

# EXCAVATIONS AT MAGIOVINIUM, BUCKINGHAMSHIRE, 1978-80

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Section 2 of 11:

## EXCAVATIONS ON SITE 17

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### EASY ON-LINE ACCESS TO FIGURES AND PLATES:

This report runs to a total of 137 printed pages, which makes it too large for publication on-line as a single digital file. The report has therefore been split into eleven separate sections. Each can be downloaded separately and saved locally.

The report contains 56 drawings ('figures') and 12 photographs ('plates'). For ease of access these have all been saved into a single file titled 'Magiovinium – figures and plates'. The reader should open (or download) this file when reading any of the report's 11 sections. Individual illustrations referenced in the text can then be found by searching for 'Figure XX' or 'Plate XX', where 'XX' is the number of the figure or plate you wish to view.

The full details for academic source references given in the text can be found in the 11<sup>th</sup> and last section of the report: 'A bibliography of Magiovinium'.

## THE EXCAVATIONS

### *Site 17 ( [Pl. I](#) )*

#### *Summary of Phases*

1. Pre-conquest field systems oriented east- west possibly dictating orientation of later fort.
2. Construction of fort (situated on south side of Watling Street and represented by crop marks),
3. Realignment of Watling Street skirting north side of fort. Associated roadside ditches.
4. Extensive field systems on a slightly different alignment to features of Phases 1 and 2 and possibly aligned onto road leading to fort.
5. Roadside ditches infilled. Settlement with industrial furnaces constructed on top.
6. Clearance and levelling of above. Later appearance of new buildings and industrial activity,
7. Abandonment of some plots or allotments to create a cemetery.

#### *Phase I*

Phase I is represented by a narrow ditch (No. 1, [Fig. 4](#); [PL II](#)), running approximately east- west situated at 290-300 m east, 205 m north, It was subsequently recut on three successive occasions demonstrated in Section 396 ([Fig. 5](#)) by, in sequence, 1630, 1607, 2164 and 2177 (the primary fillings).

The pottery from the earliest layer (L1751, equating with L2164, Section 396, [Fig. 5](#)) is exclusively native and includes specific vessels Nos. 220, 221 and 268 and types equivalent to Nos. 232, 236, 244 and 250. They occur at Saffron Gardens (Waugh *et al.* 1974, 373) and Caldecotte (forthcoming) situated nearby on the north and south banks respectively of the River Ouzel. The absence of Roman wares in this phase, although not demonstrating conclusively a pre-conquest date, suggests the possibility. Slightly further east, later recuts have realigned the ditch with the Phase 4 field systems. A scatter of native fabrics elsewhere about the site further supports native occupation; it is to be regretted however that conditions for excavation were so poor that early features could have been missed. It is possible that this occupation and probable field system dictated the orientation of the conquest fort believed to lie southwards in the field opposite. Three Republican issues (Nos. 1-3) from a ditch opposite the Pulman Cafe are further support for early occupation.

#### *Phases 2 and 3*

Evidence for a fort to the south of Watling Street has been published by Charmian Wood- field (1977, 384ff.). Aerial photographs show two possible forts, the first, probably of Claudian date and the second a reconstruction interpreted as possibly being associated with the

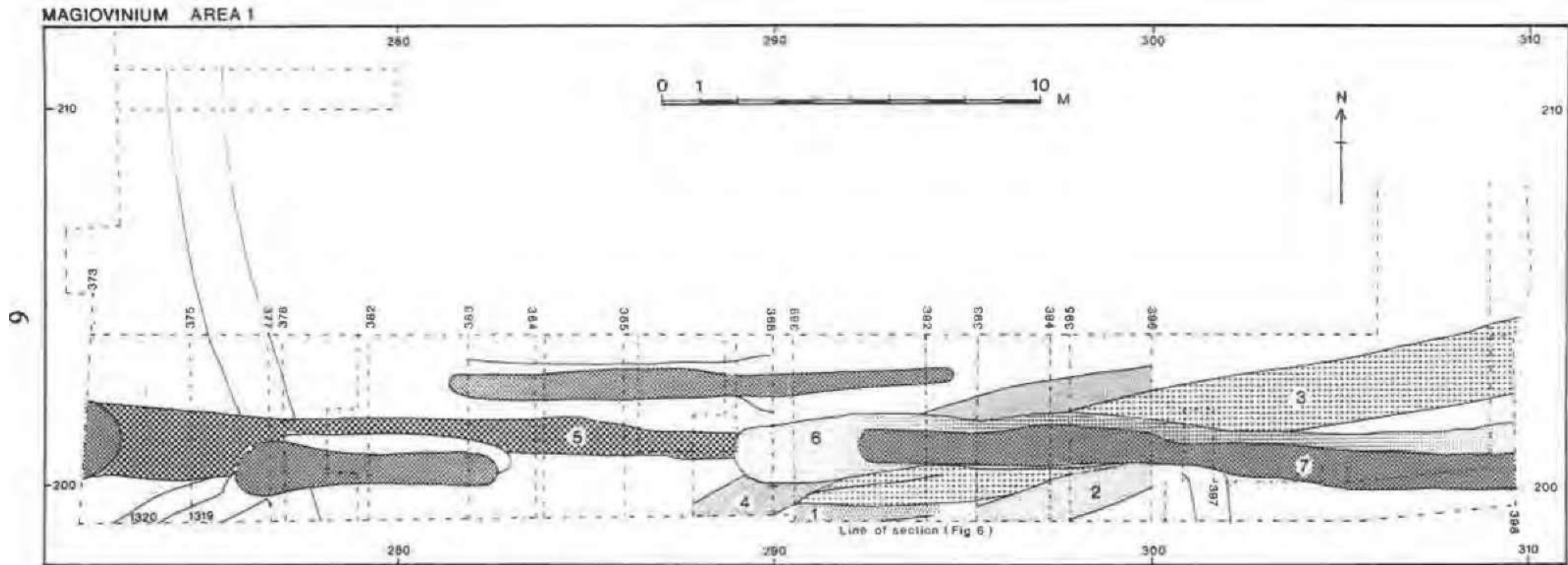


Fig. 4. Plan of road-ditches; Site 17 Area 1. Numerals 1-7 denote sequence of cuttings.

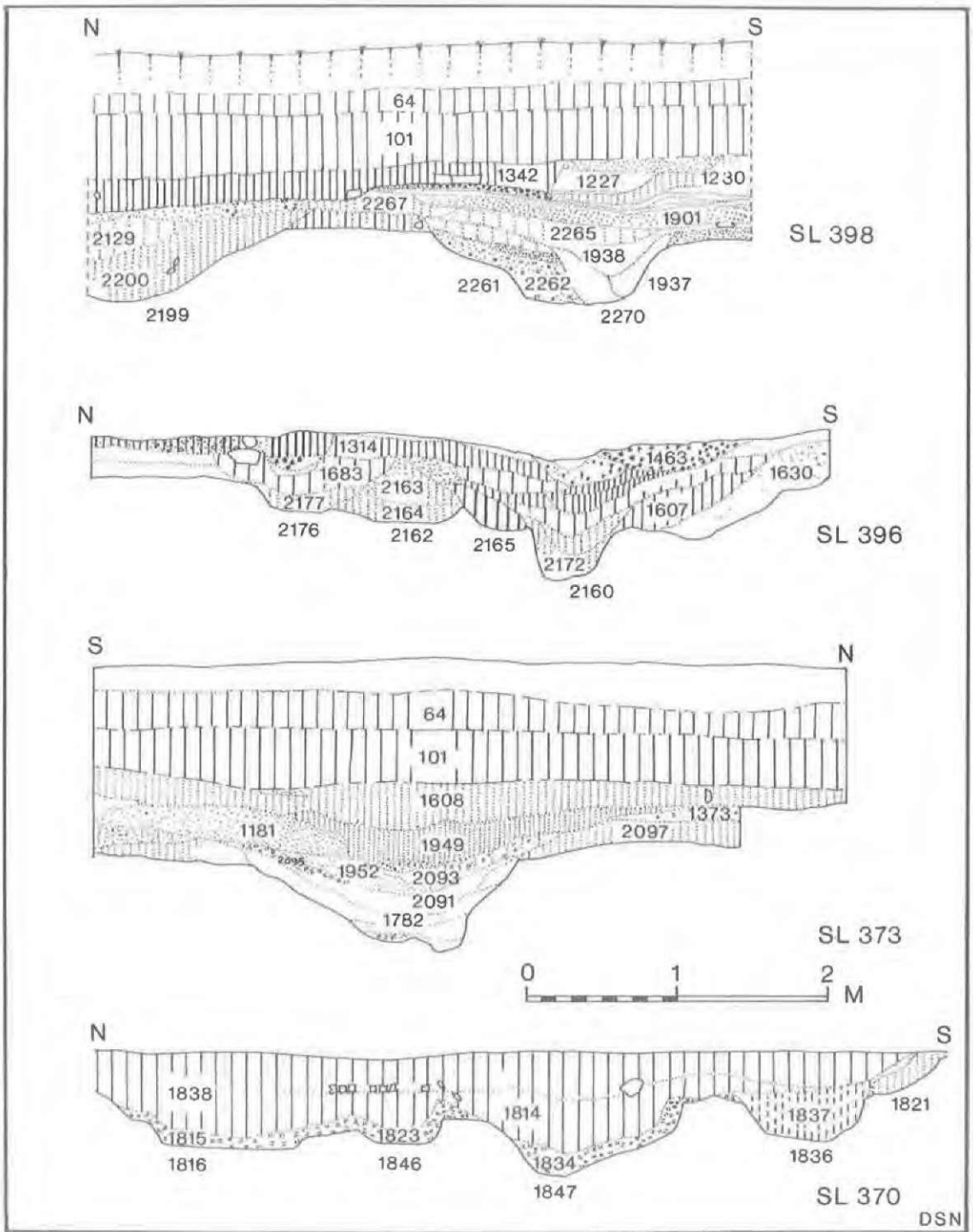


Fig. 5. Sections north-south across roadside ditches on north side of Watling Street; Site 17 Area 1.

Boudiccan revolt of A.D. 61-2. Excavations by Mrs Woodfield in 1976 in a water-pipe trench shown on [Fig. 3](#) at 390-400 m east, 170 m north, located two ditches, possibly the north angle of the fort. Unfortunately the high water-table prevented excavation beyond a depth of 1.50 m but they were between 4 and 5 m wide.

In March 1986 two trenches were cut by the writer on the western verge of Galley Lane, south of the A5 ([Fig. 3](#)) and south of the 1976 discoveries, in the hope that the east ditch of the fort might be located. However, no evidence for it was found (only post-medieval cart-ruts associated with the original alignment of this section of road) and it is assumed that the ditch lies slightly further to the west.

A significant feature of the possible fort ([Fig. 1](#)) is that although its orientation is the same as the Phase 1 ditches neither appears to have influenced the route of Watling Street or allotments of land along its north side. A possible explanation is that the road leading to the fort approached at an oblique angle. Allotments may have been set out alongside this road but were not realigned following the construction of Watling Street. The evidence is tenuous especially as surfaces of Roman Watling Street have never been recorded. However, at about 275 m east two gullies were found (Nos. 1319 and 1320, [Fig. 4](#)), one a recut of the first (Section 388, [Fig. 6](#)) aligned approximately east-west and another (No. 1198) aligned north-south, linking with other gullies which were associated with the field systems. They were cut by a roadside ditch (5), probably contemporary with Watling Street (Phase 3).

Pottery from the earliest gully includes vessels similar in form to Nos. 131, 147 and 252, none later than Flavian. A fragment of Drag. 18 South Gaulish samian of pre-Flavian date was also discovered. Because these allotments expanded following the realignment of Watling Street, they will be described under Phase 4 below.

After the abandonment of the fort Watling Street was realigned to the north

(2), probably serving a *vicus* (3) situated to the north-west, represented by the later defended area of Magiovinium. This route follows a straight line as far as Towcester ([Fig. 1](#), insert) which suggests a major programme of civil engineering including possibly building of new bridges,

As already stated, details of the construction of Watling Street near Magiovinium are not known nor likely to be since the level of the road was lowered in the 1820s by Thomas Telford as part of a major scheme of improvements to the London-Holyhead turnpike. There is no stratigraphic link therefore between the road and its ditches; however, it is assumed that Ditch 5 ([Fig. 4](#)) is the original northern road ditch. A length of 20 m was excavated between 270 and 290 m east. At the eastern limit it was about 1 m wide and had been erased by later recuts ([Pl II](#)); at the lower western end it was 2 m wide. Whether the ditch proceeded westwards to run through the nucleus of the *vicus* is uncertain, but the volume of water that the gullies drained would suggest the need for a major north-south culvert to divert water from the town. Pottery from the earliest levels in this ditch included Pot Nos. 206 and 252, a storage jar similar to form 331 and a carinated bowl all in native fabrics dated to the later first century. No samian was found.

In Area 3 on the south side of the road two parallel road ditches were located between 410 and 425 m east; the northern, 2389 ([Fig. 7](#)) was probably the earlier and was V-shaped in profile, measuring 1.50 m wide by 70 cm deep. At a later date they were sealed by a circular house, a similar sequence to the ditch on the north side of Watling Street which also had structures built over its filling.

#### *Phase 4* ([Fig. 3](#))

A major feature of the excavations was the discovery of a series of small ditched enclosures stretching for over 500 m along the north side of the road. As we have already seen the alignment appears to have been based on an earlier alignment of Watling Street. Nearer the town the plots were five deep but eastwards they gradually thinned out. They were delineated by a

series of fairly narrow north-south gullies draining into broader east-west ditches. Casual Observation suggests a piecemeal development but more critical assessment indicates a certain uniformity. Most of the plots are about 19 m wide (a similar width was noted at Towcester), but at about 300 m east there were two adjacent plots (A and B) double width (about 38 m) and others (C and D) at approximately 550-600 m east. Their depths north-south appear less regular but may have originally been more uniform depending on their relationship to Watling Street which seems to truncate the layout. At about 250 m east one field was 56 m deep and had a small 'enclosure' on its southeast side. Smaller plots were also found behind plots at about 600 m east.

There is evidence for allotments on Site 3 on the south side of Watling Street also diverging from the road. At the southern limit of the excavation, 420-430 m east, were traces of three parallel gullies, 2353, 2346 and 2341 (Fig. 8). Although the area excavated was limited and their overall layout uncertain it is possible that they were part of the same system. What is significant, perhaps, is that the distance (110 m) between the larger gully (2346) and a major east-west gully across Areas 1 and 2 (270-550 m east and c.240 m north; Fig. 3), is the same as the distance between the latter and the northernmost east-west gully on the site (at about 200 m east by 335 m north).

Although the ditches acted as field boundaries their use as drainage gullies was vital. Many had silted up and had been recut three or four times (observation of a modern roadside gully associated with the road development demonstrated all too clearly the need for drainage gullies and the speed at which they silted up—about 10 cm of silt followed a storm within about one hour). There was evidence that attempts were made to prevent silting: gully 760, found at about 650 m east (Fig. 9), was timber-lined with steep sides and nails along its length. Its filling contained an assemblage of pottery of which 32 vessels are published here (Nos. 335-65, Fig. 45 and Fig.46) dated no later than the mid second century. After silting up, and being used as a rubbish dump, it was recut further east. It also

postdates at least two earlier gullies located in the same trench.

Ribbon development took place along the whole length of the road where allotments occur. However, only in a few places can the occupation be associated with the actual plots: some buildings postdate the road ditches and others the allotments. Traces of four circular buildings associated with the plots were located at the east end of Area 2, between 560 and 630m east (Fig. 9) and included Nos. 172, 781, 784 and 794. They were 8-10 m wide and were constructed in wattle and daub with penannular gullies with entrances on the west sides—facing Magiovinium.

Building 794 had traces of burnt daub indicating destruction by fire. The surface of the daub had a thin coating of white plaster suggesting attempts to decorate the hut in Roman fashion. Pottery in the filling of the penannular gully of house 781 indicates a late second-century date and includes forms such as Nos. 4 (Fig. 32), 30 (Fig. 33), 101, 113 (Fig. 36), 129 (Fig. 37) and 303B (Fig. 43). Further west, towards the town, the buildings may have improved in quality, for at about 440 m east traces of a rectilinear timber building were observed in two trenches alongside Watling Street. Unfortunately waterlogging prevented their examination. Other circular features such as 2221 (Fig. 10) may have been gullies around haystacks as their diameters were very small.

The road ditches were allowed, in places, to silt up and be backfilled. The reason for this is uncertain, but was probably due to the fact that when the ditches cut existing plots, access to them from Watling Street by occupants, or allotment holders, was effectively barred. Consequently we now see the ditch being recut, but with causeways to provide access, for example Ditches 6 and 7 (Fig. 4) are recuts of the road ditch, but they are not continuous; they both have causeways at about 273 and 285 m east. The latest pottery from the filling of LI938 of Ditch 7 for example, showing in S.L. 398 (Fig. 5) is exclusively early second-century and is further sealed by horizon L1901 of Antonine deposition.

Causeways have not been observed in Area 3 on the south side of the road although the

MAGIOVINIUM AREA 1

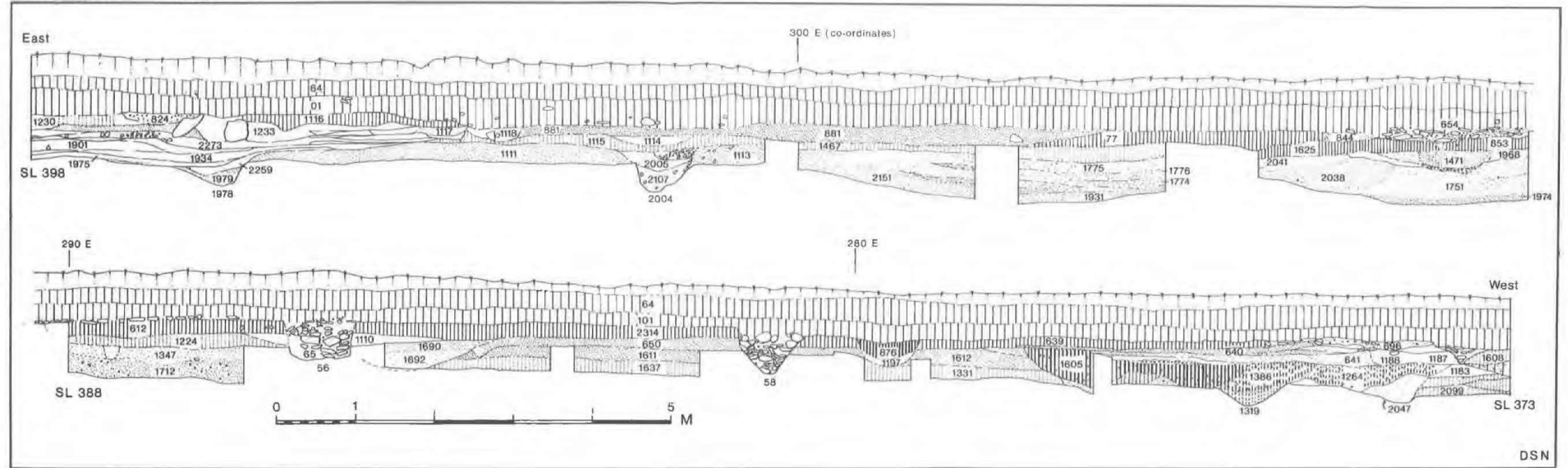


Fig. 6. Sections east-west showing sequence of levels cut by and sealing roadside ditches; Site 17, Area 1

MAGIOVINIUM AREA 3

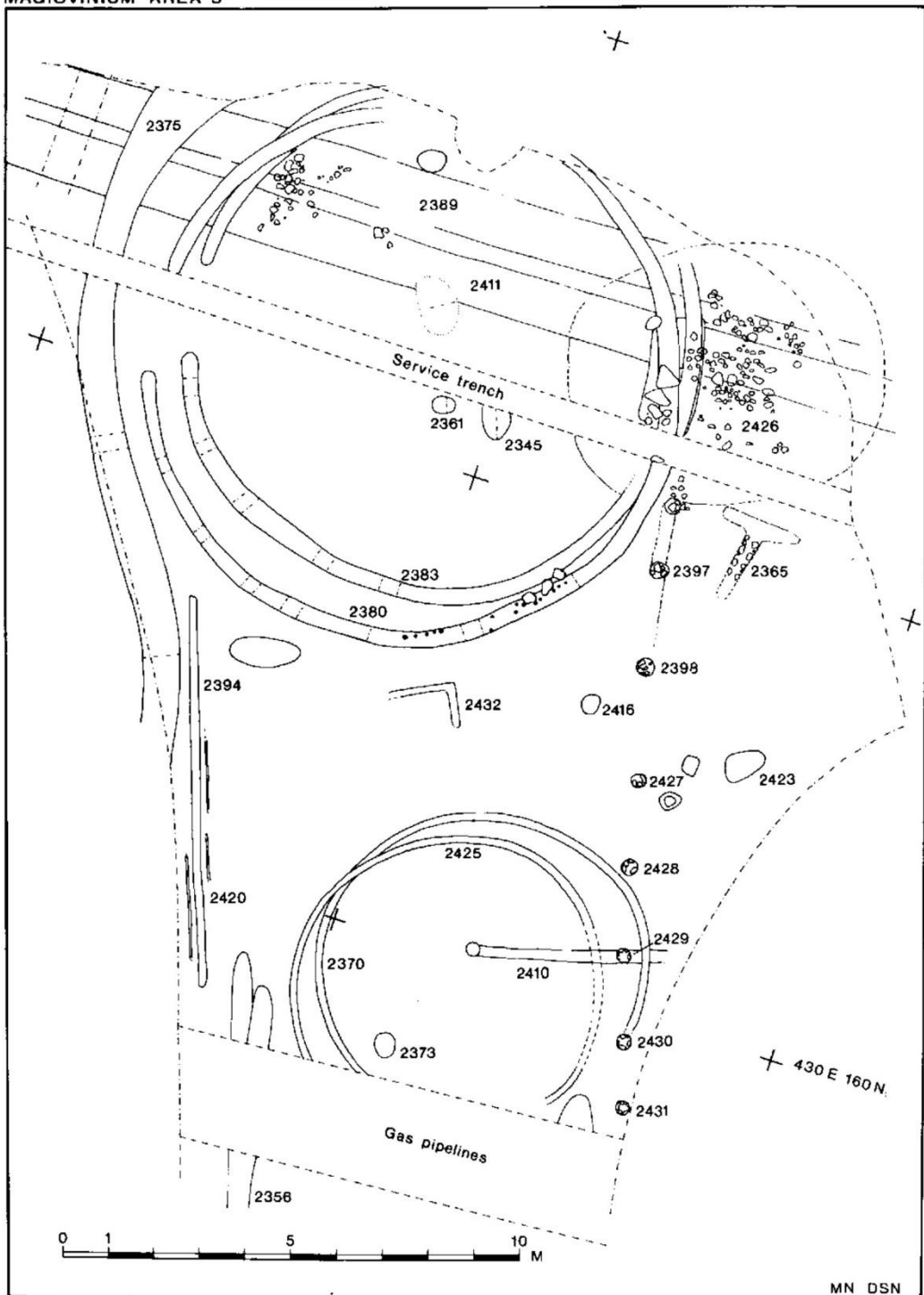


Fig. 7. Plan showing circular houses on south side of Watling Street; Site 17, Area 3.



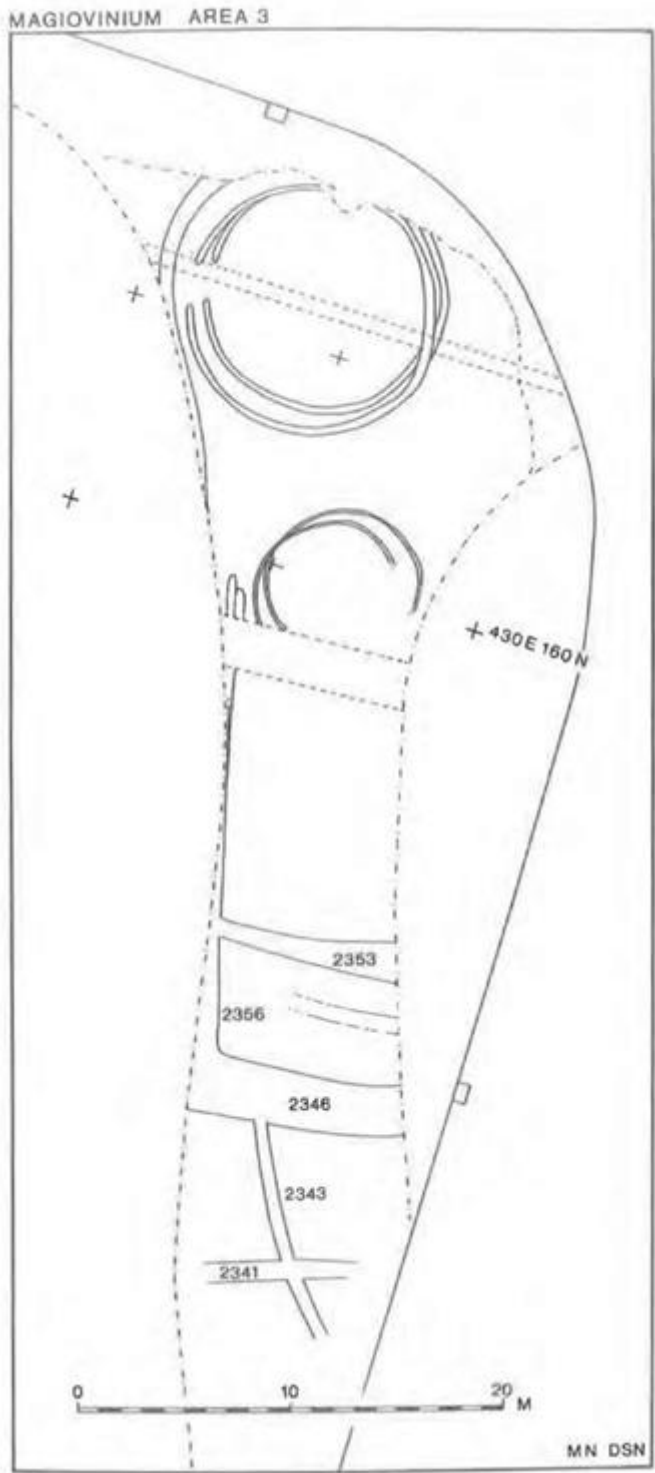


Fig. 8. Plan showing location of field ditches in relation to circular houses on south side of Watling Street; Site 17, Area 3.

MAGIOVINIUM Area 2

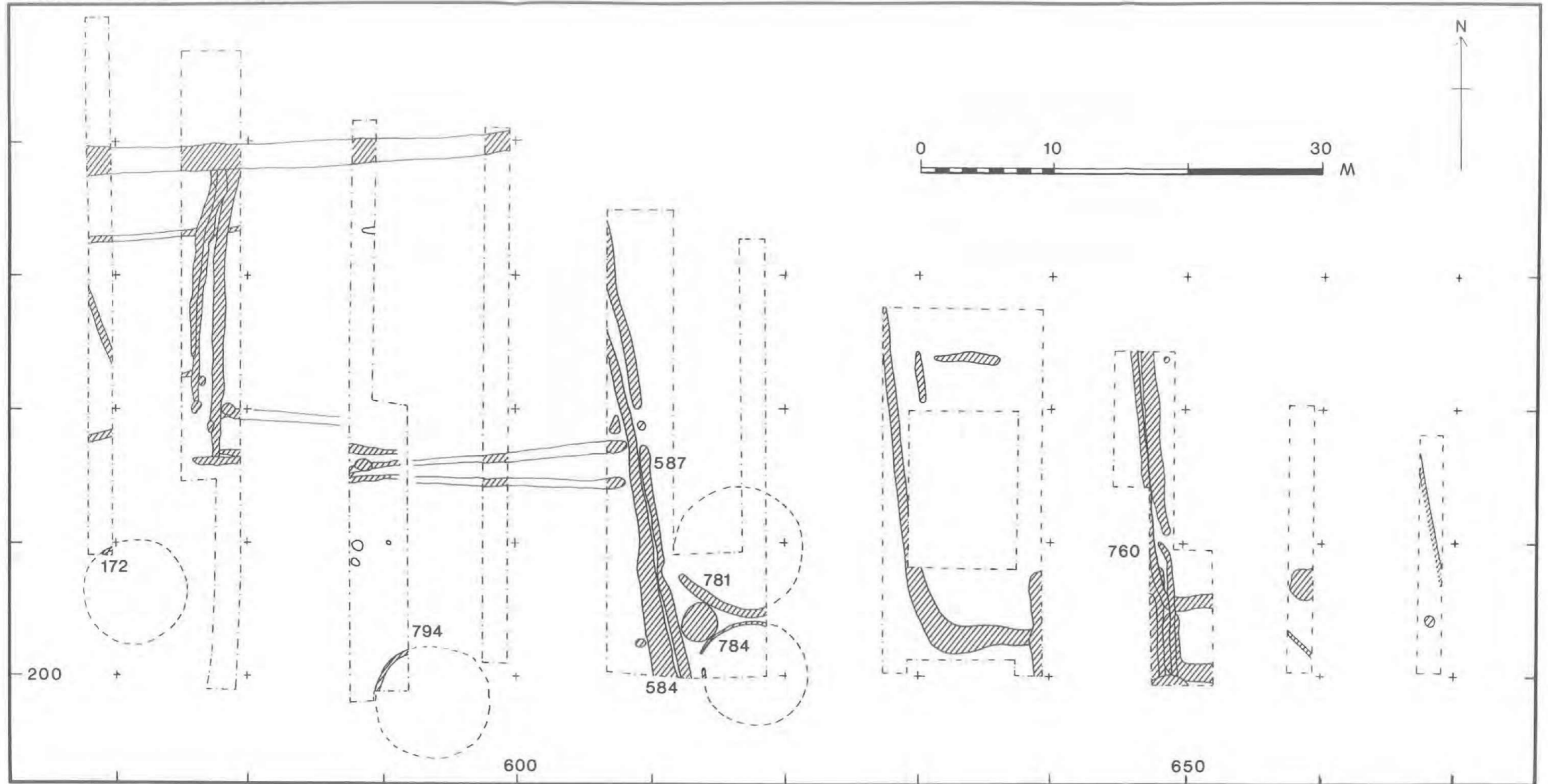


Fig. 9. Plan of field ditches and circular gullies; Site 17, Area 2.

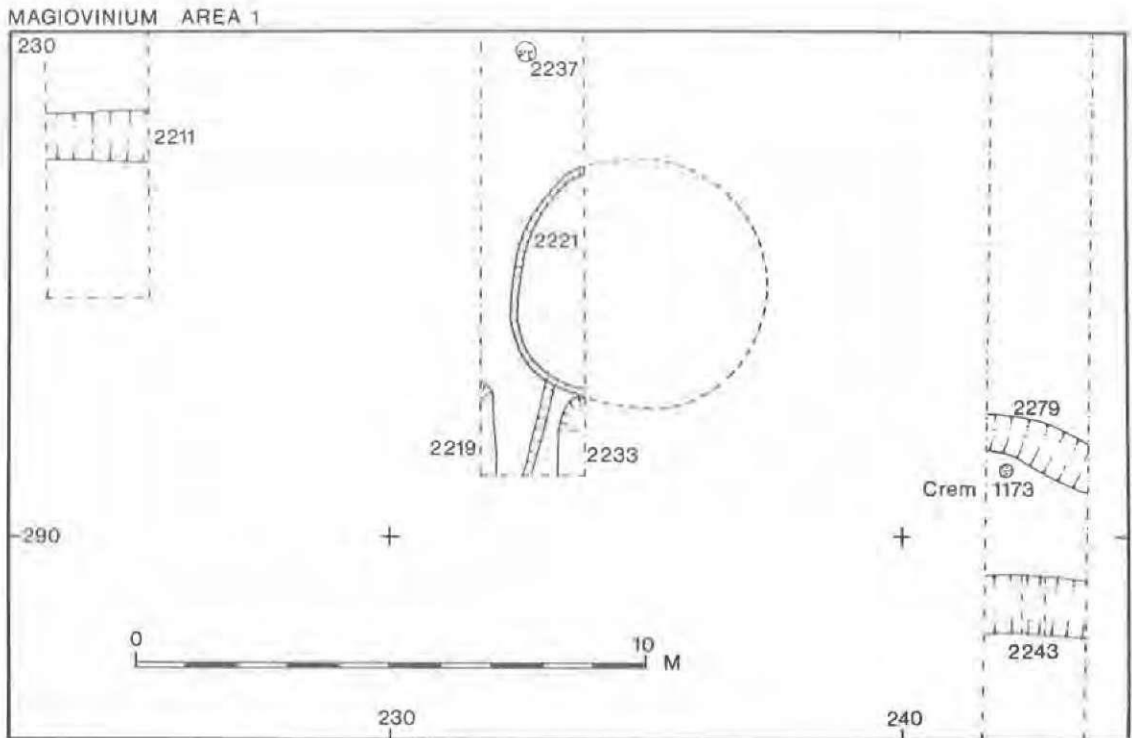


Fig. 10. Plan of 'circular' gully; Site 17, Area 1.

ditches here also went out of use and were later sealed by buildings of Antonine date. The latest pottery in the ditches, sealed by the buildings, is of the early second century and includes forms 3.18 and 9.7.

An intermediate stage in Area 3 sees a large rubbish pit (2426) or possibly a well (not excavated) sealed by buildings, further evidence for a gradual decline in the importance of the road ditches. The implication is that either conditions on the actual carriageway were allowed to deteriorate, or more likely that an area drainage scheme was implemented which reduced their need; in the Antonine period they were abandoned altogether and never replaced.

#### Phase 5 (Fig. 11)

In Phase 5, dated to the Antonine Period, there is greater activity about the site. Following the filling of the road ditches, huts with rough metallised floors and associated with industrial hearths were

constructed along the north side of Watling Street. The allotments continued in use and may have expanded in places; existing field ditches were recut.

Traces of four buildings of the most ephemeral kind were found; working eastwards: buildings 1192 and 1693, the latter a replacement of the first, were represented by narrow slots probably for the emplacement of wattles. Associated with the earlier was a circular furnace, 891. To the east was a row of five post-holes which became smaller towards the north. It is possible that that feature was the principal side of a lean-to shed. Building 2487 comprised an area of metalling, 1259, 4 X 7m, defined by a narrow slot 1359, fairly straight on the west side but curving eastwards on the north. No evidence was found for a similar slot on the east and it is assumed that the structure was also open on one side and was associated with industrial furnaces shown in detail in Fig. 12 and Fig. 13 and similar in plan and construction to other furnaces found as far

MAGIOVINIUM Area 1

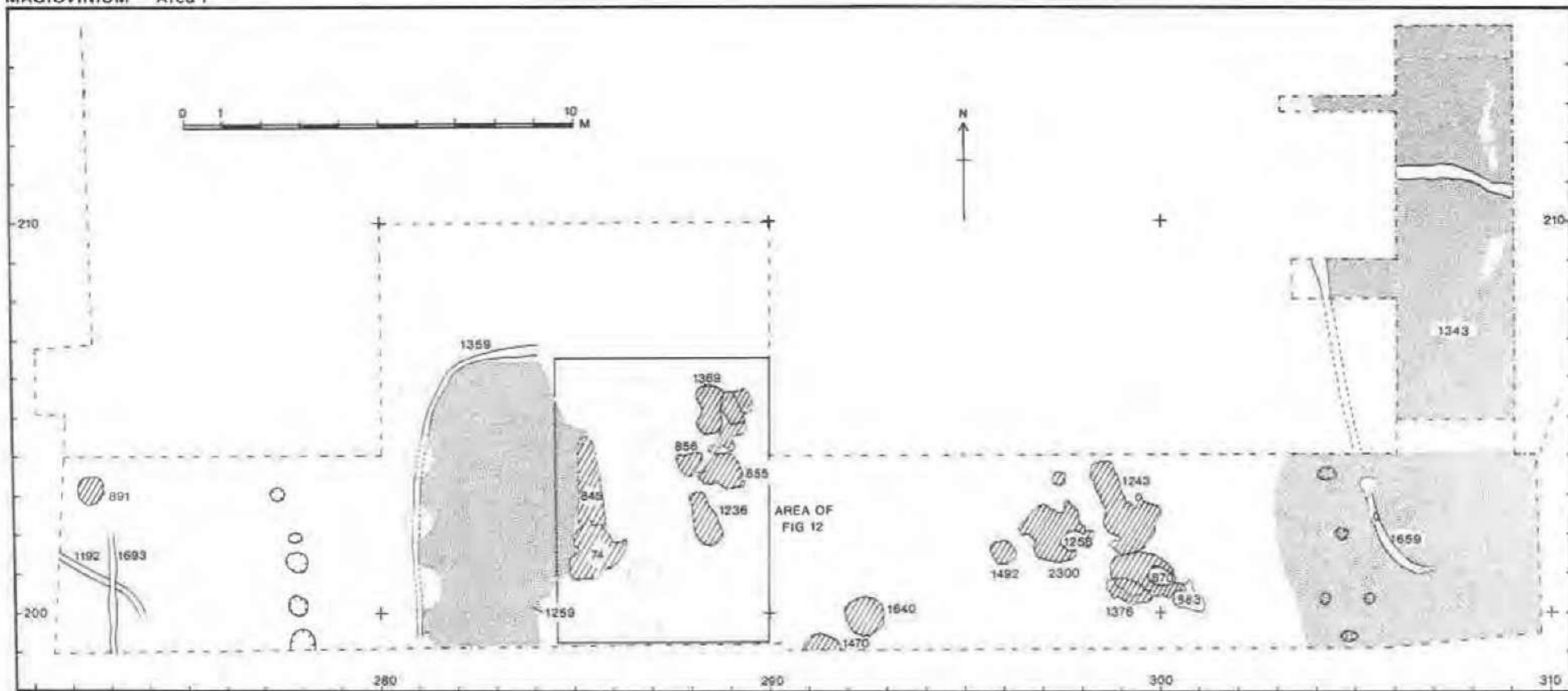


Fig. 11. Plan showing metallised floors of huts and furnaces along north side of Watling Street; Site 17, Area 1.

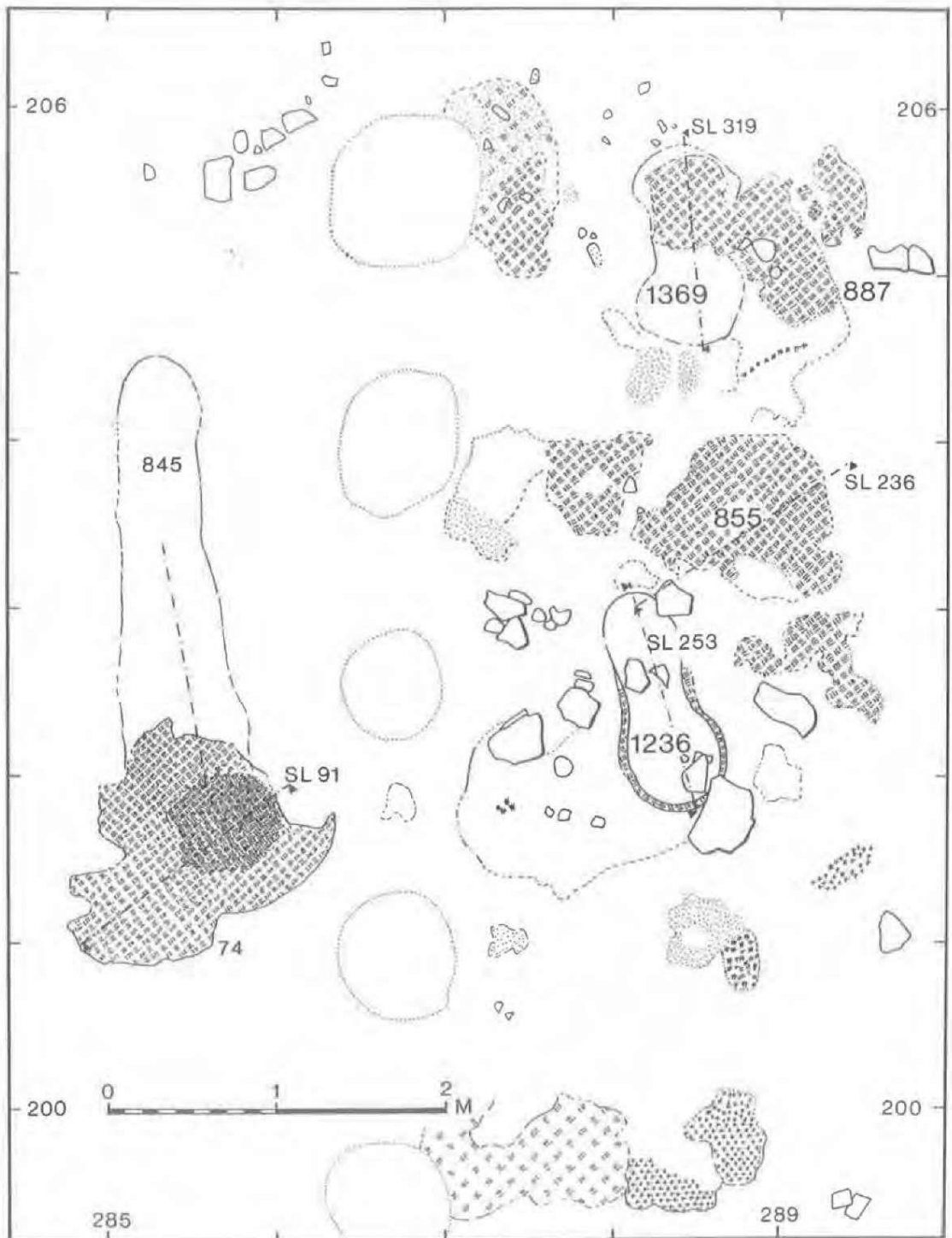


Fig. 12. Plan of furnaces (context 74) and associated hearths; Site 17, Area I.

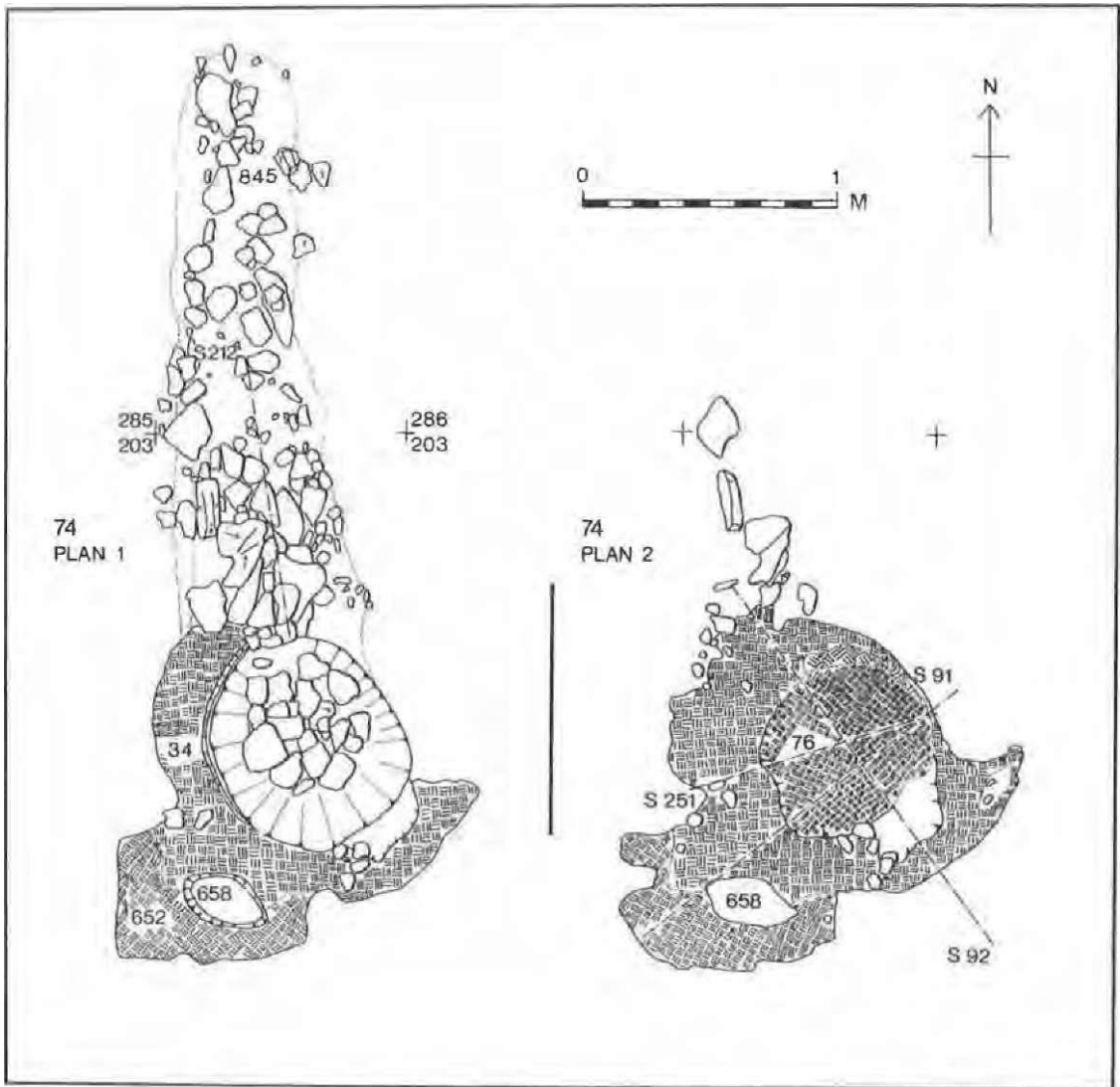


Fig. 13. Detailed plans of furnace (context 74) showing underlying soakaway and gully; Site 17, Area 1. Plan 1 shows the surface levels and Plan 2 the soakaway.

as 730 m east, where a particularly fine example was found. Furnace 74 (Fig. 12 and Pl. III) was constructed over a circular bowl-shaped pit filled with large stones, and had on its north side a gully (845) 2.30 m long and U-shaped in section. Above the stones a layer of clay had been rammed, in the centre of which was a shallow hollow, heavily scorched. The stones beneath the clay were presumably intended as a soakaway. It is also possible that originally the clay formed part of a shaft

furnace since large quantities of iron slag indicating metal-working were found nearby. Slightly further east patches of clay, also burnt, indicate the presence of other furnaces, one of which, 1236, was probably domestic as it was similar in plan to conventional horseshoe-shaped bread-ovens found on numerous other sites. Around this oven, but associated with a later example were a number of flat stones intended as pads for uprights supporting a crude canopy. More furnaces were encountered

291-293 m east (features 1470 and 1640, [Fig. 11](#)) and others 296-300 m east where traces of four furnaces were recorded (1243, 1376, 1492 and 2300) constructed over similar stone-filled hollows capped with clay. Associated with this complex was a very large mass of slag, probably tap-slag, which had possibly dribbled and fused into a furnace mouth (1256). Fiona Macalister, formerly of She Ancient Monuments Laboratory (AMD, reports on the slag as follows:

*The Slag* by Fiona Macalister

The total weight of the slag was 59.1 kg and was of two types, smithing and fuel ash slag, but there is a complete range between the two. The smithing slag is in the form of irregular masses, 'puddles', 'buns' and hearth bottoms. The latter are generally of the order of 12 cm across, indicating small-scale working, but one (AML 7711040) measures 36 cm, and is thus a product of smithing on a large scale. Further evidence for large-scale working is found in a group of slags (1256) which formed as one and weighs 21.4 kg. This slag has the texture of smithing slag but has flowed. It may be tap-slag which was poured over pieces of wood, producing bubbles and thus giving a vesicular texture to the slag, or it may be the result of a smelting process which has failed. In the absence of any ordinary tap-slag it is not possible to say definitely that smelting was carried out here, but it is reasonable to assume that ores would have been smelted nearby. Some of the smithing slag is magnetic due to the presence of hammer scale. The lighter fuel ash slag is often found as dribbles of cooled molten slag and one piece formed close to the tuyere (957),

Evidence for the fuel used was seen in both types of slag, in the form of wood and charcoal, and also as casts, particularly clear in 1256. These show that quite large pieces of wood were sometimes used, up to 3 cm in diameter. Two pieces of wood tar were found (1229), which would have been used as fuel,

There are a few pieces of *hearth lining*, with the thickness of the lining varying

from 1.5 cm to about 2 cm, burnt clay and a few corroded iron 'lumps' and two corroded iron objects. There was one piece of copper alloy (516), which was analysed using X-ray fluorescence and was found to contain Cu, Zn, Pb, (Fe), and Sn, and is therefore a gun metal (AML Report No, 3154).

### Glossary

*Smithing slag:* Produced by secondary working of raw iron in a smithing hearth. It is chemically similar to tap-slag but is spongy and inhomogeneous.

*Fuel Ash Slag:* A vitreous material which is produced when ash in the fire reacts with sand, clay or other siliceous material. It is usually but not always associated with metalworking.

*Hearth lining:* The sand or clay lining of the hearth becomes vitrified on one side, producing a glassy skin which grades into ordinary high-fired clay.

*Tap-slag:* A dense, homogeneous iron silicate slag, dark in colour, which is tapped out of an iron smelting furnace and cooled rapidly from the molten state. It has a smooth surface and only a few large gas bubbles.

*Hearth bottom:* Plano-convex in form, this is the smithing slag which collected in a pool in the bottom of the hearth and solidified on cooling.

It is interesting to note the use of slag as metalling in trackways from Watling Street towards the allotments in this and later periods (D.S.N.),

At 303-310 m east was another large area of metalling (1343) which probably originally defined the inside floor of a hut later to be cut by a right-angled slot (1659) of another hut, the south end of which curved slightly to the east ([PL IV](#)). This shed too was probably open-sided and like the others may have been associated with the adjacent furnaces.

The evidence of metalworking suggests the presence of smiths either engaged in shoeing horses (although no evidence was found for the manufacture of horseshoes or hipposandals), or wheelwrights catering for the needs of transport using Watling Street. It is unlikely, perhaps, that these 'undesirable' or potentially dangerous industries were allowed to trade in the nucleus of the settlement for fear of fire.

### Area 3

In Area 3 on the opposite side of Watling Street, at about 415 m east, were two huts, Nos. 2383/2380 2370/2425 (Fig. 7), both of which had been rebuilt. Unfortunately the relationship of the two groups of huts is uncertain and it is quite possible that they were in use at the same time, especially as their different sizes may indicate different functions. However, a row of post-holes (Nos. 2397-8 and 2427-31) appears to respect the northern hut but crosses the southern and, if so, the southern group might be the earlier.

#### Buildings 2370/2425

The southern hut, 2370, measured 6.75 m wide, its replacement, 2425, being of similar proportions. They both had U-shaped slots which were 'broken' on their east sides, indicating the possible positions of entrances.

#### Buildings 2383/2380 (Pl. V)

These were situated to the north of the buildings just described and were constructed over earlier road ditches and also over a pit or well (2426). They were both about 11.25 m wide and had entrances on their west sides. The slots of both were U-shaped in section and packed with clay forming part of a wall reinforced by wattles, evidence for which was found on the southern area of the later hut, where 15 stake-holes occurred. Both huts had central hearths and also evidence for a domestic oven (2345). Where the later hut crossed the earlier pit, 2426, its wall was given a foundation of large stones, presumably to counteract subsidence. Conceivably the presence of the pit may have necessitated the reconstruction of the hut. Both huts were probably living quarters. Curving around the west side of the hut was a U-shaped gully 2375 intended to drain water southwards and also, possibly, on account of its close proximity to the hut, to act as an eavesdrip to prevent rainwater flooding the entrance; the entrance was on the opposite side of the hut to building 2370 further south.

A large group of pottery from the gully contained mid to late second-century shell-tempered forms 3.38 with rilled body

sherds, sandy grey-ware bowls, forms 5.6, and a small indented beaker with white slip. A fine red-ware omphalos base, possibly from the Oxfordshire kilns, suggests a later second/early third-century date for the group and the period of occupation for the larger huts.

On the south side, the gully ran under the side of the modern road cutting but appears to have straightened out to run north-south and roughly parallel to a sleeper beam (2394) for either a palisade or a rectilinear hut.

Further south, traces of another gully (2356) continued the general alignment. The alignment, further represented by a row of stone-packed post-holes (2397-8 and 2427-31), forming a fence or larger stockade, is not at right angles to Watling Street but on the same orientation as the allotments on the north side of the road—further evidence perhaps that a feature of the topography, earlier than Watling Street, influenced alignments. On the east side of the stockade, lined with stone, was a T-shaped furnace (2365). There was no industrial waste associated with it and the lack of scorching suggested that it was a conventional corn-drying or malting oven. Pottery dumped in the structure following its disuse included forms 3.9 and 9.2 in shell-tempered fabrics from the Harrold Kilns; the sherds are of the later second century.

Associated with this general phase on both Areas 1 and 2 were a number of cremations. In Area 1 there were nine and in Area 2, more superficially sampled, 14. Both groups were about 60 m from Watling Street, the same distance from a north-south road as the cremation groups on Site 18 (p. 27), and represent two separate cemeteries to the east of the town. That in Area 1 was located at about 270 m east by 250 m north and on Area 2 at about 500 m east by 250 m north. Of the cremations only three were deposited in and associated with pottery grave-goods—others were contained in small wooden boxes, evidence for which came from groups of accompanying nails. In Area 2 there were eight inhumations oriented east-west which probably represent





Plate I. Site 17. General view south-west. The hedge marks the line of Watling Street. Fenny Stratford can be seen in the distance.

(Photo CEU)



Plate II. Site 17. Successive recuts of road-side ditch along Watling Street. View north-west. A sequence of earlier gullies can be seen diverging beneath sections on left. (Photo CEU)

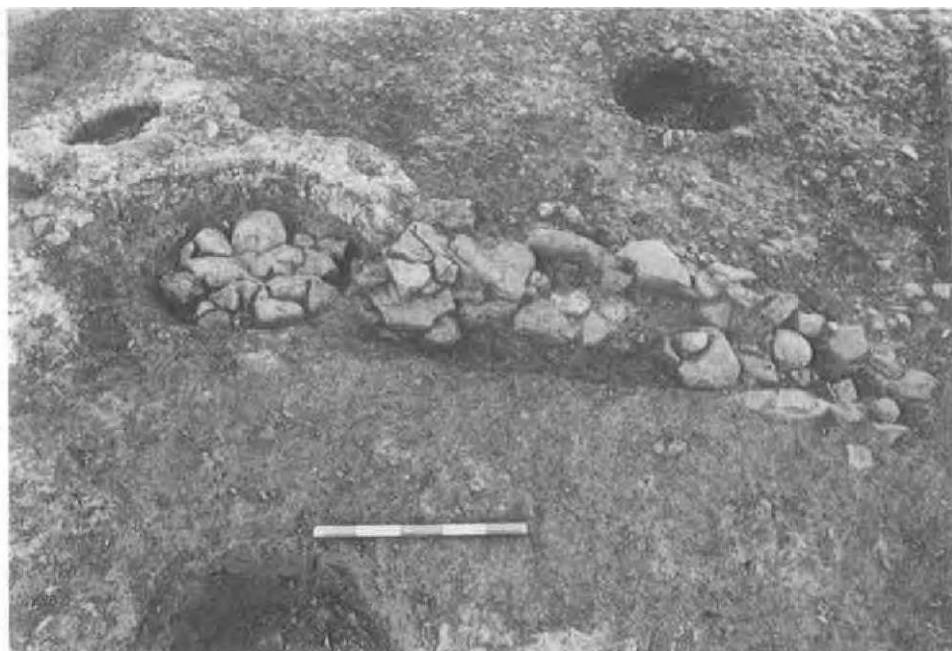


Plate III. Site 17. Furnace 74 with hearth removed showing stone-filled soakaway. View west. (Photo CEU)

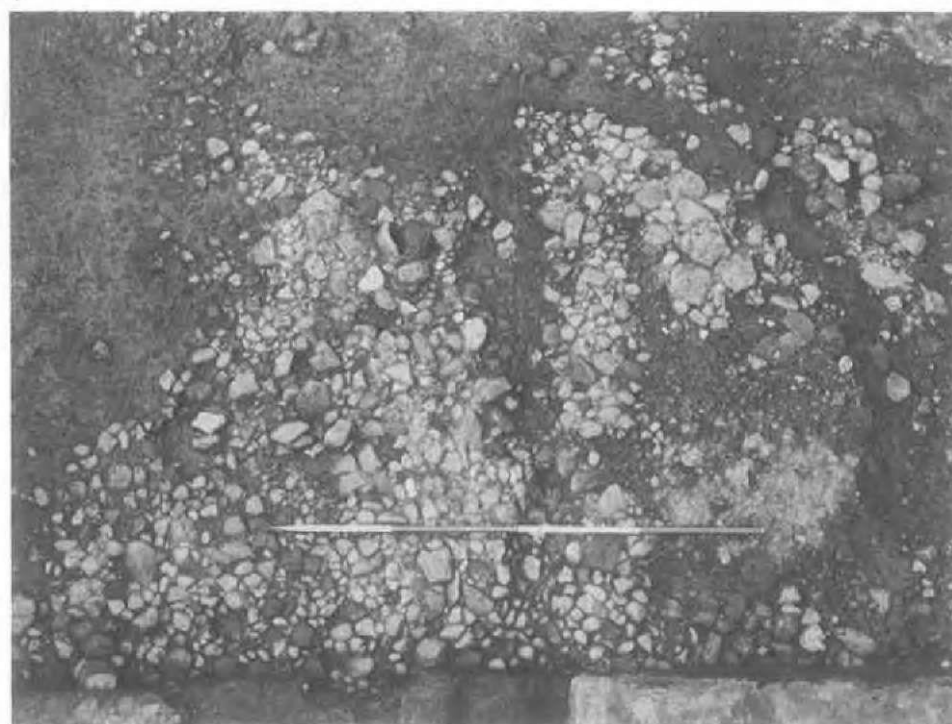


Plate IV. Site 17. Metallised area (1343) cut by curved slot (1659) of hut. View south. (Photo CEU)



Plate V. Site 17. Area 3. Buildings 2383/2380. A cutting top left gives the location of the underlying road-side ditch. Modern Watling Street top right. View north. (Photo C. Woodfield)

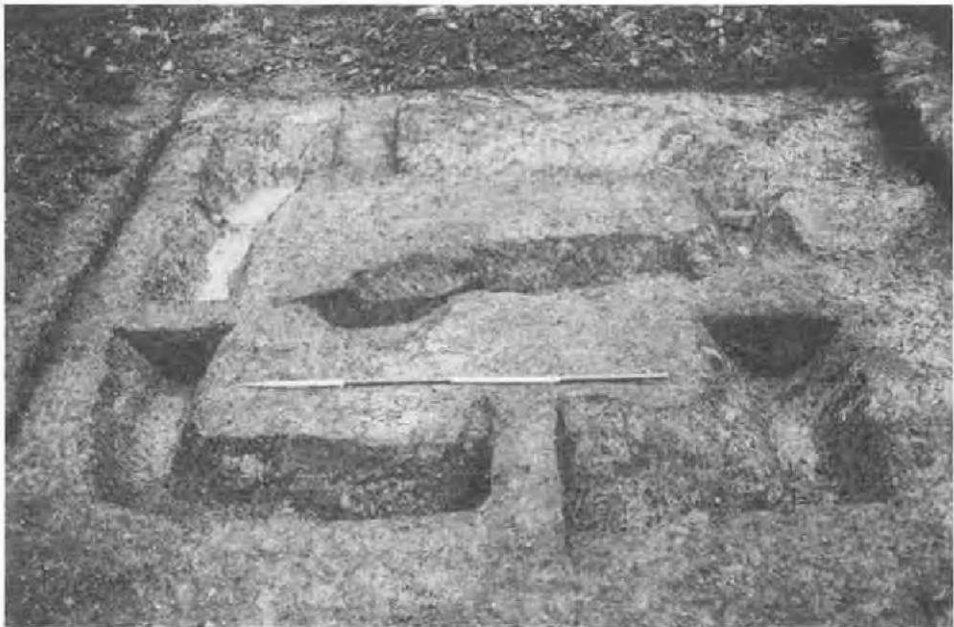


Plate VI. Site 17. Rectangular enclosure 2329 with central burial. View east. (Photo CEU)

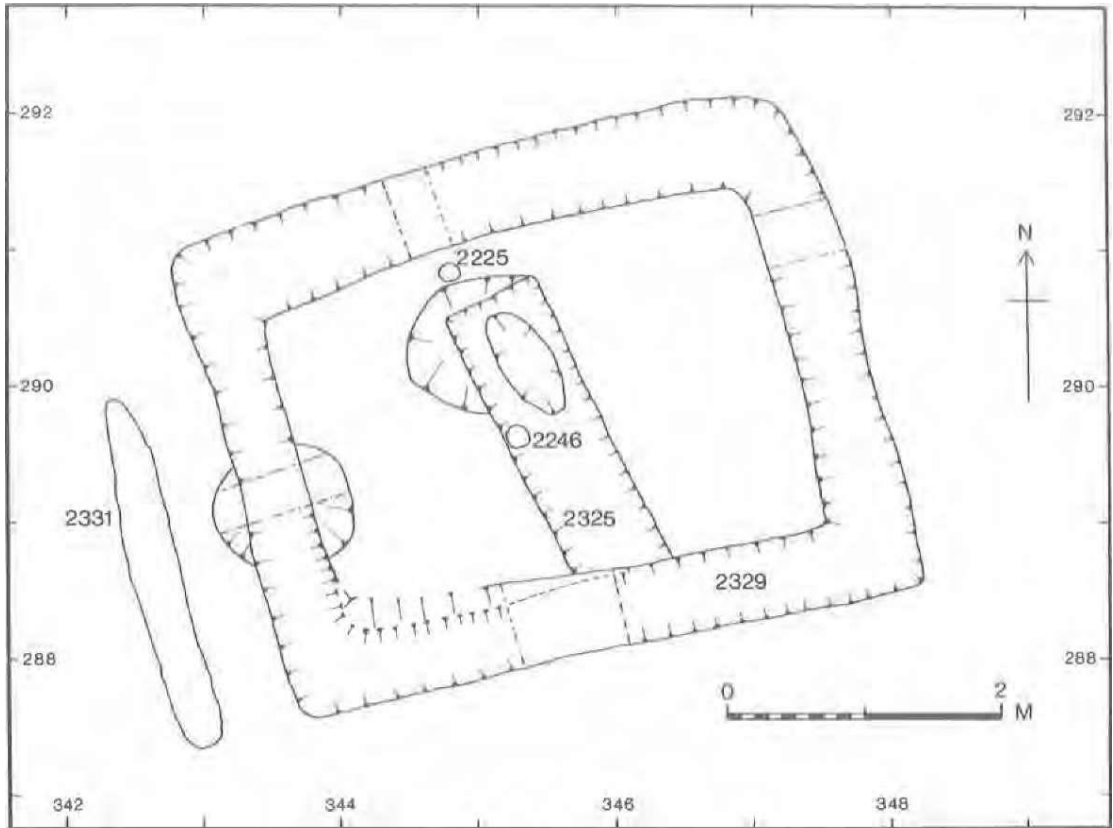


Fig. 14. Burial enclosure 2329; Site 17, Area 1.

the transition from cremation to inhumation burial practice and since they were found in the same areas the cremations indicate that the cemeteries continued in use. The inhumations had no grave goods but iron nails show evidence for wooden coffins. On Area 1 at 350 m east by 295 m north there was a more elaborate burial (Fig. 14). It began as a cremation set in a shallow pit, without funerary objects, surrounded by a rectangular ditched enclosure (2329), measuring 2.70 by 3.70 m (Pl. VI). It was reminiscent of late iron Age square barrows, for example those excavated by Dr I. M. Stead at Burton Fleming, N. Humberside (Stead 1976, Fig. 1). Cutting the cremation pit was a secondary inhumation (2325), without a skeleton, containing a fine penannular bronze bracelet (No. 25, Fig. 24) with snakehead terminals dated by parallels to the fourth century. These were the 'official'

graves. In addition to the above, Area 5 yielded eight infant burials, perhaps deposited without ceremony, overlying the infilled roadside ditch hollows at about 280 m east by 200 m north and a single isolated example at 285 m east by 245 m north. In contrast Area 2 produced no infant burials and the explanation therefore would appear to be that infants from the town were being hastily buried outside the town gate. An examination of the skeletal remains by Janet D. Henderson (p. 103) showed that all eight individuals could be classed as infants—one was foetal, two were from term to three months, four were from early post-natal to three months and one was three to four months. Infant mortality therefore seems to have been common during the first three months. Inhumations on Area 1 (Fig. 18) associated with the later cemetery will be described under Phase 7 below.

### Phase 6

This was probably a significant period in the history of Magiovinium. Covering the industrial hearths and structures on Area 1 was a broad swathe of coarse sandy soil, in places 30 cm deep, in other places absent, its extent giving the impression that it was spread with the intention of levelling and tidying-up the area and therefore possibly part of a municipal programme of works. This levelling sealed considerable quantities of pottery, none dated later than c.AD 180, A single coin of Tetricus was apparently found in a level sealed by the sand but the pottery is consistently of late second-century date or earlier and the coin is therefore believed to be an intrusion. What inspired this programme of 'civic pride' is not known but the date is similar to the date of construction of the town defences at Towcester and Great Casterton. If Magiovinium was being defended in this period (it has the remains of a bank and shallow ditch) it is possible that ribbon development beyond the nucleus was removed and residents left outside the new limits of the town were moved inside.

Following perhaps a period of inactivity represented by a broad swathe of loam (Layers 639 and 2314) containing Nene Valley wares, we now see metalled trackways from Watling Street leading into the allotments and some allotment ditches being recut (Fig. 3). Traces of six such trackways were found between 275 and 340 m east. Although the original allotments appear to have been based on a width of about 19 m, the spaces between the trackways was now less uniform, ranging from 15 to 20 m. They appear to have divided properties fronting Watling Street, but evidence for these was slight with the single exception of Building 60.

#### *Building 60* (Fig. 15, PL VIII)

This was situated between 281 and 286-7 m east adjacent to trackway 654. It was about 5.50 m wide, its length north-south being unknown (at least 6.50 m) as it ran beneath the modern hedgerow along Watling Street and was not fully excavated. The structure was of timber and had originally at least four bays separated by posts supported on large circular pads of

stones (Pl. VIII), set into pits varying between 50-80 cm deep and 70-100 cm wide (Sections, Fig. 16). Two rows of five posts were excavated, the northern pair having another post between them (42), giving the gable additional support. Also associated with the building were three post-holes (Nos. 624, 628 and 632) shallower than the main supports and perhaps indicating the position of a central division. There was no evidence for intermediate walls between the main posts although on the west side a sleeper beam, assumed to relate to an earlier structure, may conceivably be a sill. The lack of evidence for post-pipes in the holes confirmed their function as pads and therefore raises questions as to the method or construction and means of stability (Fig. 17). The posts on one side match those on the other so it is probable that each pair was joined by a tie-beam. Although the north-south divisions (1.60 m centre to centre) were fairly regular, the opposite post of a pair was sometimes askew from the right angle. However, the north-south centre-line between both rows of posts was very regular and it seems likely that the five pairs of posts and connecting tie-beams were stabilized by a wall-plate on which the common rafters rested. The lack of evidence for intermediate walling may be merely a consequence of ploughing but more likely, perhaps, is that the structure was clad in timber planks or wattles fixed with wooden pegs (nails were not found in quantity). Lack of tiles or slates suggests a thatched roof.

The function of the building must remain a matter for speculation but it was probably a barn. A single hearth found on the east side need not necessarily indicate a domestic use. If it was for habitation more traces of ovens and rubbish would have been found. It could have been another one or two bays longer. It is impossible to tell how late the building ran owing to plough damage, but it is likely to have continued into the early fourth century and may have remained when the cemetery to the north extended its area.

Post-holes of Phase 6 structures along the roadside were found elsewhere in Area 1 but they did not form any logical plan. The

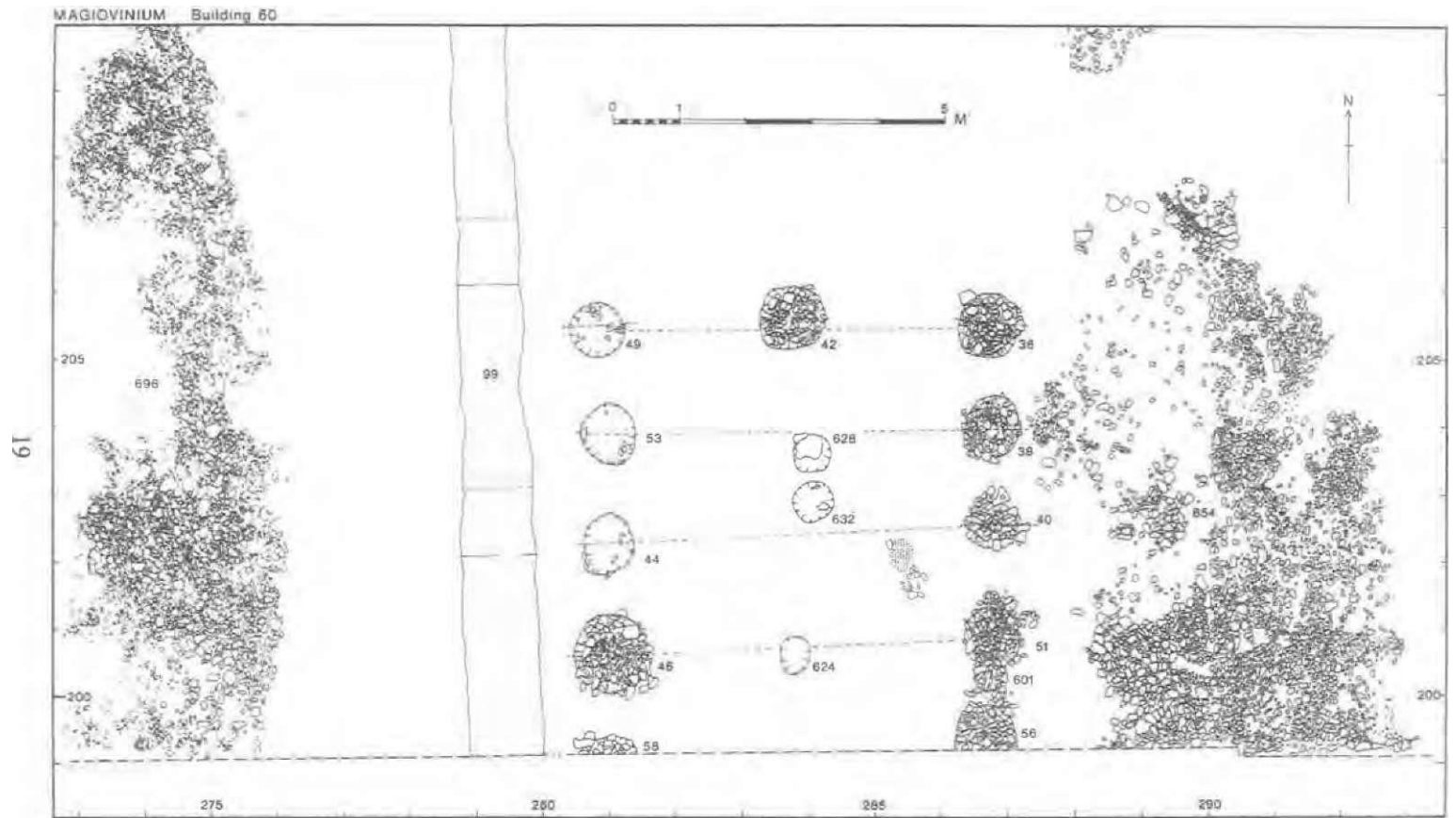


Fig. 15. Plan of Building 60 with associated trackways to east and west; Site 17, Area I.

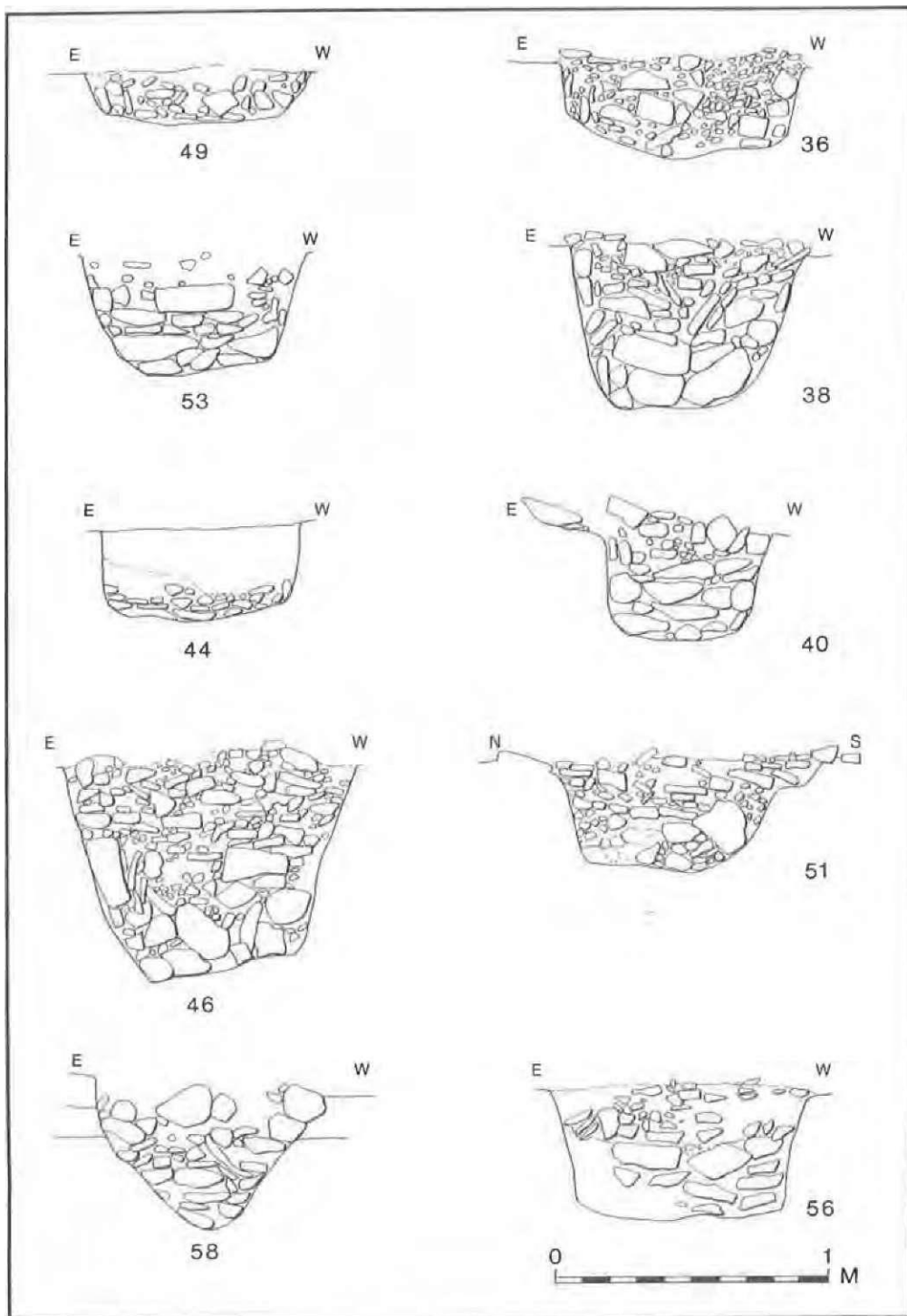


Fig. 16. Sections through post-holes, Building 60; Site 17, Area 1.



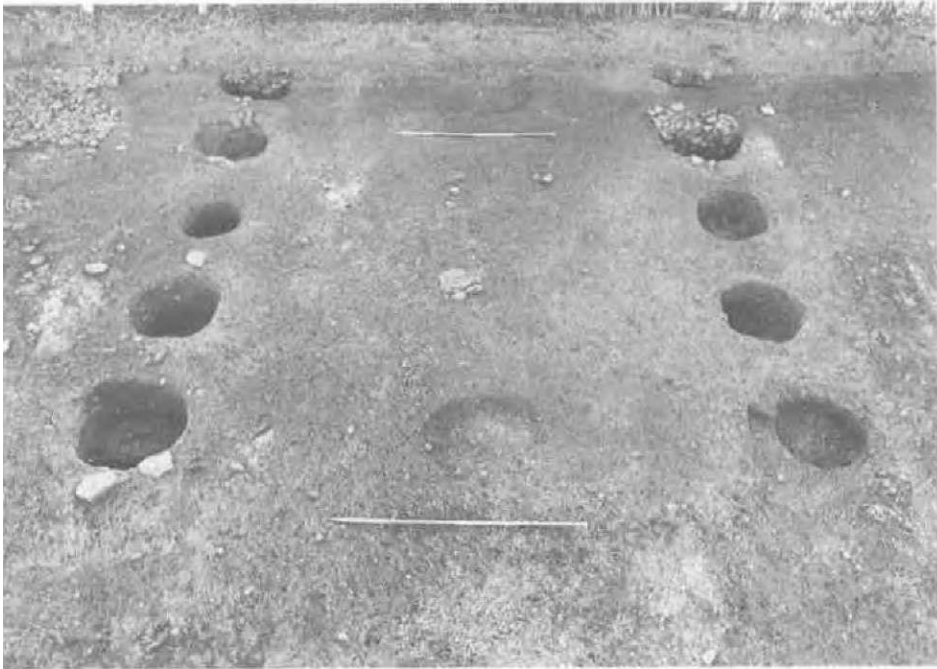


Plate VII. Site 17, Building 60. Overall view south. (Photo CEU)



Plate VIII. Site 17, Building 60. Post-pad 38. View south. (Photo CEU)



Plate IX. Site 17. Skeleton of a horse. (Photo CEU)

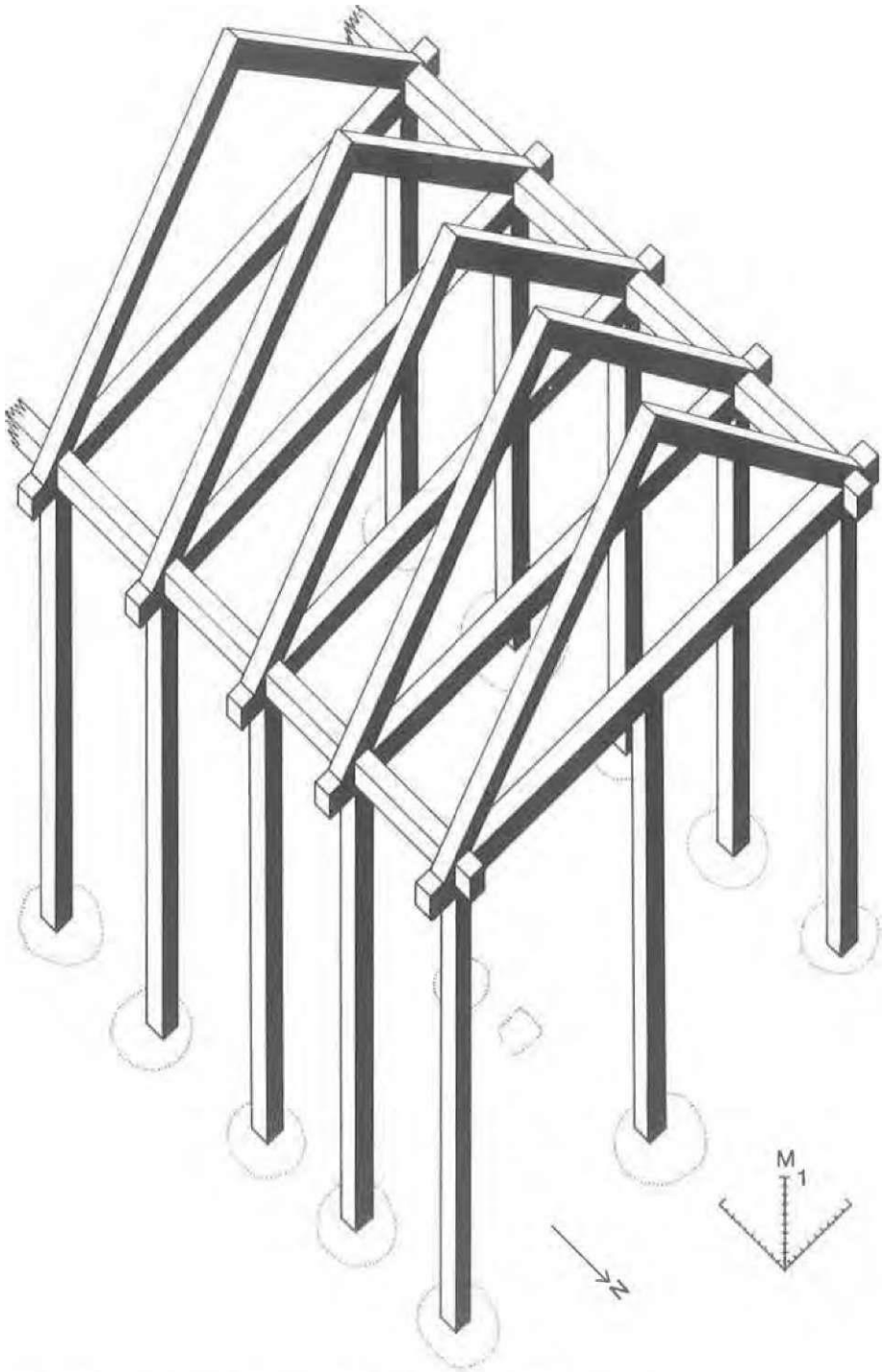


Fig. 17. Reconstruction drawing of Building 60; Site 17, Area 1.

re-introduction of industrial activity is represented by spreads of scorched clay found at c.300 m east (not shown on plan) perhaps evidence that the town could not be contained within its new limits and traders were allowed to expand. How far eastwards later occupation is to be found is uncertain—Hedley Pengelly's excavation in 1970 of a trench situated at c.355 m east located a line of stones interpreted as a wall but which is more likely to be another trackway. No trackways have been found on Area 2 further east, nor evidence for later buildings.

### Phase 7

Many of the allotments and trackways in Area 1 were abandoned when the cemetery was enlarged (Fig. 18). Initially the cemetery appears to have had defined limits, its northern extent being an east-west ditch (1894), situated at about 260 m north, which was recut in the fourth century. The southern boundary was close to the road. On the east side no graves were found beyond north-south gully 1507 at about 300 m east; the western limit is not known.

The graves were of two types; three, Nos. 1518, 1817 and 996, without grave-goods, were oriented east-west, the first with head to the east and the others head to the west. One of this group (1518) lies to the north and 'outside' the assumed northern boundary. The other graves, of which 22 have been located, were oriented north-south, heads to south, without coffins and without grave-goods, excepting Grave 1519 which had a bone comb (No, 98, Fig. 27). It is difficult from such a small sample to read significance in their distribution, but a north-south 'row' including 1564, 1895, 1865, 1886, 1890 and 1871 appear to be separated from the other graves by a 5 m wide gap. It is possible that this gap indicates evidence for a path leading into the fields further north (both gullies here were now silted-up), especially since its alignment is a continuation of trackway 696 (Fig. 15). Furthermore, terminals 1816 and 1846 of east-west ditch complex 1894, defining the assumed north boundary to the cemetery, stopped at the same alignment, further supporting this hypothesis. Also of

interest was the presence of two skulls buried, perhaps without ceremony, in gully 1878 just beyond the north boundary, and the skeletons of a mother and child in grave 1871. As none of the graves had ritual deposits it was impossible to date them. A further complication regarding date was the remote chance that the burials were medieval and victims of the hangman nearby at Galley Lane (Fig. 2). Accordingly, samples from both east-west (212) and north-south (1564) oriented graves were submitted for C14 analysis which suggested that the north-south graves were of late third/early fourth century and the east-west burials were late fourth century. The results, expressed as DELC 13, AGE bp and bp-1950, are given in accordance with the method outlined in Harwell Notes Sheet NS/1/75:

Harwell Ref	Senders Ref	Type	Delc13 (+/-10> (yrs)	Age bp	bp-1950
2935	17/1564	Bone	-21.6	1660+/-80	AD 290
317A	17/212	Bone	-21.5	1550+/-90	AD 400

The skeletons were studied by Miss Janet Henderson of the Ancient Monuments Laboratory (AML Report No. 3548) and her detailed observations are available in archive form. The small sample size makes deductions about the population unreliable, but there were more females than males and a noticeable absence of juveniles or sub-adults compared to the number of infants. Women dying in childbirth might account for the higher ratio of women to men. Of the graves, few were notable except 1871 which contained the skeletons of an adult and a juvenile aged 2-4 years. The position of the east-west graves north of those oriented north-south might suggest that the cemetery had expanded beyond its original northern limit represented by ditch 1894, and also suggests that a separate cult and burial custom now prevailed.

In many of the ditches, especially the upper filling of No. 1894 (Fig. 18), were very large numbers of animal bones, kindly identified by Mrs A. Locker. Of significance are the bones from horses, many of which were found in semi-articulated positions suggesting that portions of carcasses were being dumped, the ditches providing a useful, if unhygienic,

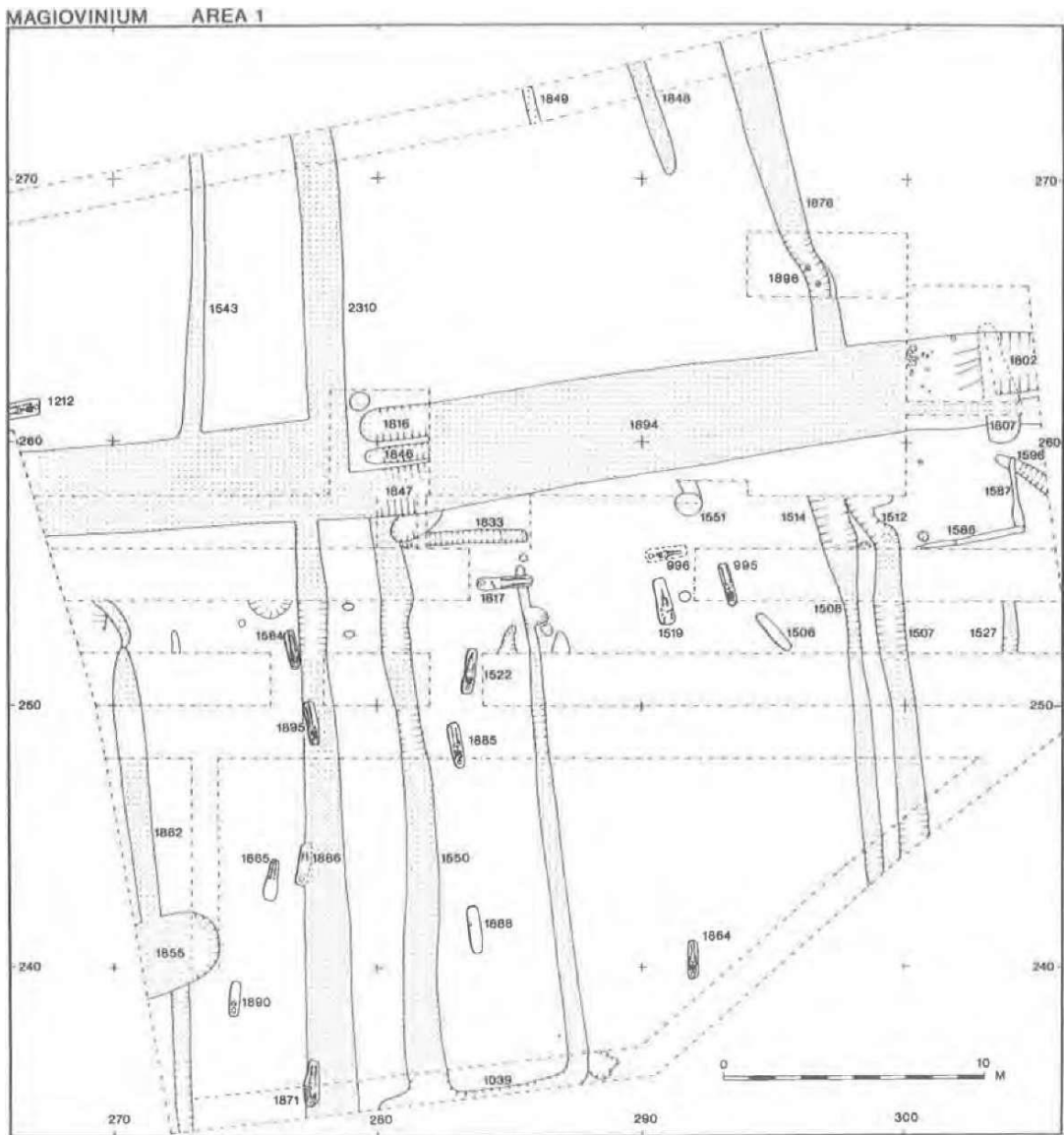


Fig. 18. Plan of cemetery; Site 17, Area 1.

void to be filled. The general picture which emerges is one of worn-out horses meeting their end in knacker's yards alongside Watling Street, their meat possibly stripped for consumption and their skins used by various traders. Magiovinium, sitting astride Watling Street, would have been a major centre for the supply and change of horses, which could have pastured on the meadows. Apart from a general trade

obtained from travellers using Watling Street, Magiovinium may have been a centre associated with the sand industry.

Very large deposits of sand are to be found two miles south of Magiovinium and hauliers would be required to transport the material to villas and towns, especially Verulamium; the yellow sand found there is

possibly from this general source. Sand from the Woodwich and Reading beds is available locally to Verulamium but it is rarely in 'clean' deposits, and is usually mixed with gravel, and pale yellow/grey in colour. Leighton Buzzard and its area provides a source of 'pure' yellow-orange sand easily extracted, A consequence of this trade would be a need for iron-traders and smiths, as demonstrated by the furnaces, and possibly cartwrights.

This trade was not confined solely to the north-west, south-east route along Watling Street however. The Ouzel, flowing north to link with the Great Ouze, must also have borne traffic as did a road discovered on Site 18 leading from Magiovinium to the north-east probably to link up with Harrold in Bedfordshire, and further afield Irchester on the River Nene; trading from the Harrold area is attested by the pottery, much of which was from the Harrold Kilns.

**This article continues in [Section 3: Excavations on Site 18.](#)**