were identified, based on macroscopic and microscopic examination of sherds. Subsequently, attempts to identify a source were made. These are summarized below (Table 7) and fully detailed on microfiche. An asterisk denotes fabric types recovered from the present investigation and identified by Winbolt. Full catalogues for Samian ware and *mortaria* are also on microfiche.

Undiagnostic body sherds comprise over 71 per cent of the pottery from field artefact collection and 53 per cent of the material recovered from the roadside trench. It is rare for a vessel to be represented by more than one sherd, attesting the disturbed nature of the assemblage.

Discussion with contributions by Joanna Bird (Samian ware) and Kay Hartley (*mortaria*)

The vessels recovered range in date from the mid 1st to the early 4th century AD, with a bias towards pottery of 2nd- to 3rd-century origin.

Local products

Although no pottery kilns are known at Alfoldean, it is quite feasible these may have existed (*see* Synthesis). No wasters were noted among the present assemblage, although a single, unsourced grey ware jar (Fig. 8:1) has been identified as a kiln second (Lyne pers. comm.). It is probable, however, that pot seconds were traded from various sources.

The majority of the assemblage comprises reduced quartz-sand-tempered wares deriving from a number of centres. One of the two principal sources appears to have been the Hardham kilns (Fig. 10:23–30). Winbolt's (1927, 121) observation that a large proportion of the pottery manufactured at Hardham was exported to Alfoldean is undoubtedly confirmed. The second source was the Alice Holt/Farnham potteries, which from c. AD 200 onwards, comprised the bulk of the assemblage, attesting the domination of the industry across the region.

Broadly contemporary with the sandy reduced wares are a number of East Sussex grog-tempered wares (Fig. 8:2), which constitute 3 per cent of the assemblage. Diagnostic forms date from the late 1st century AD to c. AD 270. Their presence at Alfoldean is thought to represent the westernmost extent of the core distribution area (Lyne pers. comm.).

Products of the Wiggonholt-Pulborough potteries comprise white, buff and oxidized wares in a range of forms, including table wares and kitchen wares (Fig. 8:3–5). This group dates from the late 1st to early 2nd century AD and constitutes 11 per cent of the assemblage. The majority of the *mortaria* recovered from the site also derive from this source (Fig. 9:14–21). Twenty-nine *mortaria* sherds were examined ranging in date from the Flavian period to c. AD 300+, although two-thirds belong to the period AD 140–200+. The only 1st-century AD *mortarium* is from the important potteries south of Verulamium. The thirteen examples from the workshop at Wiggonholt, dated AD 140–200+, illustrate the local fabric variations very well. Alfoldean would have been one of the major markets for this workshop, along with Chichester, Fishbourne, villas such as Chiddingfold and Rapsley, and other sites in the immediate area. It served primarily a local market, but a few of its *mortaria* reached London, where two stamped examples have been recorded. A *mortarium* fragment in a similar fabric with a herringbone stamp is known to have been recovered from the roadside trench, but its present location is unknown.

There were small workshops like that at Wiggonholt

Table 7. Summary of type series (* = fabric types recovered from present investigation and identified by Winbolt).

	Common name	% Assemblage	Source	Illustration no.
Type 1	Reduced wares	64.0	(1) Hardham* (2) Alice Holt/Farnham (3) Rowlands Castle valley (4) Upchurch* (5) Highgate Wood (6) New Forest* (7) unknown, probably local	23–30 22 1
Type 2	Black burnished ware (BB2)	4.0	North Kent	
Type 3	Black burnished ware (BB1)*	1.4	Dorset	
Type 4	Fine micaceous 'London Ware'	1.2	various London regions	
Type 5	Buff gritty ware*	<1.0	Hardham	
Type 6A	Fine white/buff wares	8.0	Wiggonholt	3, 4 & 5
Type 6B	Coarse white/buff wares	1.4	Wiggonholt	
Type 7	Grog-tempered wares	3.0	East Sussex	2
Type 8	Oxidized gritty ware	2.0	unknown, probably local	
Type 9	Oxidized sandy ware	<1.0	Wiggonholt	6
Type 10	White ware	<1.0	Verulamium region	
Type 11	Grey-cored oxidized sandy ware	<1.0	?Wiggonholt/Hardham variant	
Type 12	Oxidized ware	<1.0	Oxford region	
Type 13	Hoo fabric/white-slipped ware	<1.0	North Kent	7
Type 14A	Samian ware*	2.0	central Gaul	
Type 14B	Samian ware	1.1	south Gaul	10
Type 14C	Samian ware	<1.0	east Gaul	
Type 14D	Samian ware	<1.0	Aldgate/Pulborough	8, 9, 11–13
Type 15	<i>Mortaria</i>	<1.0	(1) Verulamium region (2) Oxford region (3) Rhineland (4) Wiggonholt (fabrics i–vii)	14–21
Type 16	Fine wares*	4.0	New Forest	
Type 17	Colour-coated wares	<1.0	Nene Valley	
Type 18	Colour-coated wares	<1.0	Colchester	
Type 19	Colour-coated wares	<1.0	Trier	
Type 20	Fine wares (reduced)*	1.1	New Forest	
Type 21	Parchment ware	<1.0	Oxford region	
Type 22	Colour-coated wares	<1.0	Cologne	
Type 23	Reduced sandy with red margins	<1.0	?late product from Hardham	
Type 24	Gritty buff/grey wares	<1.0	Hardham variant (cf. Type 5)	
Type 25	Hard orange wares	<1.0	unknown, probably local	

producing *mortaria* and other coarse ware, throughout Roman Britain in the 2nd century AD. Most had ceased to exist by the end of the 2nd century AD or the early 3rd century AD. In the south, their markets were very largely taken over by the Oxford potteries and it is no surprise that a quarter of this sample is from this source, all dating later than AD 240.

Locally manufactured wares are also attested by imitation Samian vessels by the Aldgate-Pulborough potter, dating c. AD 98–138. Three decorated sherds (Fig. 8:8, 9 & 12) and between four and six plain vessels (Fig. 8:11 & 13) are represented. It now seems probable that at least two potters were active at this workshop (Dickinson 1994, 137–8), although the decorated pieces are all in the same rather clumsily modelled style.

Regional imports

Regional imports are poorly attested and constitute c. 2 per cent of the total. This is interesting, given the accessibility of the site to goods presumed to have been transported up and down Stane Street between London and the south coast. The proportion of imported wares does, however, appear to be similar at Hardham (Winbolt 1927, 102ff.).

A small quantity of grey wares from non-local sources is present, including a 2nd-century AD poppy head beaker from Highgate Wood C kilns and similarly dated vessels from Upchurch and Rowlands Castle (Fig. 10:22). Although the distribution route of the latter was predominantly along the coastal plain, it is now known to have reached Alfoldean via Stane Street. The kilns are thought to have been functioning from the later 1st century AD until the 3rd century AD (Cunliffe 1971, 252, 254).

Regional imports also comprise 2nd-century AD vessels from the Verulamium region potteries, BB2 (c. AD 130–early 3rd century) and white-slipped wares from north Kent (Fig. 8:7). Diagnostic BB1 vessels from south-east Dorset date from c. AD 220–300 and comprise less than 2 per cent of the assemblage. The rarity of this normally abundant type attests the dominance of the Alice Holt/Farnham industry in the immediate local market. The later period is represented by fine table-wares from Colchester, the Nene Valley and Oxfordshire. Late Roman fine wares from the New Forest potteries constitute 5 per cent of the total. Fabrics from these industries dominated the fine ware markets in the later Roman period after the cessation of Samian imports to Britain in the mid-3rd century AD.

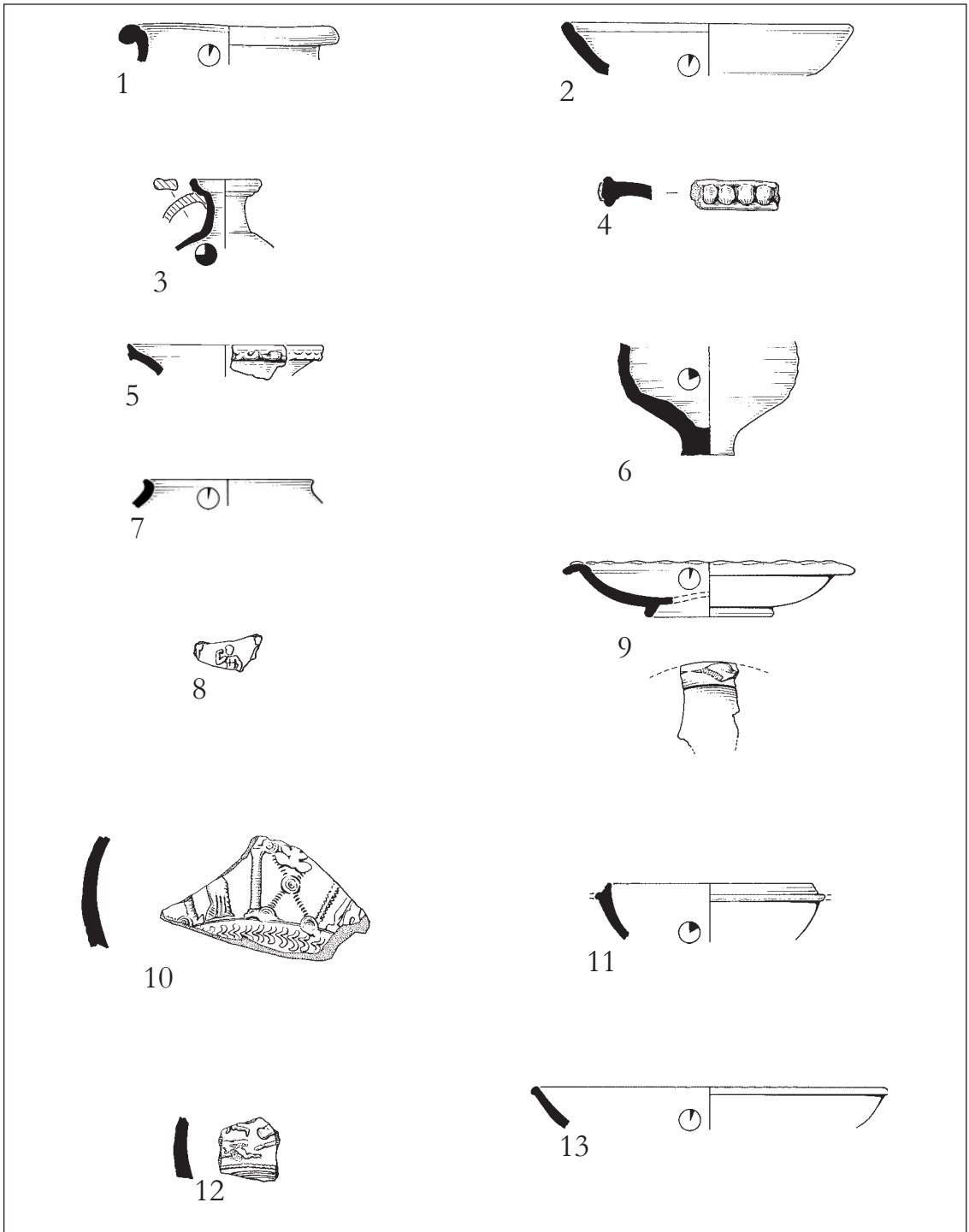


Fig. 8. Selected local wares and Samian. Scale 1:4.

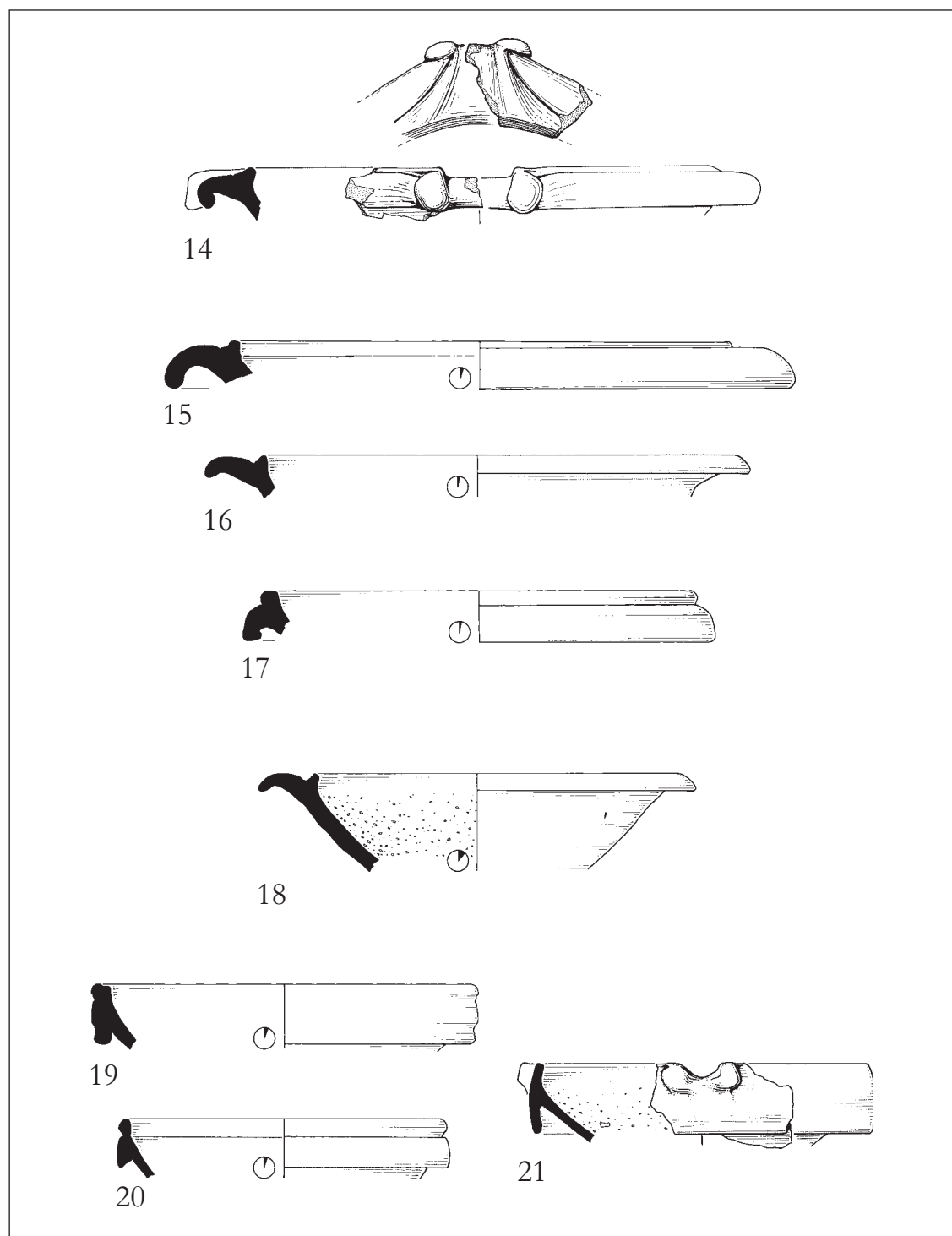


Fig. 9. Selected *mortaria*. Scale 1:4.

Table 8. Catalogue of illustrated vessels.

Illust. no.	Type		Description
1	1 (7)	Reduced-ware	Possible kiln second
2	7	East Sussex grog-tempered	Platter copying Gallo-Belgic form
3	6A	Fine white/buff ware	Flagon
4	6A	Fine white/buff ware	Large bowl with applied decoration
5	6A	Fine white/buff ware	Tazza
6	9	Oxidized sandy ware	Amphora stopper
7	13	Hoo fabric/white-slipped ware	White-slipped beaker
8	14D	Aldgate-Pulborough	Dr 37 bowl depicting a small figure possibly flanked by caryatids
9	14D	Aldgate-Pulborough	Dr 36 dish with barbotine partially lifted on the rim
10	14B	South Gaulish (Montans) Samian	Dr 37 bowl depicting a Minerva figure
11	14D	Aldgate-Pulborough	Curle 11 bowl with deliberately chipped flange
12	14D	Aldgate-Pulborough	Dr 37 bowl: freestyle design depicting a hare, ?panther & human figure
13	14D	Aldgate-Pulborough	Dr 18/31 dish
14	15 (4)	Wiggonholt	Flanged <i>mortarium</i> with part of left-facing spout
15	15 (4)	Wiggonholt	Flanged <i>mortarium</i>
16	15 (4)	Wiggonholt	Flanged <i>mortarium</i> with neat grooves in the side of the bead
17	15 (4)	Wiggonholt	<i>Mortarium</i> with high bead & a flange in two planes
18	15 (4)	Wiggonholt	Flanged <i>mortarium</i>
19	15 (4)	Wiggonholt	Wall-sided <i>mortarium</i> with collar divided into 3 zones
20	15 (4)	Wiggonholt	Flanged <i>mortarium</i> (cf. Young M12)
21	15 (4)	Wiggonholt	Wall-sided <i>mortarium</i> with very thin collar & surviving spout
22	1 (3)	Reduced-ware (Rowlands Castle)	Jar
23	1 (1)	Reduced-ware (Hardham)	Jar
24	1 (1)	Reduced-ware (Hardham)	Jar
25	1 (1)	Reduced-ware (Hardham)	Jar
26	1 (1)	Reduced-ware (Hardham)	Bowl (Ritterling copy)
27	1 (1)	Reduced-ware (Hardham)	Bowl
28	1 (1)	Reduced-ware (Hardham)	Dog-dish
29	1 (1)	Reduced-ware (Hardham)	Bowl
30	1 (1)	Reduced-ware (Hardham)	Storage jar

Continental imports

Continental imports constitute c. 4 per cent of the assemblage. This is directly comparable with the assemblage from all phases at Neatham (Millett & Graham 1986, 87). Of the imports at Alfoldean, the majority are Samian vessels (102 sherds) ranging in date from the mid-1st century AD to the first half of the 3rd century AD. Vessels of central Gaulish origin predominate, although examples from east and southern Gaul are also represented. Of significance among the latter is an unusual decorated bowl (Fig. 8:10) by one of the later potters working at Montans.

Other imported wares comprise colour-coated beakers from Cologne and Trier, dated AD 130–200+ and AD 200–276 respectively. Interestingly, only a single imported amphora fragment was recorded (whereabouts unknown), although a number were recovered by Winbolt (1923, 147). A locally manufactured amphora stopper (Fig. 8:6) was, however, recovered from the present study area. One *mortarium* is an import from the Rhineland: such *mortaria* are widely represented on sites in southern and south-western England, but unfortunately cannot be dated more closely than AD 150–300.

The pottery and the phased sequence

The pottery was examined by phase but use of this material to assist in the dating of phases has proved problematic. Nearly 70 per cent of the pottery recovered from the roadside trench derived from topsoil and modern boundary features. The majority of the diagnostic forms derive from this unstratified

material. Much of the stratified material comprises small and undiagnostic body sherds. Many derive from Phase 5 and 7 layers which may have accumulated over a long period of time and whose nature and significance is uncertain. Consequently a discussion of the pottery by phase has been considered inappropriate. Where relevant, pottery has been discussed above in the phased sequence.

BUILDING MATERIAL

Brick and tile

Owing to the large quantity of brick and tile visible within the roadside trench and during field artefact collection (*see above*), only a sample was retained. Although the majority of the 210 fragments observed in the roadside trench (Table 8 on microfiche) were undiagnostic, their thickness and general appearance suggested that many were probably *tegulae*. During field artefact collection all flue and selected other tiles were kept (148 in total).

Two fabric types were identified namely (a) uniformly oxidized fine sand-tempered, and (b) coarse/vesicular oxidized sand-tempered with a blue-grey core. The predominant tile forms were *tegulae*, flue tile and *imbrices*. The presence of the ubiquitous animal prints was noted, including an *imbrex* marked by the paw prints of a dog. A number of the *tegulae* contained 'signatures', comprising simple finger-impressed semi-circles at the tile edges.

Flue tiles, identified by their keying patterns, were mainly located within the *mansio* complex (Fig. 2a). Patterns noted

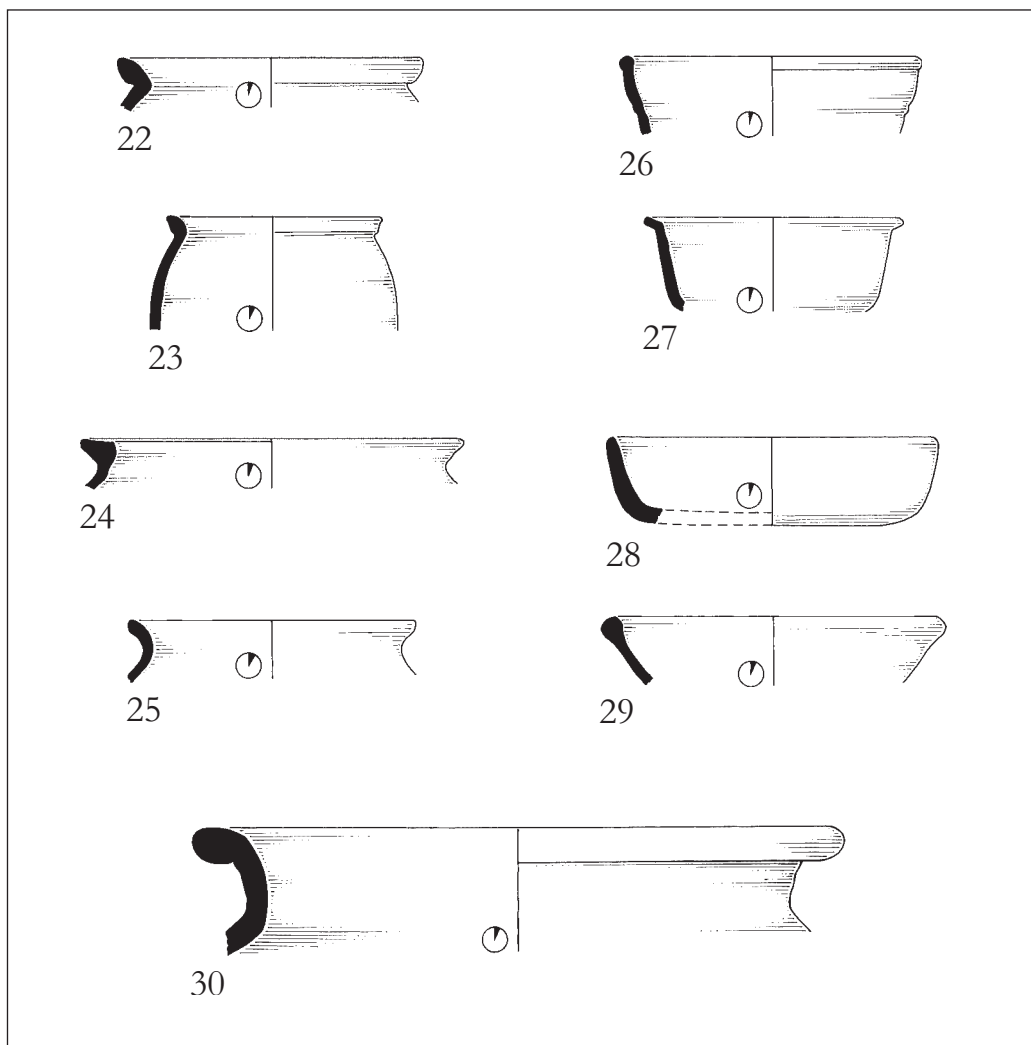


Fig. 10. Selected coarse wares. Scale 1:4.

were achieved by roller-stamping (relief-patterned tiles) and combing, the latter being predominant. Combed surfaces occur in either a wavy or straight-line pattern. The use of four, seven and nine pronged combs is attested, giving combing widths of 26 mm, 38 mm and 33 mm respectively. Green's examination of flue tile recovered from Alfoldean (1970, 32), indicated that, based on the use of two distinctive combs (four- and seven-pronged), much of the material derived from Itchingfield. Interestingly, no nine-pronged tiles were recovered from Itchingfield or Wykehurst.

A number of relief-patterned flue tiles were recovered during field artefact collection, all deriving from within the *mansio* complex. The recent corpus of relief-patterned tiles (Betts *et al.* 1994) records the presence of stamped tiles using dies 4, 5 and 66 (W-chevron) among the material collected during field artefact collection. Other dies recorded from the

site in this corpus include 22 and 23 (Diamond and Lattice), identified by Brodribb (1987) and possibly die 16 (Diamond and Lattice) identified by Lowther (1948). The latter also apparently identified dies 18 and 19, but this was a mis-identification based on a photograph of tiles found in Winbolt's excavations at Folkestone (Betts *et al.* 1994, 90–91).

Betts *et al.* (1994) have suggested provisional dates for the use of the dies. Those from Alfoldean range from the Flavian period (dies 22 & 23) to the mid- to late-2nd century (dies 4, 5, 16 & 66). It has been suggested (Black 1985, 359–60) that the widespread occurrence of die 16 at *mansio* sites may indicate a co-ordinated programme of building, possibly linked to the governmental assumption of responsibility for *mansiones*.

Three incomplete Type A *tegulae mammatae* (Brodribb 1987, 60) were recovered from ploughsoil within the *mansio* complex. At least one other fragment has been found at

Alfoldean (Winbolt 1923, 104). Brodribb suggested their purpose was to assist bonding when used in walls or floors, although Cunliffe (1971, vol. 2, 43) proposed the idea that the bosses were added to act as spacers during firing. At both Fishbourne (Cunliffe 1971, vol. 2, 43) and Gorhambury (Neal *et al.* 1990, 169) they appear to be a later 1st-century AD phenomenon.

The percentage of tile occurring within each of the phases is fairly uniform following the establishment of the settlement in Phase 3. However, the distribution of tile within the roadside trench is concentrated inside and within 230 m south of the *mansio* complex.

Daub and fired clay

Although the presence of daub and fired clay was recorded within the roadside trench, only five fragments were retained. Two pieces (300 g) derived from topsoil (308) in the vicinity of B05, and the remainder (296 g) from topsoil (306), inside the enclosure. Fragments from (308) retain surfaces and edges, and the larger piece has a wattle impression (c. 35 mm diameter).

Opus signinum

A single fragment of *opus signinum* (wt 101 g, thickness 30.0 mm) was recovered during field artefact collection from the vicinity of the 'officer's quarters' (Winbolt 1923, 91–2).

OTHER ARTEFACTS

Other artefacts comprise a disparate group in contrast to the range of material recovered by Winbolt.

Spindlewhorls

Two ceramic spindlewhorls were recorded. One unstratified example deriving from topsoil (308) is made from a re-used fine greyware base sherd of Hardham type (dia. of perforation 7.0 mm, thickness 6.0 mm, dia. 41.0 mm, wt 21 g). The second was recovered from T09 (Phase 2) and is a moulded and lathe turned whorl in unprovenanced coarse grey ware (dia. of perforation 6.0 mm, thickness 10.0 mm, dia. 32.5 mm, wt 14.5 g).

Quernstone

An incomplete upper stone from a rotary quern was recovered during field artefact collection, approximately 180 m south of the *mansio* complex. The stone has an estimated diameter of 340 mm, an average thickness of 41.0 mm, and retains part of

the central feeder. The Lower Greensand from which the quern is made, is likely to have been locally obtained. A comparable example was recovered from the spoil of the roadside trench 220 m south of the *mansio* complex (Aldsworth 1987, 221).

WINDOW GLASS

Five fragments of pale green window glass were recovered, ranging in thickness from 1.5–3.5 mm. One retains a U-shaped rounded edge, and all have semi-glossy surfaces, air bubbles and striations characteristic of cylinder blown glass (Harden 1961, 46–7). Single fragments derive from T09 (Phase 2), B02 (Phase 6) and two from topsoil within the roadside trench. An additional fragment was recovered during field artefact collection from inside the *mansio* enclosure (west).

VESSEL GLASS

Two unstratified fragments of colourless vessel glass derived from topsoil (308). One fragment has a vertically running rib and may be part of a globular ribbed jar. The period of manufacture of the latter extends from the Flavian period to the early 2nd century AD. The second fragment is undiagnostic.

INDUSTRIAL RESIDUES (incorporating comments by Jeremy Hodgkinson)

Thirty-eight fragments of ferrous slag and vitrified clay were recovered from the roadside trench (Table 9 on microfiche). Samples of bloomery refuse among the material suggest a source in the re-heating process whereby raw blooms from nearby smelting sites might have been brought to Alfoldean for working prior to sale or dispatch. The slag distribution shows three concentrations: centrally within the *mansio* complex, immediately to the south in the vicinity of S06 and to the north of B05. The presence of bog iron within Roman features may indicate the exploitation of this naturally occurring resource in the industrial process. The frequent pieces of vitrified clay suggest the presence of kilns or furnaces. It is unclear whether they are connected with iron-working.

IRON OBJECTS

Iron objects comprise the fragmentary remains of two possible staples and six square-sectioned nail shanks. A single complete example of a Type 1A (pyramidal head) timber nail (Manning 1985, 134) was also recovered. Stratified iron objects derive from layers (515), (577) and (667) Phase 5, the fills of D28 and S06 Phase 6, layer (690) Phase 8, and D19 Phase 10.

SYNTHESIS OF FIELDWORK RESULTS AND RE-INTERPRETATION OF ALFOLDEAN

The evidence described above can be discussed in relation to various themes associated with Roman settlement in the Weald and roadside settlements in general. Inevitably it is impossible to discuss these without referring to the work of Winbolt in the 1920s. Although his published reports are difficult to follow in places, Cunliffe (1973, 71) seems a little harsh in referring to 'the lamentable quality of the excavations of 1922–3'. It is largely the re-

examination of these excavation reports by Luke (1985) and Black (1987) that has permitted the identification of the *mansio* buildings at Alfoldean. These are now known to be only one element of the settlement.

ORIGINS OF THE SETTLEMENT

Construction of Stane Street

The construction of Stane Street is fundamental to any discussion on the origins of the settlement. It is generally accepted that much of the road system in the south-east was established in the 1st century AD, with London at its strategic centre. It was primarily

intended as a military road system (Black 1995, 1). Although a pre-Roman settlement and conquest period military supply base existed in the Chichester/Fishbourne area (Drewett *et al.* 1988, 184), it is thought a settlement/military supply base was not established at London before c. AD 50 (Merrifield 1983, 26–36). It seems likely that the construction of Stane Street in this area would have commenced shortly after the establishment of London.

Although there is no evidence at Alfoldean for construction camps or quarries adjacent to the road, the prospect of a river crossing makes their former existence likely. Two extensive stony deposits recorded within the roadside trench may represent or be related to Stane Street (Phase 2). Based on the location of these deposits, Winbolt's information and the orientation of the 19th-century road and boundaries, it has been possible to estimate the position of Stane Street through the study area. This is crucial to much of the discussion on the morphology and layout of the settlement.

Establishment of settlement

The complex origins of similar roadside settlements have been discussed by many authors, for example Smith (1987, 3–19), Hingley (1989, 25–9) and Black (1995, 30–31). A number of authors have suggested that the establishment of Alfoldean was linked with a postulated fort (Webster 1980, 139) or other military post (Bird & Bird 1987, 165). However, as Winbolt (1923, 100) noted, no military material (apart from an enigmatic catapult ball) or structures are known.

Black (1995, 15), unlike other authors, believes that economic conditions alone could not have created the system of roadside settlements. As roadside settlements often served the interests of the Roman government or relevant *civitas* authority, Black (1995, 30) suggests some were deliberately established from the late 1st century AD and settlers encouraged. Official travellers would have expected them to provide overnight accommodation, food, change of vehicles/animals and the protection of their goods. These could be provided within private residences or in official complexes (*mansiones*).

The date of establishment is still not precisely known, although the artefactual assemblage recovered by the recent work, together with Winbolt's from the 1920s suggest this may have

occurred in the mid 1st century AD. The coins series noted by Winbolt started with Nero and continued up to a coin of Valentinian (Winbolt 1939, 151–2). The earliest formalized settlement at Alfoldean (Phase 3) comprised a series of tracks/boundaries orientated perpendicular to Stane Street and defining plots of land between 68 m and 131 m wide. Similarities in plot width and boundary construction suggest an organized, possibly officially imposed, layout to the settlement. Broadly comparable layouts are known at Godmanchester (Burnham & Wachter 1990, 12) and Hibaldstow. Smith (1987, 31) noted for the latter that land was not divided equally among settlers. At Alfoldean the plots contained probable buildings, including a possible round-house (S09) and hearths.

THE MANSIO COMPLEX

Small towns often contained only one or two buildings of above average size and more sophisticated plan. Such buildings are frequently interpreted as the accommodation area of a *mansio*, as for example at Chelmsford (Drury 1988). Black (1987, 25) believes the latter was enclosed within a substantial rampart and ditch. It is possible that some establishments also housed officials involved with policing and tax collection. A number of the buildings investigated by Winbolt in the north-east corner of the settlement at Alfoldean have been interpreted by Black (1987, 120–23) as those of a *mansio*. The new fieldwork has demonstrated that these are the only sophisticated buildings within the settlement. Along with accommodation buildings there would also have been a bathhouse, stabling, staff quarters and secure wagon park.

Apart from the relief-patterned flue tile (*see below*), the dating evidence for the *mansio* buildings is solely derived from Winbolt's investigations. Some of these buildings were in existence by the mid 2nd century AD (Winbolt 1923, 92). Winbolt's (1924, 118) discovery of a coin of Valerian on the surface of one of the mortar corridors (apparently under collapse/demolition material) indicates that some *mansio* buildings continued to function until at least the mid 3rd century AD.

Accommodation buildings

Winbolt (1923, 92) identified a building that he called the 'officer's quarters', which comprised evidence of hypocausts, mortar and tessellated floors and stone/brick walls (or robber trenches). As well

as the structural remains, Winbolt's artefact assemblage from this area included *opus signinum*, *tesserae* (red, white and blue), painted wall plaster, window glass, flue and roofing tile, indicating an elaborate building. This has been complemented by recent field artefact collection. Black (1987, 122) is clearly correct in his interpretation of this building as the residential part of the *mansio* complex. If the isolated corridors and floors, identified by Winbolt, are part of the same building then this would have been substantial, extending up to 50 m north to south and 30 m west to east. Corridors frequently occur in *mansio* buildings, providing communal access to a range of individual rooms. Black (1995, 56–7) believes that courtyard buildings (for example at Wall: Round 1992) and 'barrack-like' buildings (for example at Caves Inn: Lucas 1984) both served as *mansiones* despite differences in design.

Bathroom

Black (1987, 122) suggests that the area described by Winbolt (1924, 119) as comprising 'thin pink-mortar floors', immediately north of the accommodation building, is the best candidate for a bathroom (see Summary of previous archaeological work). This is supported by Winbolt's description of 'two layers of big tiles' suggestive, perhaps, of a *pila*. The field artefact collection has demonstrated that the 'keyed wall-brick' (flue tile) and 'nipple bricks' (*tegulae mammatae*) described by Winbolt will largely have been recovered from this area. The extent of the mortar spreads at Alfoldean is comparable to a number of small bathhouses associated with *mansio* complexes identified by Black (1995, fig. 70).

Both relief-pattern and combed flue tile have been found within the *mansio* complex. Betts *et al.* (1994) include fragments of relief-patterned tile from the field artefact collection and previous investigations at Alfoldean. Black (1987, 122) considered that the dies he had viewed from the site were in use c. AD 90–110 and c. AD 150–80, indicating that the construction of the major buildings was not contemporaneous. The presence of *tegulae mammatae* supports the later 1st-century AD date (see Brick and Tile section).

Western half of *mansio* complex

There is no conclusive evidence, in terms of elaborate buildings, to suggest that the *mansio* complex extended west of Stane Street prior to the

earthworks' construction. However, if the Phase 3 boundary T01 were projected to the east it would coincide with the end of Winbolt's 'long corridor' (Winbolt 1924, plan on p. 113). Therefore, this may represent the southern limit to the original complex. In contrast to the substantial buildings east of Stane Street, probably constructed towards the end of the 1st century AD, only two small hearths were identified west of Stane Street in Phase 3. However, in Phase 6, building B02 comprised of a stone makeup layer, clay floor and wall trenches, was the most substantial building identified within the roadside trench. By Phase 8 it is likely that the western street frontage contained several buildings, corresponding to those identified by Winbolt on the east.

The earthwork enclosure

Probably sometime in the later 2nd century AD the *mansio* complex at Alfoldean was surrounded by a bank and two (?) ditches. Although dating evidence is limited to pottery in the Hardham tradition, the enclosure did not respect the layout of the earlier Phase 3 settlement. No boundary ditches were found within the enclosure, suggesting its establishment prior to Phase 6 settlement. The construction of the earthwork on the east side of Stane Street may have resulted in the demolition of a building, the 'tumbled remains' of which were described by Winbolt (1924, 120) as the 'guardroom'. Although not specifically mentioned, this would appear to have been located within the southern bank (see Winbolt 1924, plan on p. 113). It apparently contained a coin of Trajan and 1st-century AD Samian ware. The dating, by Winbolt, of a number of the substantial buildings within the north-east corner of the settlement, suggest they are contemporary with the enclosure.

Of the comparable enclosed so-called *mansio* complexes, only Neatham has produced a convincing date for construction. There, the primary silting of the ditches took place in the late 2nd or early 3rd centuries AD (Millet & Graham 1986, 43). The evidence from both Neatham and Hardham suggests that the enclosures, as at Alfoldean, were constructed within pre-existing settlements.

Winbolt's (1924, 112) measurements of the enclosure banks at Alfoldean are confirmed by the 1870 OS map. The banks were 93 m north to south and 106 m west to east enclosing a rectangular area of 0.9 ha. Comparable rectangular enclosures

surround the presumed *mansio* complexes at Hardham (1.4 ha), Iping (0.8 ha) and Neatham (1.8 ha). Rivet's published plan (1964, fig. 5) highlights just how small these enclosures were in comparison to small towns.

The eastern bank at Alfoldean was described by Winbolt (1924, 112) as 4.6 m wide and composed of 'local clay'. The roadside trench truncated the southern earthwork, which initially comprised a bank 4.3 m wide, separated from its ditch by a berm of c. 3 m. The inner ditch was a maximum of 6 m wide and the outer 2.8 m. Only at Neatham have enclosure ditches been reliably excavated, the inner 8 m wide and outer 6 m, both approximately 2 m deep (Millet & Graham 1986, 43). Both the roadside trench and aerial photographs make it clear that the two ditches continued, at least partially, round the west side of the enclosure at Alfoldean. Other than Winbolt's (1923, pl. II; 1924, 113) published plans, there is no evidence to suggest an earthwork existed on the northern (river) side of the *mansio* complex. The southern bank was extended over the berm, presumably when the ditches were recut. There is no dating evidence for this at Alfoldean but at Neatham both ditches were re-established in the mid 3rd century AD (Millet & Graham 1986, 43). In contrast to Neatham, at Alfoldean there is no evidence that the ditches were ever deliberately backfilled.

A shallowly buried enigmatic pitched stone, tile and brick feature 1.5 m wide, was identified, by Winbolt (1923, 89, 91, pl. III; 1924, 114) who believed it was associated with the north and east banks. It is variously interpreted as a 'wall-footing, or more probably, as an *intra-vallum* roadway' (Winbolt 1923, 91). Although he described it as being situated on 'top of the *vallum*', the published plan suggests that it was inside. Confusingly he claimed it was joined by the mortar 'path' (reinterpreted as a corridor), which apparently 'sloped down through the *vallum*' at the south-east as if to cross the ditch, but could not be traced in or beyond the ditch. One further enigmatic element of this feature is marked 'Bastion?' (Winbolt 1923, pl. II) but this is not discussed in his text. Black (1987, 122) discusses the possibility that this is part of later alterations to the earthwork. No evidence was found in the roadside trench for a similar feature associated with the southern earthwork. At Hardham, Winbolt (1927, 100–101) believed that he had located both a wall at the corner of the enclosure and an '*extra-vallum* road'.

MORPHOLOGY OF THE REST OF THE SETTLEMENT

The *mansio* complex was only one part of the settlement at Alfoldean. The roadside trench and field artefact collection have revealed the full extent and details of the internal morphology of the settlement, the existence of which Cleere (1978, 60) doubted.

Settlement extent

The distribution of Roman material, primarily from field artefact collection, suggests the settlement extended for 600 m south of the River Arun. The maximum extent of the settlement, including the *mansio* complex, is now known to have been approximately nine hectares (Fig. 2). Like so many roadside settlements, occupation was concentrated in a 'ribbon' within 40 m of the main road. Only in two distinct areas is there evidence for settlement having developed away from the road. Although river transport is often suggested for the Weald (e.g. Cleere 1978, 60), there is no evidence that Alfoldean developed to exploit the river.

Although there is minimal evidence that the settlement continued north of the river plain, this cannot be ruled out. Winbolt (1929, 219) records what he believed to be the course of Stane Street in the back garden of Roman Gate Cottage (Fig. 1), but there is no mention of occupational debris other than the iron slag core of the road (*see below*). Green (1970, 32) refers to examining tiles 'from Roman Gate (= Alfoldean)', so these are also likely to be from south of the river. The only known Roman artefact from north of the river is a coin (Winbolt 1930, 264).

Trackways/streets

The regular system of trackways established in Phase 3 were too insubstantial to have served more than the needs of the plot-holders. However, in Phases 6 and 8, more substantial trackways T07 and T08 (respectively) were constructed. These are located c. 20 m south of the *mansio* complex and may be related to the occupation behind the street frontage plots identified by Elliott (1994). It may be no coincidence that the three linear cropmarks which may define a trackway are located in this area. A number of the narrow plots could represent routeways in-between roadside properties providing access to land behind the settlement.

Land plots

The identification of boundary features within the roadside trench has made it possible to map the land

division adjacent to the west side of Stane Street for the entire settlement. As Smith (1987, 22–33) demonstrated, this is a relatively rare occurrence, despite aerial photography and geophysical surveys. There is a general contrast in Phases 6 and 8 between the west to east land plots immediately south of the *mansio* complex and those aligned north-west to south-east (perpendicular to Stane Street) further to the south (Figs 3 & 7). A similar phenomenon has been observed at Hibaldstow where the excavator suggested that the difference may reflect the later expansion of the settlement, the land contours, or a branch road (Smith 1987, 29). The latter two reasons are plausible for Alfoldean. Here the west to east boundaries are on shallowly sloping ground and potentially could be aligned on the three parallel cropmark ditches which may reflect a trackway.

Generally the plots were larger in the earlier phases, and became increasingly smaller over time. This presumably reflects sub-division and alteration to the original plots, as observed at Hibaldstow (Smith 1987, 31). It is interesting that only a small number of plot boundaries coincide in different phases. This may reflect amalgamation and more extensive reorganization of the land plots.

Although there is no consistent plot width, there are a number which occur more than once in each phase. For example in Phase 3, the widths of 90 or 110 m, in Phase 6 widths of 10–22 m, 61–68 or 108 m, and in Phase 8 14–25 m or 36 m. The land plots within other settlements have indicated some uniformity, for example boundaries at Catsgore (26 & 46 m), Fenny Stratford (19 & 38 m) and Hibaldstow (15–18 & 30 m). The 25 m distance between pit clusters was used at Neatham to deduce plot widths due to the absence of surviving boundaries (Millet & Graham 1986, 153). At Alfoldean the reduction in Roman material within the ploughsoil suggests plots may be 40 m deep and therefore comparable to Neatham.

Roadside settlements exhibiting ribbon development along one main road are often only one plot deep. However, at Fenny Stratford (Neal 1987, 30) depths of two and three were observed. These do not always contain evidence of domestic activity and are sometimes viewed as ancillary to the roadside plots to which they were attached. At Alfoldean the two concentrations of Roman material behind the roadside plots may reflect this type of settlement layout.

Building layout and types

Seven definite and ten possible buildings were identified, all of which owing to the location of the roadside trench, would have been located within 10 m of Stane Street. With the exception of one possible roundhouse (S09), all are presumed to have been rectangular. The majority were timber-walled with clay floors. Only in two instances (B02 & B03) was there a suggestion that stone footings were utilized to support the walls. To the east of Stane Street Winbolt (1924, 122) located *tegulae* with their flanges turned downward onto a clay floor suggestive of a substantial hearth.

Only in one case was it possible to ascertain with any degree of confidence the width and length of a building: B05 was 8.8 m wide and over 13 m long. It was orientated parallel to, and within 2 m of Stane Street.

It has been possible to make an imprecise distinction in orientation of buildings at Alfoldean based on observed widths. Those buildings less than 5 m wide (3 definite and 3 possible) may be orientated perpendicular to the road, and those over 7 m (4 definite and 3 possible) may be parallel to it. Although the excavated parts of Hibaldstow indicated a common orientation of buildings perpendicular to the street frontage, settlements like Alfoldean and Neatham indicate that the situation may be more mixed.

THE ECONOMIC BASIS FOR THE SETTLEMENT

Alfoldean was part of an established network of settlements situated along Stane Street with the primary purpose of supplying the needs of official travellers (Black 1995, 15). It may also have fulfilled, to a minor degree, some of the same objectives behind the creation of *civitas* capitals, i.e. as centres for administration. However, the extent of the settlement outside the *mansio* complex suggests other economic functions need to be reviewed.

Agriculture

The presence of querns and spindlewhorls is testimony to small-scale preparation of food and clothes. The settlement at Alfoldean is likely to have maintained strong agricultural connections, not least because its inhabitants, as well as travellers, had to be fed, clothed and serviced.

Craft and industry

Evidence for craft and industry is notoriously difficult to identify without large-scale fieldwork.

Strip buildings of the sort tentatively identified at Alfoldean adjacent to the street frontage are often interpreted as combined shop (at front), manufacturing (central) and residence (rear).

The quantities of iron slag recovered from Roman features and deposits may be testimony to smelting and forging as noted at Wiggonholt (Evans 1974, 110). It is interesting that although the slag derived from different phases, it occurred in only three locations; centrally within the western half of the *mansio* complex, immediately to the south in the vicinity of S06 (a possible furnace) and just north of B05. The nearest known iron-working site is located 14 km to the east at Broadfield (Cartwright 1992). However, the recovery of fragments of bog iron from Roman deposits may suggest an attempt was made to produce iron from locally available material. Iron slag formed the core of the road believed to be Stane Street at Roman Gate (Winbolt 1929, 219), although a post-medieval date cannot be ruled out.

Distinctive comb marks on flue tile demonstrate that products of the Itchingfield workshop (4 km to the east) reached Alfoldean (Green 1970, 108). Both sites share similar locations and it is possible tile was also manufactured at Alfoldean itself. The concentration of flue tile noted 260 m west of Stane Street may represent the products of a tile kiln. It may be significant that the presumed quarry pits visible on aerial photographs are located in this area. The unprovenanced nine-pronged comb may tentatively be considered in the discussion of tile manufacture at Alfoldean. It is conceivable that Itchingfield, like the Wykehurst kiln close to the Rapsley villa, was constructed primarily to supply tile and brick to an as yet unidentified villa in its vicinity.

A small percentage of the reduced ware pottery is unsourced, including a possible kiln second. Although no wasters were noted, the possibility of pottery manufacture cannot be ruled out.

Market

The concept of local centres serving as markets has been discussed by Hingley (1989, 111–20). As Burnham and Wachter (1990, 44) noted of small towns, at one level they would have supplied a range of services and facilities for residents and travellers, while at another they would have provided periodic or permanent markets for the surrounding countryside. Burnham and Wachter (1990, 44) suggested that 10–12 km was the maximum distance people would travel by foot

to markets (halved for mounted pack animals). These figures indicate the potential catchment area for the settlement at Alfoldean.

The range of goods found at Alfoldean indicates effective trading. Given their location on Stane Street 16 km to the south of Alfoldean, it is not surprising that much of the pottery assemblage described in this article is derived from the Arun Valley Potteries (Hardham and Wiggonholt kilns). The large quantity of Alice Holt/Farnham products is a little surprising given the apparent absence of a main road between the sites.

Cooper (1984, 82) highlighted the likelihood that Alfoldean was involved in the supply of a range of products, including pottery from the Arun Valley and tile from Itchingfield, to the Chiddingfold villa located 14 km to the west. Due to the absence of a main road close to the villa, it was suggested that many goods were transported from Alfoldean *via* the Arun. Much has been made of the possibilities of river transport (Burnham & Wachter 1990, 43), which the settlement at Alfoldean would appear to have been ideally sited to utilize. However, based on the morphology of the settlement, Stane Street was the dominant influence.

The distribution of villas around similar settlements such as Neatham, as well as larger towns, suggests that surplus agricultural/industrial produce was traded at local centres. However, only two villas (Rapsley and Chiddingfold) are known within 14 km of Alfoldean, excluding those near Pulborough. Hanworth (1968, 31–2) suggested a mixed economy for Rapsley relying on stock-raising, tile-making (from the Wykehurst kiln) and stone quarrying. There is limited evidence for the economy at Chiddingfold, leading Bird and Bird (1987, 180) to speculate that it may have been the centre of a forestry estate.

ALFOLDEAN AND THE WEALD

It has previously been suggested that the heavy soils of the Weald were not conducive to agriculture or that much of the Weald was an Imperial Estate (Cleere 1978, 62; Drewett *et al.* 1988, 239). There are only a small number of Roman findspots recorded in the Site and Monuments Record within three kilometres of the River Arun in the vicinity of Alfoldean. However, the majority of these were located during building work in the Horsham area suggesting further sites await discovery along both the River Arun and Stane Street.

STATUS OF THE SETTLEMENT

The status of Roman settlements is frequently debated (Hingley 1989, 25). Terms such as *vicus* (Johnson 1975, 75–84), roadside settlement (Smith 1987, 1), small town (Burnham & Wachter 1990, 1) and local centre (Hingley 1989, 25) have all been proposed.

It is clear that Alfoldean was one of a number of settlements (Hardham, Dorking? and Ewell), probably deliberately established along Stane Street approximately every 12 km. A similar system is known to have existed on the Chichester to Silchester road (Iping and Neatham). Originally these may have been intended to provide facilities for official travellers, but other official functions cannot be ruled out. With the exception of Alfoldean, no substantial buildings have yet been located at these settlements, and it is probable the status of each may have varied (Luke in prep.). At Alfoldean the settlement extended up to 9 ha suggesting it was also a successful community in its own right.

CONCLUSION

The combination of non-intrusive field survey, salvage recording and the re-examination of previous archaeological investigations has considerably increased our understanding of the settlement at Alfoldean. The earliest settlement exhibited some evidence for deliberate planning. It is possible it was deliberately established (or at least encouraged) during the second half of the 1st century AD by the *civitas* authority to provide, among other functions, roadside services to official travellers. The recent fieldwork has demonstrated that the only substantial building (with tessellated floors, hypocausts, painted walls and glass windows) within the settlement was situated immediately south of the river to the east of Stane Street. This was originally constructed at the end of the 1st century AD and is likely to represent the accommodation and (possibly) bathing establishment of a *mansio* complex. During the second half of the 2nd century AD this complex was surrounded by a substantial bank and ditches which did not conform to the original settlement layout.

The settlement south of the enclosure continued

to flourish at least into the early 4th century AD, with field artefact collection suggesting a maximum extent of 9 ha. It was divided into plots defined by ditches laid out perpendicular to Stane Street. Unlike many Roman roadside settlements, the layout of these plots is known in some detail for the land immediately to the west of Stane Street. Occupation was mainly concentrated adjacent to this road, although it did extend from it in two discrete areas. Buildings were mainly constructed of timber with clay floors, although two may have had stone footings. The settlement would have served both roadside travellers and as a market for the surrounding area. Although at present the SMR contains few sites in the vicinity of Alfoldean, this would surely change with more intensive field survey on the lands adjacent to the River Arun and along Stane Street.

The finds and paper archive will be deposited at Horsham Museum.

Acknowledgements

Mike Luke would like to thank his parents for first introducing him to Alfoldean and in his teenage years for supporting his interest in the site. Field artefact collection was undertaken by, at times, the entire Luke family, Rolfe Showell and Judie English. The co-operation of the landowner, R. Harrison and Sons, is duly acknowledged. Much of the roadside trench was recorded by Judie English and Mike Luke assisted at times by Graham Berton, Barbara Blatchford, Pete Boyes, Peter Cheer, Rolfe Showell and Felicity Thomson.

The persistence of Judie English in encouraging the production of this article is duly acknowledged along with her comments on the first draft. Drew Shotliff was also particularly diligent in reading the text and his comments and suggestions are greatly appreciated. The authors are grateful to Malcolm Lyne who generously gave time in identifying the sources of a number of pottery fabric types. Digitization of the features recorded in the roadside trench was undertaken by Joan Lightning. This formed the basis for the plans and sections produced by Joanna Richards. Mike Trevarthen stepped into the breach at the last minute to produce the pottery illustrations.

Authors: Mike Luke, 9 Sharnbrook Court, High Street, Sharnbrook, Bedfordshire, MK44 1PG; Jackie Wells, 17 The Green, Harrold, Bedfordshire, MK43 7DB.

REFERENCES

- Aldsworth, F. G.** 1987. Romano-British quern fragment from Alfoldean, Slinfold, *Sussex Archaeological Collections* (hereafter SAC) **122**, 221.
- Bello, H.** 1913. *The Stane Street*. London: Constable.
- Betts, I., Black, E. & Gower, J.** 1994. A corpus of relief-patterned tiles in Roman Britain, *Journal of Roman Pottery Studies* **7**.
- Bird, J.** 1986. Samian wares, in L. Miller, J. Schofield & M. Rhodes, *The Roman quay at St Magnus House*, London. Excavations at New Fresh Whark, Lower Thames Street, London, 1974–78, *London and Middlesex Archaeology Society Special Paper* **8**, 1–78.
- Bird, J. & Bird, D.** 1987. *The Archaeology of Surrey to 1540*. Dorking: SyA Soc.
- Black, E. W.** 1985. The dating of relief-patterned flue-tile. *Oxford Journal of Archaeology* **4.3**, 353–76.
- 1987. *The Roman Villas of South-east England*. Oxford: BAR British Series **171**.
- 1995. *Cursus Publicus: the Infrastructure of Government in Roman Britain*. Oxford: BAR British Series **241**.
- Brodrick, G.** 1987. *Roman Brick and Tile*. Gloucester: Sutton Publishing.
- Burnham, B. C. & Wachter, J.** 1990. *The 'Small Towns' of Roman Britain*. London: Batsford.
- Cartwright, C.** 1992. The excavation of a Romano-British iron working site at Broadfield, Crawley, West Sussex, SAC **130**, 22–59.
- Cleere, H.** 1978. Roman Sussex: the Weald, in Drewett 1978, 59–63.
- Cooper, The Rev. T. S.** 1984. The Roman villa at Whitebeech, Chiddingfold: excavations in 1888 and subsequently, eds. J. L. Gower & M. Gower, *Surrey Archaeological Collections* (hereafter SyAC) **75**, 58–83.
- Cunliffe, B.** 1971. *Excavations at Fishbourne*. London: Society of Antiquaries.
- 1973. *The Regni*. London: Duckworth.
- Davies, B., Richardson, B. & Tomber, R.** 1994. A dated corpus of early Roman pottery from the City of London. *The Archaeology of Roman London*, vol. 5. CBA Research Report **98**.
- Dickinson, B.** 1994. Potters' stamps on Samian ware, in M. G. O'Connell & J. Bird, *The Roman temple at Wanborough*, excavation 1985–1986, SyAC **82**, 137–8.
- Drewett, P.** 1978. *Archaeology in Sussex to AD 1500*. Nottingham: CBA.
- Drewett, P., Rudling, D. & Gardiner, M.** 1988. *The South-east to AD 1000*. London: Longman.
- Drury, P. J.** 1988. *The Mansio and Other Sites in the South-eastern Sector of Caesaromagus*. London: CBA.
- Elliott, E. C.** 1994. How Field-walking Alone Indicates the Boundaries and Buildings of Alfoldean Posting Station. Unpub. school project, Christs Hospital.
- English, J. & Gower, J.** 1985. Alfoldean Roman posting station, interim report, *Sussex Arch. Soc. Newsletter* **47**, 456–7.
- Evans, K. J.** 1974. Excavations on a Romano-British site, Wiggonholt, 1964, SAC **112**, 1–56.
- Farrar, R. A. H.** 1973. The techniques and sources of Romano-British black burnished wares, in A. Detsicas (ed.), *Current Research in Romano-British Pottery*, CBA Research Report **10**, 67–103.
- Frere, S.** 1972. *Verulamium Excavations*, vol. I. Rep. Res. Comm. Antiqs. London No. **28**. Oxford.
- Fulford, M. G.** 1975. *New Forest Roman Pottery*. Oxford: BAR British Series **17**.
- Goodchild, R. G.** 1937. The Roman brickworks at Wykehurst Farm in the parish of Cranleigh, SyAC **45**, 74–96.
- Green, C. M.** 1980. Handmade pottery and society in Late Iron Age and Roman East Sussex, SAC **118**, 69–86.
- Green, T. K.** 1970. Roman tileworks at Itchingfield, SAC **108**, 23–38.
- Hanworth, R.** 1968. The Roman villa at Rapsley, Ewhurst, SyAC **65**, 1–70.
- Harden, D. B.** 1961. Domestic window glass: Roman, Saxon and medieval, in E. M. Jope (ed.), *Studies in Building History: Essays in Recognition of the Work of BH St J. O'Neil*. London: Odhams, 39–63.
- Harrison, J. P.** 1874. A vicinal road which formerly ran through the parish of Ewhurst, Surrey, from the Stane Street at Rowhook, towards the old town or station at Farley, near Albury, SyAC **6**, 1–10.
- Hayman, G.** 1998. Excavation in St Martin's Walk, Dorking, SyAC **85**, 63–95.
- Hingley, R.** 1989. *Rural Settlement in Roman Britain*. London: Seaby.
- Hull, M. R.** 1963. *The Roman Potters' Kilns of Colchester*. Rep. Res. Comm. Antiq. London **21**. Oxford.
- Johnson, S.** 1975. Vici in Lowland Britain, in Rodwell & Rowley, 75–84.
- Lowther, A. W. G.** 1948. *A Study of the Patterns on Roman Flue-tiles and their Distribution*. Res. Papers Surrey Archaeol. Soc. **1**.
- Lucas, J.** 1984. Tripointium, third interim report, *Transactions of the Birmingham and Warwickshire Archaeological Society* **91**, 25–54.
- Luke, M.** 1985. Alfoldean: a Re-assessment of Past Archaeological Activity and a Report on Recent Activity. Unpub. B.Sc. dissertation, Univ. Cardiff.
- in prep. *Enclosure on Roads Radiating from Chichester*.
- Lyne, M. A. B. & Jefferies, R. S.** 1979. *The Alice Holt/Farnham Roman Pottery Industry*, CBA Research Report No. **30**.
- Manning, W. H.** 1985. *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum*. London: British Museum Publications.
- Marley, T. A.** 1975. Slinfold Parish Church. Unpublished booklet.
- Marsh, G. D.** 1978. Early second century fine wares in the London area, in P. R. Arthur & G. D. Marsh (eds.), *Early Fine Wares in Roman Britain*. Oxford: BAR **57**, 119–223.
- Martin, P. J.** 1859. Stane Street Causeway, SAC **11**, 145.
- Martin, T.** 1979. Données nouvelles sur la chronologie des ateliers de Montans, *Rei Cretariae Romanae Fautorum Acta* **19/20**, 170–81.
- 1986. Montans, in C. Bemont & J. P. Jacob, *La terre sigillée gallo-romaine. Lieux de productions de Haut Empire: implantations, produits, relations*, *Documents d'Archéologie Française* **6**, 58–71.
- Merrifield, R.** 1983. *London, City of the Romans*. London: Batsford.
- Millet, M. & Graham, D.** 1986. *Excavations on the Romano-British Small Town at Neatham, Hampshire 1969–1979*. Gloucester: Hampshire Field Club.

- Neal, D. S.** 1987. Excavations at Magiovinium, Buckinghamshire, 1978–80, *Records of Bucks* **29**, 1–124.
- Neal, D. S., Wardle, A. & Hunn, J.** 1990. *Excavation of the Iron Age, Roman and Medieval Settlement at Gorhambury, St Albans*. London: English Heritage.
- Puttock, J.** 1841. Roman stations and roads of the Regni, *The Gentlemans Magazine* (September 1841), 260–62.
- Richardson, B.** 1986. Pottery, in T. Dyson (ed.), *The Roman Quay at St Magnus House, London, LAMAS Special Paper* **8**, 96–139.
- Rivet, A. L. F.** 1964. *Town and Country in Roman Britain*. London: Hutchinson.
- Rodwell, W. & Rowley, T.** 1975. *The Small Towns of Roman Britain*. Oxford: BAR.
- Round, A. A.** 1992. Excavations on the *Mansio* site at Wall (Letocetum), Staffordshire, 1972–78 (Wall Excavation Report no. 14), *Transactions of the South Staffordshire Archaeological and Historical Society* **32**, 1–78.
- Simpson, G.** 1952. The Aldgate Potter: a maker of Romano-British Samian ware, *Journal of Roman Studies* **42**, 68–71.
- Smith, R. F.** 1987. *Roadside Settlements in Lowland Roman Britain*. Oxford: BAR.
- Stanfield, J. A.** 1936. Unusual form of terra sigillata: second series, *Archaeological Journal* **93**, 101–16.
- Tomber, R. & Dore, J.** 1998. *The National Roman Fabric Collection*. London: Museum of London Archaeology Service.
- Webster, G.** 1980. *The Roman Invasion of Britain*. London: Pan.
- Webster, P. V.** 1975. More British samian ware by the Aldgate-Pulborough potter, *Britannia* **16**, 163–70.
- Winbolt, S. E.** 1923. Alfoldean Roman Station: first report, 1922, *SAC* **64**, 81–104.
- — 1924. Alfoldean Roman Station: second report (on 1923), *SAC* **65**, 122–7.
- — 1927. Excavations at Hardham Camp, Pulborough, *SAC* **68**, 122–7.
- — 1929. Report on excavations in Horsham District, *SAC* **70**, 219–20.
- — 1930. Report on excavations in Horsham District, *SAC* **71**, 264.
- — 1935. Remains of the Roman Bridge over the Arun, Alfoldean, *SAC* **76**, 183–92.
- — 1939. Alfoldean Camp and Bridge: list of Roman coins recorded or found to September 1938, *Sussex Notes and Queries* **7**(5), 151–2.
- Young, C. J.** 1977. *The Roman Pottery Industry of the Oxford Region*. Oxford: BAR **43**.