Excavations at Towcester, Northamptonshire: The Alchester Road Suburb

by A E BROWN and CHARMIAN WOODFIELD, with D C MYNARD

with contributions by Denise Allen, Joanna Bird, Rod Clough, H E M Cool, A Eastham, J C Eaton, M A Girling, K F Hartley, Elizabeth Healey, M Henig, J M Holmes, R T Jones, Don Mackreth, G C Morgan, Glenys Lloyd Morgan, C Orr, S Payne, Hedley Pengelly, Jennifer Price, June Swann, Robin Symonds, the late J H Thornton, and C T P Woodfield.

Fortunati sunt fabri ferrarii qui apud carbones assident (Plautus, *Rudens*)

SUMMARY

From 1967 to 1978 a series of three separate rescue excavations and observations was conducted on an area of some 5.7 ha south west of the defended area of Roman Towcester.

Towards the end of the 1st century a metalled road to Alchester in Oxfordshire, was set out between a pair of side ditches. Where the road ran through marshy ground the metalling was revetted with stakes and one of the side ditches omitted. On the western side of the road were ditched fields, sometimes containing small circular structures, probably related to the villa at Wood Burcote 1km to the south west; there was evidence for concern with land drainage.

The side ditches were recut or re-dug throughout the first half of the 2nd century, but after they had largely silted up the character of the site underwent a dramatic change. About 170 AD a series of ditched plots, apparently forming a planned scheme, was laid out along both sides of the Alchester road, on a different alignment from the earlier fields. This lay-out provided deeper plots to the west of the road than to the east, perhaps due to a difference in ownership.

Buildings of timber or of cob on stone foundations were erected within the plots; they were all generally rectilinear. There is evidence for iron-working. There was much activity until c230 when there appears to have been a marked fall-off in the intensity of occupation.

Around 270 a new road, with side ditches, was created, running in from the south east to join the road to Alchester; its destination was probably Fleet Marston in Buckinghamshire. At the same time the Alchester road underwent major modifications. Fresh, narrower, side ditches were dug; and where the road ran through marshy ground it was completely remodelled, reduced in width and revetted with stakes.

About 330 AD a new set of ditched enclosures was laid out as a planned series on both sides of the Alchester road, the difference in plot sizes being maintained. Buildings were erected inside the plots and in general exhibited two phases; initial buildings of probable D-shape with drainage ditches around them were replaced by buildings of stylobate or post pad construction, often re-using architectural masonry of very high quality. Where necessary these buildings were approached across the road side ditches by means of causeways; the ditches themselves were re-cut twice. Waterlogged conditions enabled details of the wooden revetting of some of the drainage ditches to be recovered.

There was abundant evidence for more industrial activity at this time in the form of iron and lead working; possibly also the working of pewter and the manufacture of irregular small change. There is also evidence in the form of beetle remains for the keeping of stock. This latter activity may have gone on into the late 370's, some time after the end of the metalworking c 360 AD.

Notable finds include a 4th century lead pig and other lead working debris, a 4th century pewter dish, an important series of 4th century glass fragments, a late 3rd century intaglio, an enamelled stacking stand, and a 1st century mirror. A useful stratified series of later Roman pottery was recovered.

This account is a composite report embracing three separate investigations carried out south-west of Towcester along the line of the Roman road to Alchester in Oxfordshire. In November and December 1967 Mr D C Mynard excavated for three weeks in advance of housing development in the area of Link Way and St George's Close. Since further housing development was planned in the fields adjacent to the area investigated by Mr Mynard, the first named author carried out three seasons of work, each of six weeks, immediately to the west of St Lawrence Road in the autumn months of 1974-76. In 1977-78 Mrs C Woodfield was able to watch the excavation of service trenches and roads and the erection of houses on this site and in conditions of considerable difficulty to record archaeological information rapidly which in many cases was almost immediately destroyed. Financial support was provided by the Department of the Environment.

ORGANISATION OF THE REPORT

The report is divided into two portions, the main printed text and sections in microfiche. The breakdown between the two is as follows:—

Printed text

1. Phasing and description of main features, with summary reference to the associated dating evidence.
2. The principal dating evidence:
   - The Samian ware *by* Joanna Bird and Hedley Pengelly
   - The mortaria *by* K F Hartley
   - The remainder of the Roman pottery *by* C Woodfield
   - The coins: summary report *by* C T P Woodfield
3. Small finds: brief descriptions in the main, but detailed accounts of certain outstanding items and collections:
   - Objects of silver
   - Objects of copper alloy
   - Certain objects of iron
   - Objects of lead
   - Objects of pewter
   - The glass found in the excavations of 1974-76 *by* Jennifer Price and H E M Cool
   - Objects of stone excluding querns
   - Objects of bone
   - Objects of wood *by* G C Morgan
4. Metallurgical specimens *by* G C Morgan
5. Environmental implications *by* M A Girling
6. Concluding discussion

Microfiche

1. List of contexts broken down by phase; this also acts as a concordance between the original context numbers allocated by the three excavators and the new ones used in this account (M1-5)
2. Detailed descriptions of boundary ditches and of certain other features (M6-17)
3. Finds reports
   - i Detailed list of coins arranged by Phase *by* C T P Woodfield (M18-31)
   - ii Analysis of coin *by* G C Morgan (M32)
   - iii Samian ware from contexts of Phases 3 and 4 *by* Joanna Bird and Hedley Pengelly (M33-37)
   - iv Pottery fabric type series, Towcester (M38-41)
   - v Imported colour coated pottery from the 1977-78 watching brief *by* R Symonds (M42)
   - vi Technical report on the Roman mirror *by* G C Morgan (M43-7)
   - vii The flints *by* Elizabeth Healey (M48-49)
   - viii Additional ironwork (M50-54)
   - ix Objects of jet and shale (M55-56)
   - x Objects of leather *by* the late John Thornton, and J Swann (M57-58)
   - xi Querns (M59-62)
   - xii Spindle whorls (M63-64)
   - xiii Discs of stone and pottery (M65)
   - xiv Roman building materials (M66-71)
   - xv Roman architectural masonry *by* C T P Woodfield (M72-73)
   - xvi Glass from the excavations of 1967 (M74)

xvii Glass from the excavations of 1977 *by* D Allen (M75)
xviii The remainder of the wood *by* G C Morgan (M76-83)
xix Animal bones from the excavations of 1967 *by* R T Jones (M84)
xx Animal bones from the excavations of 1974-6 *by* S Payne (M85-109)
xxi Animal bones from the excavations of 1977 by J M Holmes (M110-112)
xxii Bird bones from the excavations of 1974-76 *by* Anne Eastham (M113-119)
xxiii Human bones from grave A *by* C T P Woodfield (M120)
xxiv Oyster shells from the excavations of 1974-76 *by* C Orr (M121-122)
xxv Deposits on the inside of pottery fragments *by* G C Morgan (M123)
xxvi Possible daub fragments *by* G C Morgan (M124)
xxvii Coal *by* J C Eaton (M125-127)
xxviii Analysis of slag remains from watching brief, 1977 *by* R Clough (M128-130)
xxix Species list, environmental samples *by* Maureen Girling (M131)
xxx Medieval and Post-medieval finds (M132-133)

An index of microfiche figures is given on p 136.

NATURE OF THE EXCAVATIONS

In all a strip of ground 325m long and 175m wide was investigated by one means or another (FIG 1), although the intensity of excavation was variable; the area involved was 5.7ha, almost exactly half the defended area of Roman Towcester. Because of the shortness of time Mr Mynard trial trenched a considerable part of the area due to be built on in 1967, opening up larger areas to investigate features located by this means (FIGS 3 and 11, Trenches 20-28 and Area 5; and FIG 1, Trench 29). A combination of trial trenching and the clearance of some 2000 sq m by area excavation techniques, following the removal of the ploughsoil by machinery, was used during the excavations of 1974-76 (FIGS 3 and 11, Trenches 1-19 and Areas 1-4). Mrs Woodfield's observations in 1977-78 resulted in the recording of numerous features which lay outside the trench and area systems established by the earlier excavators; reference to FIGS 3 and 11 will show how the features then recorded bear a clear relationship to the new roads and main sewer trenches then brought into being.

THE SITE — GENERAL

The area shown on FIG 1 lies on the southern, northward facing, slope of the valley of the Silverstone Brook, 400m from the walled town of Towcester. Aerial photographs (1) show that most of it had been covered with ridge and furrow and therefore formed part of the Medieval open field system of Towcester (note the Medieval coulter from Building 2/3-4/1b, M132); the field which contained Areas 1-3 had been ploughed flat in more recent times. All this meant that in general the preservation of the remains was poor; in several instances postholes and stone spreads only survived, and that faintly, where they lay on top of ditch fills. The destruction of stratification had also resulted in the creation at the base of the ploughsoil of a layer directly overlying disturbed stone yards and floors and containing finds of all periods, thereby making precise dating or even phasing very difficult; this was particularly noticeable in Areas 1 and 5. The exception to all this was the western side of Area 3 and the eastern side of Area 4, which lay close to a hedge and were to some extent protected by the headlands at the ends of the fields.

The low quality of preservation was partly compensated for by the nature of the local geology. This consisted of sands of the Lower Estuarine Series and Northampton Sand overlying Upper Lias Clay. Water emerged at the junction of the permeable and impermeable levels, creating wet conditions at the western edge of Area 3, resulting in the preservation of wood and other organic remains. This persistent dampness had created difficulties not only for the Roman road engineers but also for all subsequent farmers, as the abundance of land drains of all types indicated (FIGS 3 and 11).

The trial trenching by Mr Mynard and observations made by earlier fieldworkers (2) and during the building works established that essentially occupation along the Alchester road consisted of a relatively narrow band some 45m wide on the west side and *c* 25m on the east. Trenches 20, 21, 26-29 produced nothing.

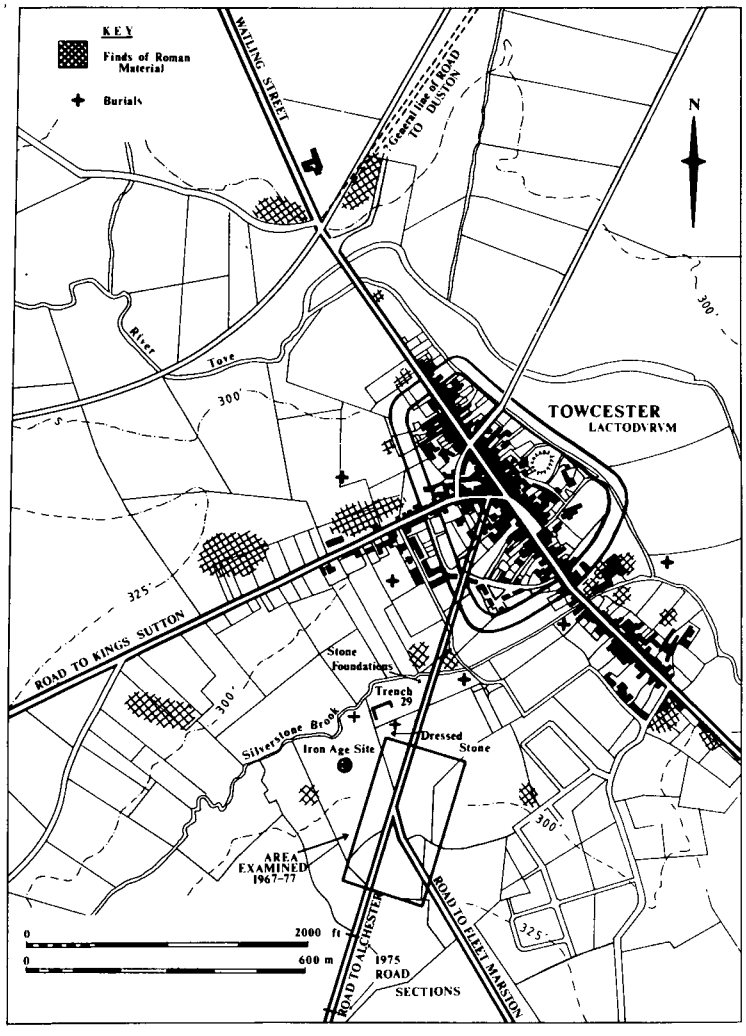


Fig 1 Towcester, Alchester road suburbs: location plan.

DESCRIPTION OF PHASES

PHASE 1 (general plan, FIG 2: detailed plan, FIG 3). Late Flavian - *c* 170 AD.

(a). *The Alchester road.* The excavation succeeded in tracing the line of the Roman road from Towcester to Alchester (Margary 160a), hitherto unknown in detail at this end, for a distance of 620m (FIG 1). The road, which had been greatly disturbed by the plough, consisted for the most part of a strip of gravel pebbles of variable width, but probably originally 10m; the pebbles themselves ranged in size from 20-30mm to 100-150mm across. There were occasional flattish pieces of limestone. The road ranged in thickness from 120-150mm and in one place (Trench 2), where the subsoil was a stiff yellow clay, rested on a layer of white sand 200mm thick.

Where the road ran through a patch of marshy ground in Area 3 a series of closely set stakeholes 60-100mm in diameter was uncovered along the edge of the metalling (FIGS 4 and 12). The one surviving stake, along the eastern side, proved to be of hazel (M76, S269) (PL 3). These stakes would have supported wattling or planks intended to keep the metalling in place (for a comparable

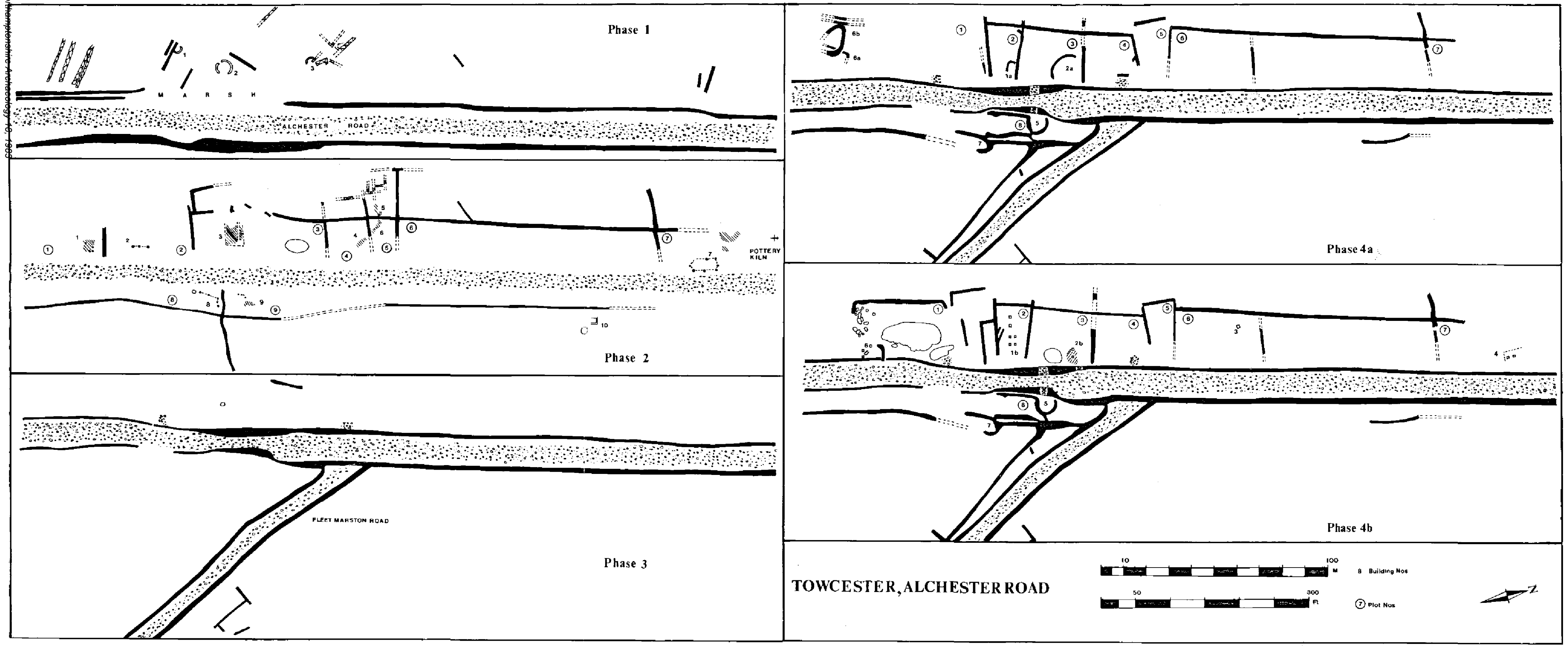
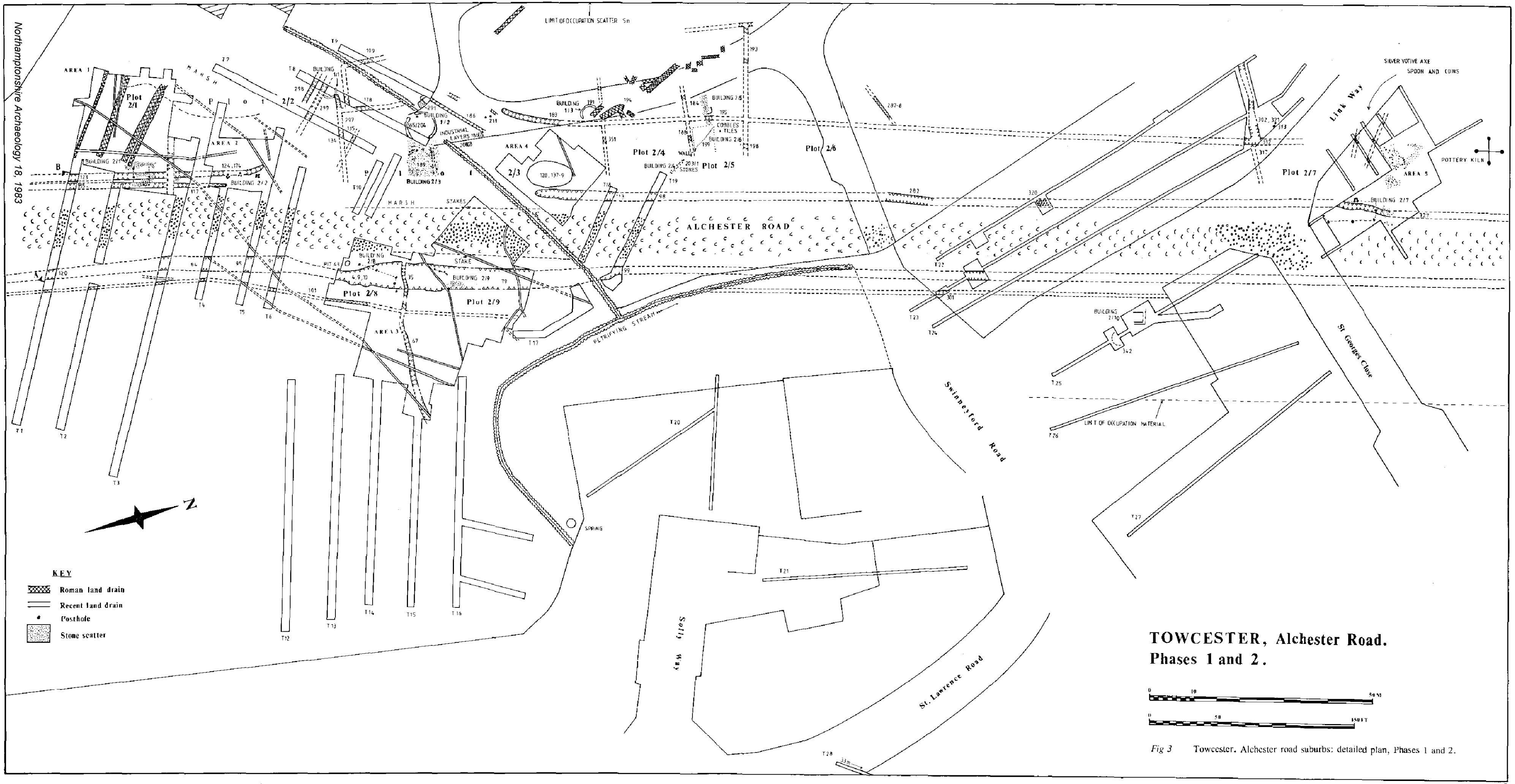
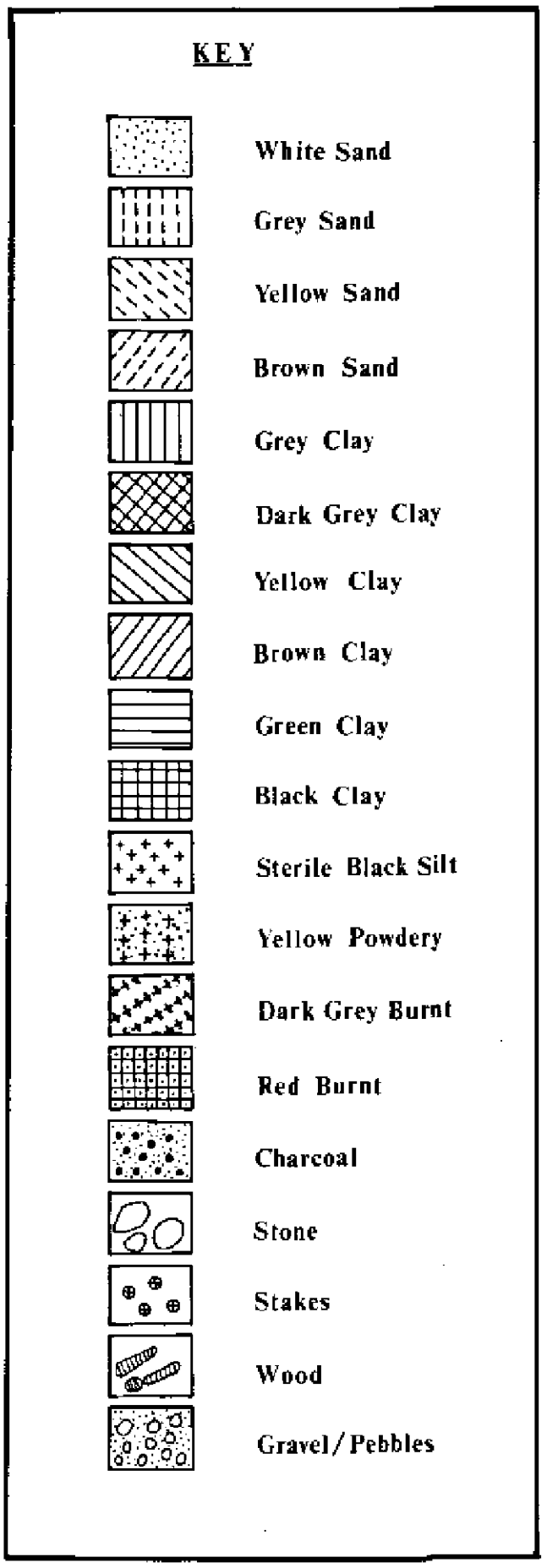


Fig 2 Towcester, Alchester road suburbs: general phasing diagram.



TOWCESTER, Alchester Road.
Phases 1 and 2.

Fig 3 Towcester. Alchester road suburbs: detailed plan, Phases 1 and 2.


KEY
White Sand
Grey Sand
Yellow Sand
Brown Sand
Grey Clay
Dark Grey Clay
Yellow Clay
Brown Clay
Green Clay
Black Clay
Sterile Black Silt
Yellow Powdery
Dark Grey Burnt
Red Burnt
Charcoal
Stone
Stakes
Wood
Gravel/Pebbles

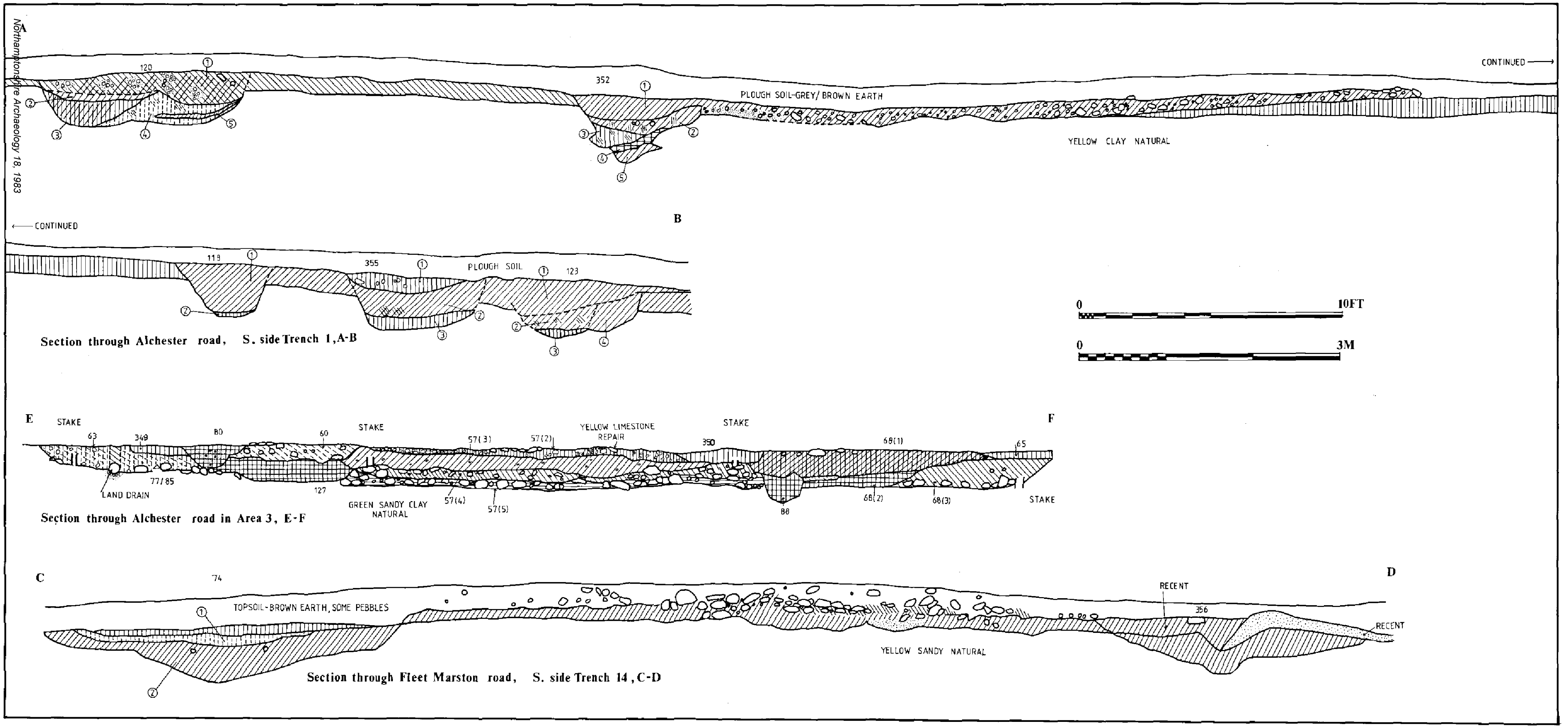


Fig 4 Towcester, Alchester road suburbs: sections through Alchester and Fleet Marston roads.

use of wooden stakes alongside a road in Southwark, this time to retain a foundation layer of logs, see Bird *et al* 1978, FIG 14).

The side ditches, separated from the road by a strip of land some 4m wide were generally 2-3.5m wide, U-shaped in section and 800mm to 1m deep below the modern ground surface (FIG 5, 91, 84: FIG 6, 282). Where the western side ditch ran through stiff blue and grey-green clay in Area 4 and Trenches 18 and 19 it was however V-shaped (FIG 5, 124 and 113). The western side ditch was omitted altogether in the marshy zone between Areas 2 and 3. In this area, on the eastern side, where the subsoil was a softish yellow sand, the side ditch was shallow, only 420mm deep, but very wide, 5m (FIG 5, 4-9).

There was evidence for at least one re-cut along both sides (FIG 4, Trench 1, 120, 123; FIG 5, 95). On the west, in Areas 1 and 2, after the original side ditch had silted up, another was dug immediately to the east of it, closer to the road. This was 1.3 to 1.5m wide and 800-900mm deep, U-shaped (FIG 4, Trench 1, 355; FIG 5, 117).

No dating evidence was obtained from below or within the road metalling itself, which in any case was probably the product of numerous repairs throughout the Roman period. Little was forthcoming from the side ditches but from the middle silt of the eastern ditch (84 (3), p 68) come fragments of Hadrianic and early-mid 2nd century Samian and a 2nd century mortarium sherd. Equivalent levels from the western side ditches produced early to mid-2nd century Samian (123(2) and 174, p 68). Both ditches produced early to mid 2nd century black burnished ware dishes (p 81 nos 7 and 8). The replacement ditch along the west produced a mortarium base of *c* 150-250. What coarse pottery there is (p 81) is not inconsistent with the view that the road was initially constructed shortly before the turn of the 1st and 2nd centuries and that its ditches went on silting up and being cleaned out at various times up to *c* 170 AD.

(bi). *Land drains.* On the western side of the road in Area 1 was a series of ditches on a consistent NW-SE alignment (FIG 2; shown hatched on FIGS 3 and 8); they respect the roadside ditch and have carefully squared-off ends. Their width varies, from 660mm (152) to 1.06m (162) and since 357 cuts 151 more than one phase is involved. They all share certain features however — they are shallow, only 100-500mm deep, with flat or irregular bottoms; most have at the bottom a layer of soft black earth covered with a whitish sandy clay, ie replaced subsoil (sections of 142, 151, 162, FIG 5; other details, M9-10). The black earth has produced twigs of oak and hazel and peat like material (M76, S295 and 325). The best explanation is that these were land drains of twigs and brushwood, dug out and immediately filled again (for Iron Age examples, Pryor 1978, 17).

(bii). To the west of the later Plot 2/4 (FIG 3) was a group of narrow channels *c* 1m wide. Like the land drains in Area 1, some had straight, cut off ends; they produced one sherd of pottery (Fabric 35a (M40), later 1st-first half 2nd century), some oyster shells and scraps of animal bone. The impression given was of an intersecting maze but they were basically on two alignments — one running NW-SE, like those in Area 1, and perhaps relating to Ditch 186; and the other N-S, perhaps relating to the back plot layout of Phase 2 (p 135). The fill was clean red sand. The profile was V-shaped, with a narrow channel cut at the bottom. They are best interpreted as another set of land drains.

(c). There was also evidence for the existence of ditched plots on the same general alignment as the land drains in Area 1 and the set of drains west of Plot 2/4. To the north of the drains in Area 1 were Ditches 298, 299 (Trench 8) and 135 (Trench 7); these produced 2nd century Samian (p 68). What could have been two more ran through Area 5. The existence of pairs of ditches might suggest that one was a replacement for the other.

At right angles to the alignment of these Ditches were Ditches 287/8 (west of plot 2/6) and 186 (in the later Plot 2/3). The fill of ditch 287/8(2) was of clean reddish yellow clayey silt and it contained a small amount of pottery of the middle to third quarter of the 2nd century. Ditch 186 could in fact have been either a ditch or some sort of fence, or even a clay and wattle wall (details, M10). It was observed for about 15m and was dead straight. It was about 700mm wide, although the top had been lost by machinery. The section (FIG 16) shows a W profile, perhaps designed to take two panels of wattling with clay rammed in between. There was evidence for partial replacement of wattle panels or stakes. It contained only the odd oyster shell.

This series is obviously incomplete, but taken with the land drains, the ditches seem to represent

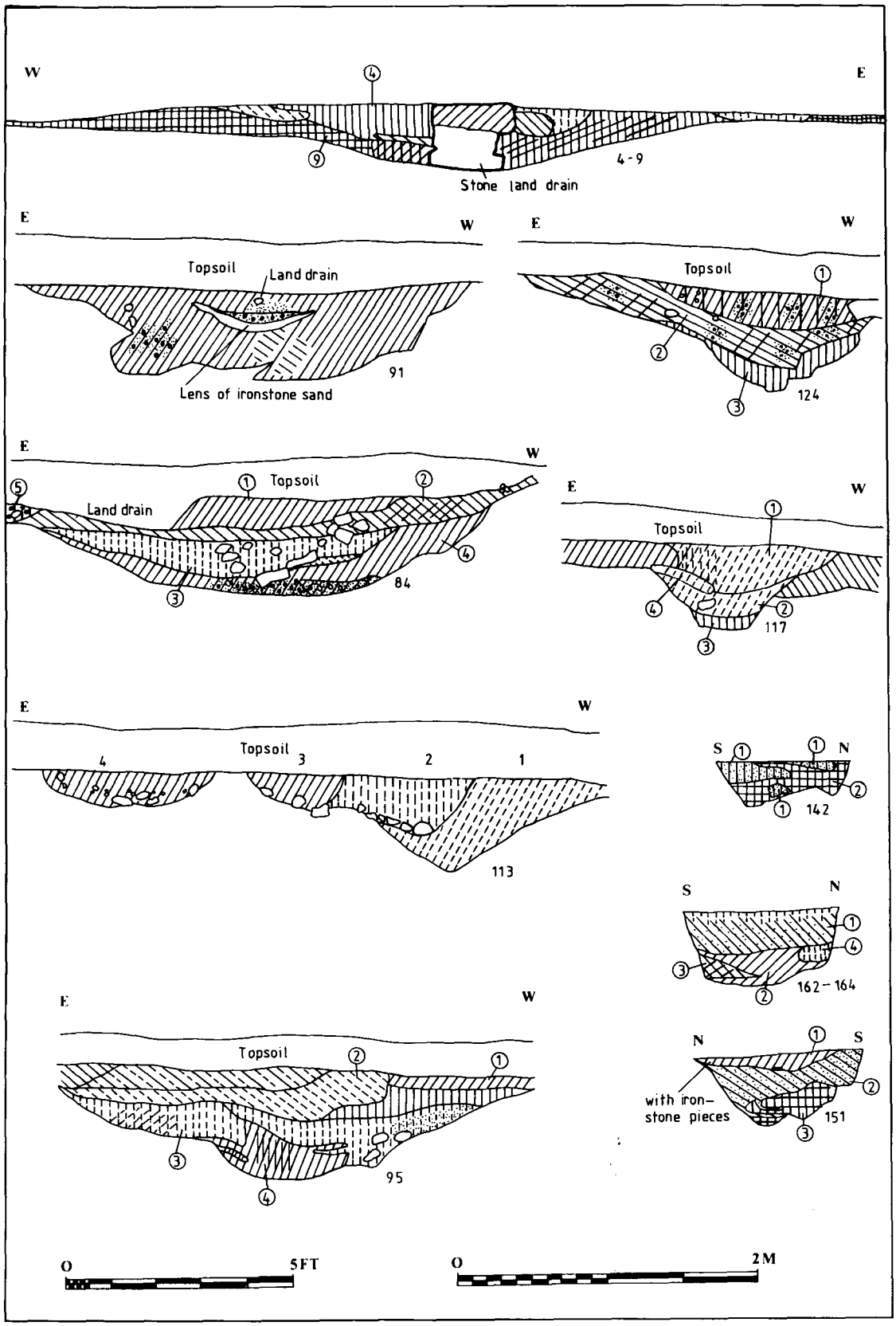


Fig 5 Towcester, Alchester road suburbs: sections through Alchester road side ditches, and land drains.

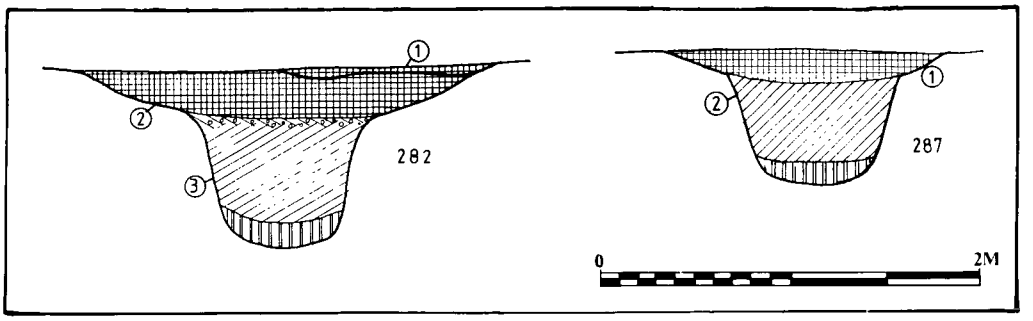


Fig 6 Towcester. Alchester road suburbs: road and boundary ditch sections.

an orderly land division, presumably for agricultural purposes.

(d). At some stage during Phase 1 small round structures, represented by their construction slots, were set in the enclosures.

i) *Building 1/1* (Trench 8) This cut Ditch 299 and consisted of a semi-circular slot *c* 350mm in width defining a building 5m in diameter. It appeared to be cut by the Phase 2 ditch 297.

ii) *Building 1/2* (Trench 8, FIG 7) lay close to Ditch 186. It consisted of a slot 550mm wide and over 160mm deep (165, FIG 15) defining a building 5m in diameter. An entrance 300mm wide to the SW and a single posthole 350 x 230mm to the N of the doorway were observed before destruction, cut into natural. Iron working debris was present in the slot but this could well have been deposited during and after demolition. The later black material overlying it contained 2nd century pottery and mid to late Antonine Samian.

iii) *Building 1/3* The construction slot of this building was briefly observed west of Area 4, cut into the natural during its destruction in 1977. It appeared to be only some 3m in diameter. The width of the slot was 300-400mm. A scatter of later 2nd century material was recovered from the disturbed levels overlying this structure.

These ring gullies could have represented small buildings; alternatively, some could be seen as the remains of stack stands (Pryor 1984, 127).

PHASE 2 (general plan, FIG 2: detailed plan, FIG 3). *c*170-*c*270 AD.

After the side ditches had largely silted up, a series of regular ditched plots was laid out on both sides of the Alchester road, on a different alignment from the drains and ditches of Phase 1. An element of planning is evident; Ditches 178 (Trench 8), 183, 195 and 312 (Trench 24), which form the rearward boundary of the series of plots west of the road, maintain a consistent alignment, as do Ditches 101 (Trenches 1-6) and 301 (Trench 23) east of it. The latter only deviates from its course to avoid the marshy ground in Area 3 (for sections through the back and side ditches of the plots, FIG 15; for descriptions, M10-11).

(a) *West of the Alchester Road*

Plot 2/1 was at least 20m wide: no SW boundary ditch was identified. It contained *Building 2/1* (FIG 8). This survived as a roughly rectangular spread of pieces of limestone, much disturbed by ploughing, *c* 8 x 10m, lying on the top of the silted up roadside ditches. Five definite postholes 100-200mm square, defined by their packing stones, remained. A patch of red burnt clay, 1.5 x 0.6m across, possibly the remains of a hearth or furnace, could have gone with this building. No unequivocal evidence was forthcoming for its purpose, but iron slag in the topmost fill of the roadside ditch to the south (123, p 126) suggests the working of iron somewhere in the vicinity. Because of heavy ploughing the material from much of the floor area (169, 181) represented a mixture of 2nd and 4th century types, but only 2nd century pottery was found in deposits sealed by the later, Phase 4b, furnace 182 (ie the sandy brown earth, 182(3).

Plot 2/2 was 38m wide. It contained *Building 2/2*. The bases of only three postholes survived; the remainder had been removed by pits of Period 4. The circular arrangements of pebbles representing the packing were 300-400mm and the posts themselves 200mm in diameter. Immediately to the west of the posthole picked up in Trench 4 was a grey patch 300mm in diameter which probably represented the base of a posthole belonging to an

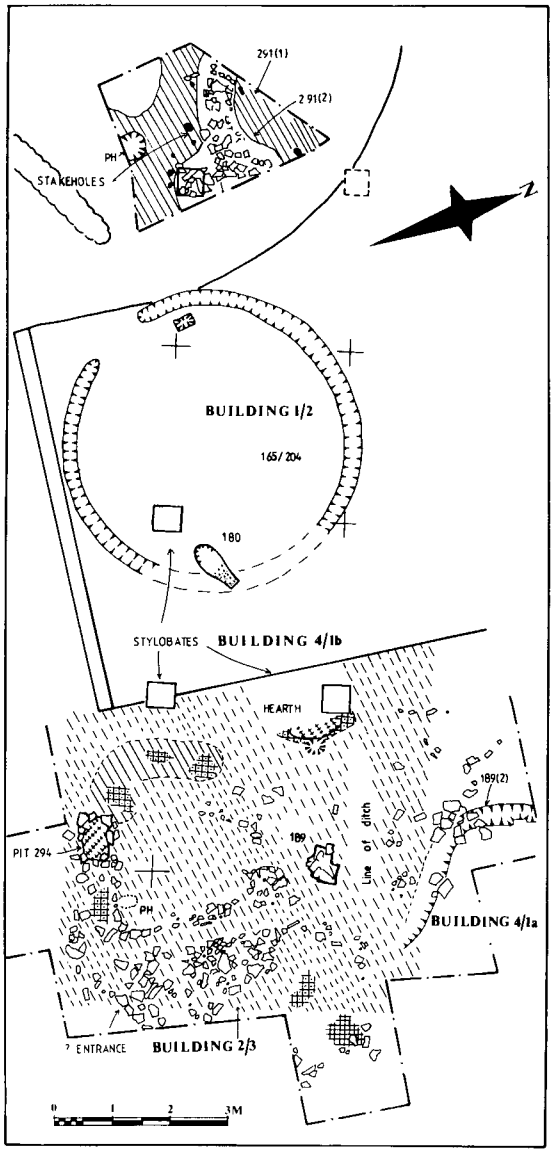


Fig 7 Towcester, Alchester road suburbs: detailed plan, part of Plot 2/3 and Plot 4/2.

pottery was found at the base of the ploughsoil over these postholes.

Plot 2/3 The northern boundary of this plot has been taken to be Ditch 351; this produced no dating material, but would give a width of 57m. To the west, Ditch 109 in Trench 9 on much the same alignment as the comparable ditch behind Plot 2/5, could well have formed the boundary of a series of rearward plots.

Plot 2/3 contained *Building 2/3*. The mutilated remains of this building were identified in section after the cutting of a road during the 1977 watching brief (FIG 7). Clearance to the east revealed part of an industrial apparently smithing building about 7m across, with a roughly paved entrance at the SE facing towards the road. It was assumed that the building's long axis was at right angles to the road, and the surfaces cleared to the

Fig 8 Towcester, Alchester road suburbs: plan, Area 1.

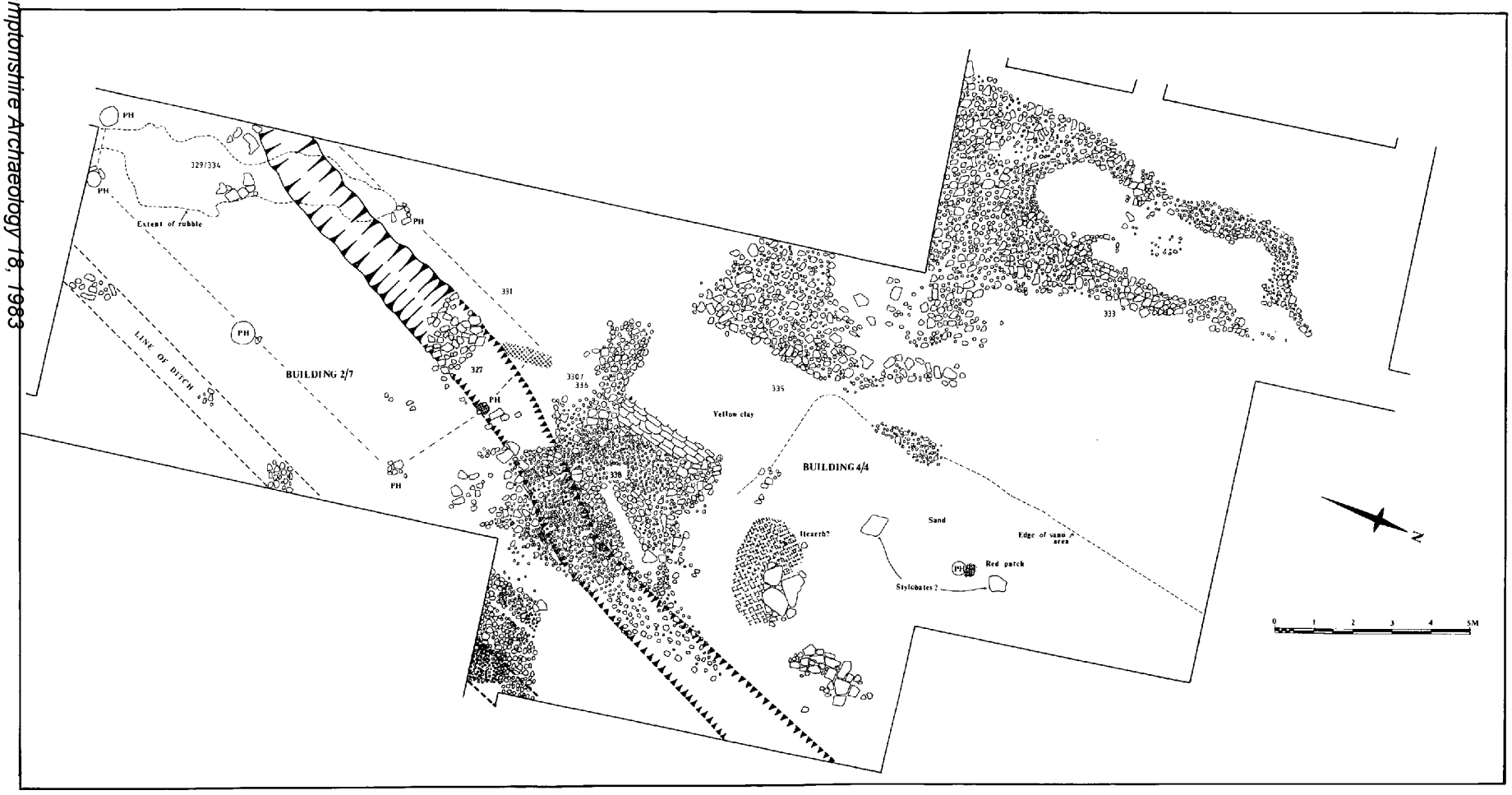


Fig 9 Towcester, Alchester road suburbs: plan, Area 5.

west of the road cutting (291(1)) appeared to be those of the same building, although this is not susceptible of proof. If this was the case the building would be some 17m long. It is probably more likely that the surfaces cleared to the west were those of a working area behind Building 2/3, or perhaps part of another structure. The presence of a hearth some 5m from the entrance of Building 2/3, if more or less central, would have given a building perhaps some 11m in length. A thin scatter of unmortared stone may represent all that was left of the walls, but the building was only really defined by the entrance paving and the thinning out of the yellow clay floor, itself only 10 to 20mm thick, with its many red burnt patches; it may well have been open sided. The surface was much disturbed by ploughing, and a Medieval coulter (M132) was recovered from out of the clay floor surface. No postholes were identified to the east of the road cutting except for one just inside the entrance at the SE 300 x 200mm but a large posthole 500mm across of unknown date survived to the west. A general scatter of iron dross lay over both yellow clay floors, giving a distinctive rusty appearance, and smithing debris was seen. Into the yellow clay surface at the W of the road cutting (F291(1)) was cut a damaged feature, (291(2)). It appeared to be a ditch-like structure, swelling into a sub-circular feature at the NE end, although this was confused by the insertion of a later post-pad. The structure had some seven post or stake holes, with diameters varying from 70mm to 150mm around its perimeter. The feature was quite shallow — some 300mm deep, and was more or less flat bottomed. The section showed that firing had taken place in it, and there was a bed of fired patches of whitish sand and ash. It was perhaps some sort of furnace. The stones were a fill — they were packed in bright yellow clay and themselves showed no signs of firing.

Despite the presence of much 4th century material in the base of the ploughsoil, the clay floors and the industrial feature 291(2)) produced Phase 2 pottery in sufficient quantity for there to be no reasonable doubt that these structures belonged to that Phase.

Building 2/3 overlay a filled-in ditch on the same alignment as the other Phase 2 boundary ditches; the significance of this is discussed on p 132.

Close to the NE corner of the plot was a large pit (105/2, 128, 137-9) 10 x 5m across and 400mm deep, dug to remove the stiff blue Upper Lias Clay (FIG 13); it was filled with grey-brown loamy earth.

Two postholes (211) 150mm in diameter at 1.3m centres were briefly observed before destruction close to the S end of ditch 183. No dating material was recovered.

Plot 2/4 was 19m across. The only hint of a structure within it was *Building 2/4,* a substantial spread of cobble and stone overlying natural, seen in a sewer trench. Some dozen sherds of late 2nd century pottery were recovered from it. It was assumed to be the floor of a building as it was on the frontage, but may have been a yard.

Plot 2/5 was *c* 10m across. The same sewer trench cut another substantial spread of cobbles and tile laid over natural. This spread *(Building 2/6)* was bounded by a certain unmortared stone wall to the SE and a probable one to the NW. Its distribution suggested a building with a width of some 6-7m. Both 2nd and 4th century material was secured from this area but in circumstances that did not permit the separation of topsoil material.

In the enclosure attached to the rear of this plot, a small excavation revealed the corner of an unmortared stone *Building 2/5.* It had a substantial cobble and clay floor. The pottery recovered from the surfaces and ditch related to the structure was all firmly dateable to Phase 2.

Plot 2/6. No building was identified inside this. Slags derived from iron working were found in the top fill of the Alchester road side ditch (282(2), p 126). This fill gave the impression of the clearing up of an area after a fire. There were copious quantities of pottery, some of it of Phase 1 date, and a small quantity of burnt daub (M 124).

Plot 2/7 (Area 5, FIG 9) contained *Building 2/7.* This was rectangular, but with bow-shaped ends, *c* 10.5 x 5m, defined by postholes 400-500mm in diameter set 5m apart on the long side and 2.5m apart at the ends. The floor was of clay. Generally rectangular spreads of rubble to the N (330, 333, 336, 338) might belong to the phase and represent trodden yard surfaces or even buildings but both 2nd and 4th century pottery came from them.

Pottery from a rubble spread at the southern end of Building 2/7 (329, 334) was generally of 2nd century date. Several lumps of iron slag (p 126) were found here.

(b) *East of the Alchester road*

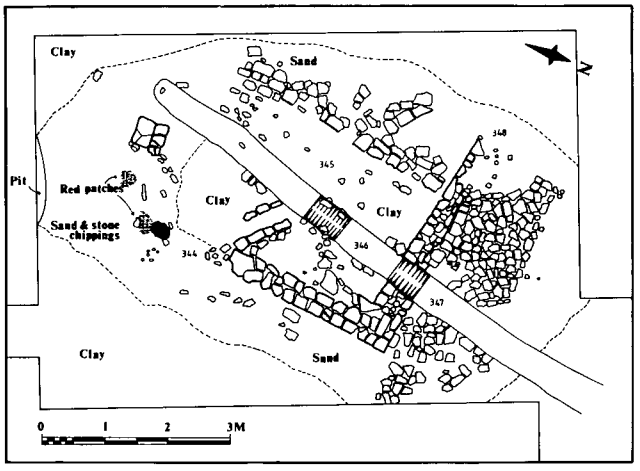


Fig 10 Towcester, Alchester road suburbs: plan, Building 2/10.

Plot 2/8 contained *Building 2/8,* represented on its western side by a line 9m long of three posthole bases 100mm in diameter and 4-5m apart. On the north, a further two postholes 200mm in diameter, one of them apparently out of alignment (p 132) could have gone with this building.

To the south was a pit (43), 1.2m in diameter and over 200mm deep (section, FIG 15).

Plot 2/9. Building 2/9 was represented simply by the bases of a row, 3m long, of four postholes 100mm in diameter and 0.8-1m apart, indicated by smears of black earth on top of the silted roadside ditch (Area 3, FIG 12); the northernmost was slightly out of alignment (p 132). Two metres to the NE was a scatter of irregular, flat limestone slabs, chocolate brown earth and dirty brown clay. Iron slag came from the top of the silt of the roadside ditch at this point (4, p 126).

There was much samian ware (p 126) and late 2nd century pottery in the ploughsoil above Buildings 2/8 and 9.

Building 2/10, Trench 25 (FIG 10). This lay to the east of the projected line of the back boundary ditch on this side of the Alchester road. As excavated, it was a rectangular structure at least 4 x 3m internally, with walls of roughly dressed limestone on average 530mm thick, surviving to a height of 300mm in the NE corner; but it was probably originally longer, the plan suggesting a two-cell structure end-on to the road. The walls appeared to be unmortared and the spread of sandy earth about them might suggest that they had in fact supported walls of cob. The floor was of clay. The southern side of the excavated room might have been open; the function of the stone channel is unknown, but this, together with the patches of burning here and a large free-standing stone base hint at some industrial activity. To the SE was a shallow pit (342), which produced the skulls of a horse and an ox (M84).

Dating

A proportion of the Samian from the topmost silt layer of the Alchester road side ditches is clearly residual from Phase 1; but from the upper part of the fill on the eastern side (95(3), FIG 5) and on the western (176 and 282(2),FIG 6) came fragments of mid to late Antonine vessels. The Samian from the plot boundaries and buildings of this phase is overwhelmingly late Antonine (pp 70-1); this late 2nd century date is supported by the remainder of the pottery (p 81). The mortaria are mainly Oxfordshire examples of the period 180-240. Building 2/1 produced two possible coins of Antoninus Pius and one of Faustina (146-75) (M18). A date somewhere in the region of 170-80 AD can be suggested for the start of this phase.

As for its end, the area of Building 2/5 produced coins of Elagabalus (218) and Severus Alexander (227) (M18). Much of the pottery cannot be dated to after *c* 230, and the ceramic evidence certainly seems to point to a sharp decline in the intensity of activity on the site at about that time. But this is not the same thing as abandonment, and the

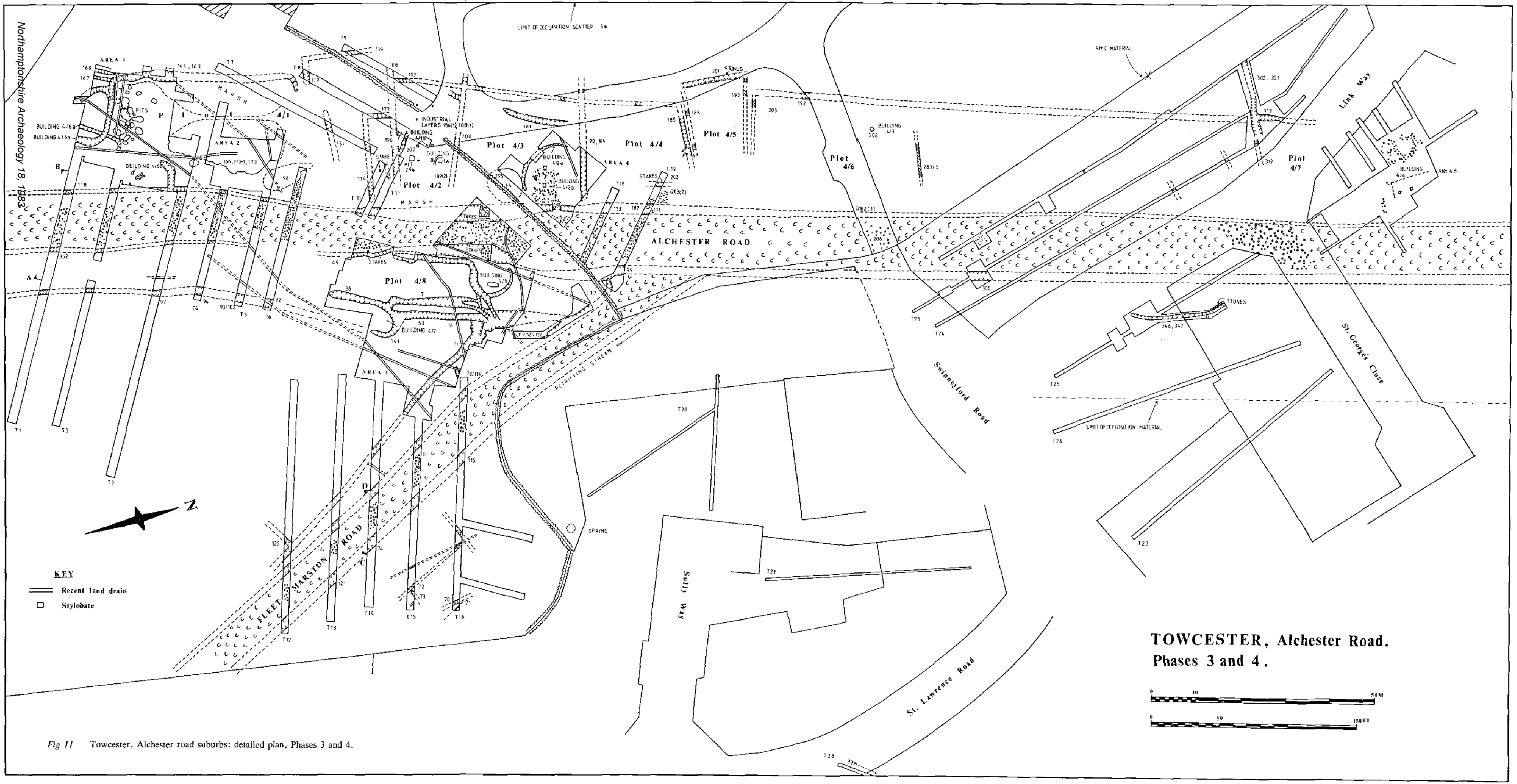


Fig 11 Towcester, Alchester road suburbs: detailed plan, Phases 3 and 4.

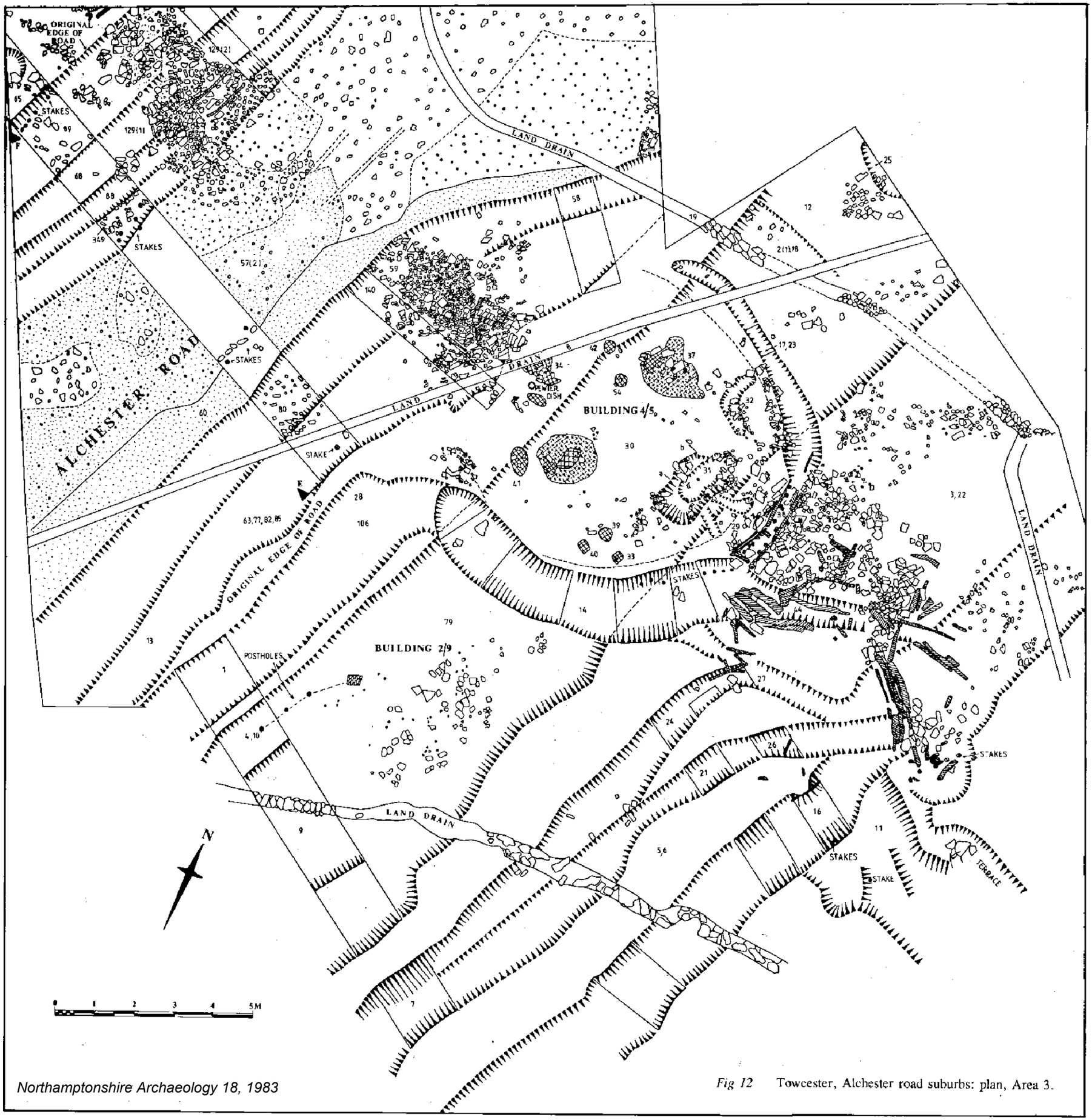


Fig 12 Towcester, Alchester road suburbs: plan, Area 3.

presence of a range of mainly rather coarse kitchen wares of generally 3rd century aspect may imply that occupation went on, albeit at a somewhat reduced level (p 80) until the start of Phase 3.

PHASE 3 (general plan, FIG 2; detailed plan, FIG 11) *c* 270 to *c* 330 AD

In this phase the road system was remodelled by:

(a) The creation of another road running in from the South to join the road to Alchester. This new road, located in Trenches 12-16 (FIG 11; section, FIG 4) was 6m wide and consisted of pieces of limestone forming a layer 200mm thick resting on the natural clay. This sat within a 'road zone' 10m wide delimited by side ditches 1.2-1.3m wide and 300-700mm deep. There was evidence for recutting on both eastern (115) and western (116, 126) sides (sections, FIG 15 and details, M11-12). For the final 50m of its length the southern side corresponded with the line of a stream which ran close to the eastern side of the Alchester road (p 131); this might account for the slight alteration in its alignment in this area. The general direction of the road suggests that its destination was Fleet Marston in Buckinghamshire, where there was a substantial settlement (3) (Margary 1967, 169; see also p 133).

(b) The modification of the Alchester road. This entailed (i) the excavation of new side ditches on both sides of the road, close to the edge of the metalling. The new ditches were smaller than the earlier ones, only 1.1-1.4m wide and 0.8-1.1m deep. They were picked up in almost all the trenches excavated along the line of the road (FIG 11; sections FIG 4 (Trench 1), FIG 5, 113(2); FIG 15, 87).

(ii) Where it ran through the marshy area a 40m length of the road was halved in width and reconstructed (Area 3, FIGS 11 and 12; section, FIG 4; PL 3). At the bottom a layer 100mm thick of greenish grey clay and large pieces of gravel up to 120mm across, was laid (57(5)). Above this was a layer of similar thickness of orange clay and gravel (57/4), with marked concentrations of heavier stones along the edges. The uppermost layers had been removed during later reconstructions. Both road edges were revetted with stakes, those on the damper, western side being much more closely set (or more frequently renewed) than those along the east, as was the case in Phase 1 (PL 2). Two holes contained fragments of stakes; one on the eastern side proved to be of maple, one on the west of oak (M76, S225, 226).

The remains of the bottoming of the original road, consisting at this point of large gravel pebbles up to 150mm across, could be seen in the wide side ditches created by the removal of half of the road metalling (FIG 4; on the eastern side, 63, 77, 85, 127; on the west, 68 (2, 3)).

The reduction in width of the road must have caused difficulties and it is therefore possible that a spread of gravel found attached to the western side of the road in Trench 6 and a bed of limestone 100mm thick overlain by gravel in Plot 4/4 (Feature 203(2) (FIG 11)) represented additional metalling laid down to accommodate waiting traffic.

Other features

A slight revival in activity in the area might be evidenced by the recutting of Ditch 183 (in what became Plot 4/3) and by the excavation of Pit 294 through the remains of Building 2/3 (FIG 7); this contained a small hoard of coins of Claudius Gothicus (268-70) (M19-20). The fill was black, very ashy with burnt and smithing material mixed with unburnt stone.

In Trenches 15 and 16 slight evidence for the existence of rectangular ditched plots aligned on the new road was found, in the form of small ditches *c* 300mm wide and *c* 200mm deep (FIG 11; details M12). No dating evidence was recovered from them.

Dating

The pottery from the various road side ditches belongs to the final decades of the 3rd century and the first quarter of the 4th (pp 85-90). Ditch 183 produced a coin of *c* 270 as well as much pottery of this period from its upper fill; there was a group of nine coins of the period 268-296 essentially unstratified in Area 5, that part of the site closest to the town (M18-19). A date range of *c* 270 to *c* 330 may be suggested.

PHASE 4 (general plan, FIG 2; detailed plan, FIG 11) *c* 330-370+ AD

There were two sub-phases (*a* and *b*). Some contexts represent features which were clearly in use during both; most of them will most conveniently be dealt with under *a*.

1. PHASE 4 (a).

Where it ran through the marshy zone in Area 3, the wide side ditches created alongside the Alchester road were re-cut (FIG 4, 349 on eastern side, 68 (1) and 88 on the western). The narrow side ditch on the western side of the road was also re-cut in the stretch immediately to the north of the marshy area, at least as far as Trench 19 (sections, (FIG 5; 113 (3), FIG 15, 81). It is probable that the narrow part of the road was resurfaced now; layer 57(3) (FIG 4) (small gravel and brownish sandy clay) oversails the black clay silt of the wide side ditch on the eastern side of the road (127), as does a strip of orange sand and gravel (60) 200mm thick and 1.5m wide, which is attached to its eastern edge throughout Area 3 (plan, FIG 12; section, FIG 4).

Boundary ditches were dug parallel with both sides of the Alchester road, replacing the 2nd century ones. Along the east, Ditches 92, 97, 94, 93/102 (FIG 15) and 36, in Trenches 1-6 and Area 3, obviously replaced Ditch 101. Ditch 346/7 in Trench 25 continues the same alignment and cuts through Building 2/10 (FIG 10). Ditch 16/53 (FIG 15) in Area 3 was a direct re-cut, obliterating the earlier ditch completely. Along the western side, Ditches 167/168 (Area 1) (FIG 15), 107, (Trench 9) 192 and 319 (Trench 24) (FIG 15) are on the same alignment, 5-7m further to the west than the earlier boundary ditch. This run is only disturbed by the anomalous Ditch 201 at the back of Plot 4/5.

It is probable that at the same time a boundary ditch (11) (FIG 16) was dug to the west of and not

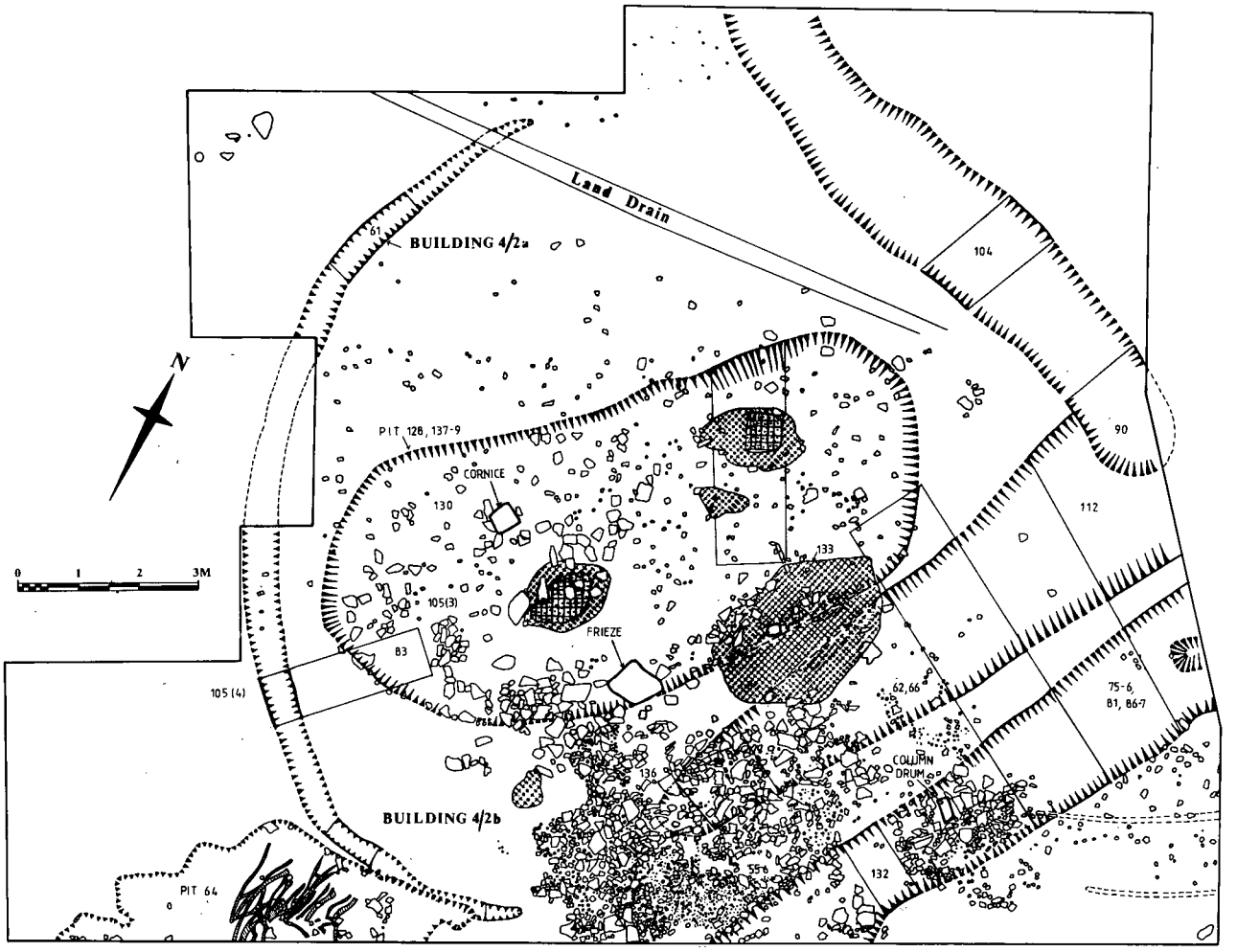


Fig 13 Towcester, Alchester road suburbs: plan, Area 4.

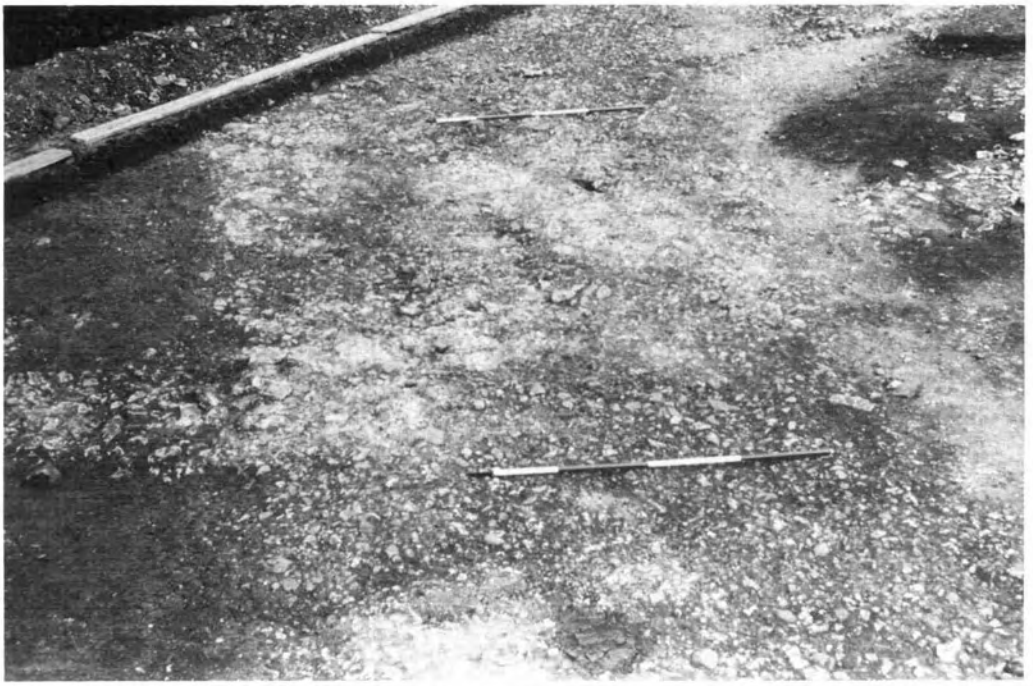


Plate 1 Towcester, Alchester road suburbs. View of part of Area 3, showing the Alchester road at the point where it was reduced in width in Phase 3. The dark bands on either side of it represent the new side ditches, crossed by causeways. Note how the road is regaining its original width at the top (north) of the photograph.

Plate 2 Towcester, Alchester road suburbs. The western end of the section across the narrowed Alchester road in Area 3 (compare Figs 4 and 12). Note the stake holes and large stones. The ditch to the right (west) is Ditch 88, the side ditch re-cut of Phase 4a.

Plate 3 Towcester, Alchester road suburbs. Eastern end of section across Alchester road in Area 3, showing stake which retained the road at its original, Phase 1, width. Note the stones, remnants of the bottoming of the full width road.

Plate 4 Towcester, Alchester road suburbs. Causeway 129 across western side ditch of reduced Alchester road, Area 3. Note the two phases and the remains of a wooden culvert to carry the Phase 4a ditch re-cut.

altogether parallel with the Fleet Marston road.

In places these ditches were revetted with stakes (plan, Area 3, FIG 12; details, M76-77). From Ditch 16 (2) close to its junction with Ditch 11, came fragments of split oak and hazel 50-60mm across and a poplar branch 100mm in diameter which could have supported wattling formed of pieces of hazel, poplar and maple 10-40mm in diameter, some of which bear cut marks. The southern side of Ditch 11 yielded a maple branch 80mm in diameter from a recut (11(3)). North of the junction with Ditch 11, where there was greater erosion, Ditch 16 was retained by a series of five posts of maple and poplar, of greater average diameter (80-140mm) than those to the south. These would have supported planks of oak, fragments of which were found close to them.

New plot side ditches were dug west of the Alchester road and buildings constructed within them (sections, FIG 15 (321); FIG 16 (104); details M13-14). Only in the cases of Plots 4/5 and 4/7 were the lines of the 2nd century ditches followed or redug.

West of the Alchester road

Plot 4/1 was very wide, at least 76m (plans, FIGS 8 and 12). It contained a length of curved, narrow, steep sided and flat bottomed gully or possibly bedding trench (160: section, FIG 16). This probably defined a structure, *Building 4/6a* (p 134); nothing was found inside it. This gully was cut by another (143, 154 (1, 2), 155, 157 (2), 161 (1-2), 163 (2)). This was wider than feature 160 and had a somewhat different profile, U-shaped (sections, FIG 16); it clearly succeeded Building 4/6a and although nothing was found inside it probably contained its successor, *Building 4/6b*. To the north were two areas of extensive pit digging, to be considered more fully under Phase 4 (b) (p 61); these excavations, for industrial purposes, could however have begun now.

The back boundary of this plot went through two phases (167 and 168, FIG 15), possibly corresponding to the two building phases suggested here.

Plot 4/2 was narrow, only *c* 10-13m wide. In this phase it contained *Building 4/1a,* represented only by a slot of similar plan to that of Building 4/6a (FIG 7). This was an L-shaped gully or construction slot, 300-400mm wide. It was not known how far it continued to the north. The fill was black clay. BB1 and Nene Valley sherds recovered from the slot were of early 4th century type.

Plot 4/3 was 30m wide (Area 4, plan, FIG 13). In the NE corner was *Building 4/2a,* represented by a short stretch of gully 500mm wide and 200mm deep, curved, but not forming an arc of a circle. The material dug out from it had been dumped along the outer edge (105(2) and (4), FIG 16). There were no postholes or any other structural evidence for the method of construction of this building or indeed for its function; but it could have been connected with smithing since hammer scale in some quantity, presumably created during this phase, had been shovelled into the gully before Building 4/2b was built in Phase 4b (FIG 16 105(1)).

This plot was reached from the Alchester road by a causeway 2m wide composed of gravel pebbles, which crossed the wide side ditch created by the reduction in width of the Alchester road here in Phase 3 (Area 3, FIG 12). The remains of a culvert of oak planks formed to accommodate the appropriate recut of this side ditch (88) were uncovered (details of wood, M77) (PL 4)). Another causeway, 2m across 14m to the north could have been constructed now (FIG 13).

Plots 4/4-4/6. These were 22, 14 and 38m wide respectively.

East of the Alchester road

Plot 4/8 (Area 3, FIG 12) lay in the angle formed with the road to Fleet Marston. In Phase 4b an additional drainage ditch was dug immediately to the east of and parallel with the wide Alchester road side ditch (1, 28, 14, 106; sections, FIG 16); in all probability this has removed evidence of a similar ditch dug now. After 17m this Phase 4b ditch turned sharply to the east to define the southern side of a roughly circular area *c* 7m in diameter, the northern side of which was marked by an earlier, presumably Phase 4a ditch, much narrower, 400-900mm across, and 500mm deep (17, 23; section, FIG 16). These drainage ditches defined another building, *Building 4/5.* As with Buildings 4/6 a-b and 4/2a hardly any trace remained of the method of construction; only the base of one posthole at the western entrance. This was a hollow 400mm in diameter and 20mm deep, containing a packing of small stones, a tile fragment and a piece of quern-stone; the post it had contained had been 200mm in diameter. The actual floor area (30) was

indicated by a patch of darker earth, the gap between this and the edges of the ditches giving a wall thickness of 300-600mm. The building could hardly have been circular since it would have impinged upon the broad side ditches at this point, and what evidence we have suggests a D-shaped plan (p 134). The walls would probably have been formed of cob or turf.

Close to the E entrance of Building 4/5 was a furnace (31) 2.25m long, 1m wide, 300mm deep and stone lined at its N end, containing two layers of grey clayey fill separated by a layer of sandy earth, representing two phases of use (sections, FIG 16) (PL 9). Three postholes to the S, 100mm deep and 300mm in diameter could have supported a workbench or perhaps a bellows. To the W were two shallow patches of red burnt clay *c* 1.5m across, with burnt stones, presumably the remains of furnaces, both with the shallow bases of postholes to the SW of them, similar to those near the sunken furnace; these could have been associated with bellows, either as part of the apparatus itself, or as a shield for the operator (Manning 1976, FIG 23). One of these above-ground furnaces probably succeeded the other. Close to the W edge of the workshop was an irregular patch of black earth, with no suggestion of any very high temperature having been used; perhaps a domestic hearth. Against the N side of the building was an L-shaped hollow (32), 320mm across, 300mm deep, U-shaped in section, containing stones, some burnt, and dark grey earth.

The stones forming the E entrance overlay a well preserved wooden culvert 2.2m long and 300mm wide (38). This consisted of two rows of stakes of oak, poplar and hazel, 50-90mm in diameter and *c* 400mm high, supporting planks of oak (for details of the wood, M77) (PL 11). Beyond the culvert, on the east and north, was a yard roughly paved with stone. This produced much pottery and many coins and several smallish bits of wood — branches (some split) of oak and poplar, twigs of oak and hazel (M78-79).

When the workshop was built the N-S boundary ditch E of it (16, 53) was supplemented by another (7, 24/27) dug 4m to the W, closer to the building (section, FIG 15); water from the ditches around the workshop was conducted into it by means of a short spur. The new ditch then turned sharply to the E to rejoin the original line of Ditch 16. Just beyond the point at which this happened Ditches 7 and 16 were crossed by a series of planks and split branches of oak, ash and maple, forming a kind of simple footbridge (M78). This led to a terraced path along the N side of Ditch 11, giving access to the elongated piece of land between Ditch 11 and the side ditches of the Fleet Marston road. The signficance of this is discussed on p 135.

The erection of this building quite definitely post-dated the reduction in width of the Alchester road at this point. It was approached by a causeway 4m long and 1.6m wide (59) (PL 5) which respected the strip of orange sand and gravel added to the E edge of the road at this time (60). Also the causeway rested on 110mm of grey clayey ditch silt which had accumulated since the road had been reduced in width.

The function of this building is tolerably clear. From the later of the pair of black earthy fills representing the phases of use of Furnace 31 came two large lumps of lead; a further 19 pieces of various shapes and sizes, including what can only be described as a section of a pig, were found on the surface of the yard outside the building or from the ditch system around and to the east of it (p 109).

Furnace 31 also produced fragments of burnt white sandy clay, possibly the remains of lining, as well as hazel charcoal (p 126). There can be little real doubt that the Building 4/5 was used for lead working, and that Furnace 31 was used for heating this metal, presumably in crucibles of some sort; similar furnaces have been observed at Manchester (Jones and Grealey 1974, 69 and FIG 24, Fs18, 19). A pewter plate found on the floor of the building and a fragment of what was probably a lid of pewter from the surface of the Alchester Road to the west of it make the working of pewter another possibility; the quantity of small imitation coins suggests counterfeiting also (p 101). A parallel for the workshop as a whole, although built in a different architectural tradition, can be found in Building 17 at Camerton, Somerset (Wedlake 1958, 63), which contained a hearth, a furnace and a gully (? for holding water for cooling the metal) rather like the Towcester example. Moulds for the casting of plates were found and there was a coal dump outside.

The pair of above ground hearths or furnaces have still to be explained. These could have been connected with ironworking, since Ditches 1 and 28 produced iron slag (p 126).

Plate 5 Towcester, Alchester road suburbs. Causeway 59 leading across the eastern side ditch of the narrowed Alchester road in Area 3 towards Building 4/5.

Plate 6 Towcester, Alchester road suburbs. Causeway across western side ditch, Alchester road, in Area 4, (see Fig 13). Note column drum.

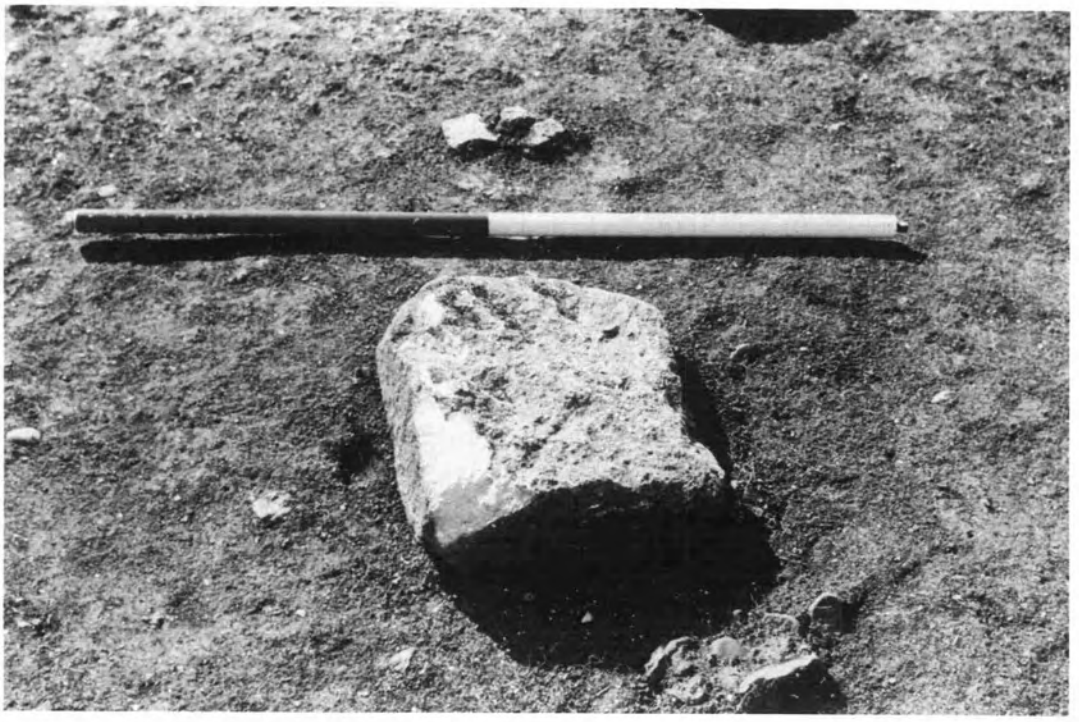


Plate 7 Building stone re-used as stylobate, Building 4/6c, Area 1 (this is the westernmost of the pair, Fig 8).

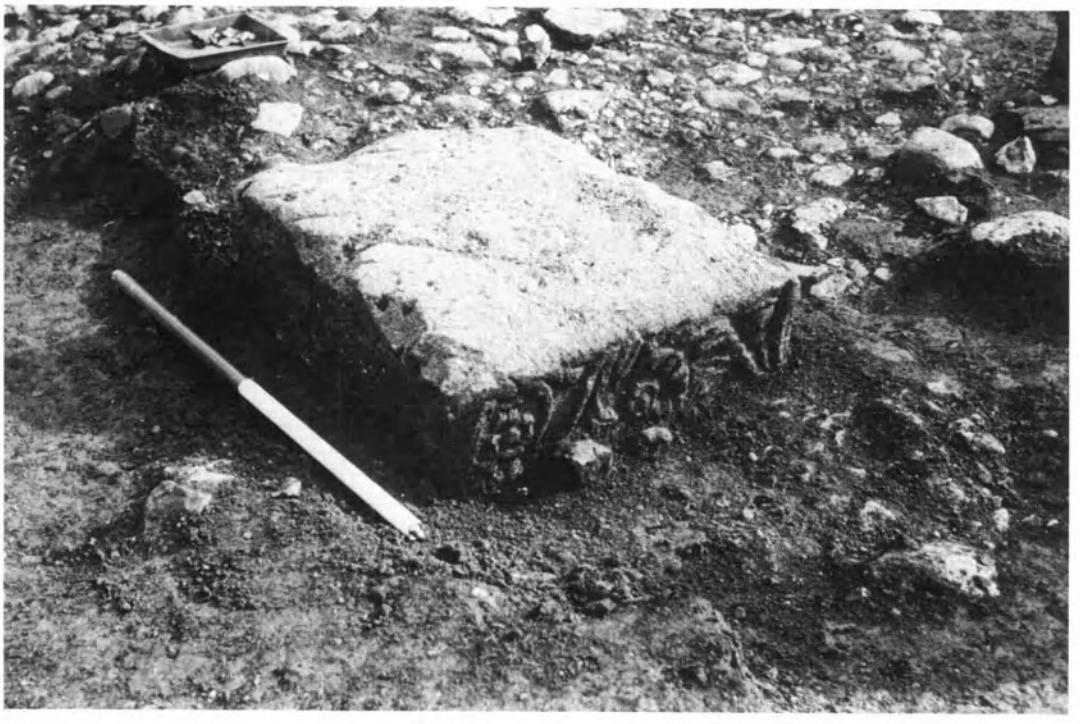


Plate 8 Frieze re-used as stylobate, Building 4/2b (Fig 13).

Building 4/7. A short length of curved ditch (141) was attached to the eastern side of the junction of Ditches 36 and 53, Area 3 (FIG 11). This was 1.4m wide but its remains were very shallow, only 300mm deep, U-shaped, filled with chocolate brown earth with some patches of grey clay. Nothing whatsoever was found in or over the ditch, or in its general area, but there is a general resemblance in plan with the ditch around Building 4/5 and so perhaps another similar building is indicated. If so, then it might have been a dwelling, away from the road frontage, or used for storage; the environmental samples taken from Ditch 16 (2) nearby indicate the presence somewhere in the vicinity of a building in which foodstuffs were kept (p 130).

2. PHASE 4b (general plan, FIG 2; detailed plan, FIG 11)

The roadside ditch in the narrowed section of the Alchester road was re-cut again; as before, this re-cut was traced as far to the north as Trench 19 (sections, FIG 4, Area 3, 80 (eastern side), 350 (western side); FIG 5, 113(4); FIG 15, 76).

West of the Alchester road

Plot 4/1 (detailed plan, Area 1, FIG 8). This was now reduced in size. A new rearward boundary (144, 163; section FIG 16) was dug, with inturned ends; the northern boundary was probably now Ditch 131 (Trench 7). In the SE corner of the plot a short length of curved ditch (172, 175; section, FIG 16), which cut through the Phase 3 roadside ditch and in effect represented a re-cutting of Phase 2 Ditch 152, served to mark off the site of *Building 4/6c.* This, in common with other buildings of this phase, was of stylobate construction; one of the stylobates was a piece of re-used squared limestone (M 72) (PL 7), the other simply a large piece of unworked limestone. The only other feature definitely assignable to this building was a stone furnace, 2m long, with an oven 600mm in diameter and a flue 400mm wide (PL 10). This is similar to furnaces discovered in the Nene valley and elsewhere and usually attributed to smithing (Wild 1974, FIG 10). Ironworking including smithing could well have gone on in this plot now since slag, including hammer slag, came from Ditch 175 (p 126). Another strong possibility is the working of lead; the mixture of 2nd and 4th century material on the stone floor of Building 2/1 contained 10 pieces of lead of various sizes; Ditch 172 yielded a fragment of lead sheet and Pit 173 a lead plug (p 109). This pit formed part of a series of irregular interconnecting pits to the north of Building 4/6b (for list, M6; for a section through one of them, 170, FIG 16), which, together with the smaller ones to the west of the building, had been dug to obtain a white sandy clay. This material could have been used for the lining of furnaces of all kinds, and also for the manufacture of coarse moulds for the casting of ingots and sheets of lead, such as were found during the excavations (p 128).

Plot 4/2, narrow before, could have been enlarged at some point during Phase 4b by expansion southwards at the expense of Plot 4/1; its southern boundary eventually became Ditch 114, giving a new frontage of 18m. Expansion at the rear is indicated by Ditch 179, the rounded end of which respects the new back boundary ditch of Plot 4/1. Ditch 110 probably formed part of this new back boundary.

This plot contained *Building 4/1b* (FIG 7). Three certain and are possible mortared post pads or stylobates were observed during road works in 1977, and a fifth was recorded during trial trenching in 1976. These were rectangular, about 600 x 500mm, and were constructed of fairly small (ie 300 x 200mm sized) pieces of flat limestone and tile mortared together. They indicate a building 12m (or perhaps 18m) in length. Their relationship with the half ploughed away floor of Building 2/3 was not easy to clarify and no certain traces of a construction trench or cut around them were distinguished. However, the discovery of a sherd of late shelly ware, Fabric 44d, mortared into one of the stylobates, confirmed a date for their construction in the second half of the 4th century. The spacing was 3m centres. No floors or occupation surfaces associated with this building had survived ploughing (4), but a waterlogged black industrial level survived protected by the hedge to the west (F208 (1)). The drainage ditch F207, a recut of F164/196, was lined with substantial stakes on its south-western sides; one was of oak (M79). The stakes were 150 to 200mm by about 100mm, had sharpened ends and were at 500 to 600mm centres. At one stage this ditch had ended with a butt end at the NW, the stakes continuing round this end.

Plot 4/3. After the surface of the causeway in Area 3 had accumulated 90mm of dark grey sticky clay, it was resurfaced with fragments of

yellowish limestone; this layer corresponded with repairs made now to the Alchester road surface with similar material (road section, FIG 4). Building 4/2a was abolished and its drainage gully filled in. It was replaced by a rectangular one (*Building 4/2b;* plan, Area 4, FIG 13), defined by a stone floor *c* 6 x 10m (its true size is uncertain because of plough damage on the west). The roof was supported by posts resting on a pair of stylobates consisting of re-used architectural fragments 3.6m apart (M72-73) (PL 8), with a hearth halfway between them. A patch of dark earth 2 to 3m across (133), perhaps the base of a furnace, probably belonged to this phase.

To the south was a large clay pit (64, 195) resembling the Phase 2 one below the 4th century buildings. It cut the gully across Building 4/2a and was filled with grey clay, stones and pieces of wood (M79).

The stone causeway across the Alchester road side ditch in Area 4 was certainly in use now, if not before, because another architectural fragment, a column drum, lay on it (M72-73) (PL 6).

Iron forging seems to have been one activity which went on in this building since hammer slag was found on the stone floor; but a fragment of fine micaceous clay suitable for making moulds hints that other finer metalworking processes may have been carried on (p 128). Small fragments of lead were also found on the floor and in Pit 64 (p 109).

Plot 4/6; Building 4/3. This was briefly observed during the course of destruction by house building. A stylobate with a minimum dimension of 600mm was recorded, made of flat stones set in clay. There was an associated yellow clay floor. No associated dating material was recovered, but this type of construction would be appropriate for this Phase.

Plot 4/7; Building 4/4 (plan, Area 5, FIG 9) lay to the north of *Building 2/7;* only the southern end was excavated since the northern part ran under stacks of bricks and the site of the new Police Houses. Its floor was defined as a yellow sandy layer quite distinct from the sticky yellow clay to the south and west. The building was aligned N-S. Two stone stylobates survived; their resemblance to those of the other buildings of this phase constitute the sole evidence for the dating of this building. They were 2.5m from the W side of the floor and 3.6m apart; the building was at least 11.5m long, but of unknown width because the poor preservation of the remains on the E side does not enable one to say whether it was aisled or not. An oval burnt area 2.4 x 2m was all that survived of a hearth or furnace represented also by several large stones burnt on the top edge; this lay at the S end of the building and not in a central position. Between the stylobates was a small post-hole 260mm in diameter, with an adjacent burnt patch; it is uncertain whether this was a contemporary or earlier feature.

West of Building 4/4 a yellow clay surface separated it from the stony yard surfaces, and to the S was what appeared to be some kind of extension 3.2 x 4.4m clearly defined by its yellow clay floor enclosed by stony patches. On the E side of this the stone surface was regular and pitched. The whole arrangement might have constituted a porch.

Plot 4/8 (plan, Area 3, FIG 12). *Building 4/5.* The additional drainage ditch (1, 28, 106) to the east of and parallel with the Alchester road side ditch was certainly brought into being now, if not before; it was continued by a recut version of the southern portion of the circular ditch around Building 4/5 (14; sections, FIG 16). This was revetted with stakes of hazel and maple some 40mm in diameter (M79-80). The north-south ditch to the east of the workshop was re-cut, further away from the building (7(3) 21, 26; section, FIG 15); fresh planking of oak, overlapping that of the previous phases, was laid across where it rejoined the original alignment of Ditch 16 (M80). A new spur ditch (44) was dug to link the workshop with Ditch 16; this contained many plank fragments and split branches, mainly of oak, together with some stakes (M80-1); the remains of ditch revetting similar to that preserved in the culvert (38) are indicated. These changes presumably corresponded with the later of the two phases of use observable in the furnaces within the building (p 58). The material from the yard outside it certainly indicates that Building 4/5 went on being used until late in the Roman period.

Dating. The abundance of Constantinian coinage shows quite clearly that the second quarter of the 4th century was another period of intense activity along the Alchester road, during Phase 4 (M20-29). Many of the coins come from features which were in use during both parts of this Phase

Plate 9 Furnace 31 in Building 4/5, Area 3.

Plate 10 Furnace 182 in Building 4/6c, Area 1.

Plate 11 Culvert 38, Building 4/5, Area 3 (Fig 12).

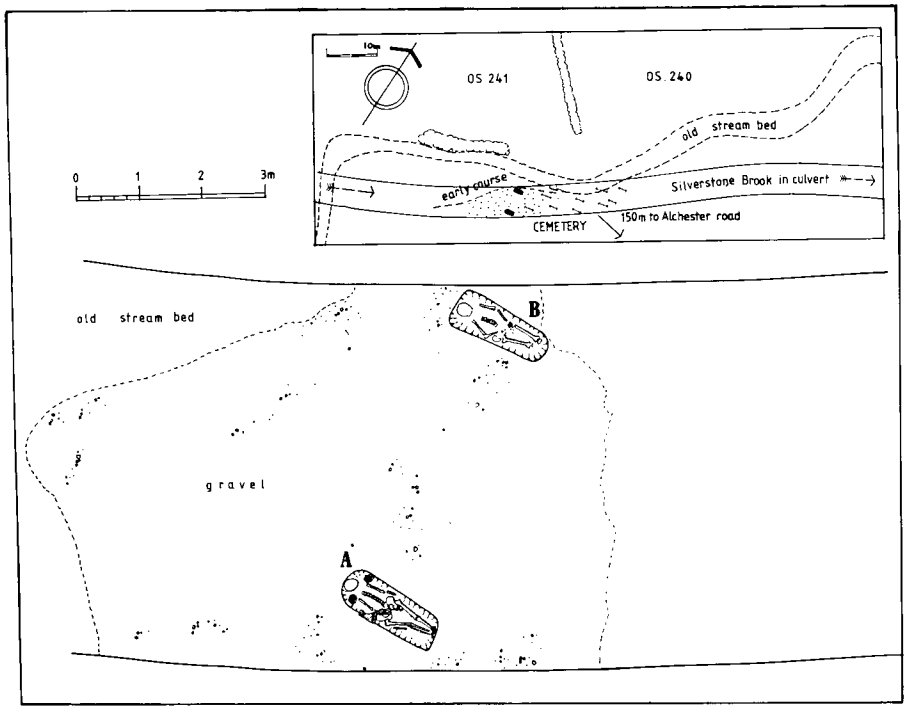


Fig 14 Towcester, Alchester road suburbs: the burials.

and coins which can be placed in Phase 4a alone are relatively few. However, the basal silt of Ditch 11 (4) produced a coin of 337-41; the gully around Building 4/2a (61) one of 330-35. This suggests that Phase 4 began *c* 330. The division into two sub phases is based upon the fact that many of the buildings show two phases of building or use and some of the ditches an episode of re-cutting. Whether this operated uniformly over the site as a whole or happened piecemeal is difficult to say, but certainly Phase 4a went on into the 350's in Plot 4/1 since a coin of 351-2 came from the ditch around Building 4/6b (154) and there were many coins of the 350's from the bottom of Furnace 31 in Building 4/5, Area 3. Perhaps somewhere around 355 might be taken as the terminal date for Phase 4a. As for the end of Phase 4b, there are many counterfeit coins of the late 350s-360s from the upper level of Furnace 31(1), but relatively few later coins from elsewhere — a coin of 360+ and another possibly of *c* 383 from Building 4/2b (66); a coin of 365-78 from the wooden culvert belonging to Building 4/5 (44); another of 360+ from Yard 3. But the pottery seems to point towards the continuation of occupation into the 370s or even beyond (p 94). Perhaps some change of emphasis in the economy of the site is indicated after *c* 360, with the end of the vigorous industrial (and probably commercial) phase but the continuation of farming or perhaps more accurately smallholding activity into the later 4th century (p 135).

The burials (FIGS 1 and 14)

Work on the flood alleviation scheme for Silverstone Brook in July 1978 by the Anglian Water Authority to the west of Trench 29 (FIG 1) resulted in the discovery of several burials (5). Two graves still *in situ*, though damaged, were planned (FIG 14). The graves lay in a cemetery area some 31m across from SW to NE; the two survivors were situated on an orange gravel peninsula bounded to the south by an area of much clayier gravel, and to the west and north-east by the black waterlogged organic deposits of either an

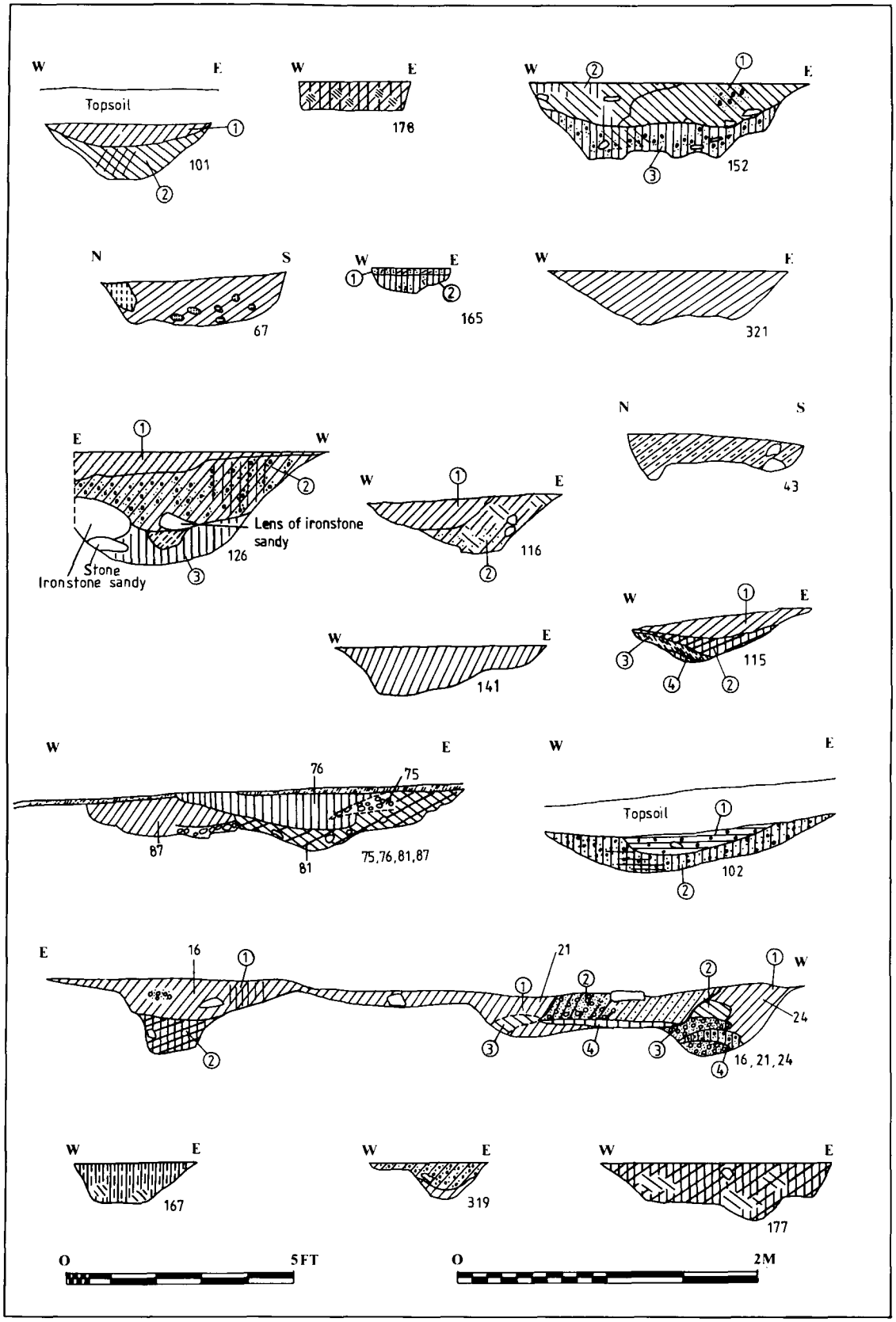


Fig 15 Towcester, Alchester road suburbs: sections.

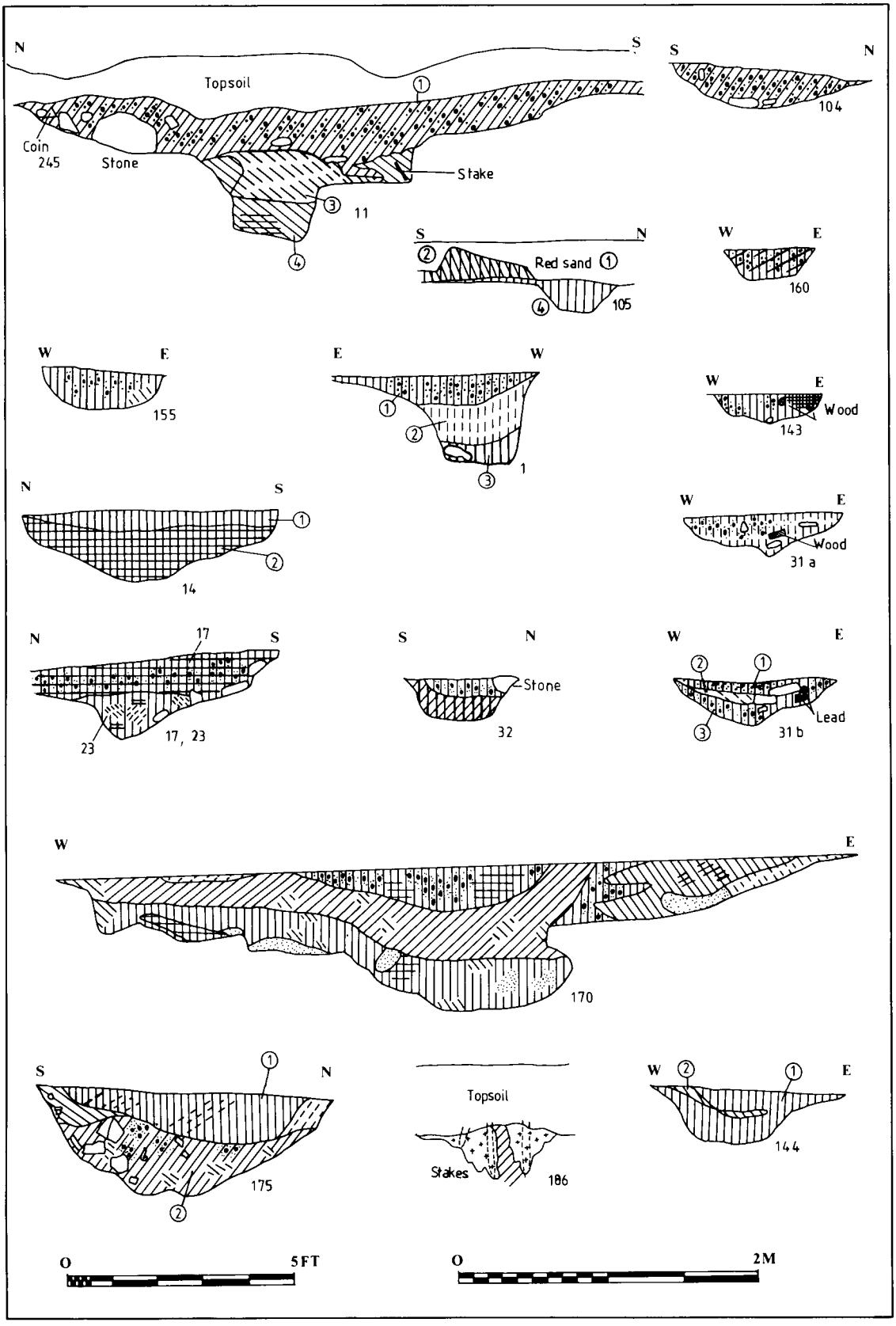


Fig. 16. Towcester, Alchester road suburbs: sections.

earlier stream bed or an area of marsh.

The site had been largely stripped to the gravel level along the line of the culvert, and much of the downstream area was already concreted in. It was observed, however, that a thick bed of clayey silt had overlain the gravel. The graves, which were heavily waterlogged, were cut into the clean orange gravel natural, and the bottoms of the graves had been some 1.8m down from the modern ground level as far as could be ascertained, although there had clearly been much silt build up. The fill of the graves was dirty grey clay with flints. The remains of wooden coffins, or perhaps biers, were observable in Grave A. The wood shown on plan was probably disturbed, but there were clear traces of undisturbed wood under the skull and the pelvis. The workmen referred to the discovery of other burials, and said that a 'coffin' had been extracted by machine during works to the culvert to the NE and had been dumped on the bank edge. Unfortunately search failed to reveal any signs of this. The workmen estimated that about 9 or 10 other burials had been discovered in an area extending some 23m downstream from Grave A during work for the new culvert. Examination revealed that an area of at least 8m to the SW of Grave A in the area being culverted was clear of burials, and this may be the limit of the cemetery. It was stated that all coffins had run roughly parallel to those planned, ie east to west. (The position of these other graves as shown on FIG 14 is, however, purely schematic and not based on direct observation.)

Grave A. The burial was extended, if a bit cramped, but with certainly one and possibly both hands *under* the left femur. The feet were turned up hard against the end of the grave pit. A description of the skeletal remains, apparently those of a male of about 40 years is appended (M120).

Grave B. This burial was also extended, but with the hands lying over the pelvis. The lower leg bones were missing, and the grave cut as surviving did not allow room for their original presence (6).

There were no grave goods (7), but the possibility of these being late Roman burials warrants their inclusion here. They do lie further back from the Roman road (some 125m) than might have been anticipated, as the occupation back from that road seems to thin out at about 50-70m (FIGS 3 and 11), but the course of the culvert lies further north as it approaches Water Lane downstream, and the cemetery may well lie nearer to the back plots along the Alchester road in an area undisturbed by the 1978 works (8).

THE FINDS

THE SAMIAN WARE (FIG 17)

Amalgamated reports by Joanna Bird and Hedley Pengelly; with comments on the stamps by Brenda Dickinson and B R Hartley

This report covers the Samian ware from stratified contexts of Phases 1 and 2. Residual Samian from deposits of Phases 3 and 4 is described in microfiche, M33-37.

PHASE 1

1. Alchester road side ditches

i) Eastern side

84 (1) Dr 37, CG. Short rows of circles were used by Attianus (S & S PL 86, no 19); the other panels include a small medallion and a figure. Had-early Ant.
Dr 37, CG, early 2nd cent.

84 (3) Dr 33, CG, early-mid 2nd cent.
Dr 37, CG, Had.
Dr 37, CG; ovolo too abraded to identify. Had.

91 CG sherd, 2nd cent.

95 (2) Dr 27, SG, 1st cent.
Two CG sherds, 2nd cent.

95 (3) Dr 18/31, CG, 2nd cent.
Dr 46 probably, grooved on rim and without ledge (*cf* Oswald & Pryce 1920, PL LV, nos 24, 25). CG, later 2nd cent.

ii) Western side

123 (2) Dr 33, CG, early-mid 2nd cent.

174 Dr 27, CG, early 2nd cent.

2. Land drains and ditches

135 SG sherd, 1st cent, burnt
CG sherd, 2nd cent.

298 Dr 18/31, four pieces, two joining, CG, Had.
Dr 37, CG. Part of a small bowl in the style of Cettus of Les Martres-de-Veyre (the 'Small S potter' of S & S PLS 141-144). Ovolo (Rogers B263), leaf on bent stalk (*ibid* J144), rosette (*cf* S & S PL 144, 49), panther (D805, O1570), lion (O1404). Early Ant (FIG 17, 3). Scrap, dish form, CG, fabric overfired. Probably early to mid 2nd cent.

PHASE 2

1. Upper part of fill, Alchester road side ditches

i) Eastern side

4 Dr 33, CG, mid 2nd cent.

95 (1) Dr 27, CG, early-mid 2nd cent.
Dr 37, CG, abraded. The figures are not certainly identifiable. Had-Ant.
CG sherd, later 2nd cent.

99 lower
Dr 36, CG, early 2nd cent.

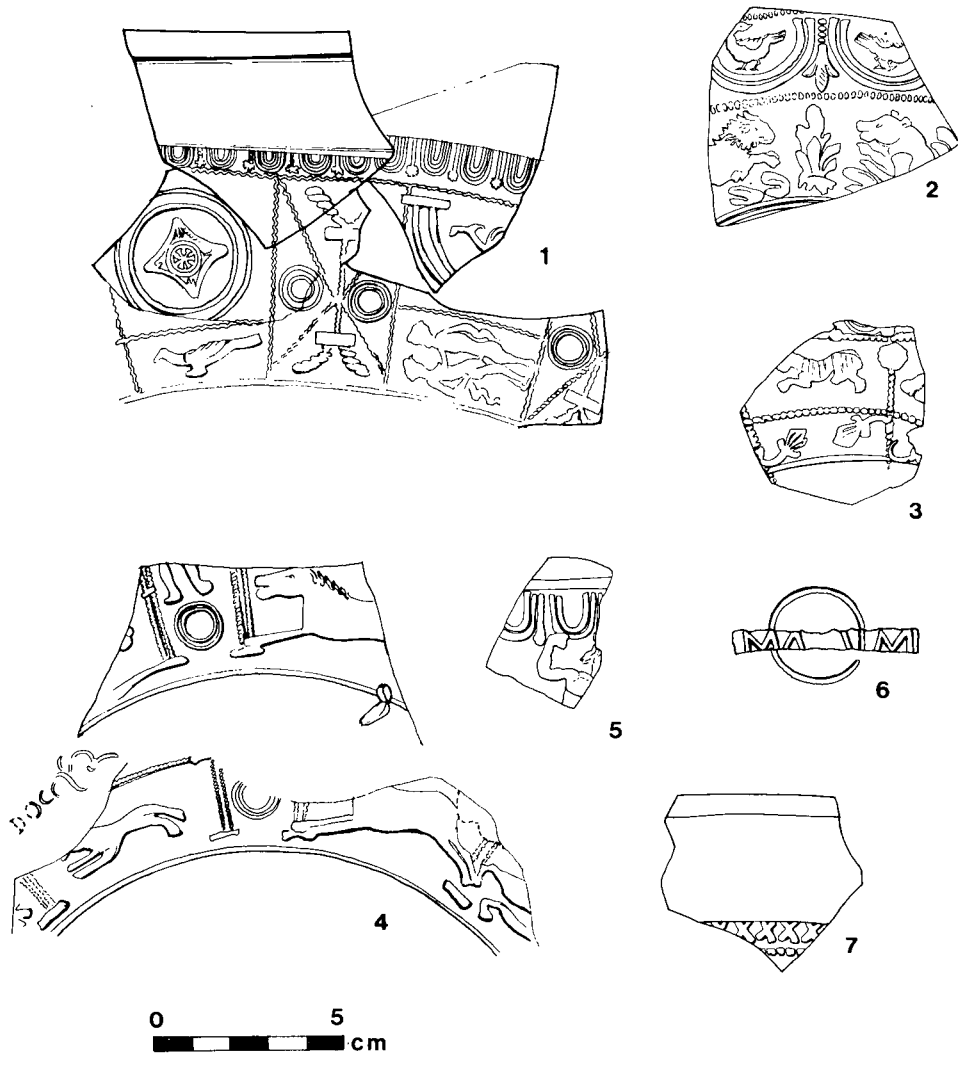


Fig 17 Towcester, Alchester road suburbs: decorated Samian ware (½). For Nos 1, 2, 5, 7 see M 37.

Dr 37, signed by Docilis of Lezoux. All but one of the motifs occur elsewhere on signed bowls: the bear, boar (O1666/D834), and astragalus on S & S PL 91, no 6, the parallel bead rows and small double medallion on *ibid*, no 9, and the standing figure (Venus, O279/D174 variant) on *ibid* no 1. The small animal may be O1627, a bear. The signatures on the three bowls cited are similar to this. This is in his earlier style *c* AD 130-145. Rivetted. (FIG 17, 4).
SG sherd, 1st cent.
CG sherd, 2nd cent.

ii) Western side

112 CG sherd, 2nd cent.
Dr 18, SG, later 1st cent.

113 Dr 18/31, CG, mid 2nd cent.

176 Lud Tg, CG, later 2nd cent.

282 (2) Dish or bowl fragment, CG, Had or Ant.
Walters 80, CG, with a poorly impressed stamp. The reading is not certain but appears to be MARTIM; if correct, then presumably a stamp of Martius of Lezoux. Both the fabric and the form of the cup agree

with activity in the later Ant period (FIG 17, 6).
Fragment, EG, slightly burnt. Probably Ant.
Here also was a collection of CG items of predominantly mid to late Ant appearance, comprising five miscellaneous fragments from large bowls or dishes and the following:
Dr 31, burnt
Dr 31, rim
Dr 31 etc, small fragment, burnt
Dr 31R
Dr 31R, abraded fragment
Dr 33, four joining pieces
Dr 33, two pieces of the same cup
Dr 33, two examples
Dr 33 or 46, base and footring
Dr 38
Curle 23, burnt
320 Dr 18/31R or 31R rim, Ant.
327 Eroded fragment of a dish or open bowl with curving wall (Dr 36 etc), Ant.

2. Upper part of fill, additional side ditch, western side, Alchester road
117 (1) Two CG sherds, 2nd cent.

3. Ditches, west of Alchester road
i) Rearward plot boundaries
183 Dr 18/31R or 31R, CG, Ant.
(2,3) Dr 36, EG, late Ant or early 3rd cent
Dr 37 rim, CG, mid to late Ant.
Dr 38, CG, slightly burnt, late Ant.
Dr 79 etc, CG, mid or late Ant.
Curle 15 or 23, CG, late Ant.
Rim of enclosed jar or the like, CG, Ant.
Base with club-shaped footring, CG, Late Ant.
Dish or bowl fragment, CG, Ant.
Rim scrap, CG, probably Ant.
Three abraded scraps, CG, Had. or Ant.
195 Dr 31R, CG, burnt, mid to late Ant.
Dr 31R, CG, burnt, mid or late Ant.
Lud Tg, CG or EG, burnt, late Ant or early 3rd cent.
Small footring fragment, burnt
Scrap showing traces of moulded decoration, possibly EG (Rheinzabern). Ant or later.

ii) Plot side boundaries
198 Dr 31R, CG, Ant.
Dr 33, CG, mid to late Ant.
287 (1) Dr 33, CG, slightly burnt
Dr 37, rim giving traces of an abraded ovolo, CG, Ant.
Dr 79, three joining pieces, CG, mid to late Ant.
Flake, burnt
288 (1) Dr 31R, ten pieces all probably from the same dish; slightly burnt. CG, mid to late Ant.
297 Dr 31, burnt, CG, Ant.
Dr 37, CG, small, slightly burnt fragment showing part of an ovolo, Ant.
Dr 37, CG, showing an ovolo too badly damaged to identify and traces of a double medallion. Ant.
Rim flake, Dr 31 etc, slightly burnt. CG, Ant.
321 Dr 31, slightly burnt, Ant.

4. Structures and other features
i) Plot 2/1
169 (Building 2/1)
Dr 18, SG, Flav-Traj.
Dr 31, CG, Ant.
Dr 18/31 or 31, CG, Ant.
Dr 18/31, CG, early-mid 2nd cent.
Dr 31 probably, EG, later 2nd-mid 3rd cent.
Dr 31, CG, Ant; worn
Dr 31, C/EG, later 2nd-early 3rd cent.
Dr 35, CG, later 2nd cent; burnt
Dr 37 in the style of X-13 ('Donnaucus') of Les Martres. The small double medallion with rosette is on S & S PL 49, no 590. The motifs in the large medallions or festoons are not identifiable. *c* AD 100-125
Dr 37, SG, tip of wreath at base. Flavian
Dr 37, CG, early 2nd cent.
Walters 79, CG, later 2nd cent.
Lud Tg, CG, later 2nd cent.
Walters 79, CG, later 2nd cent.
CG mortarium sherd, later 2nd cent.
CG sherd, 2nd cent.
CG sherd, 2nd cent., abraded interior
181 (Building 2/1)
Rim sherd, probably Dr 37; EG (Rheinzabern), later 2nd-mid 3rd cent.
EG sherd, perhaps from a Dr 45 mortarium
Dr 36, CG, mid 2nd cent.
Dr 36, CG, Ant.
CG sherd, 2nd cent.

ii) Plot 2/2
299 (1) Dr 31, CG, slightly burnt. Probably mid to late Ant.
Dr 33, CG, Ant.

iii) Plot 2/3
189 (Building 2/3)
Dr 18/31R — 31R, CG, Ant.
Dr 31, CG, probably Ant.
Dr 31R, CG, with part of stamp]IM. Mid to late Ant.
Dr 31, CG, slightly burnt. Ant.
Dr 33 or 46, base and footring; slightly burnt. CG or EG, probably Ant.
Dr 37, CG, with Cinnamus ovolo 3 (S & S FIG 47, 3 = Rogers B143). *c* AD 145-175
Dr 45, EG, slightly burnt. Trituration grit thrown well up on to interior of collar. Late 2nd or early 3rd cent.
Scraps from four different vessels in CG fabrics
Dr 79 or 79R, part of a large dish. CG, late Ant.
Club shaped footring (Dr 38 etc). Probably EG, Ant or later
Dish or bowl fragment, CG, Ant.
291 (1) (industrial features)
Dr 18, two slightly burnt pieces of the same dish, SG, Flav.
Small burnt fragment, probably CG, Ant.
Scrap, CG, 2nd cent.
Rim fragment, CG, of an enclosed jar; Déch 72 or the like (*cf* O & P PL LXXVII). Slightly burnt. Probably mid 2nd cent.
Scrap, cup form, CG, 2nd cent.

Dr 31, CG, slightly burnt, Ant.
Dr 33, CG, slightly burnt, Ant.

186 (2) (industrial layer)
Dr 33, CG or EG, Had or Ant.

208 (2) (industrial layer)
Dr 31, CG, mid to late Ant.
Dr 31, CG, burnt, mid or late Ant.
Dr 33, CG, probably mid to late Ant.
Dr 36 rim, CG, slightly burnt, Had or Ant.
Dr 36, CG, mid to late Ant.
Three scraps from different vessels, one with part of a leaf *en barbotine* (Dr 36, Curle 11, etc). All probably CG, 2nd cent.
Dish fragment, CG, mid 2nd cent.
Dish or bowl, footring, CG, probably Ant.
Small rim flake, CG, Ant.
Scrap, slightly burnt
Small fragment, heavily burnt
Curle 15 or 23, fragment, CG, mid to late Ant.

137 (pit)
CG sherd, 2nd cent.

138 (1) (same pit)
Two pieces, Dr 18/31 or 31, CG, Ant.

138 (2) (same pit)
Dr 45, CG, later 2nd cent.

139 (same pit)
SG sherd, 1st cent)

iv) Plot 2/5

184 (Building 2/5)
Dr 31, CG, Ant.
Dr 31R, eleven flakes from the same dish, CG, Ant.
Dr 31R, CG, Ant.
Dish fragment (Dr 36 etc), CG, Ant.
Lud Tg, two small bits, CG, mid to late Ant.
Flat dish fragment, CG, mid or late Ant.
Featureless scraps from two or more different vessels, CG, probably Ant.
Small scrap, CG, Had, or Ant.

199 (Building 2/6)
Dr 31, CG, Ant.
Dr 31R, CG, Ant.
Scrap, CG, early to mid 2nd cent.

v) Plot 2/7

329 (Building 2/7)
Dr 18/31, CG, early Ant.
Dr 18/31 or 31, CG, Had-Ant or Ant.
Dr 33, CG, Ant.
Dr 45, CG, *c* AD 170-200

330 (Building 2/7)
Dr 27, CG, Ant: not later than AD 160
Five adjoining fragments of a large cup of Dr 33, with a stamp from a poorly-cut die giving CIT̂AINIM, die 1a Citainus of Central Gaul probably. This stamp is rare, and is only known otherwise (incomplete) on Dr 31 at York (Yorkshire Museum) and Dr 31R at Malton. The forms and fabrics suggest a late Ant date.
Tiny flake of Dr 37 with part of a gladiator (probably O1004). Not assignable to a particular potter, but Had or Ant.
Dr 31, CG, with blotchy glaze, Ant.
Dr 31R, 36 and 79, CG, late Ant.
Dr 33, CG, eight pieces from an eroded cup and two small fragments, Ant.
Dr 37 rim, CG, Ant.

333 (Building 2/7)
Dr 33 or 46 base, CG, Ant.
Dr 36 with blotchy glaze, CG, Ant.
Dr 33, CG, and a small fragment, late Ant.
Dr 45, CG, *c* AD 170-200
A fragment of base of Dr 79/80 or 79 (the only doubt being the diameter) stamped AL.BV.SA. (die 1a). This stamp belongs to a potter working at Lezoux (Jardin de l'Hôpital) where several examples were found sealed under the second phase of a late Ant kiln. Not the same man as Albus iii of Lezoux it seems, though Dr 79 is quite common for him. *c* 170-200.

334 (Building 2/7)
Dr 18/31R-31R, CG, Ant; not later than AD 160
Dr 33, CG, slightly burnt, Ant.
Two fragments of a Dr 37 in the style of Advocisus of Lezoux with ovolo Rogers 1974, B103 and a small figure (close to O633A), *c* AD 160-90.

vi) Plots 2/8 and 2/9. Samian from topsoil over Buildings 2/8 and 2/9

[<O>F]PONTHEI on Dr 15/17 or 18. Die 1a', Pontheius of La Graufesenque. Both versions of the die occur at Flavian foundations: the complete version at Inchtuthil, also at Hofheim and occasionally on 29, the reduced version at Corbridge. *c* AD 75-90
Dr 18/31, CG, mid 2nd cent; burnt
Dr 18/31, CG, mid 2nd cent.
Dr 30, CG, with a scroll in the main frieze. The ovolo is too abraded to be certainly identifiable, but suggests an early-mid Ant date.
Dr 31, rim, CG, Ant.
Dr 31, CG, Ant.
Dr 31R, CG, mid-late Ant; worn and burnt
Two Dr 33, both CG and mid-late Ant.
Dr 33, CG, mid 2nd cent.
Dr 33, CG, mid 2nd cent.
Dr 33a, CG, early 2nd cent.
Dr 36, CG, early-mid 2nd cent.
Dr 36, CG, mid-late Ant.
Dr 36, CG, Had-Ant.
Dr 37 in the style of Cettus of Les Martres. His S-scroll and square motif, as S & S PL 144, nos 59 and 64. *c* AD 135-165
Dr 37 in the style of Doeccus of Lezoux. The medallion, beadrow and leaf are on S & S PL 150, no 42, the figure is probably that on no 43, and the vase is on PL 151, no 55. *c* AD 165-200
Walters 79R, CG, late 2nd cent.

vii) Building 2/10

344 Dr 31, CG, Ant.

342 (pit)
Dr 36, CG, Had or Ant.

Note

The FIG 18 chart includes exceptionally the Samian, Rhenish and Lezoux vessels in the phases where it is assumed they were

originally purchased, as it was wished to emphasize the range of forms known to be available at the different periods. (This of course begs the question of old stock being marketed.) It suggests that there was more Phase 1 activity on the site than the scrappy recorded evidence suggests though some of the vessels will be survivals.

MORTARIA

by K F HARTLEY

The fabric numbers are internal numbers for the mortaria report only, and the fabrics are described below. The pictorial chart (FIG 18) includes unstratified vessels where there is no reasonable doubt as to their date and form. It normally excludes residual material.

ILLUSTRATED SHERDS (FIGS 24, 26, 28 and 32)

PHASES 1 and 2

There are no illustrated stratified mortaria from these phases, but see vessels 270 and 271 (FIG 32).

PHASE 3

116. Fabric 6. Young 1977, M21.4, AD 240-300. Slightly burnt. Feature 82, 13.
117. Fabric 6. Young 1977, M18, AD 240-300. Burnt. Feature 183.
118. Fabric 8b. Lower Nene valley, probably 4th century. Slightly burnt. Feature 183.
119. Fabric 6. Young 1977, M22, slightly burnt. Feature 294.
120. Fabric 12. Mancetter Hartshill. 3rd century. Reeded near hammerhead mortarium. Feature 13.

PHASE 4a

150. Fabric 6. Young 1977, M22, AD 240-400+. Feature 201.
151. Fabric 7b. Young 1977, C97, AD 240-400+ Slip eroded, fabric discoloured. Feature 16(1).
152. Fabric 7a?. Young 1977. No slip survives but this form may not occur in Fabric 7b. Feature 200.
153. Fabric 6. Young 1977, M18. AD 240-300 Residual, heavily burnt. Feature 59.

PHASE 4b

200. Fabric 12. Mancetter Hartshill. Smooth collared type. AD 250-350, discoloured. Angle uncertain. Feature 64.
201. Fabric 6. Young 1977, M22 240-400+ Burnt. Feature 65.
202 .Fabric 6. Young 1977, M22 240-400+ Slightly burnt. Feature 196.
203. Fabric 6. Young 1977, M22 240-400+ Chemically weathered to muddy brown. Feature 196.
204. Fabric 6. Young 1977, M22 240-400+ Discoloured. Feature 64.

PHASE 4b*

260. Fabric 10b. Lincoln? Northants? 240-400. Worn and burnt, greyish white, red brown dull colour coat. Iron slag grits. Feature 38.
261. Fabric 6. Young 1977, M22 240-400+ A 4th century type. Feature 166(1)
262. Fabric 6. Young 1977, M22 240-400+ Feature 25.
263. Fabric 6. Young 1977, M22 240-400+ Feature 3, 66.
264. Fabric 7a. Young 1977, W.C.7 240-400+ Feature 66.
265. Fabric 6. Young 1977, M22 240-400+ Features 3, 31.
266. Fabric 6. Young 1977, M22 240-400+ Burnt. Features 3, 38.
267. Fabric 6. Young 1977, M22 240-400+ Feature 3.
268. Fabric 6. Young 1977, M22.14 240-400+ Feature 3.
269. Fabric 7b. Young 1977, C.100.5 300-400+ Slip gone. Feature 66.

Unstratified mortaria

270. Fabric 3b. Eroded rim sherd. Perhaps Upper Nene, 2nd century. Could well have been colour coated. Heavily burnt. U/S, area Fs297-299.
271. Fabric 3a. Northamptonshire. 170-250 Heavily burnt and abraded. U/S 1966 (T11).
272. Fabric 6. Probably Oxford (Upper Nene valley only other possible source). Discoloured. Probably 4th century. U/S area F201. The neatly made, reeded hammerhead profile is typical of products of the Mancetter-Hartshill potteries in Warwickshire. In a group with so many discoloured pieces the fabric, despite its sandy texture, might have passed for that produced in Warwickshire but fortunately a little trituration grit survives and this is typical of the Oxford potteries if the surviving grit is representative of the whole. Because so little grit survives there remains a possibility that it could have been made in Northamptonshire where this type of grit was sometimes used in conjunction with other material and where the Mancetter forms were sometimes used. But there is no evidence to date that mortaria were made there after about AD 240 and it may at least be assumed that any production thereafter was minimal. The balance of probability is that it was made in the Oxford potteries by a potter who had migrated from the Mancetter-Hartshill area, and it would be the first recorded instance of a mortarium made there in Mancetter style.

MORTARIA FABRICS

Fabric 1. Northamptonshire region, Upper Nene valley.

Slightly sandy, cream or off-white fabric, occasionally with sandwich core of salmon pink and drab cream; tempering of fine quartz and red-brown material; opaque red-brown, quartz and occasional chalk trituration.

Fabric 2A. Northamptonshire region, Upper Nene valley.

A slightly sandy, pale pinkish-buff fabric with pale grey core and fine quartz and red-brown temper; occasionally with similar core to Fabric 1; white and pink quartz, and opaque red-brown trituration.

Fabric 2B. Northamptonshire region, Upper Nene valley.

Hard, buff brown fabric with pale grey core and quartz and blackish ironstone temper; the trituration grit is composed largely of black ironstone, a little quartz and flint and occasionally chalk. Traces of a yellowish buff slip occasionally survive.

Fabric 2c. Northamptonshire region, Upper Nene Valley

Rather dense, hard fabric made somewhat gritty by addition of ill-sorted transparent and white quartz, red-brown and occasional iron slag-temper. The fabric is discoloured but appears to have been buff; traces of a yellowish-buff slip

Traded fine and specialist wares

IMPORTS

Samian | Amphorae | Rhine Lezoux

NON-LOCAL

Flagons | Mortaria other | Mortaria Oxford | Mica dusted | Oxford red colour coated wares | Lower Nene & other colour coated

Table and specialist wares

LOCAL

red sandy | Lower Nene grey wares | Much Hadham | Upper Nene fl.+mortaria | Upper Nene grey wares | Upper Nene blue-grey | Orange beakers

Kitchen wares

REGIONAL

BB1 | Alice Holt | Grogged wares | Harrold | other shellies

LOCAL

Later coarse grey ware | Light coloured sandy

PHASES: late C1 | c 170 | c 230 | c 270 | c 330 | c 355 | c 370+

PHASE: I | 2 | 3 | 4A | B | B★

Grogged wares: Belgic derived | soft pink grogged | and tile

other shellies: hand made shelly | late black shelly

red body

metallic burnished grey wares

parchment

COLOGNE | TRIER | RHEINZABERN | LEZOUX | S.GAUL | CORDOBA | CADIZ

LINCOLN | HARTSHILL | LOWER NENE | Towcester | HARROLD | MUCH HADHAM | OXFORD | ST ALBANS | ALICE HOLT | POOLE

CW PW 1983

Fig 18 Towcester, Alchester road suburbs: diagram to show range of main pottery forms current during the site's history. Scale: 1:18. Samian forms in general are the standard Dragendorff numbers (with a few vessels in the Curle/Déchelette/Ludowici series); vessel types from the Oxfordshire kilns are numbered in accordance with the series given in Young 1977. LN denotes vessel types as in Howe *et al* 1980. UN denotes vessels in Johnston 1969; G as Gillam 1976; AH as Lyne and Jefferies 1979. H: mortarium from the Hartshill kilns. The numbers on the vessels represent the estimated numbers of those vessels present. The double line after *c* 230 emphasizes the apparent ceramic gap in the latter part of Phase 2.

Table of occurrence of the illustrated and unillustrated mortaria. Numbers indicate vessels present
(precise forms may be uncertain; includes residual vessels and evidence of body sherds)

	Upper Nene/Northants			*Oxford*			*Mancetter/Hartshill*			*Lower Nene*			*Lincoln?*		
	Vessel Nos	*Fabs*	*Dates*	*Vessel Nos*	*Fabs*	*Dates*	*Vessel Nos*	*Fabs*	*Dates*	*Vessel Nos*	*Fabs*	*Dates*	*Vessel Nos*	*Fabs*	*Dates*
Phase 1	3	1-2/11	150-250 *c*100-*c*200	2	6	100-130									
TOTAL 5															
Phase 2	3	2a/2b/2c 3/13	150-*c*250	8	6	180-240	1	12	140-370						
TOTAL 11															
Phase 3				4	6	240-300	3	12	260-340	1	8b	300-400			
				2	7b	240-400									
TOTAL 10															
Phase 4a				8	6	240-400	2	12	280-370						
				3	7a 7b	240-400									
TOTAL 13															
Phase 4b				24	6	240-400	6	12	270-350						
				6	7a 7b	240-400	6	12	100-370+						
TOTAL 36															
Phase 4b*				26	6	240-400	4	12	250-350	3	8b	230-400	1	10b	240-400
				5	7a 7b	240-400			280-370						
									140-370						
TOTAL 39															
	5			88			16			4			1		

survive. The trituration consists of transparent and white quartz, flint, red brown and iron slag? material.

Fabric 3a. Northamptonshire region, Upper Nene valley.

Slightly soft, fine-textured, orange-brown fabric, often with drab grey core and usually with thin white slip; red-brown, quartz and flint temper with very occasional chalk fragments; trituration grit consists largely of quartz and a little black ironstone with occasional red-brown fragments.

Fabric 3b. Northamptonshire region, Upper Nene valley?

Slightly micaceous, fairly fine textured fabric with a very little sand temper; transparent and white quartz and red brown trituration. The only piece in this fabric (no 270) is too discoloured to distinguish the original colour but the very neatly made vessel with small flange could perhaps have been colour-coated.

Fabric 3c. Northamptonshire, Upper Nene valley?

The fabric of this fragment from Feature 186 has suffered from chemical weathering and possible burning. The greenish black trituration grit is unusual and softish and has probably been affected too. Although probably from the Upper Nene there is no reason to associate it with any other pieces so attributed (unillustrated body sherd).

Fabrics 1 to 3c and 11 are products of small workshops. Numerous slight variations occur and it is not always possible to know which are significant. These workshops were mostly in the region between Brigstock and Towcester and no doubt produced mortaria on a small scale along with other products. Their *floruit* was *c* AD 140-240 but even in this period they were never produced in sufficient quantity to prevent the import of mortaria made in the Mancetter-Hartshill and Oxford potteries. Few potters working here in the Antonine period are likely to have had markets outside Northamptonshire.

(Fabric 4, Upper Nene, and 5, Verulamium region, are represented in the walled town, but not in these suburbs.)

Fabric 6. Cowley, Headington, Sandford, etc, Oxford (Young 1977).

Slightly sandy, off-white fabric occasionally with pink core and sometimes cream to buff slip; there is a little finely fragmented quartz and red-brown temper but the trituration almost always consists of distinctive mixed pink, brownish and transparent quartz grit.

Fabric 7a. Cowley, Dorchester, Sandford, Baldon, etc, Oxford (Young 1977)

A fine textured, slightly micaceous, orange-brown fabric, sometimes with a grey core, and a thin cream or white slip; abundant trituration identical with that for Fabric 6.

Fabric 7b. As for Fabric 7a.

This fabric differs from Fabric 7a only in having a red-brown, samian-like slip.

Fabric 8b. Castor-Stibbington area of the Lower Nene valley.

Hard, fine textured off-white fabric with a little red-brown quartz and ironstone temper; trituration grit consists of black ironstone, occasionally with some haematite. There is often a yellowish-buff slip.

(Fabrics 9, Nene Valley, and 10a? Swanpool occur in the walled town but not in the suburbs.)

Fabric 10b. A fine textured greyish white fabric (perhaps burnt) with very little red-brown and quartz temper; the trituration consists of iron slag and there is a red-brown samian-like colour coat. Source uncertain.

Fabric 11. Northamptonshire region, Upper Nene valley.

A hard, brown-buff fabric, packed with quartz temper in the same way as normal Verulamium region fabric; there is an occasional iron rich particle among the temper. Trituration unknown.

Fabric 12. Mancetter-Hartshill, Warwickshire.

Hard, creamy white, often pipeclay like, fabric with little if any temper (though there are occasional exceptions); the trituration of mortaria made after *c* 135 is composed of dark brown or blackish material and/or red brown material; this grit is derived from old waste pottery. Before *c* AD 135 the trituration grit usually contains a lot of quartz and may sometimes be entirely quartz.

Fabric 13

A noticeably micaceous fine textured cream fabric with red-brown occlusions and blackish trituration grit. The reeded hammerhead form suggests Mancetter/Hartshill, but the fabric points more to Northamptonshire (unpublished casual find).

Comments

The table leaves no doubt that the bulk of the mortaria on the Towcester-Alchester road suburbs site belongs to the period AD 240-400+. The vast majority were made in the Oxford workshops; the only other supplier of any importance was the Mancetter/Hartshill pottery. The proportion of Oxford to Mancetter-Hartshill mortaria is much higher than one would expect from the other sample groups examined in the Northamptonshire area or from the sites at Harrold and Odell in Bedfordshire. This is probably the result of lack of activity on these suburb sites in part of the third century (information Mrs C Woodfield) and the fact that production at the Mancetter-Hartshill potteries was severely reduced or perhaps ceased *c* AD 370.

The workshops represented over the period from the late 2nd century on are those to be expected in this area, though more products of the workshops in the Castor-Stibbington area of the Lower Nene valley could be expected for the period AD 250-400, and it would be interesting to compare the relative amounts of colour-coated ware from the these sources. Mrs Woodfield informs me that the estimated vessel counts for Nene Valley colour coats in proportion to Lower Nene valley mortaria are as follows.

Phase 1	2:0
Phase 2	45:0
Phase 3	27:1
Phase 4a	50:0
Phase 4b	116:3

For the Oxford wares the figures are (again giving mortaria as the second figure):

Phase 1	0:2
Phase 2	0:8
Phase 3	6:6
Phase 4a	33:11
Phase 4b	170:61

(The vessel counts are higher than on FIG 18 as they include vessels of known origin but uncertain details of form)

The proportions can be accentuated by including the amounts of Lower Nene grey ware in Phase 2, and parchment wares in Phase 3. The distribution of mortaria from the Lower Nene valley suggests that apart from immediately local areas dispersal was from the Wash by sea. The lack of mortaria later than *c* AD 240 from the Upper Nene Valley is consistent with the almost complete cessation of production in the small workshops of this area by the middle of the 3rd century.

THE REMAINDER OF THE ROMAN POTTERY

by Charmian Woodfield

Some 18,000 sherds of pottery overall were examined from the three sites, but the unstratified and doubtful levels are not included in the coarse pottery report. This category includes the major part of the material from the 1967 site, as much of this came from the interface of the base of the ploughsoil and the top of the features there discovered. The 1974-76 site is used to illustrate the earliest and latest phases in the main, but the 1977-1978 watching brief provided a good range of stratified groups for the middle period. The ceramic dating of features to a phase depends therefore on a resemblance of form, where present, to those vessels illustrated for that phase, and also to the fabrics present, and in what percentages, compared to an acceptable norm for the site as established by the larger stratified groups (see FIG 18).

The purpose of the pictorial chart (FIG 18) is:

1. To show the range of forms (as far as is known or can reasonably be inferred) available on the market in the different phases of the site's history, both as regards quality and quantity (and its implications for the history of the pottery industry both as regards manufacture and marketing) and also its implications for recession (little choice) and prosperity (multiple choice), and the ebb and flow of Romanized and native taste.
2. To show the pedigree of forms (and to emphasize the general conservatism of kitchen wares).
3. To emphasize the disappearance during the 3rd century recession not only of all foreign imports but of quality local industries; further to emphasize the apparent progress of the industry as a whole towards larger units marketing over greater distances.
4. To emphasize the size of the soft pink grogged industry and to stimulate further work into its distribution pattern.
5. To attempt to clarify the position for later Roman pottery forms and fabrics for the area, particularly as much of the published pottery for these later periods is residual.
6. To simplify down the fabric types into the smallest number of meaningful groupings to make the whole classification system easier to grasp, particularly for non-pottery experts.

A list of the forms appearing in the main fabric groups is given below with their occurrence in each phase. (Where not discussed in this section of the report the number of vessels represented by an illustration is given in the pottery catalogue.)

Decoration and surface treatment, and sources, are considered where appropriate, and the percentages (based on sherds except where otherwise stated) for each fabric within each phase are given.

The numbers in italics refer to illustrated vessels. Where not suitably incorporated in tables, the numbers in brackets refer to the estimated total number of stratified vessels of that particular type (9).

Phase 4b* is a ceramic not a structural phase, and indicates the continuation of use of certain features probably into the last quarter of the 4th century.

Fabric numbers are those used in Brown and Alexander 1982. For convenience these are listed in microfiche, M38-41. Additions to this list are described below. NB. The phasing here is, of course, that of the suburbs site, NOT that of the Towcester Grammar School site.

Fab 5 Fine dense hard red fabric, 10R 6/8. Fine black and white sand, and red inclusions. Mica-dusted. Phase 2, but probably residual from Phase 1. Nos 30, 31, 32.

Fab 11 Red, 2.5YR 7/6, sandy fabric, tempered with black and white very sparkly sand, medium grain. Occasional limestone inclusions, sometimes burnt red limestone, and often very large, up to 9mm across. Brown surfaces, 2.5YR 6/6, perhaps a slip. Phase 2, no 33.

Fab 14a Rhenish-Lezoux colour coated. Phase 2, residual thereafter. Nos 27 to 29.

Fab 14d Fine soft buff, 2.5YR 7/3, fabric. White inclusions up to 1.5mm, very little sand. The colour coat is thick, red-brown, 2.5YR 5/6, and earthy, ie dull and non metallic. Phase 2, nos 24 and 25.

Fab 14i Fine orange, 2.5YR 7/4, grey, 10YR 6/1, streaky fabric. Sparse red inclusions. Barbotine over grooves and rouletting. Matt dark grey, 10YR 3/1, colour coat overall. Phase 2, no 37. Perhaps Upper Nene.

Fab 14j Grey-buff sandy fabric 10YR 7/4, sand largely white, medium to large grain. Red core. Dark grey colour coat. Phase 3. No 107.

Fab 29a Grey, 10YR 7/1, sandy fabric, sand largely white, medium to large grain, occasional large grey (6mm) inclusions. Black slip, metallic shine on undamaged sherds. Burnished. Sherds have noticeable 'wiped' appearance. Phase 4b and 4b*. Nos 185, 190, 235-240.

Fab 29b Red cored fabric, sand largely white. Grey surfaces, 10YR 7/1, black slip, possibly, but not necessarily, related to 29a. Phase 4b*. Nos 241-243.

Fab 31 Coarse very sandy grey fabric, 2.5YR 5/2, multicoloured sands, mostly white. Slip greyish/white inside vessel, black on exterior. Rather resembles Alice Holt. Phase 3. No 129.

Fab 32a Sandy light yellowy grey, 10YR 7/2, fabric, slightly micaceous, conspicuous speckle of black haematite inclusions up to 2.5mm across. White sand. Dimpled. No slip survives but all examples on site are eroded. Apparently a product of the Much Hadham kilns. Phase 4b, nos 170 and 244.

Fab 32b Slightly sandy, bright orange red, 2.5YR 6/8, fabric. Slightly micaceous and somewhat speckly appearance, red inclusions, occasional black and some white sand. Apparently Much Hadham, phases 3 and 4b, nos 109, 171?, 172.

Fab 35c Extremely crude reddish brown, 2.5YR 6/4, underfired hand made grogged fabric with the addition of ironstone and limestone. Includes large fragments of F35b sherds, up to 6mm across. Crude wavy line and ? finger nail decoration. Sparse voids from burnt-out grass. Phases 4a-4b*. Its extreme crudity raises the question as to whether it might be intrusive in Phase 4a. It looks like the dying kick of a long tradition. Nos 259, a, b, c, d.

Fab 37 Extremely sandy grey fabric, light orange surface, 7.5YR 8/6. Phase 4b. No 173.

Fab 38 A rather sandy red, 2.5YR 6/6, fabric. Occasional pieces of white sand up to 0.5mm visible on surface. Black surface sometimes, but perhaps due to burning

on site. Rather coarse rouletting. Phase 2, but almost certainly residual from Phase 1. No 96.

Fab 39 Red orange, 10R 5/8, rather fine fabric, some visible white sandy tempering. Rouletted. Phase 2, No 95.

Fab 44d Soapy black (5Y 2/1) to brown (5YR 4/6) shelly fabric, often vesicular, but shell very white, often with large (to 5mm) pieces visible on surface. Rilling often wider (up to 3mm), fabric thinner than Fab.44c (Harrold). Phases 4b and 4b*. Nos 181, 254, 255, 257.

TRADED FINE WARES

Samian

This is the subject of a separate report (pp 68-72 and M33-37) but it should be noted here as part of the overall picture that some 243 vessels were represented from the three sites, including in this case unstratified material.

Percentages

In large Phase 2 deposits (F282(2), F287(1)) in these industrial suburbs this was 12% to 14%, based on vessel count. This compares with 5% at Wood Corner, a rural and agricultural site in Milton Keynes (C Woodfield, report forthcoming as part of the Milton Keynes Unit Roman Monograph) and 50% on an urban site, from a pit overlying the Towcester town defences of very similar date (C Woodfield, report forthcoming).

Imported colour coated wares

See separate report for the material from the 1977/78 watching brief by R P Symonds (M42). The identifications for the other two sites were made by Anne Anderson. The identification of *28* was made by Hedley Pengelly. The numbers here represent vessels, not sherds, and include unstratified material.

Cologne Fab 14c

Form

Roughcast beaker (1 Phase 2; 1, *26* residual).

'Rhenish', including Central Gaul Fab 14a

Forms

Copy of a Dr 40 cup. *28* (2, both residual)
Scroll beaker. *27* (2, both residual or unstratified)
Beaker of Déchelette 74 type. *29* (1 unstratified)
Indented and rouletted beakers. (3 Phase 2, 6 residual)
Total vessel count: 16

Percentage

In large Phase 2 contexts about 1.5%.

Nene Valley colour coats, Fab 12a and 12b ('Imitation Rhenish')

Forms, Fab 12a. The form types, where discernible, are those of Howe *et al* 1980

It will be seen that beakers remain consistently the most popular product, particularly the folded beaker, even without the addition of the Fabric 12b beakers given below, until the late 4th century. At this period the luxury products seem to be flagons and there was a reduced beaker production, the main vessels marketed being plain copies of well established grey ware forms, that is the dog dish, the flanged bowl and the necked jar, accounting for 84% of the material. (The proportion of painted wares would have been much higher in more favourable soil conditions in the 4th century levels).

Percentages

Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
1.75%	12.75%	11%	13%	9%	10.5%

Nene Valley imitation Rhenish Fab 12b

Form

Tall necked bulbous bodied beaker. *105, 140, 154-159* (4, Phase 3; 8 Phase 4a; 24 Phase 4b)

NENE VALLEY COLOUR COAT FORMS FAB 12a ONLY

	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*	
Scroll beakers	3					
Indented scale beakers	9					*20*
All over scale beakers	1					*21*
Hunt cups	2					*19*
Indented beakers	10	6	3	13	3	
Boxes, type 89	8	1	1	13	3	*102 208 209*
Dog dishes, type 87		1	3	11	26	*104 210 211*
Dish type 82?		1				*103*
Bowl type 83			1			*141*
Painted beakers		1	3	7	3	*216*
Flanged bowls, type 79			3	2	11	*163 212*
Necked jars			1	5	6	*213*
Bottles and flagons, 65, 67, 68, 69				3	3	*160(2) 161 206 207*
Other beakers	2	1	5	17	6	*22 23 214 215*

Form totals

	Phase 2		Phase 3		Phase 4a		Phase 4b		Phase 4b*	
Beakers	26	76.5%	8	72.5%	11	55.0%	37	53.0%	15	23.0%
Boxes	8	23.5%	1	9.5%	1	5.0%	13	18.0%	3	5.0%
Dishes			2	18.0%	3	15.0%	11	15.0%	26	40.5%
Bowls					4	20.0%	2	3.0%	11	17.0%
Jars					1	5.0%	5	7.0%	6	9.5%
Flagons							3	4.0%	3	5.0%

Flagon? *106 217?* (1 Phase 3; 1 Phase 4b*)

Decoration

Rouletting, painted scrolls, etc. There were no plain vessels. An unstratified vessel had a neat white painted dot, 13mm diameter, underneath the base, perhaps a potter's mark.

Percentages

Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
NIL	NIL	3%	2%	1.25%	

The occurence of this fabric seems sporadic. It was as high as 19% in F185, Phase 4. In some 4th century features it seemed to be almost entirely absent (10).

Parchment wares Fab.43 — the forms are those given in Young 1977.

Forms

		Phase 3	Phase 4a	Phase 4b	Phase 4b*
P 8	*100*	1			
P11	*99*	1			
P24	*97 98 168 218*	4	2	7	3

Oxford white colour-coat

Fab 40, version of P24 1

It should be noted that the Parchment Wares are higher in vessel numbers in Phase 3 than the Oxford red colour coats. Clearly they did not hold this advantage for long (11).

Oxford red colour coats Fab 13

It does not appear that these are reaching Towcester in any quantities until the first quarter of the 4th century. They never overtake the Nene Valley colour coats in quantity of material present, although they do close the gap in the later 4th century. (The forms are those of Young 1977)

It will be obvious that the Oxford coloured coat industry is marketing a different range of products in Towcester from those marketed by the Nene valley. While the latter provide chiefly beakers, the Oxford potters provide bowls and dishes (82%) with beakers at 12.5%. While the Nene Valley potters reduce their forms in the late 4th century and are basically making colour coat versions of three plain grey ware forms, the Oxford industry expands from six forms in Phase 4a to 22 forms in Phase 4b* many highly decorated, often to a bizarre degree. The flanged bowl, necked jar and dog dish of the Nene Valley (there 84% in the latest phase) account then for only 4% of the Oxford wares. Necked jars and stamped wares do not appear until the latest phase, and the C51 makes its customary late rise in numbers.

A C41 occurs unstratified.

Decoration

Painted wares occur from Phase 4b on, but are very few and eroded, and many more must have been present than survive.

Stamped wares did not occur on either the 1967 or the 1977-78 sites. This suggests they do not appear at Towcester until the third quarter of the 4th century.

Percentages

Phase 3	Phase 4a	Phase 4b	Phase 4b*
4%	10.75%	8.5%	9.5%

Totals		Forms	Phase 3	Phase 4a	Phase 4b	Phase 4b*	
2	Flagons	C8			2		*166 167*
6	Jars	C18			6		
27	Beakers	C20			3	2	
		C22	2	2	6	7	*101*
		C25				1	
		C27			1		
		C28				2	
		C31				1	
61	Wide dishes, platters	C45	1	5	22	16	*142*
		C47		2	2	3	
		C48				4	
		C49			3	3	
46	Dr 38 copy	C51	1	1	11	33	*224*
22	Hemispherical and full bellied bowls	C55			2	2	*219?*
		C64			1		
		C68				4	
		C71		1	7	5	*225*
10	Necked bowls	C75				8	
	Stamped	C78				2	*230 231*
38	Carinated bowls	C81		2	4	12	*226*
	Stamped	C83				15	*227*
		C84				4	*228 229*
	Handled	C85				1	*232*
2	Flanged bowls	C93				2	
1	Dog dishes	C94				1	
3	Miniature necked bowls	C113			1	2	*165 222 223*

SPECIALISED WARES

Flagons and amphorae These appeared scrappily in Phases 1 and 2.
Forms
Dressel 20 Fab 45 (8, Phases 1 and 2 and residual)
Camulodunum 186c *1*, (1, Phase 1)
There were no illustratable flagon sherds, but an estimate of the number of vessels in Phases 1 and 2 suggests about 15 vessels, of which about a third appeared to be from the Oxford region, and the remainder to be from either the Verulamium area or the Upper Nene. A study of flagons is long overdue.

Mortaria — see separate report pp 72-3

TABLE WARES

This category includes the better quality coarse wares which do not appear to have been purchased as containers or used as cooking vessels.

Grey wares, Upper and Lower Nene? Fabs 22, 17, 16.

Fab 22, Upper Nene/Ecton?
Forms
Necked jars and beakers
The forms are usually cavetto and related rims, *61;* small jars with multiple cordons at the neck, *51;* rims turned out to make a flat rimmed top, *52;* channel rims, *50.* A pedestal base occurs, *46.* (2 jars in Phase 1; 13 jars, 9 beakers Phase 2).
Dishes
Triangular rim dishes, *54, 57* (2, Phase 2)
Versions of the grooved pie dish or dishes with applied beads. *55, 56.* This form has been the cause of much confusion. Its presence in Phase 2 deposits (4 vessels) here clearly dates it to the late 2nd and early 3rd centuries. Like the grooved pie dish of black burnished ware it indicates in this area the early years of the 3rd century; it does not date a feature to the late 3rd century, nor conversely does it bring the appearance of the true flanged bowl (with a conspicuous rim continuing the line of the vessel wall and raised well above the flange), back to the late Antonine period. As had been remarked (Johnston 1969) the bead is not pronounced on the earlier vessels and its position on the vessel in unimportant.

The major product of the Ecton kilns, as reflected at Towcester, seems to be necked jars and beakers, mostly not very large. There is noticeable variety of form, and even the simplest vessels are elegantly potted, with competence and artistry. (A crucible occurred in this fabric — unstratified — in the area of Ditches 298 and 299).
Decoration
Trellis, *48,* rouletting, *46,* stabbing with a round tool? *62.* Multiple cordons at neck, *51.*
Source. This material appears to be the product of the Ecton group of kilns. The presence of only 0.9% of this material in Phase 3 confirms the impression that these kilns ceased production in the first half of the 3rd century.
Percentages

Phase 1	Phase 2	Phase 3
6%	5%	0.9%

Fab 17, ?Lower Nene grey ware
Forms
Dog dishes (2, Phase 2)
Flat rimmed and triangular rimmed dishes *65* (1 Phase 1; 12 Phase 2)
Dish with sharply turned down rim *128* (1, Phase 3)
Jars and beakers *47 49 67 68* (16 Phase 2). Sherds indicate several cordoned and trellised jars in addition to *49.* The pedestal foot *47* is a rare feature.

Vessels copying BB1 forms *126, 127* (2, Phase 3). These are properly kitchen wares but are included here for convenience.

The forms are again very varied, and the potting crisp and competent.
Decoration Rouletting, *47.* Trellis and cordons, *49.* Stabbing? *69*
Source It is assumed that these vessels are products of the Lower Nene kilns, but there may well be other unknown sources using similar clays. Vessel *127* clearly carries this fabric on into the late 3rd century.
Percentages

Phase 1	Phase 2	Phase 3	Phase 4a
2%	8.5% (77/78)	1.5%	0.1%

Fab 16 Fine blue tinged grey ware, sometimes with red core.
Forms
Double rimmed jar (1, Phase 3)
Rouletted beakers *63* (2, Phase 2)
Triangular and flat-rimmed dishes *64* (3, Phase 2)
Small jars (2, Phase 2)
Dog dishes *66* (1, Phase 2)
Decoration
Rouletting *63.* Some sherds show traces of fine trellis.
Source Unknown, but the fabric appears to come from the same stable as Fab 22. There is again the same sureness of eye and competence of potting. This fabric appears to be restricted to Phase 2.
Percentages

Phase 1	Phase 2	Phase 3
Nil	4% (1977/78)	0.3%

The amalgamated percentage for these fine grey wares for Phase 2 is 17.5%. They were a conspicuous feature of the deposits of that date. Being a quality product they appear to have been unable to survive the recession of the 3rd century, except for a much reduced sale of Fabric 17.

Orange/red beaker fabrics Fabs 9, 10 and 11.
Forms
Everted rim indented beakers *33* (11, Phase 2); with pedestal foot, *35.*
Cornice rim rouletted beakers *34* (10, Phase 2; 2 Phase 3).
Plain beakers (2, Phase 2)
Sherds of other beakers occurred, but their precise form remained unknown.
Tazze *39, 38? 40?* (1 + 2?, Phase 2)
Foot ring bowl *41* (1, Phase 2)
Colour coated beaker *36* (1, Phase 2)
Colour coated bowl *42* (1, Phase 2)

This again shows the varied range of forms produced and the willingness to experiment so conspicuous in local potters at this date. However, the main product remains the beaker. The amalgamated percentage for these fabrics for Phase 2 is 16% (1977/78) and they are again a very conspicuous feature of levels of this date.

Source
It is assumed that these are local, probably Upper Nene area.
Percentages

Phase 1	Phase 2	Phase 3	Phase 4a
3.5%	16% (1977/78)	2.5%	0.6%
This must be very late in that phase.			

There is no main fabric category providing a table ware or 'finer coarse ware class' until the late 4th century when the appearance of burnished and slipped metallic grey wares should perhaps properly belong here rather than with kitchen wares, although this remains debatable. The only real candidate for the gap is the products of the *Much Hadham kilns* — Fabs 32a and b.
Forms
Jar of unknown form *109 171* (1, Phase 3; 1 Phase 4b).
Bowls with dimpled decoration *170 244* (1, Phase 4b, 1 Phase 4b*)
Other bowls 172 (1 Phase 4b)
The identification both of other vessels and other sherds was tentative, and they are not included here. Two red flagon rims occurred unstratified.

Late burnished metallic grey wares Fab 29a
Forms
Wide-mouthed jars *235* to *238* (8, Phase 4b*)
Narrow mouthed bottle-like jars and ?flagons/jugs? *239* (3, Phase 4b*)
Dog dishes *190* (1, Phase 4b, 1, Phase 4b*)
Flanged Bowls *185, 240* (2, Phase 4b, 2, Phase 4b*)
Cup *243* (1, Phase 4b*)
All vessels appear to have conspicuous 'cheese-wire' cutting whorls on the bases, *239.*
Decoration
The neck is normally unburnished, except for some horizontal spaced burnished lines, *238.* Where the sherd is in good order this can gleam like graphite. The rest of these vessels appear to have been burnished all over externally (perhaps not always towards the base) often with a highly metallic finish. Scribbling decoration appears on some flanged bowls and dishes, *240.* Some bowl or dish bases are decorated both externally and internally with continuous circular scribbling. All vessels appear originally to have had a black slip.
Source It is assumed that this material comes from the East Midlands.

Percentages

Phase 1	*Phase* 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
Nil	Nil	Nil	Nil	0.1%	5%?

Black slipped red bodied vessels Fab 29b
Forms
Narrow mouthed funnel necked vessels, with applied cabling *241 242* (3: 2 Phase 4b, 1U/S)
Decoration
These vessels have a red body with grey surfaces and a thick black colour coat or slip. In one case the vessel bears a burnished scroll which has removed the slip exposing the light grey surface, *241.* All three vessels have applied strips at or towards the base of the neck which are indented to resemble cabling.

Source The fabric appears to be from the same stable as Fab 29a but the source remains unknown.
Percentage
Phase 4b* 0.05%

KITCHEN WARES

This includes classes of vessels which appear to have been used on the fire for cooking purposes, or to have been purchased for their contents. It does not however include flagons in light coloured fabrics, amphorae or mortaria. (See M123 for the analysis of deposits on the insides of vessels.)

Soft pink/buff grogged Fab 35b
Form
The standard form for this very large class is a *wide-mouthed necked jar* with an out-curved usually more or less hooked rim. This starts in Phase 2 and continues to the end being, as with most kitchen wares, less susceptible to fashion. The variations in rim form have no discernible chronological significance; *78 135 137 192 193* (12 Phase 2; 26, Phase 3; 34, Phase 4a; 165 Phase 4b; 219, Phase 4b*). Despite the foregoing there is a widely splayed version of the standard jar, *75 76* often with applied cordons (6, Phase 2). This dates from the late 2nd century.
Narrow mouthed jars *134 149 198* (1, Phase 3; 1 Phase 4a; 1, Phase 4b; 1 Phase 4b*). Whole form uncertain.
Face flagons *132 191* (2, Phases 3 and 4).
Small cup-like vessels *133 196 197 253* (3, Phase 3; 4, Phase 4a, 24, Phase 4b; 17, Phase 4b*)
Small pot *195* (1, Phase 4b)
Handled vessel *251* (1 Phase 4b*)
Storage jars *72 a and b 139* (5, Phase 2; 6, Phase 3; 5, Phase 4a, 22, Phase 4b; 12, Phase 4b*). The rim forms are trimmed back with a knife in the 4th century, *cf 72b* with *205.* See also *259* for final hand-made storage jar form and fabric (2, Phase 4).
Cisterns *73 74* (2, Phase 2)
Colander *252* (1, Phase 4b*)
Decoration and surface treatment The storage jars frequently have a harder cream coloured surface, perhaps a slip? Incised wavy line decoration, usually between two parallel lines, occurs throughout, usually on storage jars, *72a.* Painted decoration *194,* occurs in Phase 4, and includes trellis, parallel lines of brown paint, and wavy red lines, *251,* Phase 4b*. Owing to the softness of the surface and its easily eroded nature it may well have been commoner than appears. The presence or absence of a shoulder or body groove does not appear to have any chronological significance on the standard jar.
Source Roof tile occurs in this fabric, often with colour washed surfaces. Unpainted box flue tiles also occur. The sheer quantity of all this material must indicate the presence somewhere of a very large kiln field which it might well be possible to locate. Some clue is given by the fact that the material is copious at Towcester, Milton Keynes and Magiovinium, and also at Rainsborough (12). It was not however present in material obtained in fieldwalking on the site of the Stanwick villa at Raunds, is rare at Quinton, Northants (Friendship Taylor 1979) and is extremely sparse at Odell, Beds, and at Gorhambury, Herts, (personal communication by Pat Aird and Yvonne Parminter). All this suggests a source to the south and east of Towcester.

The hook rim forms, the basic nature of both fabric and form, and the fact that none of the vessels ever appear to have been put on the fire suggests the mass production of containers.

Percentages

Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
8.5%	15.5%	38%	31.5%	38%	33%

The Phase 1 figure includes sherds from the ancestral Belgic derived grogged fabrics (Fabric 35a) which have lost their nature due to soil conditions. There is in any case a grey area between the two.

Shelly wares Fabs 44b, 44c, 44d.

Form The standard and indeed only form is the necked cooking pot, *93 130 180* until *c* post 350. The form runs throughout, from Phase 1 to Phase 4b*. The large majority are sooted.

Fab 44b

Cooking pots of rather simple devolved form with out-turned rims, *90-92* (34, Phases 1 and 2). Hand-made.

Fab 44c

Cooking pots with normally a more or less beaded cavetto rim *93* (6, Phase 1 and 2, 14, Phase 3; 26, Phase 4a; 112, Phase 4b?; ?23, Phase 4b*)

but a hooked rim appears *c* 340 *147*

Smaller jars appear particularly in the 4th century.

Dog dishes (7?, Phase 4b and 4b*)

Flanged and everted rim bowls *256* (6?, Phase 4b*)

Storage jars *258* (2, Phase 4b*)

The waterlogged and industrial conditions of the Phase 4b* levels create difficulties in the separation out of Fabs 44c and 44d.

Fab 44d.

Neatly potted thin walled cooking pots *181 254* (75?, Phases 4b and 4b*)

Dog dishes *255* (?10, Phase 4b*) Sinuous outline.

Flanged bowls *257* (?9, Phase 4b*)

Decoration Fab 44c is rilled, usually fairly close set. Fab 44d has coarser rilling. Wavy line decoration is virtually absent.

Sources Both Fabs 44b and 44d are paralleled at Shakenoak, and it is possible that a source to the south of Towcester should be looked for, but Fabric 44b may be quite local. It is curious to find so crude a hand-made product as this being marketed at a period of sophistication and refinement in pottery manufacture in the 2nd century but one must assume that it was inexpensive and serviceable. It is not replaced on the market by the Harrold shelly wares until Phase 4a, after a long life.

The large quantities of late shelly wares have been discussd before for Northamptonshire (Knight 1967) and elsewhere, where the survival of scattered conservative peasant potters producing this ware in the Upper Nene area was postulated. However the impression given here, and in a deposit of the 370's from the villa currently under excavation at Piddington, Northants (13) is that of the death of the local pottery industries, the material at Piddington (not yet processed) comprising mainly shelly wares, Oxford and Nene Valley colour coats in more or less equal quantities, Much Hadham products and burnished grey wares possibly of Trent Valley origin in less quantity. Making allowances for residual material at Towcester, the equivalent levels produce approximately one third soft pink grogged, one quarter shelly wares, and about one sixth grey wares some apparently of East Midland origin, plus a little material from Alice Holt and Much Hadham. All this looks more like the survival of large production centres outside modern Northamptonshire servicing an area which had lost its local industries and, on balance, an external source for this late shelly material both of the familiar Harrold type and of the new type should be sought.

Fab 44c appears to be a product of the Harrold kilns. This provides very little material (although it is present from Phase 1) until Phase 4a, and from then on it represents about one fifth of the material. It is still present in the latest phase, but appears to be ousted by the new source. Unfortunately the condition of the shelly material in the late industrial deposits makes any detailed analysis suspect.

Percentages (sherds)

Fabric	Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4 b*
44b	6.5%	6.5%	5.7%	0.8%	0.3%	
44c	2.5%	1.5%	7%	19%	19%	23.5%
44d						

(The majority, ie between 50 and 75%, of the Phase 4b* shelly appears to be Fab 44d.)

BB1 Fab 15

Forms

Cooking pots *14 115* (14, Phase 2; 1, Phase 3; 2, Phase 4b; 1, Phase 4b*)

Flat rimmed dishes *7 8 15* (2, Phase 1; 2, Phase 2)

Rounded rim dishes or bowls *110 247* (1, Phase 3; 1, Phase 4a; 1, Phase 4b*)

Grooved flat rimmed dishes *16-18 111* (9, Phase 2; 1, Phase 3)

Dog dishes *9-13 178* (20, Phase 2; 5, Phase 3; 25, Phase 4b; 37, Phase 4b*)

Flanged bowls *112-114 177 248* (4, Phase 3; 15, Phase 4b; 2, Phase 4b*)

Fish dishes *174-176* (1, Phase 4a; 5, Phase 4b; 1, Phase 4b*)

Decoration

Bowls and dishes

This runs from lattice and chevrons in Phase 1, *7* and *8*, to chevrons with rounded tops developing into intersecting arcs in Phase 2, *9* and *12*. These run through becoming more scribbly in Phase 4b* where decoration appears inside the vessel wall, *247*. The scribbling on vessel external bases seems to be a feature of Phases 1 and 2, *7* and *9*. The progress of the lattice on cooking pots from acute angled to obtuse seemed to be rather more erratic (not illustrated in full but see *14* and *115*). Many vessels appear to have been used on the fire.

Source The great bulk of the material appears to come from the Poole area.

Percentages

Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
12.5%	11.5%	3.5%	3.5%	3.25%	1.75%

In the larger groups on the 1977-78 site the Phase 2 percentages were even higher, F195 producing over 25% of BB1, and F198, a plot boundary, producing 20%, and F282, the Alchester road ditch, producing 17%. These percentages are quite anomalous for this area (personal communication Pauline Marney for Milton Keynes and Yvonne Parminter for Magiovinium) and perhaps raise the question of the presence of some official agency during the laying out of the suburbs, or perhaps the construction of the defences. The percentage in the town at this date was only, however, 3% (Phases 2 and 3 in Brown and Alexander 1982).

Coarse later grey wares Fab 30
Forms

	Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*	
Dog dishes	Nil	1	5	8	40	25?	*70 125 145 189 249 250*
Triangular rim dish	Nil	1	Nil	Nil	Nil	Nil	*71*
Flat rimmed dish	Nil	Nil	Nil	Nil	1	Nil	
Flanged bowls	Nil	Nil	4	6	19	21?	*123 124 144 186-188*
Dimpled bowl	Nil	Nil	1	Nil	Nil	Nil	*122*
Necked jars	Nil	Nil	3	3	9	6	*121 182? 183?*
Jar with zigzag rim, ?lid	Nil	Nil	Nil	Nil	1	Nil	*184*

The waterlogged and industrial conditions of the Phase 4b* levels (which reduced a large percentage of all sherds to an amorphous eroded surface-less brown-grey appearance) create difficulties in the separation out of Fab 30 and Fab 29. This makes the statistics approximate only for that phase. The dishes and bowls are usually sooted.

Decoration

The jars are decorated with grooves, *121*. The bowls and dishes with arcs in the BB1 manner (Phase 3 to end). In Phase 4b* decoration can become rather wild, and scribbled decoration appears internally on the base, *249 250*. An unstratified jar has combed wavy line decoration, and a dog dish an applied thumbed frill, both probably mid or later 4th century. Some vessels have a black slip, and some are burnished. It is possible that all were originally slipped, but quite large vessels like the jar *121* show no sign of slip.

Source Presumably a large fairly local source. It does not appear to be suffering the usual local late 4th century decline of grey wares, even allowing for the difficulties of identification outlined above.

Percentages

Phase 1	Phase 2	Phase 3	Phase 4a	Phase 4b	Phase 4b*
Nil	0.3%	6.5%	4.3%	7%	9%

Second century pink/cream, and red-bodied/black granular sandy wares Fabs 26, 33, 34, 36, 38, 41.

Forms

Channel rim jars 4, 81, 82, 85 (10, Phase 1; 10, Phase 2)
Other jar forms are present, *5, 6, 83, 86, 88* and there is a tendency to very everted rims and multiple grooves at the neck, but no definite class emerges.
Storage jars appear to be present, *89* (1, Phase 2)
Lid *80* (1, Phase 2)

Source Fabric 36 belongs primarily to Phase 1 and early Phase 2, and bears a resemblance to some of the products of the Verulamium area. It also appears to tail away in the third quarter of the 2nd century, as do the Brockley Hill mortaria. The other sandy fabrics appear to be local, some probably from the Upper Nene. The difficulty in separating the granular Upper Nene from Verulamium area fabrics is also experienced with the occasional mortarium (personal communication Mrs Kay Hartley).
Many of the vessels appear to have been on the fire.

Percentages

	Phase 1	Phase 2	Phase 3
Fab 26	0.5%	1%	Nil
Fab 33	Nil	1.5%	Nil
Fab 34	Nil	1.5%	0.3%
Fab 36 Fab 41	14%	6%	0.9%
Fab 38	Nil	0.75%	Nil

Coarse sand and grog tempered wares Fab 35a, buff and dark grey.

Forms

Very wide mouthed heavy bowls *2* (1, Phase 1)
Channel rim jars *3* (4, Phase 1)
Storage jars *77* (2, Phase 1 and 2, there residual?)
The channel rim jars are invariably sooted.

Decoration

Rilling *2 3*
Combing *77*

Source Local. It is possible that the kiln on the 1967 site was making coarse grogged channel rimmed cooking pots in a dark fabric (14). The kiln would of course be making vessels for the town, where such cooking pots are plentiful, rather than the suburbs, which would not presumably have been a market until fairly late in Phase 2.

Percentages

Phase 1	Phase 2	Phase 3
11%	5%	Nil

Alice Holt

This is included here as the vessel was probably bought for its contents (Lyne and Jefferies 1979, 57, where mead is suggested, and the linear occurrence of the Class 8 flagon along Roman roads for long distances is discussed). This vessel takes the Watling Street distribution of these flagons the next stage north from Magiovinium (M Lynne *in litt*).

Form

Class 8.12 flagon *246* (1, Phase 4b*, + 2 others?)
Additional sherds from two other vessels with similar burnishing on the neck to *246* indicated other vessels, but the rim form is unknown.

Percentage Phase 4b* 0.05%

Derbyshire ware?

Form Narrow mouthed jar *245* (1, Phase 4b*)

If no historical sources survived which told of the state of serious economic and political anarchy which prevailed between the death of Severus Alexander and the reign of Aurelian, this could be deduced from the pottery recovered from the Towcester suburbs. The great wealth of forms available to the purchaser in Phase 2 (FIG 18) — some ninety spread across the whole fabric range and including many luxury imported goods is reduced to a repertoire that is in essence that of devolved and debased Belgic, Durotrigean and continental Celtic — that is Belgic — traditions: BB1 cooking pots, bowls and dishes, copies thereof, the ubiquitous wide mouthed soft pink grogged jar, small quantities of Belgic-derived shelly cooking pots, and the occasional Nene Valley indented Rhineland-derived beaker. (Unfortunately we have no

archaeological features which can be ascribed to this amorphous period in the site's history, but if one subtracts from Phase 3 material known or suspected to be 4th century in date, this is the picture which emerges.) The imported fine wares, amphorae, flagons, the Upper and Lower Nene fine grey wares (except for the odd copy BB1 cooking pot apparently from the latter source), the orange and red beakers, the experimental colour coated wares, the cream to red bodied sandy wares, all these vanish for ever.

The 4th century, or perhaps the late 3rd, shows an increase in material available, with the arrival of the parchment wares, the Oxford red colour coats, and the occasional Much Hadham vessel. A steady but not spectacular prosperity seems indicated. The second half of the 4th century shows considerable ceramic changes. The Nene Valley and the shelly fabric potters reduce their forms almost to the basic sub-Roman repertoire of a jar, a flanged bowl, and a deep rather convex sided dish. At the same time, however, the Lower Nene valley is producing elaborate flagons, and some new rather plain beaker and jar forms, but these are in very small quantities. The Oxford potters burst out in a range of new and bizarre highly decorated forms. (Unfortunately the site conditions reduced paint to the occasional white blob or ghost scroll, and this aspect of decoration is not well represented on this site.) Even the grogged pottery is now painted, although here again much must have been lost. The decoration on the BB1 and its copies becomes wilder and more barbarous. New types of vessel appear apparently from an East Midland source, for it seems the larger industries are taking over and expanding. These last are handsome black metallic burnished vessels, but somewhat carelessly made and finished. A finer ware, perhaps from the same area, is decorated with cable-like applied strips, black slip and burnished scrolls. The impression is of a reasonably affluent but less Romanised society with a taste verging on the *horror vacui* of the Anglo Saxon. Vessels now appear from large centres of production, many at some distance such as Alice Holt. A new centre of shelly ware production floods this particular market, taking apparently from half to three-quarters of the established Harrold market.

The parallels to some of these later vessels appear to take the site into the 370's, or even the 380's.

CATALOGUE OF ILLUSTRATED POTTERY

The illustrations are chosen to give a representation of the types current in each phase arranged under fabrics. The preceding section of the pottery report amplifies this by indicating the numbers of vessels represented in the main fabrics. The vessel numbers will of course be proportionately higher for fine wares as a single unillustratable sherd can still be a clear indication of the presence of a fine ware vessel of a particular type. (The imported fine wares were identified by Anne Anderson, Hedley Pengelly and R P Symonds. Mr Symonds' report is in microfiche, M42.)

PHASE 1 (FIG 19)

Amphora

1 Fab 45. Dr D Williams writes: 'A rim sherd of a Camulodunum 186c (Beltrán IIA) amphora. This form has a broad neck and hooked rim, long flattened recurved handles, a body which widens towards the base, and a long hollow spike. It was made along the southern Spanish coast, particularly in the Cadiz region, and carried mainly fish-based products (Beltrán 1970; Peacock 1971, 1974). The date range is probably Flavian, or shortly before, to the early 2nd century AD'. Feature 91.

Grogged fabrics: reeded rim bowl; channel rim jar.

2 Fab 35a. Buff, grey core; faint reeding on rim, coarse rilling. Feature 84(1). A late 1st and early 2nd century form *cf* Woods 1970, FIG 14, No 81 and Brown and Alexander 1982, FIG 9, No 20.

3 Fab 35a. Dark grey/brown. Channel not pronounced. Feature 84(1).

Pink/black sandy fabrics: channel rim jars

4 Fab 33. Grey core, pink interior, black exterior *cf* Woods 1970, FIG 27, No 199. Channel rim not pronounced. Hadrianic/Antonine. Feature 91.

Orange buff sandy fabrics: necked jars

5 Fab 36. Pinky buff *cf* Frere 1972, FIG 113, No 477 (105-130 AD) Feature 124(1).

6 Fab 36. Buff. Feature 84(1)

Black burnished wares: dishes

7 Fab 15. Gillam 1976, FIG 4, No 62. Mid 2nd century. External scribbling on base. Feature 282(3)

8 Fab 15. Gillam 1976, FIG 4, No 54. Early to mid 2nd century. Feature 91.

PHASE 2 (FIG 19)

BB1: plain rimmed dishes, cooking pots and flat rimmed and grooved flat rimmed bowls

9 Fab 15. Presumably also used as a lid. Faint scribbled arcs on base. Feature 282(2)

10 Fab 15. Gillam 1976, FIG 5, No 79. Late 2nd/early 3rd century. Feature 184.

11 Fab 15. Feature 198.

12 Fab 15. Feature 287(1).

13 Fab 15. Feature 186(2).

14 Fab 15. Gillam 1976, FIG 1, No 7. Early to mid 3rd century. Feature 291(2)

15 Fab 15. The decoration puts this vessel into the late 2nd century. Feature 282(2)

16 Fab 15. Gillam 1976, FIG 3, No 42. Late 2nd to early 3rd century. Feature 208(2)

17 Fab 15. Gillam 1976, FIG 3, No 43. Early to mid 3rd century. Feature 195.

18 Fab 15. Feature 195.

FIG 20

Nene Valley colour coated beakers

19 Fab 12a. A not very usual type with two large single hound and stag panels outlined with dots. Brown colour coat. Late 2nd to early 3rd century. Feature 282(2).

20 Fab 12a. Late 2nd to early 3rd century. Feature 186(2).

21 Fab 12a. Frere 1972, FIG 131, No 1058 (200-275 AD) Blue-black colour coat. Feature 291(1).

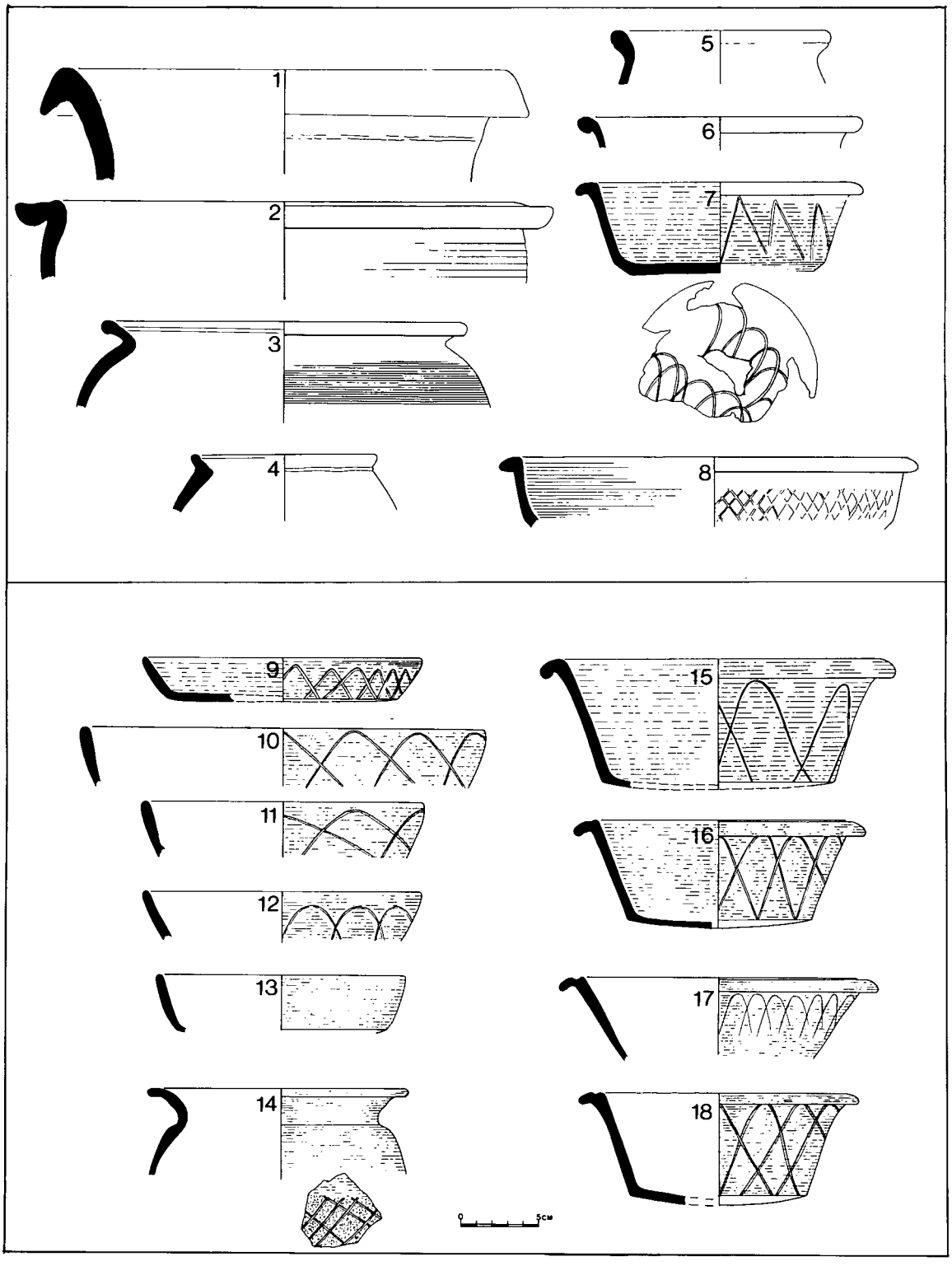


Fig 19 Towcester, Alchester road suburbs: 1-8, pottery of Phase 1 from the side ditches of the Alchester road. 9-18, BB1 vessels of Phase 2 (¼).

22 Fab 12a. Feature 282(2).
23 Fab 12a. Fabric almost white, matt grey slip. This resembles the products of the Stanground kilns. Feature 282(2).

Colour coated vessels of unknown origin: beakers and a bowl
24 Fab 14d. Buff, earthy red colour coat. Feature 291(2).
25 Fab 14d. Barbotine scrolls under colour coat, colour as above. Feature 282(2). Unillustrated vessels in this fabric also include sherds from a bowl, perhaps a Dr 18/31 copy, Feature 291(1) and sherds from a rouletted beaker, colour coat as above, Feature 282(2).

Imported colour coats, Cologne and Central Gaul: beakers, cups See specialist report M42.
26 Fab 14b. Cologne. White thin black colour coat. Residual. Feature 105(2).
27 Fab 14a. Central Gaulish. Frere 1972, FIG 131, No 1056 (200-275 AD). Feature 112.
28 Fab 14a. Central Gaulish. Copy of a Dr 40. Frere 1972, FIG 122 No 797, there dated 150-160 AD. Residual in Feature 66.
29 Fab 14a. Central Gaulish. The date range is 120-180 AD. U/S.

Mica dusted wares, copying Samian dishes, and ? triple vases. All red bodied.
30 Fab 5. Dish copying Samian form Dr 18/31 or similar. Lambrick 1980, No 112, late 2nd century. Feature 287(1).
31 Fab 5. Dish influenced by Samian form 42? Feature 282(2)
32 Fab 5. Triple vase. Other fragments indicate a median groove. Feature 287(1).
There are unillustrated sherds of two other triple vases, Feature 195 and U/S.

Orange/red fabrics, occasionally with colour coats: beakers, tazze? and bowls
33 Fab 11. Remains of brown slip? The fabric resembles Fab 5 above. Feature 282(2).
34 Fab 9. Brown and Alexander 1982, FIG 12, No 135. Late 2nd century. Feature 327
35 Fab 9. Grey core, grey streaky surfaces. Sherds indicate an indented beaker. Distinctive pedestal foot. Feature 287(1).
36 Fab 9. Brown colour coat. 1 only. Feature 287(1).
37 Fab 14(i). Orange interior, grey exterior, dark grey colour coat. 1 sherd only. Part of a barbotine scroll beaker. Feature 282(2).
38 Fab 9. Hooked irregular rim. Feature 184.
39 Fab 9. Tazza. Feature 287(1)
40 Discoloured cream fabric. The vessel has a sharp raised cordon at the base of the neck. Feature 189(1).
41 Fab 9. Base of bowl, probably a Samian copy. The ? stick impressions made when applying the foot ring have not been smoothed out. 1 only. Feature 195.
42 Fab 9. Red colour coat. 1 only. Feature 282(2).

White wares: jars, bowls, dishes
43 Fab 42. Perhaps an Oxford W33, but very sandy. Feature 327.
44 Sandy white ware, perhaps a Verulamium source? 1 only. Feature 282(2).
45 Painted white ware, perhaps a lower Nene Valley product, but rather sandy. Red paint. 1 only. Feature 282(2)

FIG 21

Grey wares of Upper Nene ('Ecton') and Lower Nene type: jars, beakers, bowls and dishes, lid
46 Fab 22. Light grey, rouletted, neat pedestal foot. Feature 287(1).
47 Fab 17. Very fine rouletting. Distinctive foot which occurs on other sherds in Fabric 22. Feature 282(2).
48 Fab 22. Dark grey, 'smoked' appearance. The two sherds are apparently the same vessel. Feature 282(2).
49 Fab 17. Feature 282(2).
50 Fab 22. Discoloured. Feature 208(2).
51 Fab 22. Dark grey, 'smoked'. Feature 287(1).
52 Fab 22. Light grey. An apparent waster. Feature 195.
53 Fab 22. Smoked grey. Apparently a large lid. Feature 195.
54 Fab 22. Smoked dark grey. Feature 282, interface (2/3).
55 Fab 22. Light grey. Feature 98.
56 Fab 22. Light grey. Feature 184.
57 Fab 22. Light grey. Feature 327.
58 Fab 22. Smoked black. Owners mark underneath base. Feature 291(1).
59 This vessel was found by and retained by the site Resident Engineer. Its find spot is reasonably certain. It was drawn before the fabric type series was set up, and was then described as 'mid grey, noticeably sandy fabric, trellis painted in dark slip, likewise band at the top and bottom. Traces of trellis are visible through the bottom band of slip'. Perhaps from the Verulamium area rather than the Upper Nene? Feature 184.
60 Fab 22. Light grey exterior. Feature 195.
61 Fab 22. Smoked grey exterior. Feature 184.
62 Fab 22. Decoration with pointed tool. Smoked grey exterior. Feature 184.
63 Fab 16. Red cored, red and blue grey surfaces. Feature 287(1).
64 Fab 16. As above. Feature 287(1).
65 Fab 17. Feature 184.
66 Fab 16. Feature 327.
67 Fab 22? or Fab 17. Smoked black exterior. Feature 139.
68 Fab 17. Light blue grey. Feature 184.
69 Fab 17?. Sherd burnt. Stab decoration. Feature 189(1).
The above represents a useful supplement to the forms shown in Johnston 1969.

Later coarse grey wares copying BB1: dishes/bowls
70 Fab 30. Coarse grey. Feature 297.
71 Fab 25/30. Intensely black. Feature 287(1).

FIGS 22, 23

Grogged fabrics, soft, normally a grey core, pink/buff surfaces: wide mouthed jars, storage jars.
72a Fab 35b. Major part of storage jar with wavy line decoration. Feature 282(2).
72b Fab 35b. Note hooked rim at this date. Feature 288.

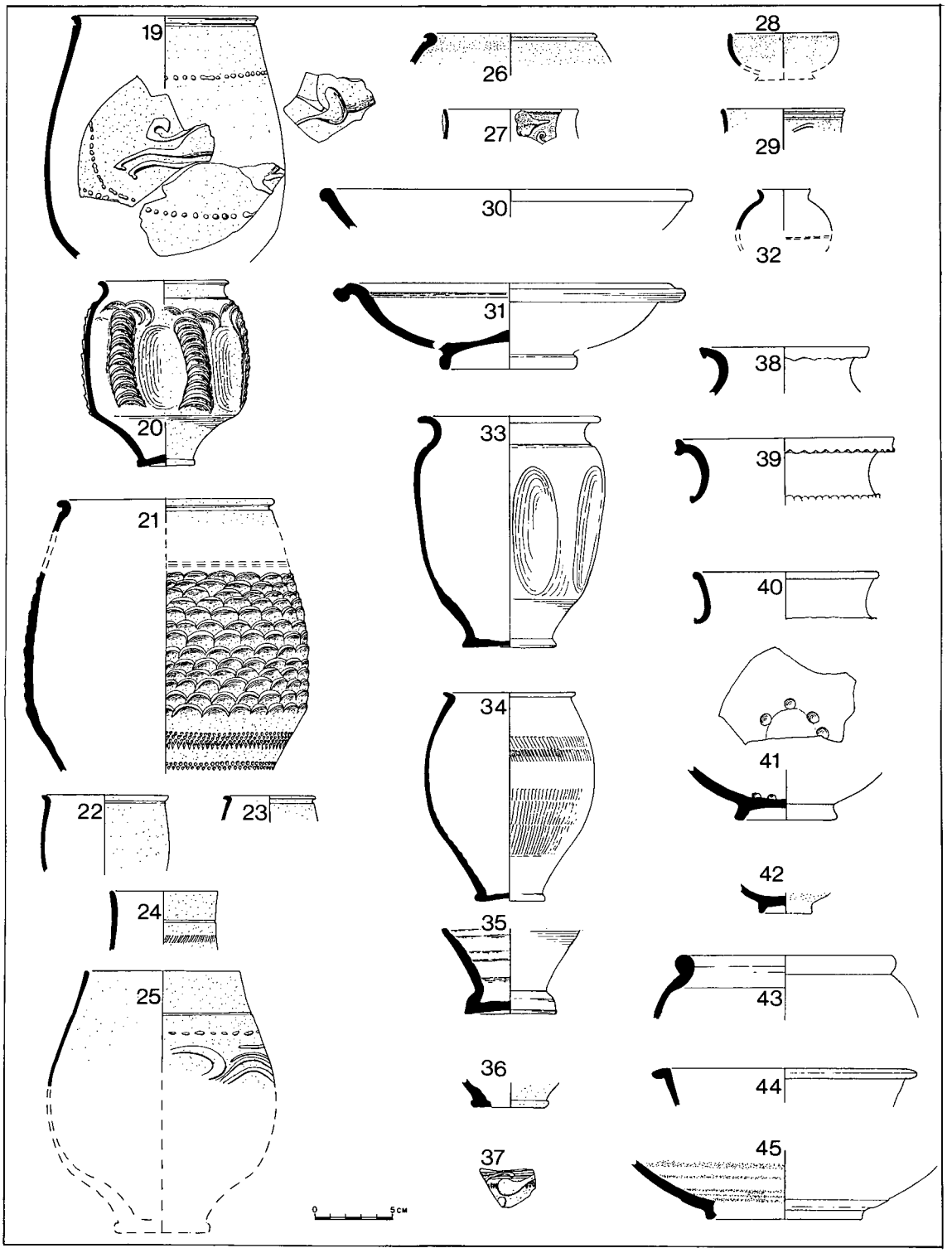


Fig 20 Towcester, Alchester road suburbs: pottery of Phase 2. 19-23, Nene Valley colour coated beakers; 24-25, other colour coated beakers; 26-29, imported colour coated vessels; 30-32, mica dusted vessels; 33-42, vessels in orange/red fabrics; 43-45, white wares (¼).

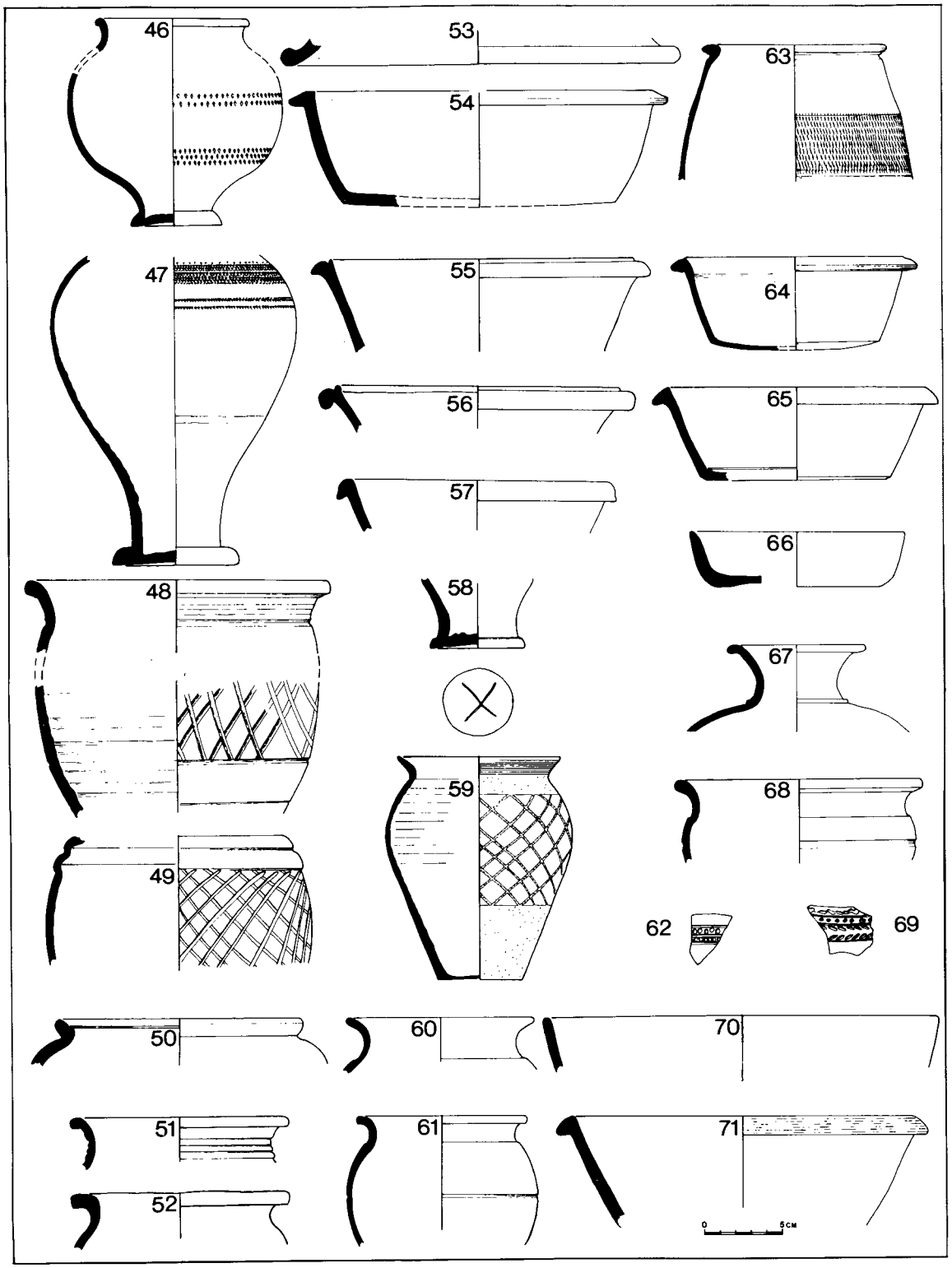


Fig 21 Towcester, Alchester road suburbs: pottery of Phase 2. 46-69, grey wares of Upper and Lower Nene valley types: 70-71, later coarse grey wares (¼).

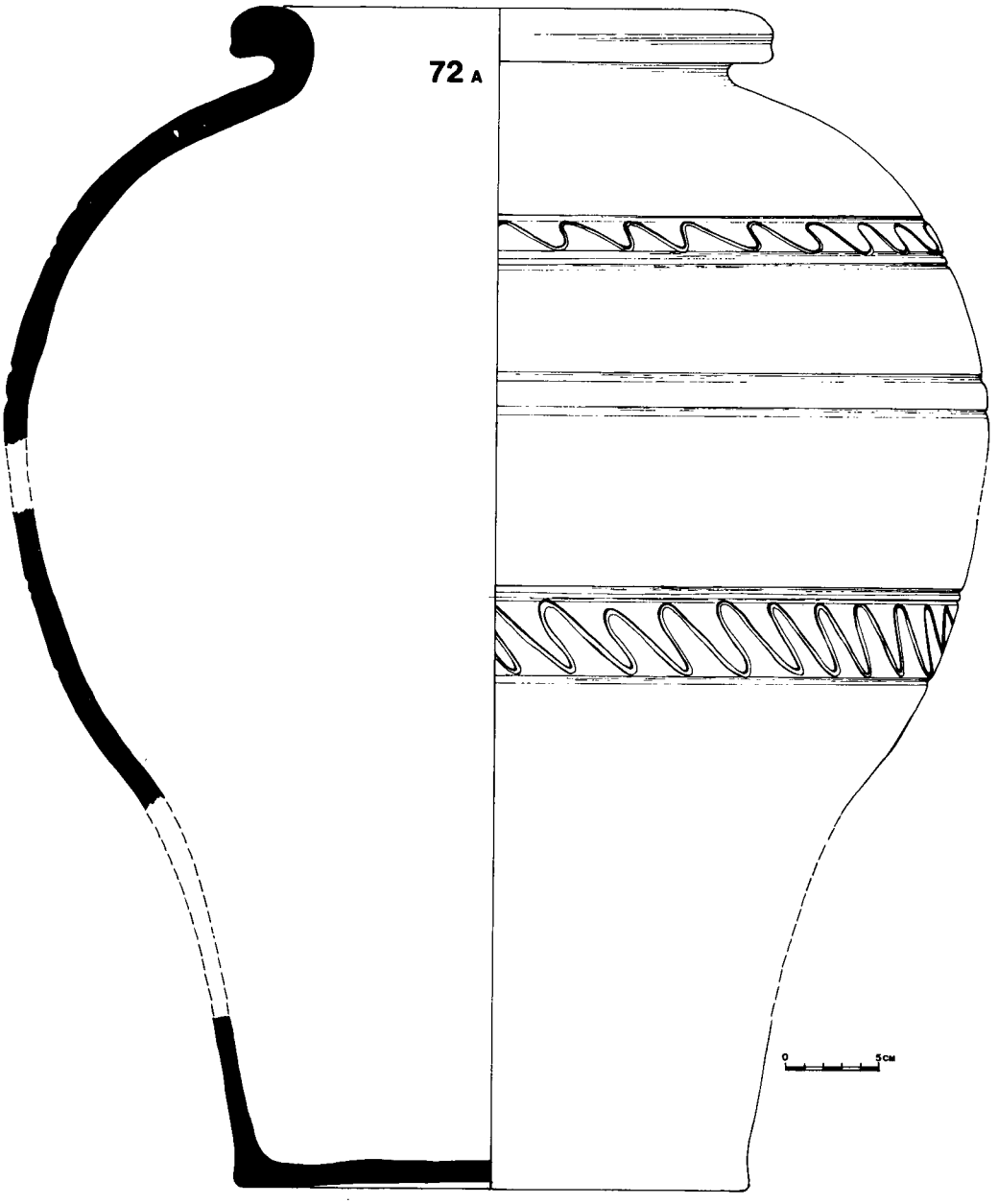


Fig 22 Towcester, Alchester road suburbs: Phase 2. 72a, large storage jar in grogged fabric (¼).

73 Fab 35b. Rim of ? cistern. Feature 195.
74 Fab 35b. Base of cistern. For further details of the probable form see Saunders 1974, FIG 5, No 34, there dated Late Antonine/Severan. Feature 282(2).
75 Fab 35b. Brown and white speckly surface. Splayed form. Woodfield 1977, FIG 2 No 1, there dated Late Antonine. Feature 282(2).
76 Fab 35b. Extremely soft and powdery. Feature 282(2).
77 Fab 35a. A grogged hand made sherd with combed decoration, and hard red-brown surfaces. It is not clear how long this conquest type continued to be made, but in any case this must be residual from Phase 1. Feature 282(2).
78 Fab 35b. Note hooked rim. Feature 287(1).

This phase sees the start of a long run of these grogged wide mouthed jars which are to dominate the ceramic scene at Towcester during the 3rd and 4th centuries.

79. Fab 35b. Feature 195.

Second century sandy fabrics, normally with a light pinkish buff body, and black exteriors: cooking vessels, virtually all sooted; channel and everted rim jars.

It should be noted that channel rim jars in this area are a Belgic tradition which dies eventually in the 3rd or perhaps in the last quarter of the 2nd century. They are NOT 4th century in South Northamptonshire and North Buckinghamshire (a misconception based on confusion with the late lid-seated jars of eg Dales ware, and the presence of this copious class residually in 4th century contexts)(15).

80 Fab 34. Conical lid. From the interface of Phase 1 and Phase 2 levels. Feature 282(2/3).
81 Fab 34. Nos 80 and 81 appear to have been purchased together and to have come from the same kiln firing. Feature 282(2).
82 An exceptionally sandy fabric, grey throughout. 1 only. Feature 287(1).
83 Fab 34. Possibly residual from Phase 1. Feature 208(2).
84 Fab 34. Presumably copying a late 2nd century BB1 form. Feature 184.
85 Fab 34. Feature 287(1).
86 Fab 34. Buff with black rim. Feature 184.
87 Fab 34. Pink/buff. Feature 184.
88 Fab 34, or perhaps a dark Ecton vessel. Feature 189.
89 Fab 34. Grey buff, very sparse shell inclusions additionally. Feature 282(2).

Shell tempered wares; cooking pots

Prickly shelly. Fab 44b. This fabric contains sharp fossil shell, perhaps freshly broken at the time of manufacture and is noticeably prickly in the hand. The vessels do not appear to have been made on the wheel.

90 Fab 44b. cf Brodribb *et al* 1978, FIG 16, No 855, there dated late 2nd/early 3rd century. Red/buff/brown/black variegated surface. Feature 184.
91 Fab 44b. Dark brown, conspicuous large shell. Sooted. Feature 282(2).
92 Fab 44b. Very large jar, diameter uncertain. Buff/dark brown. Feature 282(2).

Shelly ware of Harrold type: cooking pot

93 Fab 44c. Reddish brown and black. Rilled. Sooted. Feature 282(2).

Very sandy red wares, 'Castor box' type: beakers

94 Fab 38. Small beaker? Residual from Phase 1? The sherds of some three other vessels in this fabric were also present. The source is perhaps in the Verulamium region. Feature 287(1).
95 Fab 39. Double rimmed beaker. 1 only. Feature 291(2).
96 Fab 38. Vessel of Castor box type. Some three only, the others residual in late contexts. Red and black. Feature 195.

It is assumed that limited activity continued on the site between *c* 230 and *c* 270, but this cannot be pinned down from the coarse wares. By Phase 3 there has been a considerable ceramic change.

FIG 24

PHASE 3

Parchment wares: bowls, beaker and a jar

97 Fab 43. Young 1977, P24, paint eroded. 240-400+ Feature 183.
98 Fab 43. As last. Feature 294.
99 Fab 43. Young 1977, P11. 300-400+ Feature 294.
100 Fab 43. Young 1977, P8. 300-400+ Feature 183.

Oxford red coloured coated wares

It seems unlikely that these reach this area in any quantity before the first quarter of the 4th century, and probably towards the end of that quarter. In Feature 294 there was slightly more parchment ware than Oxford red colour coated, a situation that did not last. Beakers, the C45 dish and the C51 bowl are the first forms to appear.

101 Fab 13. Young 1977, C22, there dated 240-400+. Feature 183.

Nene Valley colour coated wares

102 Fab 12a. Box. Imprecise rouletting, dark brown colour coat. Feature 126(2).
103 Fab 12a? Whitish fabric, pink margins, red colour coat. Perhaps Howe *et al* 1980, type 85, there dated 4th century. Feature 183.
104 Fab 12a. Mid brown colour coat. Feature 183.

Nene Valley 'imitation Rhenish'

105 Fab 12b. White painted scrolls derived from Rhenish 3 dot type. Painted area defined by rouletted band. Feature 183.
106 Fab 12b. This is one of the very few sherds in this fabric not from a beaker. Vessel No 217 suggests with this sherd that flagons were also made in this fabric. Feature 183.

Other beakers Fab 14j and 11

107 Fab 14j Grey sandy, grey colour coat. Sherds indicate the presence of some four or five other beakers in this fabric and this feature. Feature 183.
108 Fab 11. Miniature orange beaker. ? Residual. Feature 183.

Much Hadham; jars

109 Fab 32b. Bright red-orange. Black and white sand present in the fabric. Presumably a jar base. Feature 183.

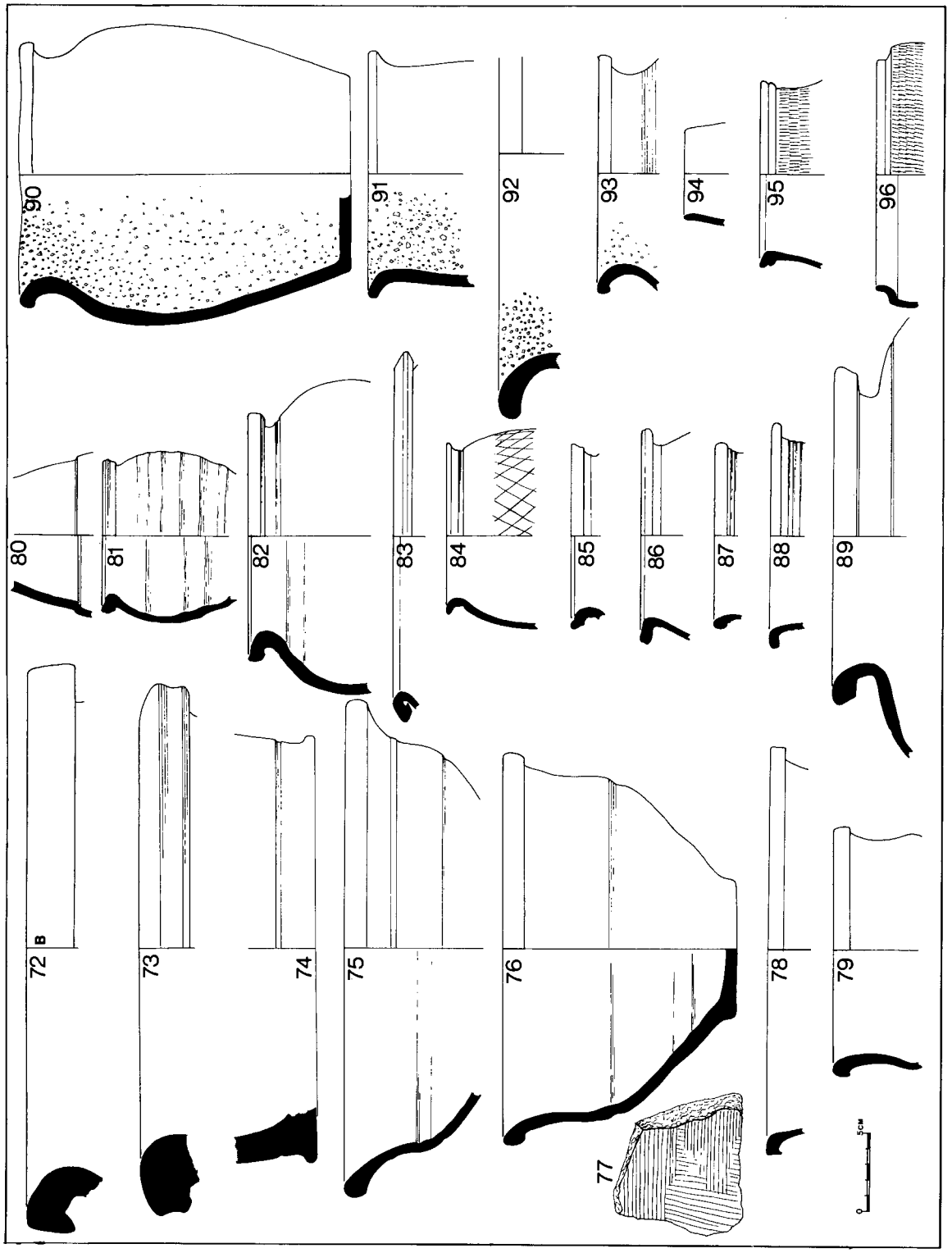


Fig 23 Towcester, Alchester road suburbs: pottery of Phase 2. 72B-79, pottery in grogged fabric; 80-89, pottery in sandy fabics; 90-93, shell tempered wares; 94-6, sandy red wares (¼).

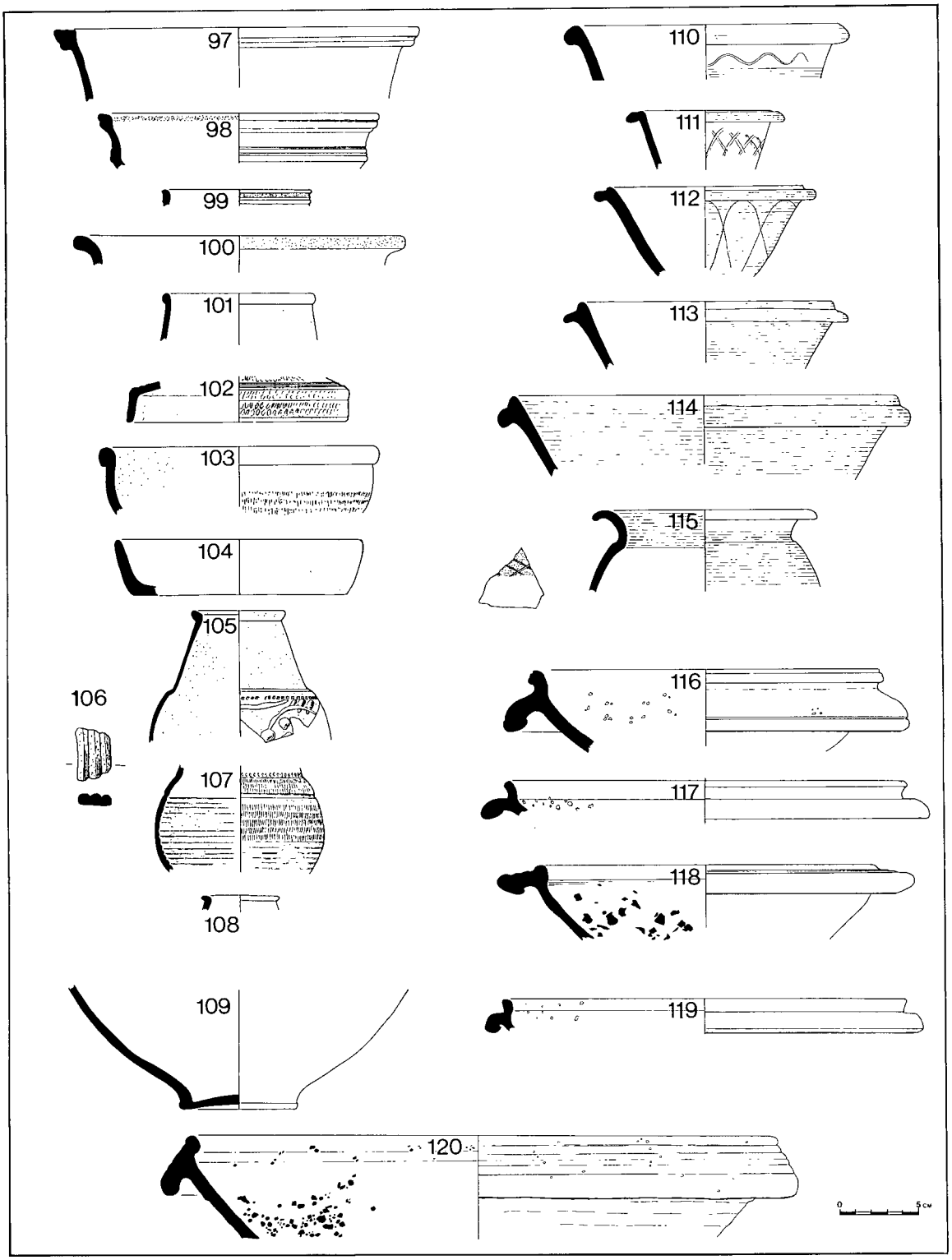


Fig 24 Towcester, Alchester road suburbs: pottery of Phase 3. 97-100, Parchment ware; 101, Oxfordshire red colour coated ware; 102-6, Nene Valley colour coated ware; 107-8, beakers; 109, Much Hadham ware; 110-115, BB1; 116-20, mortaria (¼).

BB1: dishes and bowls

110 Fab 15. Unusual decoration for BB1. Rounded rim form suggests a late 3rd century date. Feature 119(2).

111 Fab 15. Unusual small bowl (? residual from Phase 2?) Feature 183.

112 Fab 15. Intermediate from between grooved flat rimmed dish of Phase 2 and No 113 below. ?3rd quarter of 3rd century. Feature 183.

113 Fab 15. First appearance of true flanged bowl. This may well not happen in our area until the last decade or two of the 3rd century, *cf* Gillam 1976, FIG 4, No 45, there dated late 3rd century. Feature 183.

114 Fab 15. Higher bead. Presumably 1st half 4th century. Feature 183.

115 Fab 15. Gillam 1976, FIG 1, No 8, mid to late 3rd century. Feature 294.

Mortaria — for full details see specialist report, pp 72-3

116 Young 1977, M 21-4. 240-300+. Feature 82.

117 Young 1977, M18. 240-300. Feature 183.

118 Lower Nene valley. Probably 4th century. Feature 183.

119 Young 1977, M22 240-400+. Feature 294.

120 Mancetter/Hartshill, 3rd century. Feature 13.

FIG 25

Later coarse grey wares: jars, dimpled bowls, flanged bowls, dog dishes

121 Fab 30. No trace of slip. Feature 183.

122 Fab 30. A somewhat puzzling vessel. It is perhaps related to the Oxford bowl fashion copying Dr 37 forms at some remove (C55, with a date range of 240-400+), although these do not occur recognisably in this phase. It is perhaps more likely related to the 'Romano-Saxon' fashions of eastern England of the late 3rd and 4th centuries, although these also do not occur here otherwise in this Phase as far as is known. However, the presence of vessel 109 shows that the products of Much Hadham kilns are reaching here at this time. Much Hadham dimpled bowls do occur, Nos 170 and 244, but not before Phase 4b. Traces of dark grey/black slip. Feature 183.

123 Fab 30. Traces of black slip. Feature 183.

124 Fab 30. Eroded, probably originally burnished. Traces of arc decoration. Feature 183.

125 Fab 30. Black slip, conspicuous neat external burnishing. Feature 183.

Grey wares, apparently Lower Nene; cooking pots, everted rim dish

126 Fab 17. Heavily burnt, but originally dark ?blue-grey slip on lighter body. Possibly originally with lattice decoration. Comparison with BB1 cooking pots, which it is presumably imitating, suggests a date in the late 3rd century. Feature 282(1).

127 Fab 17. Dark grey slip on whitish body, somewhat burnt. Faint traces of obtuse angled lattice. Form and decoration and the presence of the scored line suggests a late 3rd to early 4th century date. Feature 282(1).
This fabric is included here for consistency with Phase 2, where it was treated as a table ware. It is probably significant that this fabric now appears as cooking pots, and has therefore survived only because of a down-grading of the product.

128 Fab 17. Slate grey slip, *cf* Woods 1970, FIG 11, Nos 46 and 47, there dated late 3rd or first half of the 4th century. Rim sharply everted. Feature 282(1)

Very coarse grey ware, fugitive black slip; dog dish

129 Fab 31. A very scarce fabric on the site. Feature 183.

Shelly wares of Harrold type: cooking pots

130 Fab 44c. Black to brown, sooted. Feature 125(2).

Soft pinky-buff grogged wares: wide mouthed bowls, cups, narrow mouthed jars, storage jars, face flagon

131 Fab 35b. Base of cup with owner's mark. Feature 13. An unstratified Fab 35b jar had two V's, 5 x 5mm incised on the external rim as an owner's mark (16).

132 Fab 35b. Face flagon. These are not known in this fabric at Magiovinium and Milton Keynes (Pers comm Pauline Marney and Yvonne Parminter). Base as shown. Feature 183.

133 Fab 35b. These small bowls or cups seem to be a 4th century form in this fabric. Feature 183.

134 Fab 35b. The precise form of these narrow mouthed vessels is not known but sherds suggest that they widen out sharply at the shoulder. Feature 183.

135 Fab 35b. Feature 183.

136 Fab 35b. Feature 183.

137 Fab 35b. Feature 183.

138 Fab 35b. Feature 125(2).

139 Fab 35b. Feature 183.

FIG 26

PHASE 4a

Nene Valley 'Rhenish': beakers

140 Fab 12b. Grey painted scrolls, presumably originally white. Zones of rouletting defining plain and painted bands. Feature 283

Nene Valley?

141 Fab 12a? White body, red colour coat. Howe *et al* 1980, type 83, late 3rd and 4th century. Feature 200.

Oxford red colour coats: bowls

142 Fab 13. Young 1977 C45 270-400+. Feature 206.

143 Fab 13. Base of foot-ring bowl with owner's mark. Feature 90.

Late coarse grey wares: flanged bowl and dog dish

144 Fab 30. Traces of black slip. Feature 192.

145 Fab 30. Black slip. Feature 188(1). The bottom of a dish or bowl (unillustrated) in this fabric has a pre-firing potter's mark of 3 parallel lines 10mm long, 5 and 7mm apart across the external basal angle. Feature 105(2).

Shelly wares of Harrold type: cooking pots

146 Fab 44c. Brown/black. Slight soot. Feature 200.

147 Fab 44c. Red/black. Hooked rim. Feature 201.

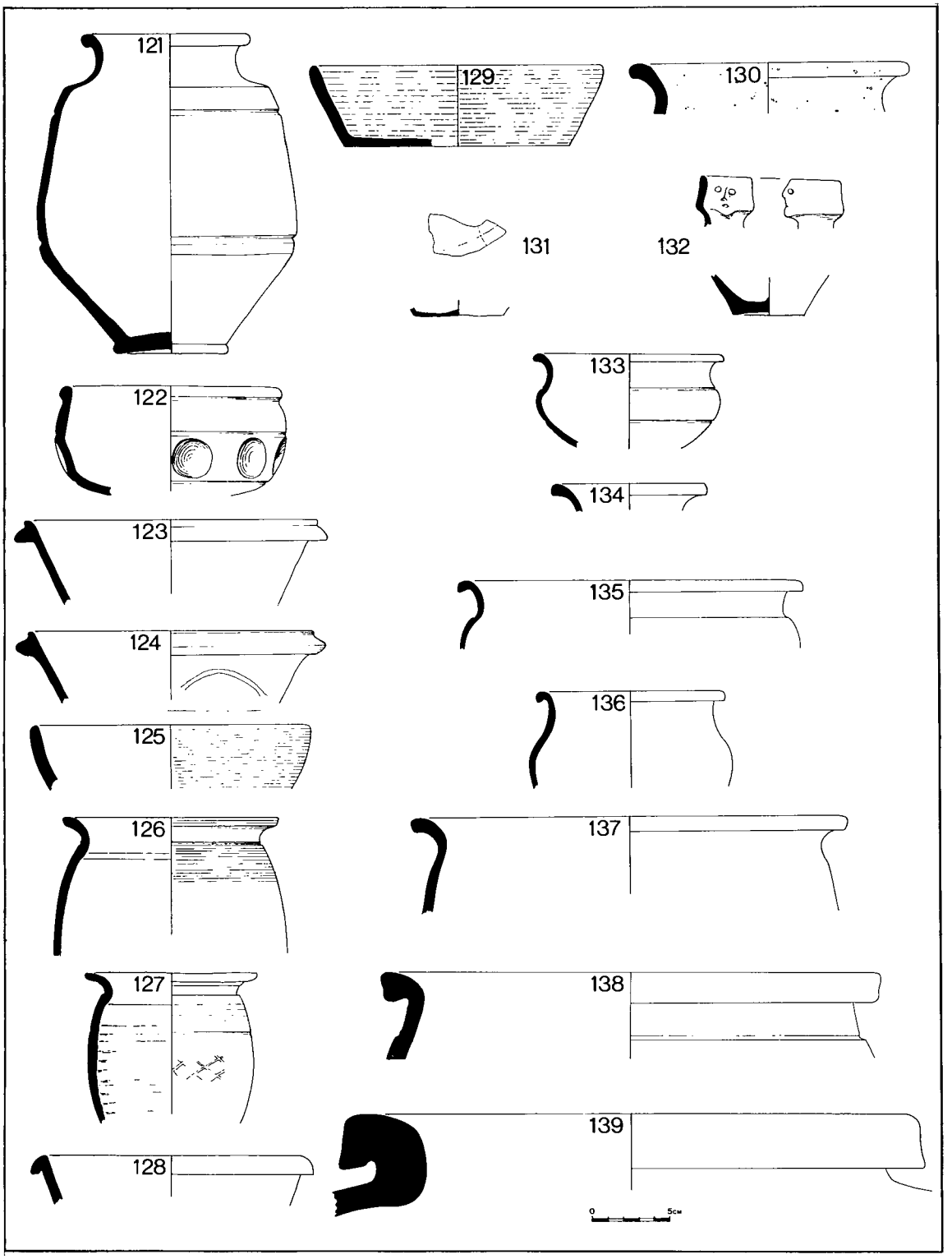


Fig 25 Towcester, Alchester road suburbs: pottery of Phase 3. 121-25, 129, later coarse grey wares; 126-28, other, possibly Lower Nene valley, grey wares; 130, shell tempered ware; 131-39, grogged ware (¼).

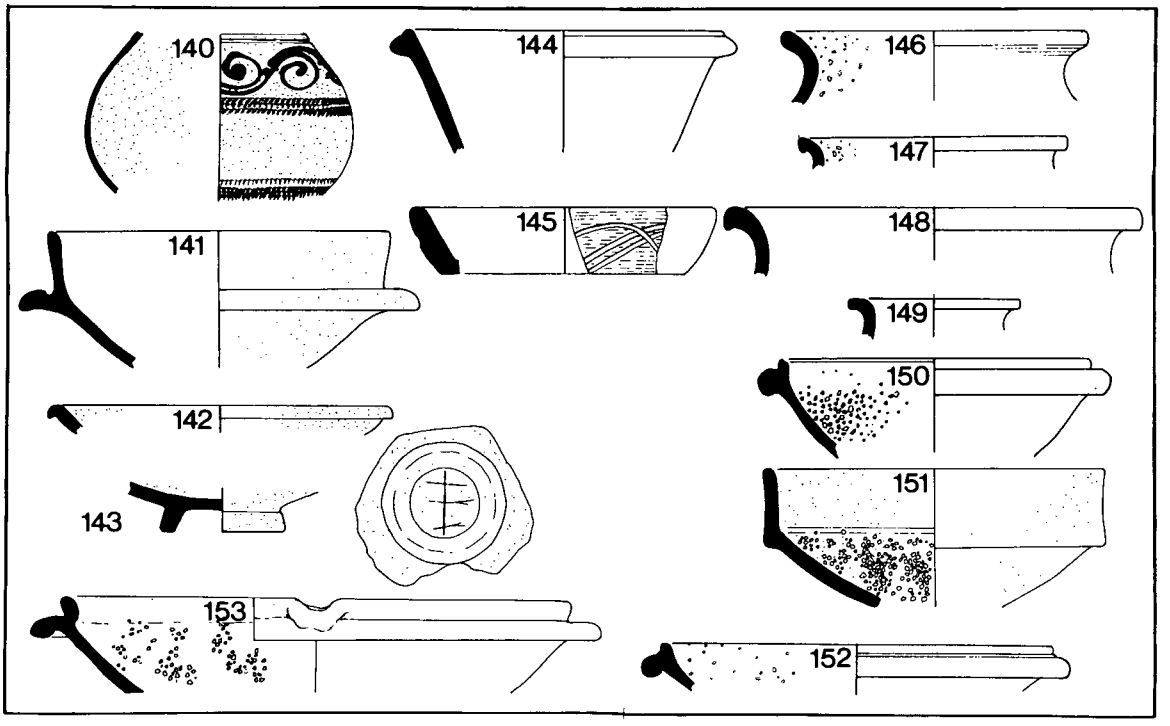


Fig 26 Towcester, Alchester road suburbs: pottery of Phase 4a. 140-41, Nene Valley colour coated ware; 142-3, Oxfordshire colour coated ware; 144-5 late coarse grey ware; 146-7 shell tempered ware; 148-9, grogged ware; 150-53, mortaria (¼).

Soft pink-buff grogged: wide mouthed and narrow mouthed jars.

148 Fab 35b. Feature 192.
149 Fab 35b. Feature 200.

Mortaria (see separate report for details pp 72-3)

150 Oxford. Feature 201.
151 Young 1977, C97. 240-400+. Feature 16(1).
152 Young 1977, C100? No slip survives but the sherd is very damaged. Feature 200.
153 Young 1977, M18. 240-300. Residual. Feature 59.

FIG 27

PHASE 4b

Nene Valley 'Rhenish': beakers

154 Fab 12b. This vessel is in the possession of a metal detector. Feature 208(1) or 207.
The unpainted version, with wide rouletted band, of these beakers.
155 Fab 12b. Running painted scroll on 'Rhenish' beaker. Wide rouletted zone. Feature 185.
156 Fab 12b. Plant motif? on a similar beaker, two narrow rouletted bands. Feature 207.
157 Fab 12b. Geometric motif as above. Rouletted zone (all paint is white). Feature 185.
158 Fab 12b. Vessel damaged. There may have been more rouletting and/or painting. Feature 185.
159 Fab 12b. Beaker base with owner's mark. Feature 189(3).

Nene Valley colour coat

160 Fab 12a. Eroded top of handled flagon of Howe *et al* 1980 type 67, handles missing. Dark brown colour coat, white body. A 4th century type. Feature 208(1).
161 Fab 12a. Bottle of Howe *et al* 1980, type 69, with trace of white painted decoration. Feature 196.
162 Fab 12. Painted decoration from large, perhaps similar vessel. Rouletted band. Feature 185.
163 Fab 12a. Coppery black colour coat. Feature 208(1).

Oxford red colour coat: bowls, miniatures, flagons

164 Fab 13. Base of foot ring dish, with incomplete potter's stamp. The stamp uses crosses and vertical lines. It is unfortunately very eroded but appears to approximate closest to Young 1977, FIG 68, No 32, of which there is one example only, used at Cowley. Feature 300.
165 Fab 13. Miniature vessel, Young 1977, No C113. Burnt, red colour coat 340-400+. Feature 207.
166 Fab 13. Presumably a Young 1977, C8, or variant. To 400+. Feature 196.
167 Fab 13. No trace of colour coat. Presumably as above. Feature 83.

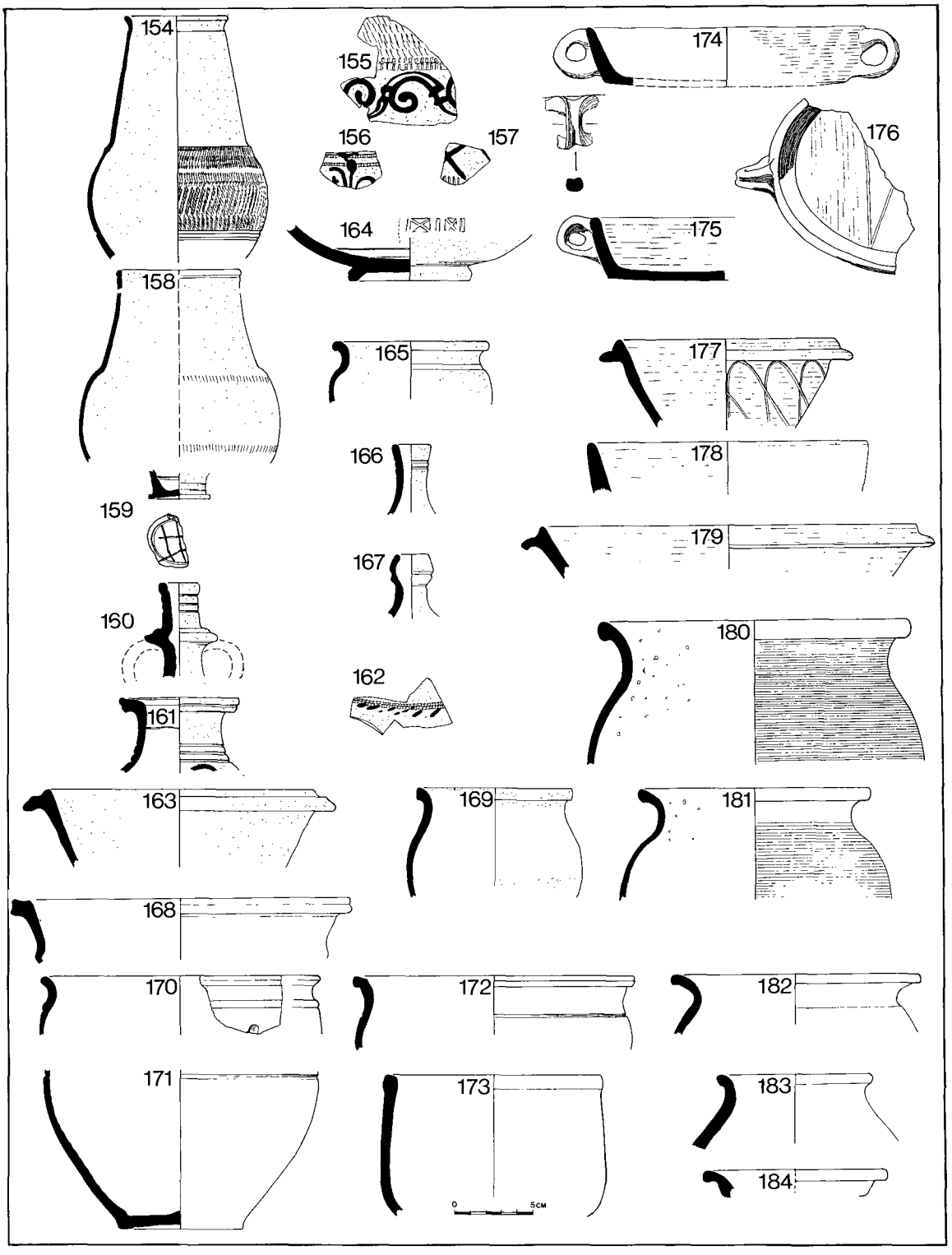


Fig 27 Towcester, Alchester road suburbs: pottery of Phase 4b. 154-63 Nene Valley colour coated ware; 164-67 Oxfordshire colour coated ware; 168-9, Parchment ware; 170-72, Much Hadham ware; 173, unknown source; 174-79, BB1; 180-181, shell tempered ware; 182-4, late grey wares (¼).

Parchment ware: bowl, jar

168 Fab 43. Young 1977, P24. No trace of paint. Feature 83.
169 Fab 43. Young 1977, P9. Very burnt. Feature 196.

Much Hadham: bowls, jar

170 Fab 32a. Light yellowy grey. Feature 185.
171 Fab 32b. Base of vessel in red ware. Feature 185.
172 Fab 32b? Necked bowl in bright red fabric. There is much white sand in the fabric but little black, so this vessel may come from another source despite the presence of other Much Hadham vessels in the same feature. Feature 185.

Unknown source: orange bowl

173 Fab 37. An unusual and unique vessel in a unique fabric, copiously tempered with white sand. Perhaps imitating a Dr 37 in the manner of an Oxford C81. Feature 185.

BB1: fish dishes, dog dish, flanged bowl

174 Fab 15. Fish dish. This vessel was certainly two-handled. Feature 208(1).
175 Fab 15. Handled dish. Feature 207.
176 Fab 15. Fish dish with internal decoration, *cf* Gillam 1976, FIG 6, No 85, there dated late 3rd to late 4th century. Feature 207.
177 Fab 15. High beaded flanged bowl with sloping arc decoration. Feature 185.
178 Fab 15. Very thick apparently plain dish. Feature 196.
179 Fab 15. Probably plain. Feature 196.

Shelly wares: cooking pots

Post mid-century a new shelly ware appears (Fab 44d), thin, black, well potted. When not vesicular, there is more white shell visible on the surface than Fab 44c. The wares of Harrold type continue, however.

180 Fab 44c. Brown/black. Narrow rilling. Feature 196.
181 Fab 44d. Black, vesicular. Rilling wider spaced than above. Feature 196.

Late grey wares: necked, bead rim and angled rim jars

182 Fab 30? Necked jar. Feature 196.
183 Fab 30? Bead rim jar, burnt. This vessel may be residual. The shortage of necked grey ware jars and indeed other grey ware jar forms during the 3rd and the major part of the 4th century is very pronounced on this site. They do however occur in this fabric. Feature 83.
184 Fab 30. Diameter arbitrary. Jar with angled rim, or perhaps a lid? Feature 185.

FIG 28

Later coarse grey wares and late 4th century burnished grey wares: flanged bowls, dishes

Fab 29a — these last seem to appear in this area sometime shortly after *c* 350/360, and appear to have an East Midlands origin (Todd 1968).

185 Fab 29a. Lead grey finish, iron discolouration. Kenyon 1948, FIG 55, No 5 for horizontal burnished grooves, No 9 for high bead. There described as 'polished ware' and dated *c* 360-370.
186 Fab 30. All over black slip. Feature 207.
187 Fab 30. Red core, traces of black slip. Feature 185.
188 Fab 30. Black slip. Unusually high bead. Feature 208(1).
189 Fab 30. Black slip. The intersecting arcs are becoming disordered, frequently an indicator of the latter half of the 4th century. Feature 208(1).
190 Fab 29a. Metallic lead grey slip. Very heavy dish. Feature 207.

Soft buff pink grogged: face flagon, wide mouthed jars, cups, small pot, narrow mouthed jar, storage jar

191 Fab 35b. Face flagon. Both face flagons from the site have an expression of despair, hard to capture precisely in the drawing. Feature 157.
192 Fab 35b. Feature 196.
193 Fab 35b. Feature 196.
194 Fab 35b. Sherd with grey painted trellis. The trellis appears to continue into the zone below the horizontal line, but is very worn. Burnt. Other sherds show parallel brown lines, and red wavy lines. Feature 196.
195 Fab 35b. Small pot, perhaps for gaming. Feature 208(1).
196 Fab 35b. Unusual rim form. Feature 207.
197 Fab 35b. The actual body of these small vessels diminishes in size during the 3rd quarter of the 4th century. Feature 185.
198 Fab 35b. Feature 196.
199 Fab 35b. Feature 207.

Mortaria (for further details see separate specialist report pp 72-3)

200 Mancetter/Hartshill, 250-350. Feature 64.
201 Young 1977, M22. 240-400+. Feature 100.
202 Young 1977, M22. Feature 196.
203 Young 1977, M22. Feature 196.
204 Young 1977, M22. Seven other M22's occurred in this phase. Feature 64.

Soft buff-pink grogged: storage jar

205 Fab 35b. Cream surface, outer edge of rim trimmed back with knife — apparently a 4th century practice. In an example from the latest phase this knifing has left an untrimmed rough frill right round the bottom edge of the rim. Feature 196.

FIG 29

PHASE 4b*

Material in these levels appears to indicate continuation of their use (or in the case of ditches filling up) into the 370's or in some cases later.

Nene Valley colour coats: flagons, boxes, dishes, flanged bowl, necked jars, beakers

206 Fab 12a. White fabric, gunmetal colour coat, white paint. Howe *et al* 1980, type 68. Probably latter part of 4th century. *cf* Corder *et al* 1951, FIG 8, No 4, post AD 375. Feature 38.
207 Fab 12a. Pink body, white surfaces, dark grey colour coat. Spouted, Howe *et al* 1980, type 65. 4th century. These also occur in the Great Casterton villa destruction deposit *cf* Corder *et al* 1951, p28.
208 Fab 12a. White body, dark grey colour coat, coarse shallow rouletting. Feature 3.
209 Fab 12a. Box, mating No 208. Feature 3.

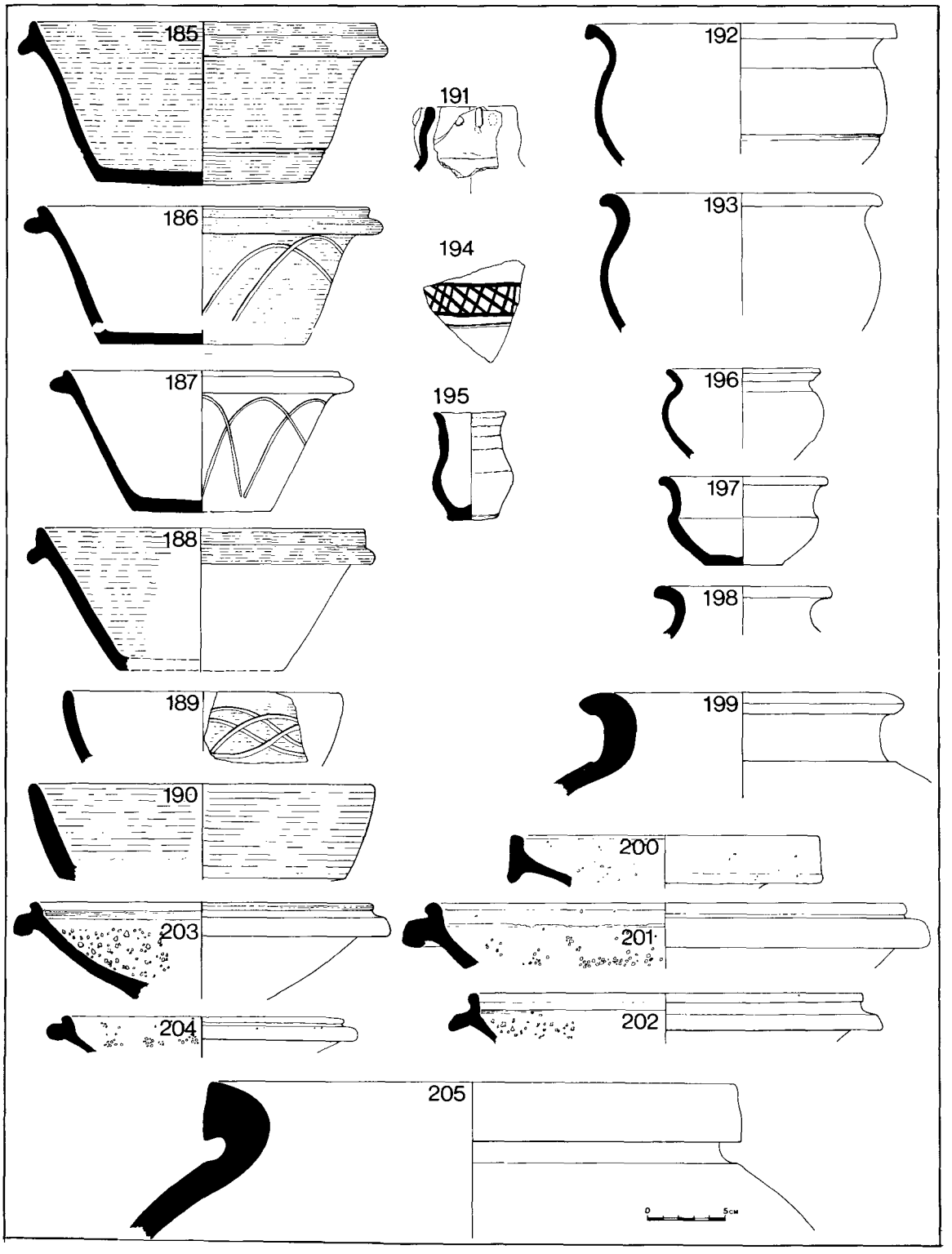


Fig 28 Towcester, Alchester road suburbs: pottery of Phase 4b. 185-190, late burnished coarse grey wares; 191-99, 205, grogged ware; 200-204, mortaria (¼).

210 Fab 12a. Small dish, burnt. Feature 3.
211 Fab 12a. Thick white fabric, reddy orange colour coat. Feature 167.
212 Fab 12a. Thick white fabric, dark grey colour coat. Feature 3.
213 Fab 12a. White fabric, dark grey colour coat. Feature 181.
214 Fab 12a. White fabric, orange colour coat. Unusual form. Feature 3.
215 Fab 12a. Thick white fabric, orange brown colour coat, unusual form. Feature 3.
216 Fab 12a. White fabric. The vessel appears to have been dipped into two colour coats, the first red brown, and the second dark grey, which has made runs over it. White paint squiggles. Howe *et al*, type 54. Feature 38.

Nene Valley 'Rhenish': flagon?
217 Fab 12b. Large vessel with white painted scroll decoration between grooves. Probably from a flagon. Feature 3.

Parchment ware: bowl
218 Fab 43. Young 1977, form P24: to 400+. Feature 38.

Oxford red colour coat: flagons, miniatures, rouletted, stamped and handled bowls
219 Fab 13. Colour coat eroded, incised wavy line. An unusual but not unknown form of decoration on Oxford vessels. Perhaps a Young 1977, C55? Feature 11.
220 Fab 13. Barbotine decoration apparently from a large vessel, probably a flagon. Feature 181.
221a Fab 13. Sherd from bowl with sharp and deep crescent impressions. Feature 18.
221b Fab 13. Sherd with circular impressions on body and crescents on cordon. Feature 18.
222 Fab 13. Young 1977, form C113. Eroded. To 400+. Feature 11(1).
223 Fab 13. As above, eroded. Feature 38.
224 Fab 13. Young 1977, form C51. There is an owner's mark of 2Vs, the arm of one V intersecting the point of the other, on the wall of this vessel under the flange. To 400+. Feature 169.
225 Fab 13. Young 1977, form C71. To 400+. Feature 38.
226 Fab 13. Young 1977, form C81. To 400+. Feature 3.
227 Fab 13. Young 1977, C83, there dated mid to late 4th century. Feature 31(1).
It does not seem likely that these stamped vessels occur in our area until towards the end of the third quarter of the 4th century. They do not occur at Quinton, Northants (Friendship Taylor 1979) although the coin list runs into the reign of Gratian.
228 Fab 13. Young 1977. Form C84. To 400+. Feature 3.
229 Fab 13. Young 1977, C84, with double cordon midway down wall, 350-400+. Feature 3.
230 Fab 13. Young 1977, C78. 340-400+. The same remarks as for stamped wares apply to these necked jar forms. Feature 1(1).
231 Fab 13. Young 1977, C78. Feature 92.
232 Fab 13. Young 1977, C85. Handled vessel, eroded, traces of stamped decoration. 350-400+. Feature 12.

Flagon and beaker of unknown source
233 Soft fine red ware, cream buff surface, and applied frilled strip. Perhaps from a flagon. 1 only. Feature 170.
234 Very hard dense grey-brown fabric, resembling stoneware. Visible white sand tempering. Raised cordon and fine rouletting. Dark grey metallic colour coat. Neat internal throwing marks. The form is later 4th century. 1 only. Feature 3.

FIG 30

Late slipped and burnished grey wares, perhaps of East Midlands/Lincolnshire origin: wide mouthed jars, bottle, flanged bowl, funnel necked vessels? cup
The vessels have a distinctive wiped or dragged look to the surfaces.
Fab 29a, grey, Fab 29b, red, cored, black slipped; appears to come from the same stable.
235 Fab 29a. Slip entirely eroded. Vessel discoloured. Feature 18.
236 Fab 29a. Much iron staining. Feature 3.
237 Fab 29b. Metallic black slip in good condition. Feature 3.
238 Fab 29a. Traces of eroded lead grey metallic slip. Feature 3.
The bases from these wide mouthed jars all have pronounced 'cheese-wire' marking, as with vessel 239. This is also a characteristic of the later 4th century, Class C jars at Alice Holt (Lyne and Jefferies 1979, p35).
239 Fab 29a. Vessel burnt and stained. The illustrated vessel has pronounced whorls from removal from the wheel with cord? Feature 172.
240 Fab 29a. Lead grey metallic slip. Burnt and stained. Feature 22.
241 Fab 29b. Red-cored fabric, mid to light grey surfaces. Black external slip. The decoration is burnished through the black slip, and reads as a grey running scroll. There is a burnished band beneath the cable *cf* Brodribb *et al* 1972, FIG 23, No 397, fabric not apparently described, but the scrolls are stated to be burnished. A date of post 370 is ascribed to the Shakenoak deposit, with a terminal date in the 5th century. Burnished scroll decoration on grey wares occurs at Lincoln in a deposit again of the 370s into the 5th century (Darling 1977, No 131). U/S.
242 Fab 29b. Fabric and slip identical with 241. In addition a sherd from a third similar vessel occurred in feature 2(1). Feature 5.
243 Fab 29b? Vessel has slight traces of external black slip. Feature 18.

Much Hadham; bowl?
244 Fab 32a. Light grey, eroded. Feature 181.

Derbyshire ware? narrow mouthed vessel
245 Very hard grey, almost stoneware, pimply surface. 1 only. This sherd resembles material from the Hazelwood kilns. Feature 11(1).

Alice Holt: flagon
246 Vessel very burnt and discoloured. Class 8.12 flagon. See Lyne and Jefferies 1979, p58 and discussion there of a linear distribution of Alice Holt wares in the late 4th century along roads leading out from London to the north and east. See also discussion on their use as containers,

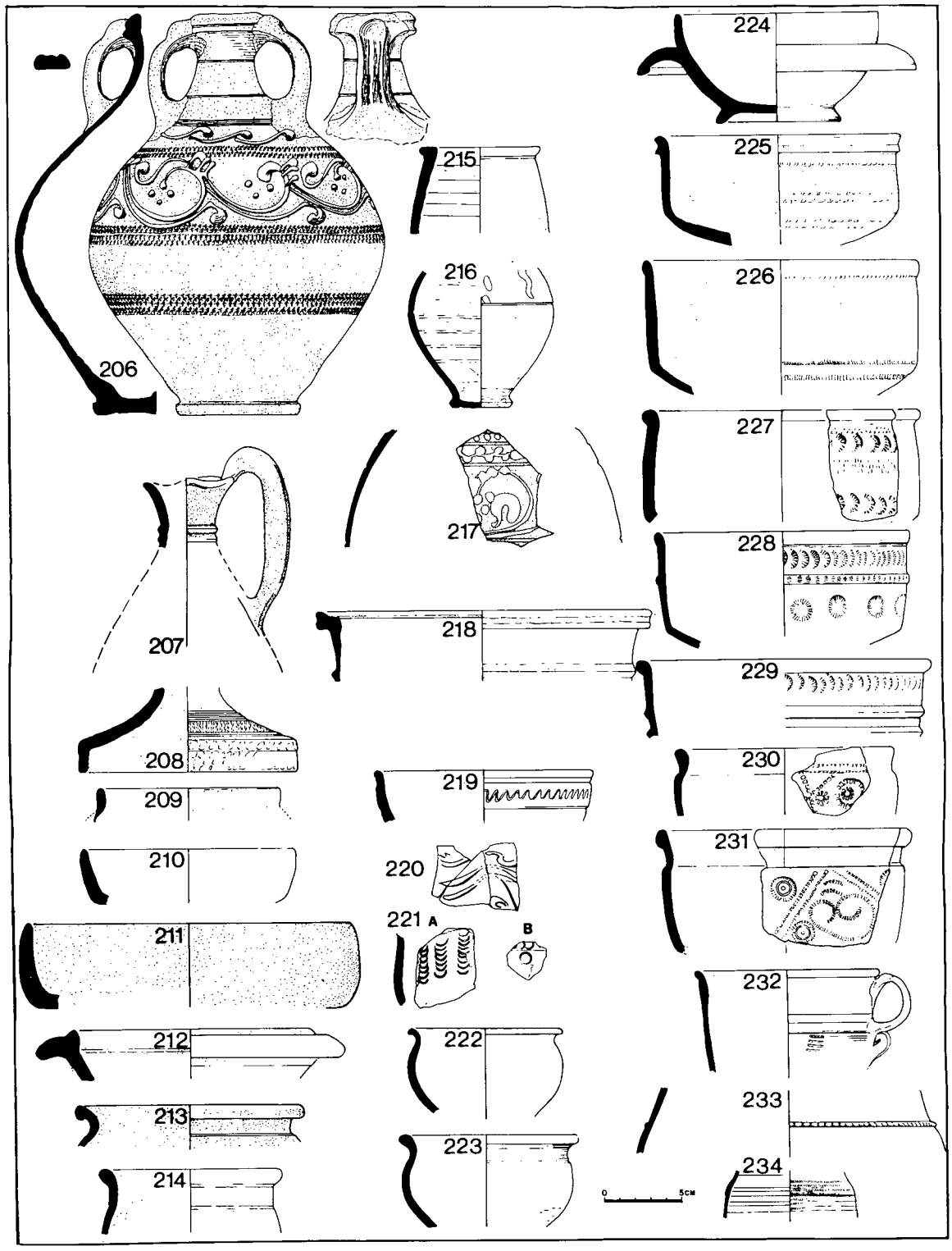


Fig 29 Towcester, Alchester road suburbs: pottery of Phase 4b*. 206-17, Nene valley colour coated ware; 218, Parchment ware, 219-232, Oxfordshire colour coated ware; 233-4, unknown source (¼).

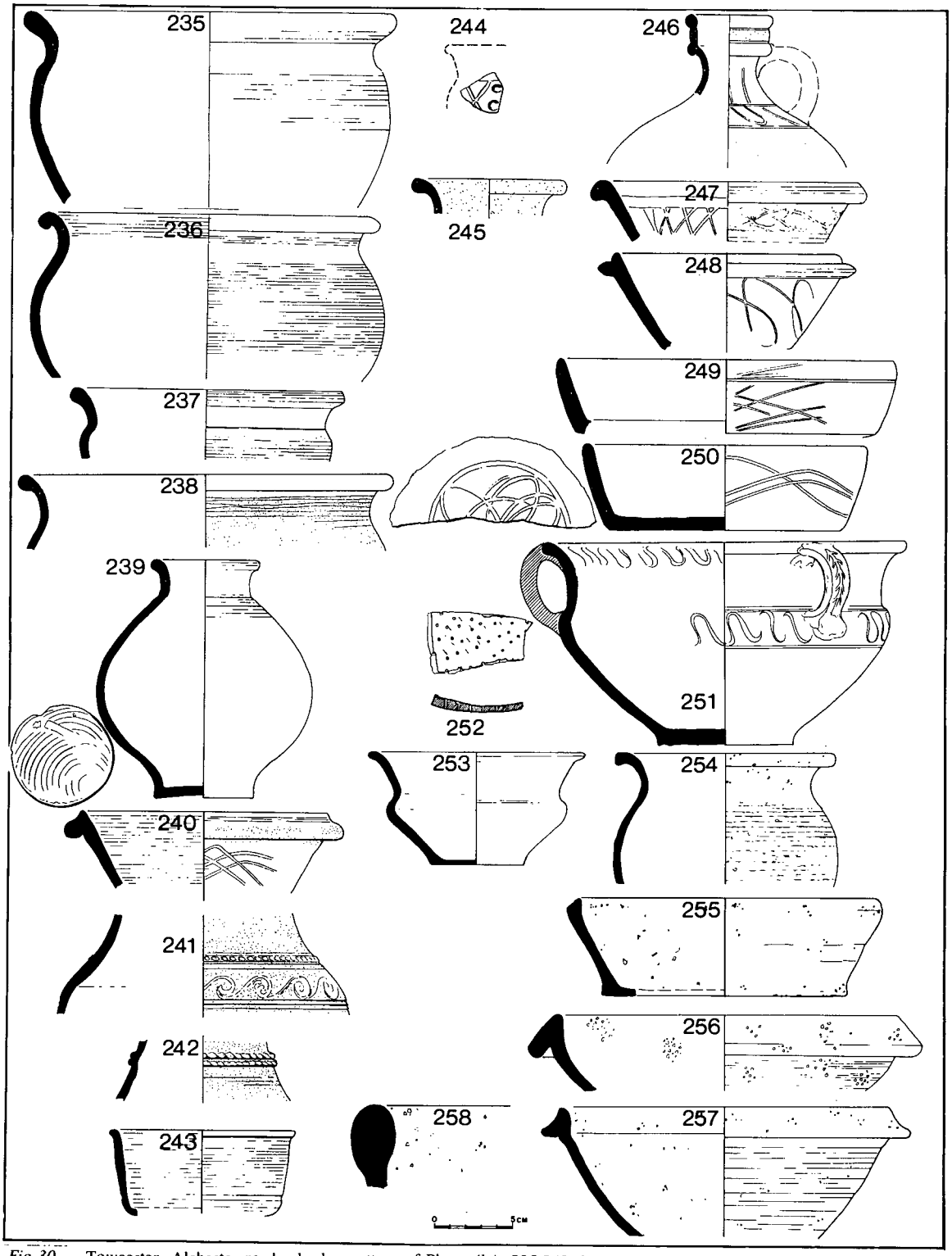


Fig 30 Towcester, Alchester road suburbs: pottery of Phase 4b*. 235-243, late slipped and burnished grey wares; 244, Much Hadham ware; 245, possibly Derbyshire ware; 246, Alice Holt ware; 247-8, BB1; 249-50, later coarse grey wares; 251-3, grogged ware; 254-8, shell tempered ware (¼).

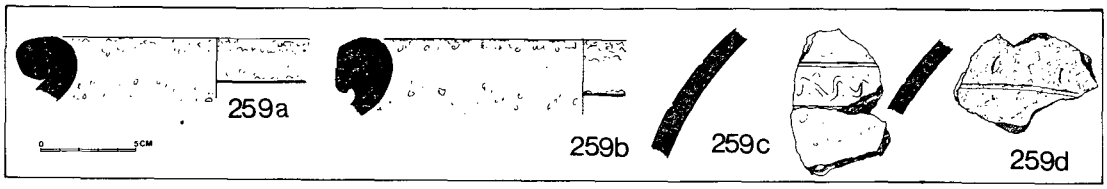


Fig 31 Towcester, Alchester road suburbs: hand-made storage jars in a crude grogged fabric from Phase 4 (¼).

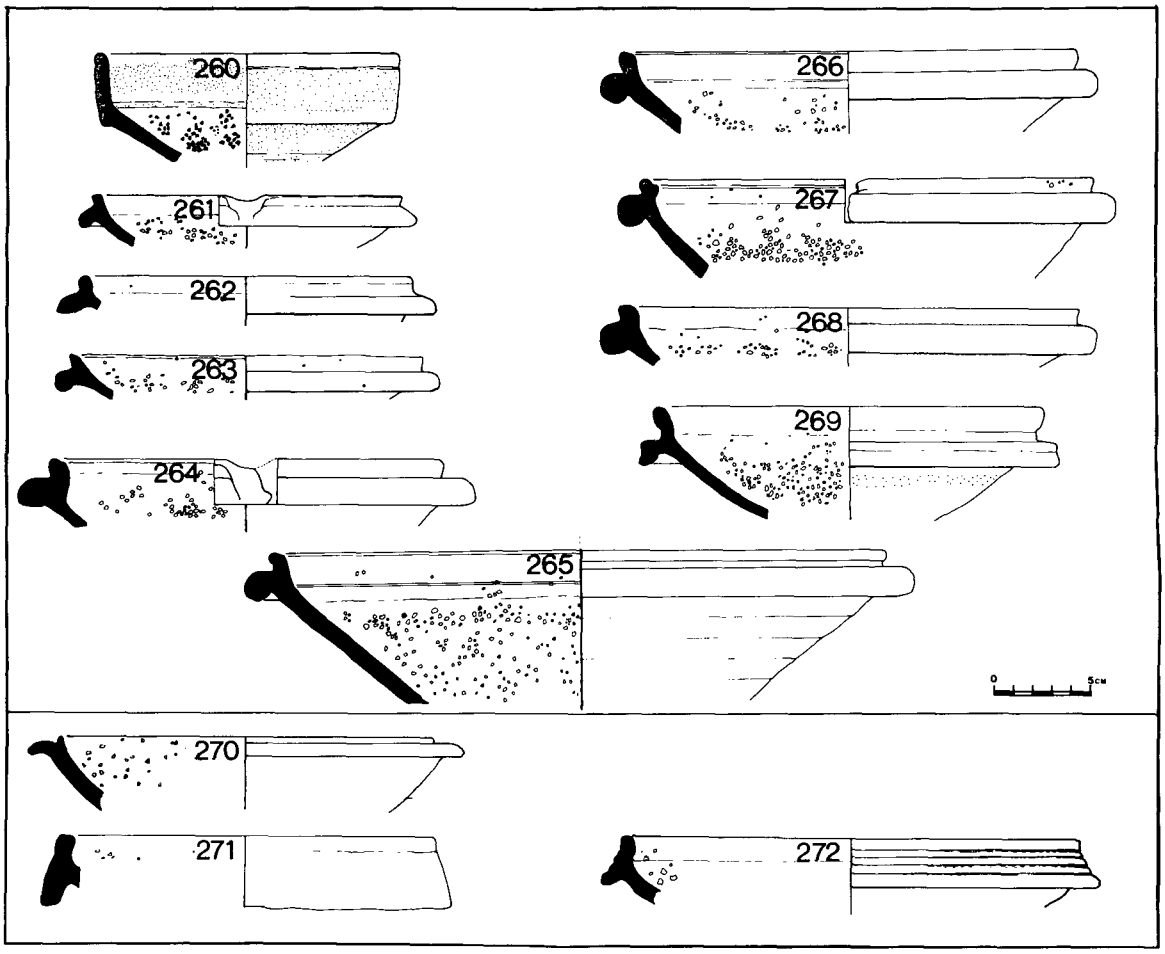


Fig 32 Towcester, Alchester road suburbs: 260-65, mortaria from Phase 4b*; 270-72, unstratified mortaria (¼).

ibid p56. Sherds from at least two other Alice Holt flagons occurred in Phase 4b* levels. Feature 3.

BB1: dish, flanged bowl

247 Fab 15. Dish with internal decoration on wall, external decoration in band. An unusual BB1 form of decoration. Feature 38.

248 Fab 15. The decoration is thin and scribbly. Feature 3. These vessels are presumably from very near the end of BB1 production.

Later coarse grey wares: dishes

249 Fab 30. Dense black. Decoration very scribbly. Feature 3.

250 Fab 30. Dark grey. The base of the dish is decorated internally. Feature 21. (Internal wavy line wall decoration occurs on unstratified Fab 30 bowls).

Soft buff-pink grogged: handled vessel, colander, cup

251 Fab 35b. Perhaps an attempt at a similar vessel to the Nene Valley form 78 (Howe *et al* 1980), thought to date from the late 4th to early 5th century. Feature 38.

252 Fab 35b. Base of colander. Feature 11(2).

253 Fab 35b. Cup of very late form — all rim and no body. Feature 38.

Shelly wares: cooking pots, dishes, flanged and everted rim bowls

254 Fab 44d. These appear to parallel the hard, thin bodied dark vessels with the small neat triangular rims which occur at Shakenoak, Brodribb *et al* 1972, FIG 23, No 389, there dated from *c* 370 into the 5th century. Feature 88.

255 Fab 44d? Dish. Handmade? Brown/black. Feature 167.

256 Fab 44c. Bowl with sharply down-turned rim. Buff, dark grey brown. Feature 129(1).

257 Fab 44d. Brown/black. Vesicular. Feature 3.

258 Fab 44c. A late shelly storage jar form, and indeed the only shelly storage jar on the site. Brown/grey. This roll rim form also occurs in post *c* 350 deposits at Wood Corner, Milton Keynes (Woodfield, report forthcoming). Feature 3.

FIG 31

259a, b, c and d. These are apparently hand-made storage jars in a crude grogged fabric. The grog appears to be from Fab 35b vessels in part with the addition of ironstone and limestone. There is the occasional void where organic material has burnt out, but it could not be called grass-tempered ware. The surface has been smoothed.

259a Fab 35c. The form is now virtually a roll rim and narrow necked; a hybrid between 199 and 205? Feature 66.

259b Fab 35c. As 259a. Feature 7.

259c Fab 35c. The vessel has been decorated with a wavy line between two grooves. Feature 16.

259d In this example, the down strokes of the wavy line alone are visible, giving the effect of finger-nail impressions. Feature 11(1).

Despite the late and barbarous appearance of these vessels, their appearance in Phase 4a levels (Features 7 and 16) may take their genesis back to *c* 350. The presence of vessels in Fab 35b which have been mended with lead rivets (see FIG 41, no 14) may indicate a failure in the production and supply of the standard soft pink grogged ware.

Mortaria (See specialist report for further details, p 72-3. Phase 4b*).

260 Wall sided mortarium ? Northamptonshire or Lincoln, 240-400. Feature 38.

261 Young 1977 M22. 240-400+. Feature 166(1).

262 Young 1977 M22. 240-400+. Feature 25.

263 Young 1977 M22. 240-400+. Feature 3.

264 Young 1977 WC7. 240-400+. Feature 66.

265 Young 1977 M22. 240-400+. Feature 3.

266 Young 1977 M22. 240-400+. Feature 3.

267 Young 1977 M22. 240-400+. Feature 3.

268 Young 1977 M22. 8 further M22's occurred in this phase. Feature 3.

269 Young 1977 C100. 300-400. Feature 66.

Mortaria Unstratified

270 Damaged rim sherd. Upper Nene. 2nd century. U/S.

271 Diameter and angle uncertain due to wear. 170-250, Northants. U/S.

272 Probably Oxford, perhaps Northants. Migrant potter from Mancetter/Hartshill. See full note in specialist report, p 72. An important piece. U/S.

THE COINS

by C T P Woodfield

A total of 489 coins were recovered from the site. Details of their find contexts and identifications are set out in microfiche, M18-31. Of this total, 79 were clearly unstratified leaving 410 found in stratified levels. However, most of the coins recovered in the 1967 excavation are so mixed as to be of little stratigraphical value. The high proportion of stratified finds might be explained by the fact that the site, particularly the central section, was well known to metal detector users, and it is probable that they had denuded the superficial levels of coins and metalwork before archaeological work commenced.

PHASE 1

No coins were recovered from features identified by their stratigraphical relationships, alignments and associated pottery to be the earliest Roman occupation of the site. The earliest coins are the usual heavily worn *aes* of the Flavian and immediately succeeding emperors which continued in circulation up to the period of the Gallic empire. This survival is also reflected in the four worn *denarii* of Vespasian to Trajan, one being of base metal. Two of these were from long used yard surfaces (3,333). The presence of these coins does not in itself support occupation of the site at an early period.

PHASE 2

Four Severan coins, all *denarii*, prove little more, but the association with Buildings 2/5 and 2/6 suggests that plots had been established by the early 3rd century.

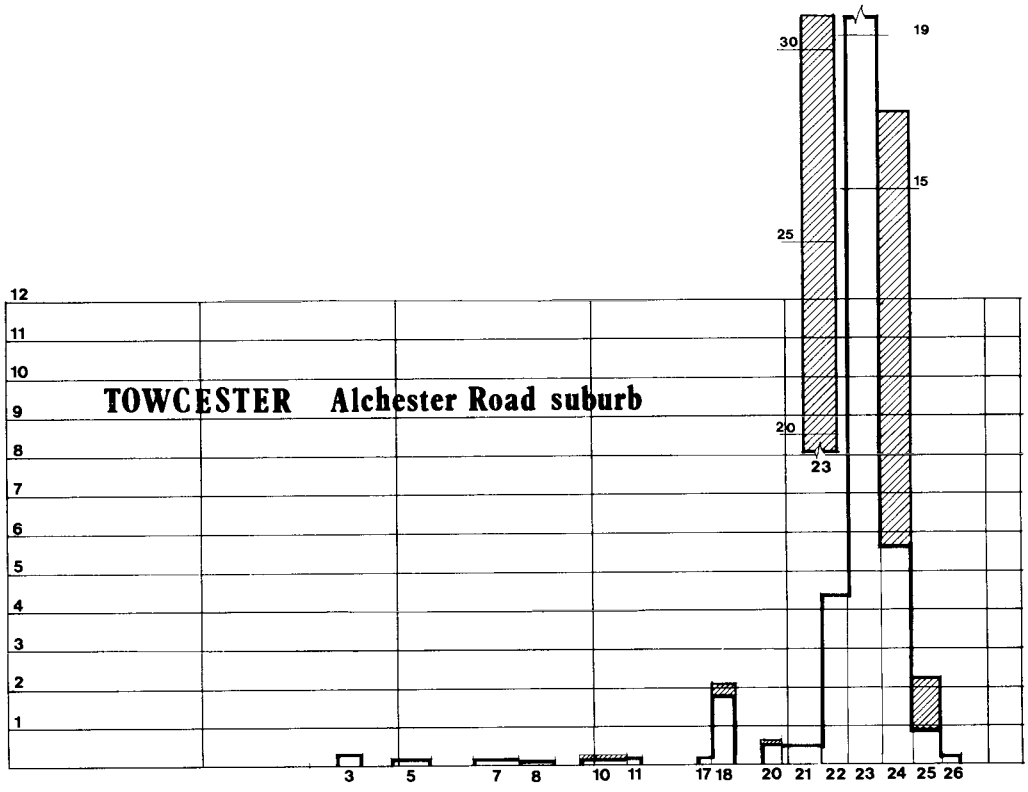


Fig 33 Towcester, Alchester road suburbs: coin histogram. The vertical scale represents the annual loss per 1000 coins, the horizontal scale issue periods as per Casey 1980.

PHASE 3

More intensive use of the site by the third quarter of the 3rd century is indicated by the establishment of the normal coin loss pattern, although, taking the site as a whole, the relative paucity of 3rd century coins suggests the occupation was sparse or that it was something other than a normal settled population. Of interest is the small group of silver washed *antoniniani* from a pit, context 294, which may well represent a loss of personal savings. The other coins are chiefly from yards or open surfaces, and thus could be residual finds.

PHASE 4

By contrast, coins from *c* 300 on are abundant, and even allowing for the normal increase in loss at this period, the numbers suggest a massive increase in activity in this phase, with the continuing use of earlier plots.

Numismatically, it is hard to define a distinction between Phases 4a and 4b, since many features continued in use right through. Plots 4/2, 4/3 and 4/8 seem to continue in use up to *c* 360 after which there appears to be a rapid decline in activity, demonstrated in the coin evidence by the relative absence of the Valentinianic issues. This pattern is however not supported by the pottery evidence which indicates continuity to a later date, so the implication is that everyday commerce had abated or shifted to a new area, or that possibly an aggregation of property into fewer hands had taken place.

Through the intense activity of Phase 4 the presence of an unusually high proportion of irregular issues is noteworthy, particularly those of small module. Analysis has shown these pieces to have an appreciable lead content (M32). Further, a number of these coins averaging 9.5mm in diameter and copying the Fallen Horseman types seem to have been executed in a similar, distinctive style. A concentration of these irregular types, including a proportion of the distinctive coins, appears in the latest phase of the furnace (31(1)) in Building 4/5, hinting that in the years *c*350-*c*360 the furnace might have played a part in replicating a money of necessity.

The histogram

To evaluate the site finds, pseudo-histograms were prepared for each section of the site, and for the site as a whole (FIG 33). These were compared with finds from the southern suburb of the town of Magiovinium, similarly situated astride Watling Street, and with the 1976 excavation within the Roman defences of Towcester itself (Lambrick 1980). The method used is that established by Ravetz (1965) but with the horizontal

scale representing time drawn to scale, and with the irregular issues differentiated. The diagram illustrates the pattern in the Towcester suburb differs from its equivalent at Magiovinium in three significant respects. Occupation starts late at Towcester, has an exceptionally high peak in period 23, the later Constantinian period, and closes early, none of which is paralleled in the more normal civilian zone histogram at Magiovinium. In Towcester town the small, perhaps not representative, group shows a strong Flavian and a later 3rd century presence clearly contrasting with the suburb. The more rural site at Wood Burcote, only 1 mile away away, by contrast exhibits a strong 1st to 2nd century presence.

The schedules (M18-31).

The schedule of coins is compiled by phases established with regard to all the evidence. Identifications were given by P Curnow in the case of the 1967 excavation, and the remainder by the writer. The coins were identified in their excavated condition with corrosion products present and received only sufficient mechanical cleaning to obtain an identification. Although in a few cases laboratory cleaning might have elucidated a little more information it is held that routine laboratory treatment prior to identification would have tended to reduce the information available to the numismatist. Where a coin is not identified, a diameter only is generally given without further comment, thus a blank entry for, for example, the reverse or mint indicates that this information could not be established. Irregular coins are so marked, but those of flan diameter of less than 12mm are, for convenience termed minims and assumed to be irregular issues. They are also assumed to be 4th century in date but are probably more specifically of *c* 340 to *c* 360 or later as the latest stratified deposits have an appreciably higher proportion of them. With regular issues unequivocal attributions are entered in capital letters, but where some doubt is present the identification is set in lower case. Only sufficient information for positive identification is included but references where possible are given to Cohen, *Déscription historique des monnaies frappées dans l'Empire Romain* (1880-92), and for the late series, to Carson, Hill and Kent, *Late Roman bronze coinage*, 1960, 324-498.

SILVER (FIG 34)

1 Spoon. From trench dug by Upper Nene Archaeological Society in 1966 to the NW of 1-3 Link Way. Drawn by Mr R M Friendship Taylor.

2 Votive axe with expanded edge. Found in 1967 to the NW of 1-3 Link Way; now lost. Drawn from descriptions given by Mr T Shirley and Mr L Jones, the former owner. Like Green 1975, FIG 2, 20 (of bronze, from Kirmington, Lincs.). A second silver axe was discovered in 1966 in an area some 20 yards to the east of this one. It resembled a bronze example from Asthall, Oxon (Green 1975, FIG 2, 8) ie it was not splayed. It was apparently *c* 30-35mm long and the handle was textured in some manner on its lower half, probably by ribbing. The axe was apparently handed in to the South Northants RDC and is now lost.

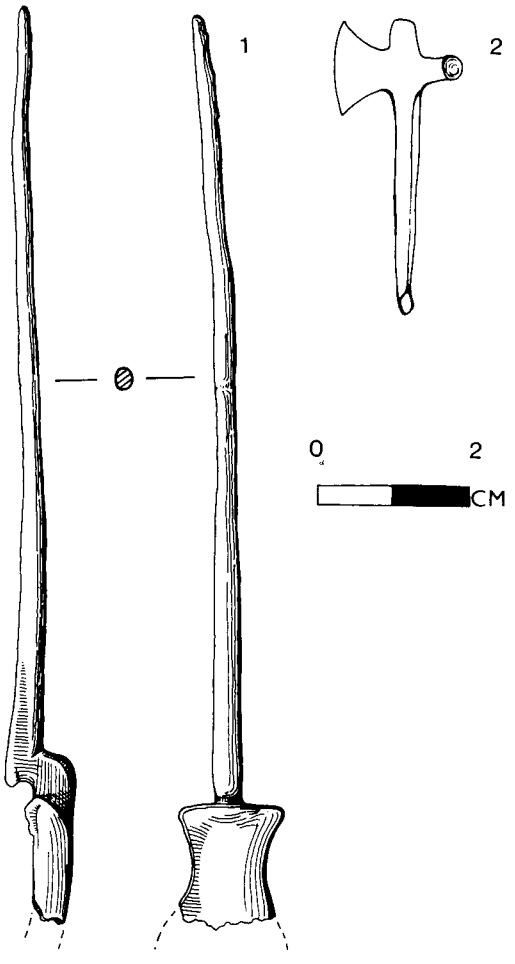


Fig 34 Towcester, Alchester road suburbs: objects of silver (1/1).

COPPER ALLOY (FIGS 35-38)

1 The following is a summary of the notes supplied by the late M R Hull. A type of brooch not found in Britain before and difficult to date. The thin flat foot suggests a late date and the slender bow resembles that of the very late fan-tailed knee brooch from Traprain Law (Curle 1932, FIG 33, 334) but the foot is much longer. The catch plate does not however support a late date. Moreover, the small triangular moulding below bow and foot is a feature of four fan-tailed brooches probably of the second half of the 1st century from Cirencester (Corinium Museum C233), Cholseley Farm, Odiham, Hockwold/Wilton (Norwich Museum) and High Cross (Leicester Museum 177. 1955); but the bows of these are of triangular section, wider, and short, with a flat curve. The engraved

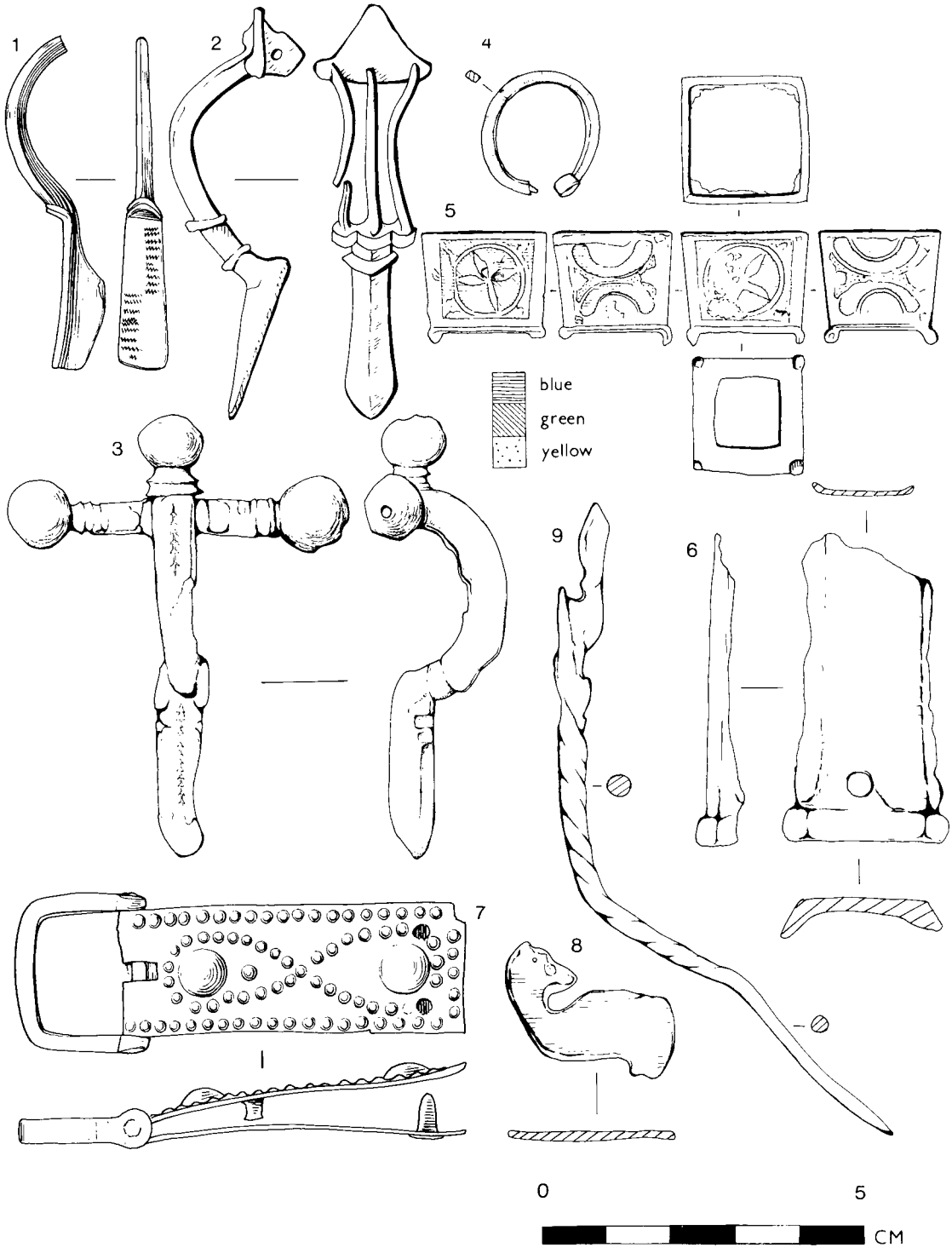


Fig 35 Towcester, Alchester road suburbs: objects of copper alloy (1/1).

zigzag decoration should also be early. Probably continental. From area of 38-40 Sandyholme Road, 1966.

Nos 2-4 have been reported on by Mr D F Mackreth as follows.

2 The spring, now missing, was held to the body of the brooch by means of an axis bar passing through the coils of the spring and a pierced lug behind the head of the bow. The head is triangular, plain, has a half-round projection at each bottom corner and the stub of a broken-off boss at the apex. The bow consists of three trapezium-sectioned bars springing from the bottom of the head and running down to a flat plate curved along the front to match each bar. Between the plate and the foot is a bridging bar with a central arris and a cross moulding. The foot has a slightly swelled front and tapers outwards towards the bottom which comes to a point. The catch-plate consists of a slot in the side of the expanded head of the foot. The brooch was once tinned or silvered.

The brooch belongs to a distinctive type whose details vary but little (Böhme 1972, Tafln 15-16, 655-697) and the commonest feature absent here is ring-and-dot ornament. Böhme's dating, on general grounds, for the type is late 2nd century and the first half of the 3rd (*ibid,* 26). What is not clear is whether or not it should be regarded as a precursor of the early Crossbow type, or, as it has a different pin-fixing arrangement from that, as being partially contemporary at the end of its life. One from Chichester comes from an Antonine context (Down 1978, 286, FIG 10.28.53); and another from Carpow must be dated to the early years of the 3rd century (Birley 1963, 197: 206, FIG 11, 4). Dating within the 3rd century is difficult and it may be that Böhme's end-date is governed more by the terminal dates of the forts at Zugmantel and Saalburg in 260 rather than by strictly stratified examples which are, indeed, hard to find. The examples found in Britain may indicate a more restricted *floruit,* say *c* 175-225. Unstratified, area of 208(1), 1977 watching brief.

3 Crossbow brooch. The three knobs have roughly hexagonal sections, that on the head being almost pentagonal and riveted through the head of the bow. Each knob has a double moulded base. The wings are, again, roughly hexagonal in section with the forward face being decorated with two mouldings, the outer one slight while the inner one is prominent and has a hole through it. The section of the bow is a truncated triangle and has, down the front, a line of sunken triangles which were probably once inlaid like those on the foot. The lower end has a waist and then a roughly shaped section joining the top of the foot-plate. The waist may once have been the seating for a piece of beaded wire (*cf* Clarke 1979, 259, FIG 32, 13). The foot-plate has, down the centre, triangles like those on the bow and some still retain an inlay now a pale dirty yellowy-green in colour. Each side of the foot-plate has a chamfer starting just below the bottom of the bow and interrupted by two pairs of roughly V-shaped mouldings. The bottom and one side of the foot-plate is heavily corroded and the ornament is assumed to have been symmetrical.

There are several reasonably close parallels from Britain, but none has been published (Hildyard Collection, 139 and 202, I am grateful to Lady Pauline Richmond-Brown for generously allowing me to make notes on the collection; Corinium Museum, B425; Birmingham Museum 2-1.58; Peterborough Museum, L.297). The chief feature which they have in common is the ornament on the foot-plate, but not all have the series of triangles which appears on only one of the parallels (Hildyard Collection, 139). In most cases, the knobs are onion-shaped and only in one of the other cases are they like the present (Corinium Museum, B425). None of the examples is dated. What is clear is that simple dating based upon the presence or absence of ornament on the bow, or onion-shaped knobs, is not possible: the range of combination of different decorative elements is very wide. However, attention may be drawn to the following features: firstly, the ornament on the front face of the wings is clearly related to the scrolls which are to be found on more developed brooches (*cf* Wheeler and Wheeler 1932, 78, FIG 13, 25) which belong to the late 4th century. Secondly, the ornament on the bow with its traces of inlay is again a trait which becomes emphasised in the second half of the 4th century. Thirdly, the curious paired projections running across the chamfer on the sides of the foot-plate could well be forerunners of the con-joined C's which are only to be found on specimens belonging to the late 4th century and later. It may also be that the wings which are long in proportion to the overall length of the brooch mark this brooch out as not being early 4th, but this is not a point to be insisted upon. The date range for the brooch may be the middle decades of the 4th century and not later than *c* 375 AD. 61. Building 4/2a, Phase 4a. 1975 SF 650.

4 Penannular brooch. The outer diameter of the slightly distorted ring is *c* 18mm and the section of the ring is a thin rectangle, 1.5 x 1mm. The surviving terminal is formed by the ring being bent back on itself at right angles to the plane of the ring and has a shallow curve down to the surface of the ring. The pin is missing.

The form of the terminal is too weak for it to be certain whether the brooch should be assigned either to Fowler's type C or D (Fowler 1960, 152). The first is given the date range of 1st century BC to Saxon times, some having been found in Saxon graves (*ibid,* 175), while the second has been found in contexts ranging from the 1st to the 3rd centuries AD (*ibid,* 176). Such simple brooches possess next to no characteristics which help to determine a relatively close date, but the small size would suit the Roman period rather than pre-Conquest times. 83, Building 4/2b, Phase 4b. 1975 SF 609.

5 Bronze miniature stool? The enamelled decoration consists of two faces of a circle inside a square, and within the circle a four-petalled flower or perhaps a cross. The circle is joined to the four corners of the square. The background is decorated with opposing areas of blue and green enamel. The other two faces carry a motif of two crescentic shapes back to back, in blue enamel, with an intermediate form resembling a double headed axe enamelled yellow. These objects are normally found on temple sites and are of unknown use (Green 1975, FIG 4, and 1981, FIG 3). Topsoil, area of 208(1), 1977 watching brief.

6 Fragment of hollow mount, possibly for a representation

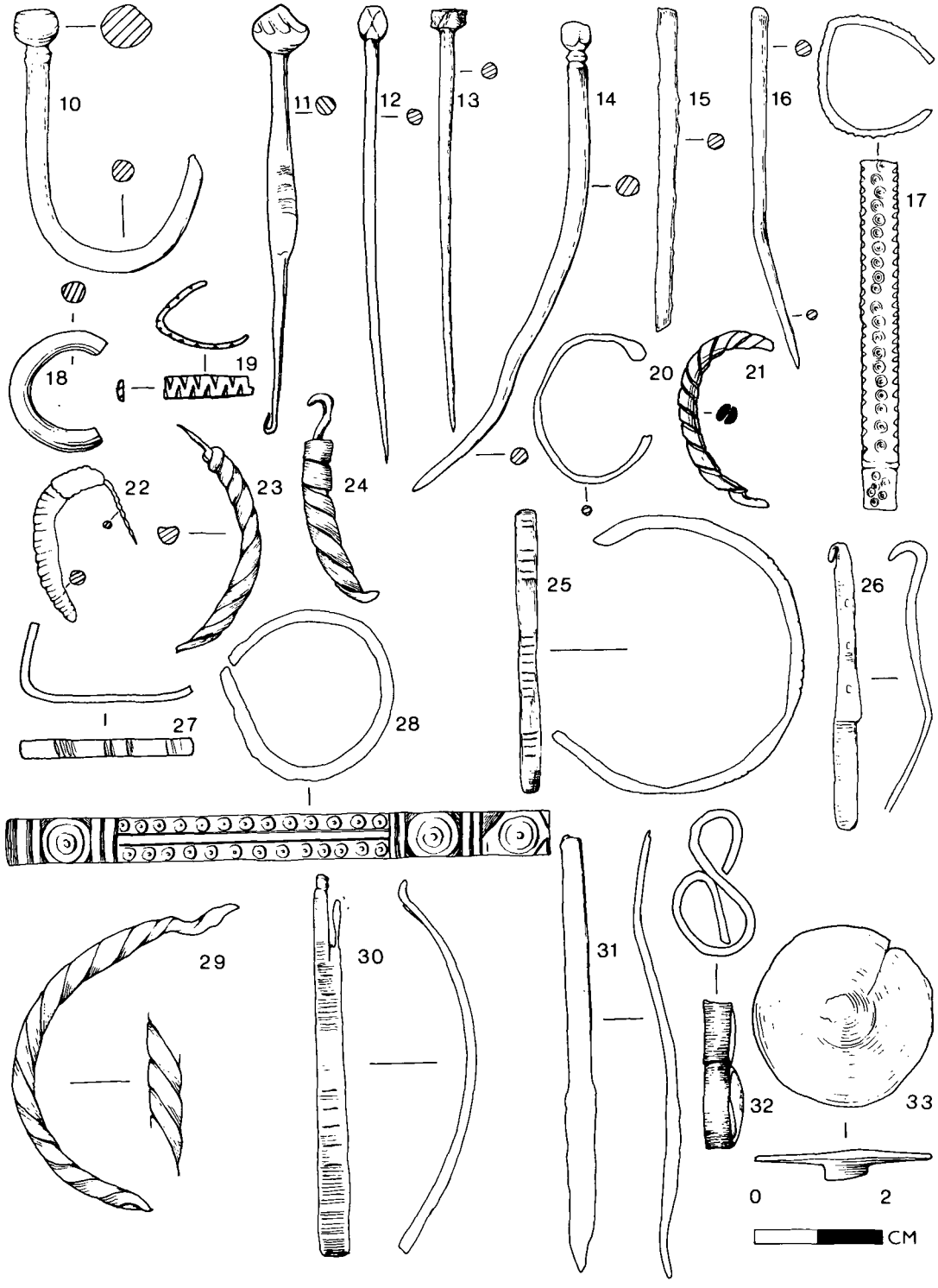


Fig 36 Towcester, Alchester road suburbs: objects of copper alloy (1/1).

of a bird or animal and part of an ornament from a cart or chariot (Toynbee and Wilkins 1982). 66, Building 4/2b, Phase 4b. 1975 SF 563.

7 Buckle and strap end with punched decoration. For late 4th century parallels from the Lankhills cemetery, see Clarke 1979, FIG 34, 126 and 279, 335, Building 4/4, Phase 4b. 1967 SF 7.

8 Fragment of decorative bronze with animal head. 66, Building 4/2b, Phase 4b. 1975 SF 552.

9 Spoon. Surface of Alchester road. Area 3. 1975 SF 459.

10 Pin. 57 (3), make-up, Alchester road, Phase 4a. 1975 SF 649.

11 Pin. Found 1967 by Mr D Smith in general area of Bickerstaffes Road development.

12 Pin. Topsoil, Area 1. 1976 SF 803.

13 Pin. 170, pit, Phase 4b. 1974 SF 35.

14 Pin. Layer 105(2), Phase 4a (but the contents of this layer as distinct from its formation ought to belong to Phase 2). 1975 SF 691.

15 Pin. 36, ditch, Phase 4a. 1974 SF 304.

16 Pin. 14 (1), Building 4/5, Phase 4b. 1974 SF 205.

17 Ring. 16 (2), ditch, Phase 4a. 1974 SF 157.

18 Ring. 333, Building 2/7, Phase 2: or Phase 4b. 1967 SF 5.

19 Ring. Topsoil, area of Building 4/1b. 1977 watching brief.

20 Earring. 169, Building 2/1, Phase 2, or Building 4/6c, Phase 4b. 1976 SF 783.

21 Earring. Topsoil, Trench 23. 1967 SF 11.

22 Earring. 16 (2), ditch, Phase 4a. 1974 SF 253.

23 Bracelet. Surface of Alchester road, Area 3. 1975 SF 500.

24 Bracelet. Surface, Area 3. 1974 SF 55.

25 Bracelet. 65, Alchester road side ditch, Phase 4b. 1975 SF 445.

26 Bracelet. 25, pit, Phase 4b. 1974 SF 246.

27 Bracelet. 338, Building 2/7, Phase 2, or Phase 4b. 1967 SF 9.

28 Ring. From garden of 1, St George's Close.

29 Bracelet. 169, Building 2/1, Phase 2, or Building 4/6c, Phase 4b. 1976 SF 745.

30 Bracelet. 169. As above. 1976 SF 780.

31 Bracelet. 57 (4), make-up, Alchester road, Phase 3. 1975 SF 656.

unill Tiny bronze clipping perhaps related to bronze working. 282(2) Alchester road side ditch, Phase 2. 1977/78 watching brief.

32 Loop. 62, Building 4/2b, Phase 4b. 1975 SF 534.

33 Stud. 330, Building 2/7, Phase 2, or Phase 4b. 1967 SF1.

34 Object of uncertain use, possibly a protective flap. As above. 1967 SF 14.

35 Fragment of cast bronze with decoration in relief, possibly representing an animal's leg. Surface find. 1976 SF 839.

36 Strip. 66, Building 4/2b, Phase 4b. 1975 SF 514.

37 Lock cover (eg Chichester St Pancras cemetery, burial 171 (Down and Rule 1971, FIG 5, 16)). Topsoil, Area 1. 1976 SF 812.

38 Knob handle. 97, ditch, Phase 4a. 1975 SF 637.

39 Stud. 62, Building 4/2b, Phase 4b. 1975 SF 526..

40 Strip with hole. 66, Building 4/2b, Phase 4b. 1975 SF 597.

41 Fragment of cup or bowl. 31(1), furnace, Building 4/5, Phase 4b. 1974 SF 347.

42 Strip with pierced expansions: not necessarily Roman. Base of topsoil, Trench 25. 1967 SF 6.

43 Loop and hook. 335, Building 4/4, Phase 4b (but layer not sealed). 1967 SF 12.

44 Mirror. Dr G Lloyd-Morgan writes: One of the most exciting and interesting Roman finds made in recent years has been a rectangular Roman mirror, turned up in the course of developments on St Lawrence Road, Towcester. The mirror itself is unfortunately fragmentary but when complete would have measured 106 x 92mm. It is 1mm thick and has the usual slightly bowed sides with bevelled edges. The most interesting feature of the piece is, however, the large amount of the wooden frame which has survived. This is roughly 120 x 110mm and about 5mm thick.

Rectangular mirrors, are as a type, one of the most popular within the Roman world, and have been found in practically all provinces of the Empire as well as outside the frontiers (17). Well over thirty examples have been found so far in Britain (18), some of them even less well preserved than the Towcester mirror. Two mirrors from the St Pancras cemetery excavations in Chichester are said to have had a wooden frame or cover (19).

A number of other examples have been found during excavations on the continent: no CC147 from a Claudian grave, now in Rijkmuseum Kam, Nijmegen (20); Romische Germanisches Museum, Cologne no 54,228; Mestni Muzej, Ljubljana no G 1162 (21), and three examples now in Locarno Museum, no. 1936;247; 1936:493; and 1936:1068, from local excavations which have all been dated to the first quarter of the first century AD (22). These excavations have also turned up two simple disc mirrors which also had fragments of wooden frames associated with them: Locarno no 1936:98 and 1936:492 (23). The latter piece is an extremely interesting parallel to the Towcester wooden frame, as examination showed the presence of different layers of wood one on top of the other, a rare example of plywood, that can also be made out in the different alignments of the wood grain in the Towcester piece. Although examples of plywood from the ancient world are not rare (24), the numbers of examples from the Roman provinces is not great, shields from Dura Europos and the Fayum being, perhaps, the best known (25).

None of the other examples of mirrors with parts of their wooden frames intact, which have already been noted, use plywood. It may be that in some examples the traces of wood were too small or frail for detailed investigation. Others, like Narodni Muzej, Ljubljana no R8774 (26) or Nijmegen no CC147, where a good lump of wood still adheres to the back, had a solid frame made from a single piece of wood, probably with added edging strips.

The discovery of the Towcester mirror is, therefore, of some importance not only as a new record for the area, but as an extremely rare piece of evidence for the type and construction of the frames used to protect the simpler forms of mirrors that were in circulation during the first century AD. 100, area of marshy ground NW of Alchester road in Trench 10. 1975 SF 620.

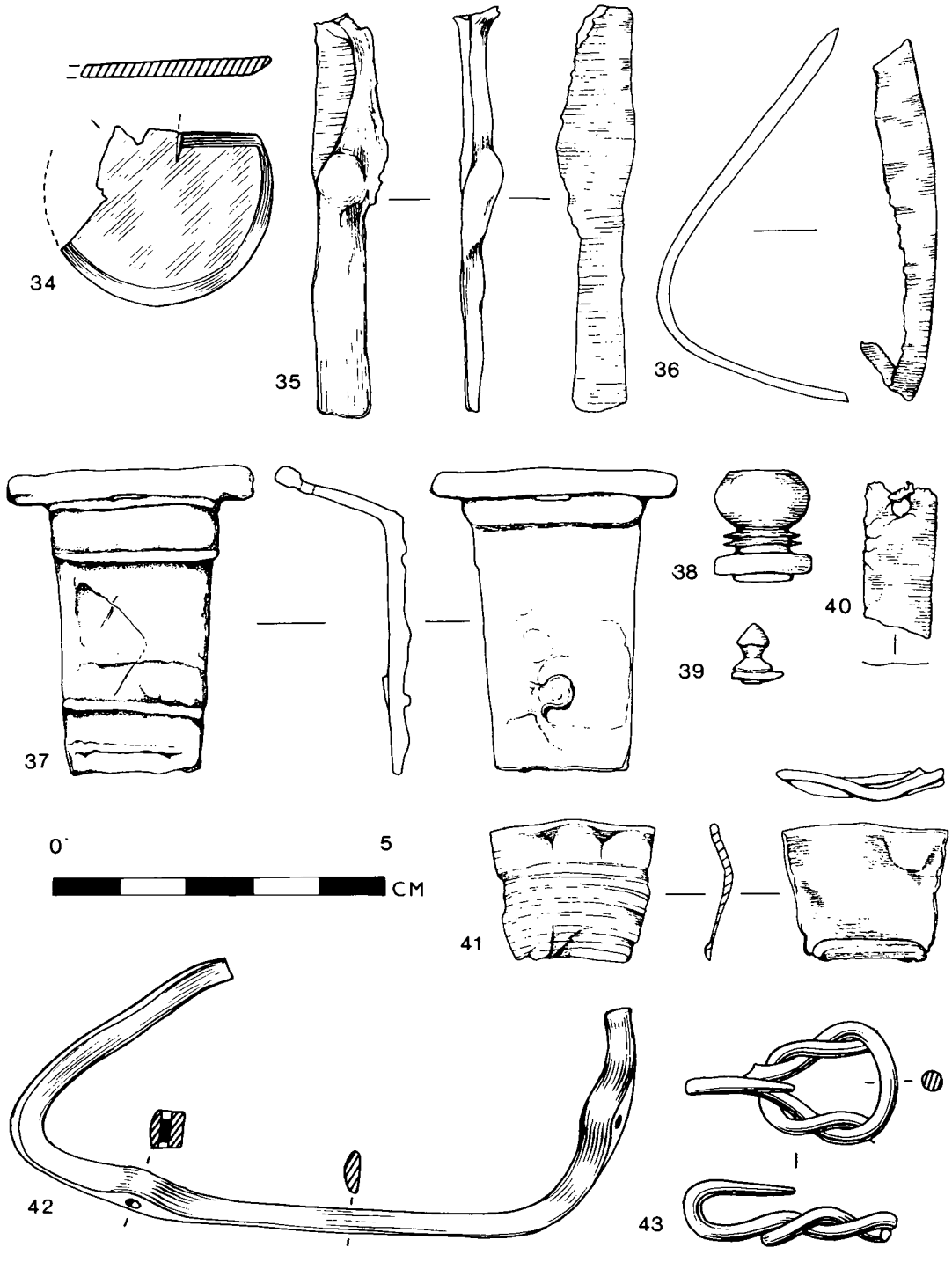


Fig 37 Towcester, Alchester road suburbs: objects of copper alloy (1/1).

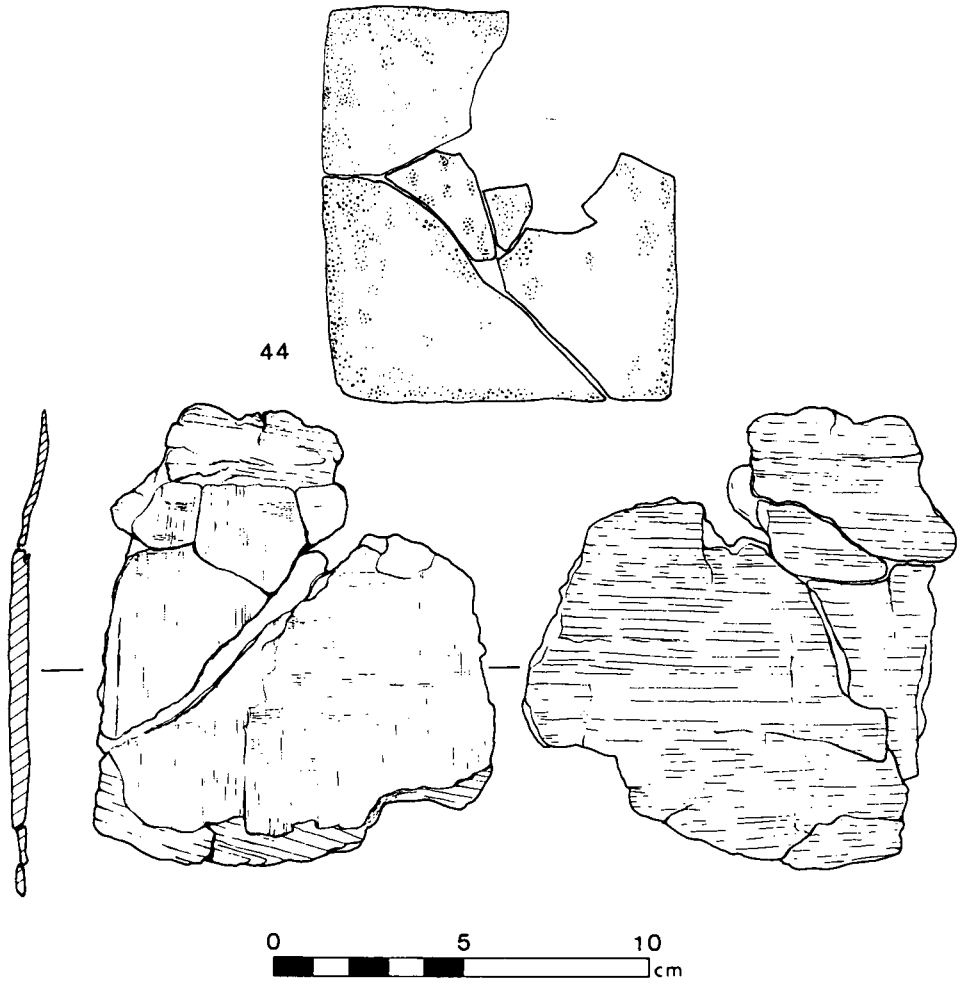


Fig 38 Towcester, Alchester road suburbs: the mirror (½).

APPENDIX

Examples of Mirrors with substantial remains of wooden frames or boxes

	Museum	*Type of mirror*	*Findspot*
1)	—	rectangular mirror, Group A	Towcester
2)	Chichester City Musuem	rectangular mirror, Group A	Chichester, St Pancras, Grave 60
3)	Chichester City Museum	rectangular mirror, Group A	Chichester, St Pancras, Grave 80
4)	Grosvenor Musuem, Chester No 233 R 1976	hand mirror?	Chester, Infirmary Field, Grave 19
5)	Norwich Castle Museum, no 133 950	hand mirror Group Gc	Norwich, Stanley Avenue, Burial 1
6)	DoE Conservation Laboratory, London	hand mirror Group K	Whitchurch, Salop
7)	Rikjmuseum Kam, Nijmegen, CC147	rectangular mirror Group A	Nijmegen, Grave 26, Cemy CC
8)	Cologne, R G Mus. no 54,228	rectangular mirror Group A	Cologne
9)	—	hand mirror Group L	Lübsow Grave 1
10)	Locarno Museum, 1936:98	disc mirror Group F	Muralto Branca, Grave 2
11)	Locarno Museum, 1936:247	rectangular mirror Group A	Muralto Villa Liverpool, Grave 12
12)	Locarno Museum, 1936:492	disc mirror Group B	Minusio Cadra, Grave 15
13)	Locarno Museum, 1936:493	rectangular mirror Group A	Muralto Passalli, Grave 4
14)	Locarno Museum, 1936:1068	rectangular mirror Group A	Minusio Cadra, Grave 5
15	Mestni Muzej, Ljubljana G1162	rectangular mirror Group A	Ljubljana, Grave 656
16)	Narodni Muzej, Ljubljana, R8774	disc mirror Group F	Ljubljana, Grave 16

A technical report on the composition of the mirror by G C Morgan is given on M43-7.

Fig 39 Towcester. Alchester road suburbs: objects of iron (½).

IRONWORK (FIG 39; also FIGS M5-7)

1 Projectile or missile point.* Unstratified, area of Ditch 207, 1977 watching brief.
2 Possibly another, 169, Building 2/1, Phase 2, or Building 4/6c, Phase 4b. 1976 SF 852.
3 Triangular blade with tang, for mounting in a wooden block. Could be used in metal working (see Gadebridge Park 471, p172 (Manning 1974)). 83, Building 4/2b, Phase 4b. 1975 SF 660.
4 Pointed ferrule.* 336, Building 2/7, Phase 2, or Phase 4b. 1967 IW 19.
5 Punch. Possibly lead concretion on tip and head. 68, Alchester road side ditch, Phase 4a. 1975 SF 618.
6 Hook. 329, Building 2/7, Phase 2. 1967 IW 6.
7 Ox goad. 83, Building 4/2b, Phase 4b. 1975 SF 635.
8 Axe. Good example of a fundamental Roman type.* 83, Building 4/2b, Phase 4b. 1975 SF 689.
9 Lamp holder. 169, Building 2/1, Phase 2, or Building 4/6c, Phase 4b. 1976 SF 740.
10 Horse bit mouth piece? (as Hod Hill 1, PL 13, K13 (Brailsford 1962)). 156, pit, Phase 4b. 1976 SF 821.
11 Hippo sandal, Type 1. 327, Alchester road side ditch, Phase 2. 1967, IW 26.
12 Chain. Surface of Alchester road, Area 3. 1975 SF 400.

* denotes the incorporation of comments by Professor W H Manning

For additional ironwork see M50-54.

LEAD (FIGS 40-44)

All the 47 pieces of lead recovered can be attributed to Phase 4. The remarks below are based on comments by Mr S J Hughes. The heavier pieces were weighed by Mr J Rigby.

1 The cut-off edge of a poured sheet. Weight: 2.551kg. 16(1), ditch, Phase 4a. 1974 SF 142.
2 Corner of a square or rectangular piece poured on to a sandy surface. Knife mark on upper surface. Knife-cut. Weight: 1.517kg. 16(1), ditch, Phase 4a. 1974 SF 437.
3 Lump poured into water to cool. Weight: 2.184kg. Topsoil, Area 1, 1976 SF 776.
4 Piece, knife cut at both ends, cooled off in a hollow in the ground. Several knife marks on lower surface. Weight: 1.683kg. 181, Building 4/6c, Phase 4b. 1976 SF 819.
5 Lump, the result of lead having been poured into and allowed to cool in a hollow in the ground. Upper edge bent over in places. Weight: 0.965kg. 169, Building 4/6c, Phase 4b. 1976 SF 818.
6 Piece of flat sheet, cast. Topsoil, 1976 excavations. 1976 SF 835.
7 Twisted piece of sheet, many knife marks. 185, ditch, Phase 4b. 1977 watching brief.
8 Plug. Weight: 0.049kg. 173(2), pit, Phase 4b. 1976 SF 781.
9 Small fragment of sheet. Weight: 0.039kg. 172, ditch, Phase 4b. 1976 SF 807.
10 Knob with iron rod 2mm in diameter inside it. Surface of Alchester road, Area 3, 1975 SF 495.
11 Lump, poured into and cooled off in a pottery vessel. Weight: 0.769kg. 169, Building 4/6c, Phase 4b. 1976 SF 772.
12 Small fragment cut off from edge of sheet. Weight: 0.049kg. 169, Building 4/6c, Phase 4b. 1976 SF 754.
13 Rivet from a pot. 64, pit, Phase 4b. 1975 SF 546.
14 Rivet with fragment of large vessel in fabric 35b still inside it. Found by Mr D Smith while watching building work in area of Bickerstaffes Road in 1967.
15 Ingot. Poured on to a sand base in a mould, hammered, then cut into sections with a knife; this is one of the sections. Mr Mark Hassall comments on the inscription: IV: but the first stroke has been cut in error, since it is set at an angle and somewhat below the V, which probably simply signified '5'. Weight: 10.489kg (23lb 2oz, or *c* 32.033 Roman lbs). 1974 coin 438 (Constantius II, 337-341) stuck to it when found. 16(1), ditch, Phase 4a. 1974 SF 436.
16 Large piece poured on to ground, edges hammered over to form a bun-like lump. Other, smaller pieces also hammered into the lump; one could be detached and is shown. Weight: 5.812kg. 31(1), furnace in Building 4/5, Phase 4b. 1974 SF 335.
17 End of lump poured on to ground, knife cut in several places. Weight: 1.233kg. 31(1), furnace in Building 4/5, Phase 4b. 1974 SF 336.
18 Spindle whorl. Unstratified in area of layer 208(2), Plot 4/2, 1977 watching brief. There are the remains of a strip of decoration consisting of a double line of indented dots.
19 Steelyard weight. Weight: 0.675kg. 181, Building 4/6c, Phase 4b. 1976 SF 855.
20 Small disc or docket, bent. Weight: 2.698gm, almost exactly one tenth of an *uncia* and a weight might be an alternative interpretation. 3, yard, Building 4/5, Phases 4a and b. 1974 SF 258.
21 Docket(?). Pattern of wedges. Surface of Alchester road, Area 3. 1975 SF 456.
22 Rivet or fastener. 65, Phase 4b. 1975 SF 545.

Other small clippings, runs or spatters came from:

58, 66 (Building 4/2b):	4
65 (ditch east of building 4/2b):	1
Surface of Alchester road (east of Building 4/2b):	1
30, (floor, Building 4/5):	1
31(2) (furnace in building 4/5):	1
3, 18, 22 (yard outside building 4/5):	6
14 (ditch south of building 4/5):	1
16(2) (ditch east of building 4/5):	1
24 (ditch east of building 4/5):	1
Topsoil, 1974 excavations over Building 4/5:	5
169, 181 (Building 4/6c):	3

Also small fragments from Ditch 185 (plot 4/4, Phase 4a).

PEWTER (FIG 45)

1 Dish. Rotary polished except for area within foot ring on the underside. Three lathe mounting scars and filled central hole. Series of scratches on underside. Similar to one from the Appleford hoard, Berks. (Brown 1973, FIG 1, 4). 30, floor of Building 4/5, Phase 4a and b.
2 Fragment probably of a lid, notching on edge. Upper surface and outer edge polished, underside left rough. Surface of Alchester road to W of Building 4/5. 1975 SF 452.

The assistance of Mr D Brown of the Ashmolean Museum, Oxford is gratefully acknowledged.

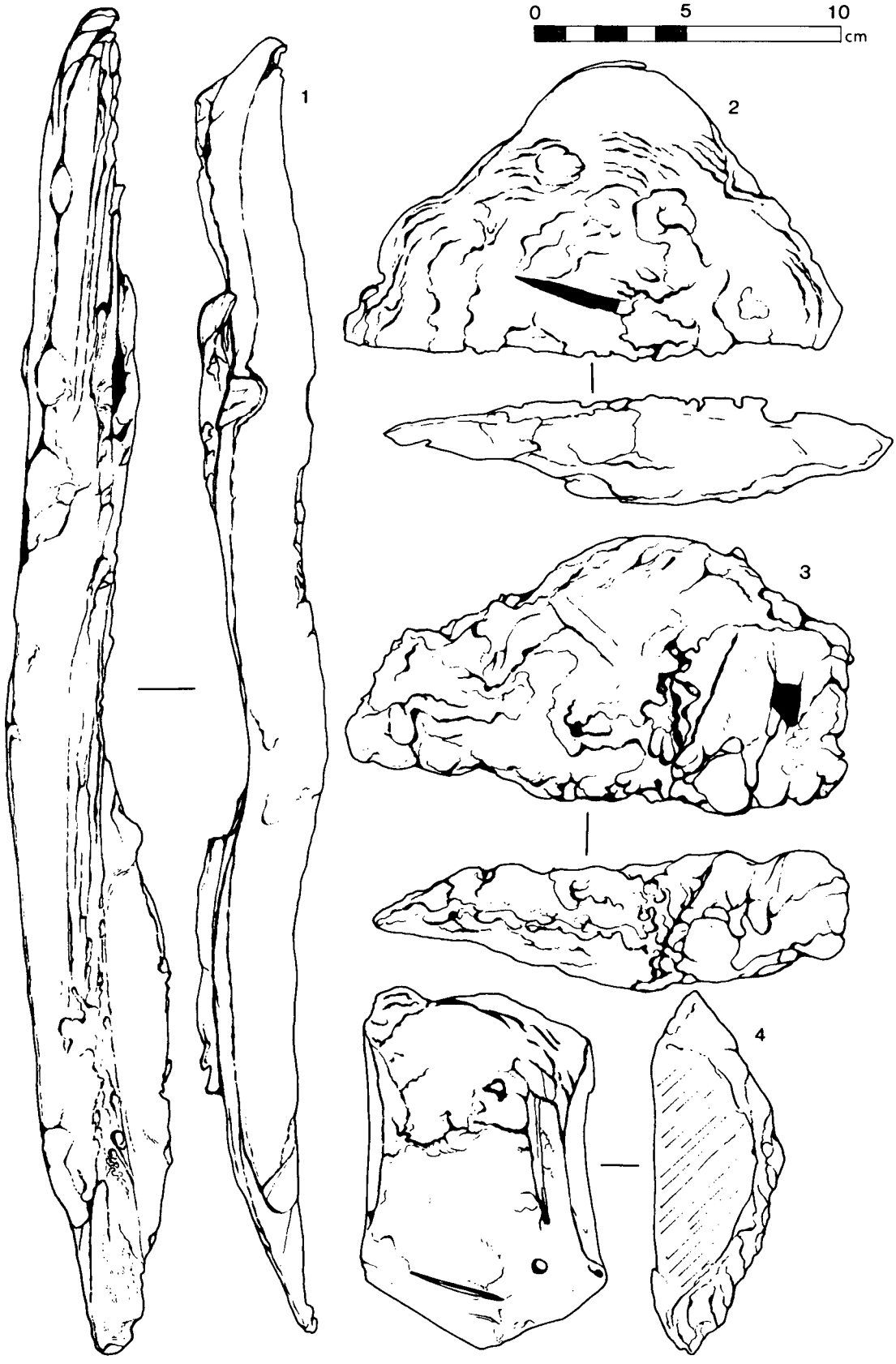


Fig 40 Towcester, Alchester road suburbs: objects of lead (½).

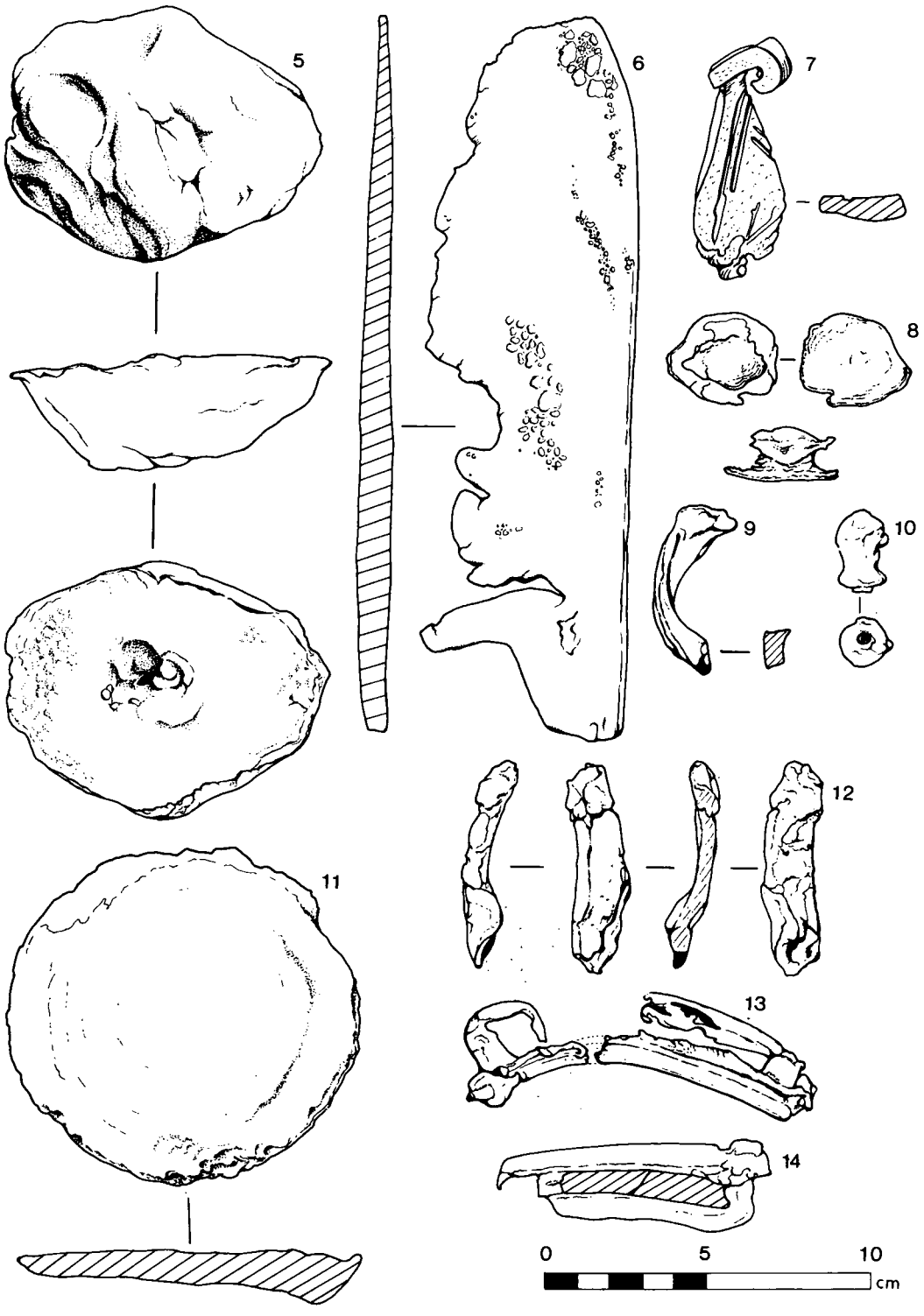


Fig 41 Towcester, Alchester road suburbs: objects of lead (½).

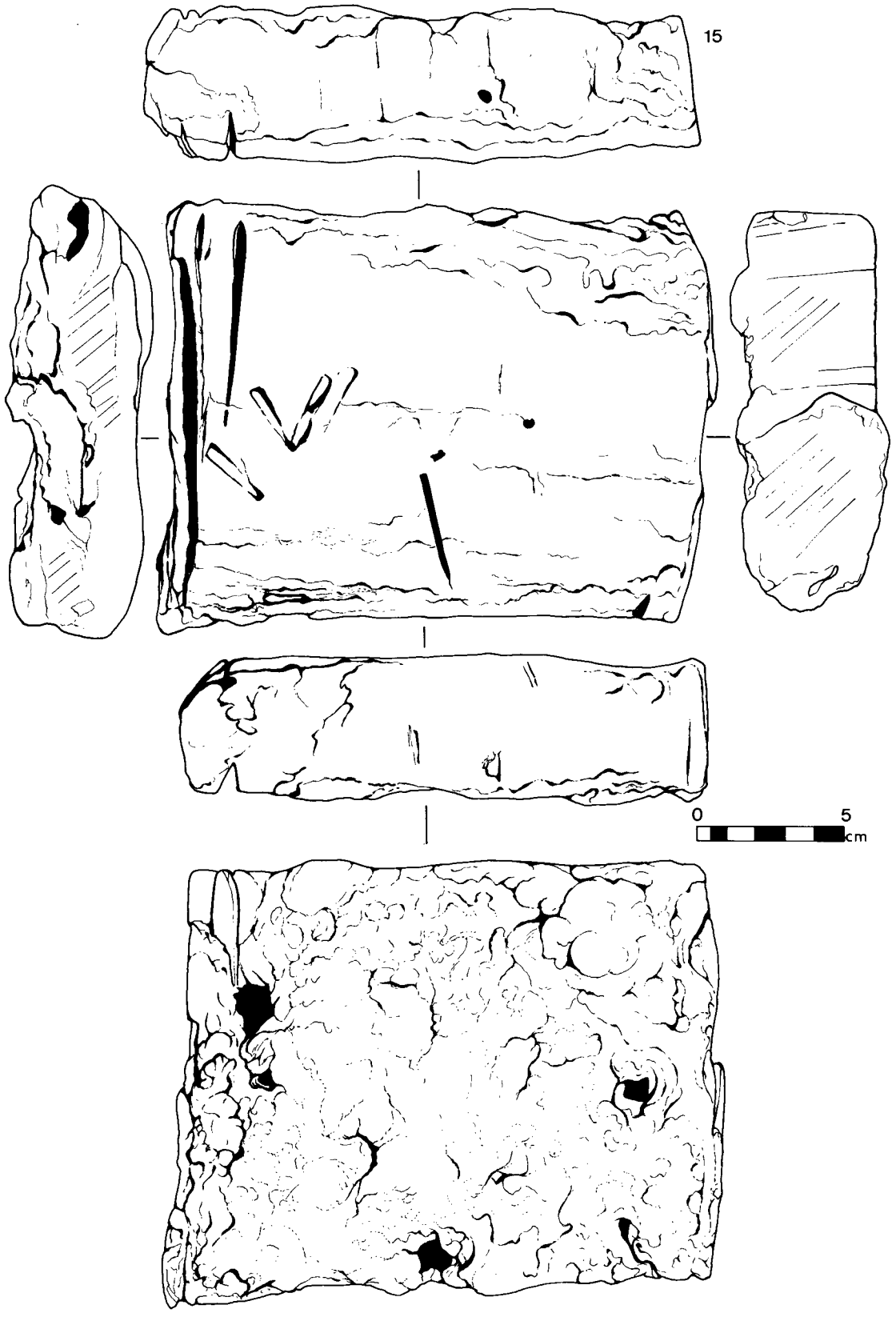


Fig 42 Towcester, Alchester road suburbs: lead pig (½).

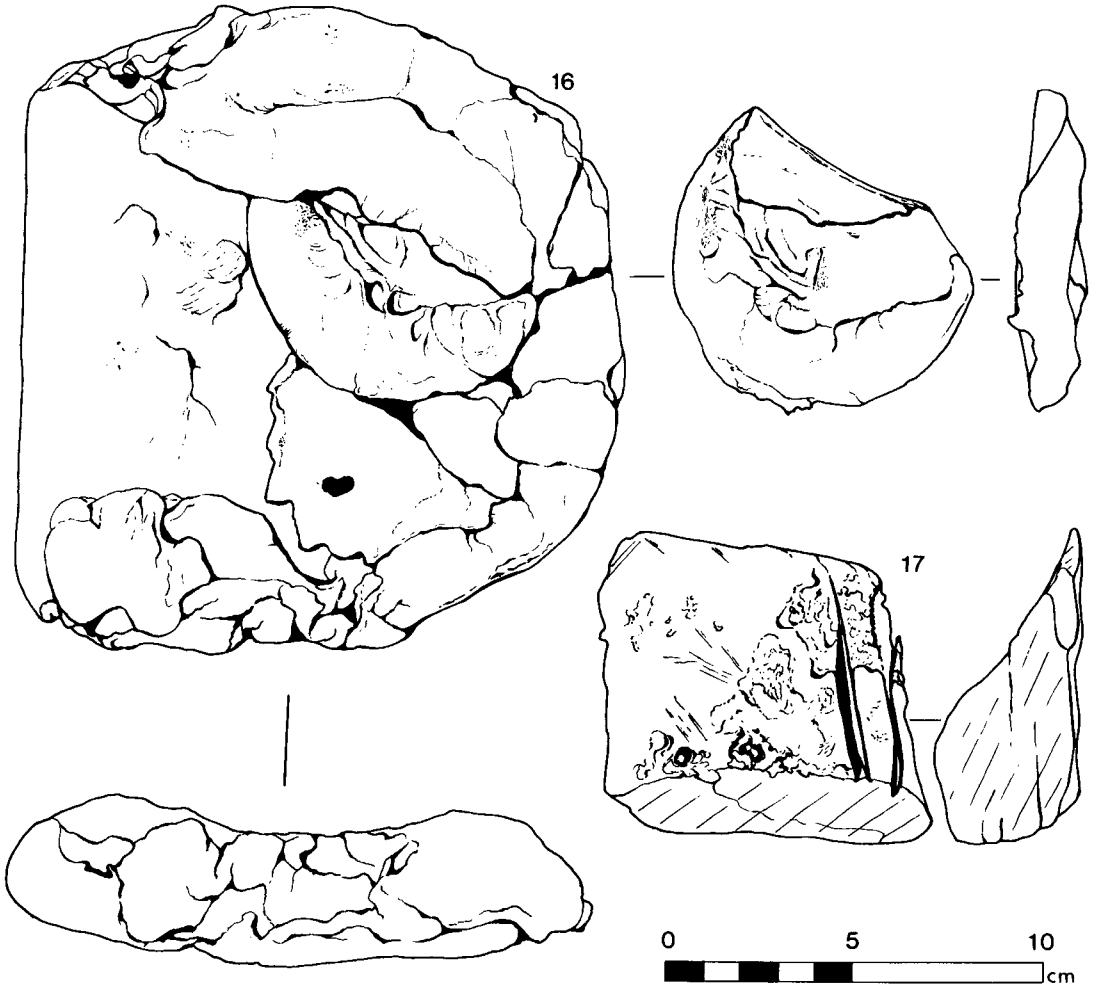


Fig 43 Towcester, Alchester road suburbs: lead from Furnace 31, Building 4/5 (½).

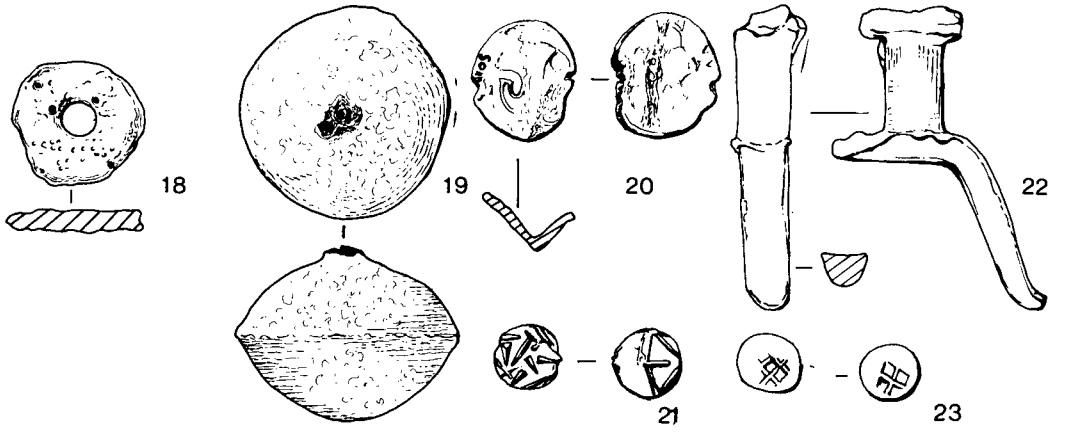


Fig 44 Towcester, Alchester road suburbs: objects of lead (Nos 18, 19, 22, ½; Nos 20, 21, 23, 1/1). For 23 see M25.

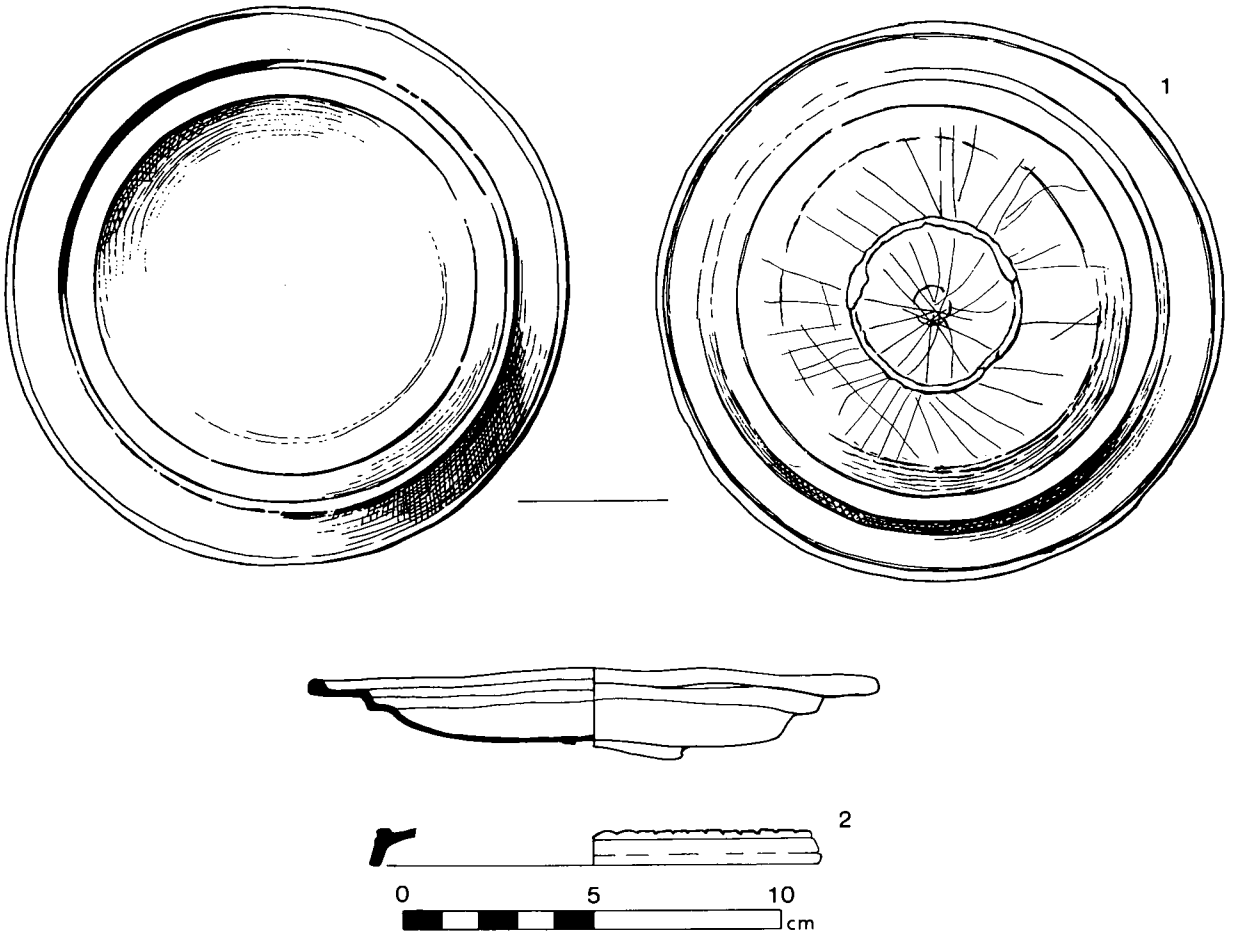


Fig 45 Towcester. Alchester road suburbs: objects of pewter (½).

GLASS FROM THE EXCAVATIONS OF 1974-76

by Jennifer Price and H E M Cool

Three hundred and eighty two fragments of Roman vessel and window glass were found during the excavations at St Lawrence Road, Towcester. Details of 205 of these will be found in the catalogue (Nos 1 to 60 and 68). The remainder are all featureless body sherds. In addition to these vessel and window fragments, seven glass beads (Nos 61 to 67) were also found. With a very small number of exceptions, details of which will be found in the catalogue, all of the glass was in very good condition and showed little if any evidence of weathering. Nos 4, 10r and s, 45, 54 and 57 showed secondary working and Nos 1, 10a, 1, m, n. and one body sherd (uncatalogued) had been affected by heat. The scarcity of sherds that had been reworked or affected by heat strongly suggests that the assemblage is primarily the result of domestic rubbish accumulation rather than a deliberate gathering together of fragments for re-melting and re-use. Twenty-one of these fragments were of colourless glass and 30 were of blue green glass. There was also one yellow glass body fragment (uncatalogued) which was found in a Phase 2 context. All of the other sherds were in the pale greenish colourless range.

Some fragments came from vessels dating from the 1st and 3rd centuries and these predate the final occupation on the site between AD 330 and *c* 370+. They include Nos 1 and 4 and probably all of the blue green fragments (Nos 7 to 10). Most of these pieces were found in Phase 4 contexts where they must be residual. However, the majority of the glass is contem-

porary with the Phase 4 occupation and represents a wide range of everyday tableware and household containers in use in Roman Britain during the first half of the 4th century. Two factors contribute greatly to the importance of this group of 4th century glass. One is that it is closely dated, and very few groups of 4th century domestic glassware found on Romano-British sites have come from dated contexts. The other is that several of the vessel forms in this group are not commonly found, and some, such as Nos 29, 36-37, and 48, have not previously been noted at sites in Britain.

Blown pad feet such as that found on No 1 occur during the 2nd century on a variety of colourless vessels. These include flasks such as the one from Hauxton, Cambs (Harden 1957, FIG 5) and cups. Although no precise parallel for the great thickness of No 1 has been found, it appears to be most closely related to a range of cups with wheel-cut decoration. These generally either take a carinated form, as in one found at Verulamium in a deposit dated to AD 150 to 155/60 (Charlesworth 1972, FIG 77/43) and two from a pit at Felmongers, Harlow dated to AD 160 to 170 (Price forthcoming). Alternately they can have a more conical form as is shown by an example from the drain at the commandant's house at Housesteads, a deposit thought to date to *c* AD 139 to 142 (Charlesworth 1971, FIG 7). No 4 is almost certainly part of the base of a colourless cylindrical cup with double base ring (Isings 1957, Form 85b). These cups were very common in Roman Britain during the 2nd and 3rd centuries.

A wide variety of conical and globular bodied jugs (Isings Forms 52 and 55) were in use during the late 1st and 2nd centuries and Nos 7 and 8 were probably fragments from such vessels. No 7 may have come from a jug like the conical one with vertical trails found in a cremation burial dated to *c* AD 85 to 95 at Winchester (Harden 1967, PL XLIIIa). No 9 is a rim fragment from a bluish green cylindrical cup or bowl of Isings Form 85. The currency of this type has already been noted in the discussion of No 4. Most of these cups were made in colourless glass but some, as No 9, were bluish green.

Twenty-two fragments of 1st and 2nd century containers were found (No 10). The majority of these fragments probably came from square bottles but at least one cylindrical bottle (No 10g) and one hexagonal bottle (No 10h) are represented amongst the fragments. All but one example (No 10l) were found in contexts that considerably post-dated their period of use. In view of this it may be significant that these fragments include most of the pieces of glass from the 1974-76 excavations which showed evidence of re-working or having been affected by heat (Nos 10a, l, m, n, s and r). It is possible that they had deliberately been gathered together for re-use in contrast to the rest of the glass which appears to be ordinary domestic rubbish.

Nos 11 to 18 are examples of hemispherical bowls decorated with bands of abraded lines. Nos 11 and 12 have curved cracked off rims and are examples of Isings Form 96. The type is a common 4th century one and has most recently been discussed in the report on the glass from Barnsley Park, Glos (Price 1982, 179). In addition to the examples given there, an example from Park Street villa, St Albans may also be noted (Harden 1945, FIG 11/6) together with one from a 4th century burial at Glaston, Rutland (Webster 1950, FIG 1/4). Nos 13 to 16 come from similar and contemporary bowls but with vertical rather than curved cracked off rims. The colourless rim fragment No 2 which has carefully cut abraded lines may also have come from a vessel of this type. Hemispherical bowls with vertical rims were also found at Barnsley Park (Price, *op cit*) and at Lankhills Winchester (Harden 1979, FIG 27/62) where one was found in a grave dated by coins to AD 350 to 370.

Nos 19 to 22, 24 and 25 are examples of hemispherical bowls decorated with trails in addition to the abraded bands. A similar vessel has come from the cemetery at Butts Road, Colchester (unpublished) while one without abraded lines was found at Lankhills, Winchester in a grave dated to AD 330 to 350 (Harden 1979, FIG 27/385). Hemispherical bowl body fragments with trailed decoration are known from Barnsley Park (Price 1982, FIG 59/16 and 17), from a late 4th century rubbish deposit at Shakenoak (Harden 1973, FIG 52/206) and in a late 4th century context at Westgate Street, Gloucester (unpublished). The fragmentary nature of these pieces, however, makes it impossible to say whether they came from vessels that also had abraded decoration. The combination of trailed and abraded decoration has not previously been noted on hemispherical bowls from British sites but it is not unknown on vessels from the Rhineland, eg on a vessel found near St Severins Church in Cologne (Fremersdorf 1962, Taf 57).

The small fragments with rather unusual trailed and blobbed decoration (Nos 26 to 28) may have come from similar vessels to Nos 19 to 22, 24 and 25. Tear-drop-shaped blobs like No 26 have been found at Frocester Court, Glos and elsewhere (Price 1979, FIG 17/20 and 21 and references) while small blob-like trail terminations similar to No 27 were found at Rudston (Charlesworth 1980, FIG 84/4). Slashed trails occur on a variety of 4th century vessels and similar trails to No 28 were found at Frocester Court (Price 1979, FIG 17/22 and 23 and references).

No 29 is a most unusual piece. It has come from a vessel which, while still in a viscous state, has had its wall pushed in with a fine pointed implement to produce an internal trail attached to the inside of the vessel at a lower point. This technique was never very common but is found occasionally on late Roman vessels and may be seen on an unprovenanced flask in the British Museum (Harden *et al* 1968, No 125).

Nos 30 to 34 are examples of conical beakers with cracked off rims (Isings Form 106). This is a very common type of 4th century vessel. Several examples were found in graves dating to the late 4th century at Lankhills, Winchester (Harden 1979, FIG 27/IIA and references), and others have come from, for example, Frocester Court (Price 1979, FIG 16/11), Silchester (Boon 1974, FIG 36/8), from a late 4th century rubbish deposit at Shakenoak (Harden 1973, FIG 52/225) and from Wint Hill, Banwell, Somerset where one was found with the segmental bowl engraved with a hunting scene (Harden 1960, FIG 9). Generally it does appear that conical beakers are far more common on 4th century sites in Britain than hemispherical bowls so it is interesting to note that amongst the glass from the excavations of 1974-76 fragments from hemispherical bowls are far more numerous than those from conical beakers. A similar phenomenon has been observed at Barnsley Park (Price 1982, 179) so it is likely that hemispeherical bowls were a commoner 4th century form in Britain than has hitherto been thought. Fourth century conical beakers generally have simple concave bases like No 34 but other variants do occur. One is the open pushed-in base represented here by No 35 and in late 4th century graves at Lankhills, Winchester by conical beakers with trailed decoration (Harden 1979, FIG 27/IIB). Another

variant is the outsplayed tubular base ring such as No 39. Concave beakers with such bases have been found at Portchester in a well whose filling appears to belong to the early 4th century (Harden 1975, FIG 198/17) and in a stone coffin found at the Mount cemetery, York (Harden 1962, PL 66/HG144).

Nos 36 and 37 have been reconstructed as parts of biconical beakers on high feet perhaps like Isings Form 109a and b, although it is possible that they could have come from biconical jugs such as Isings Form 120. No 38 could be part of the base of such a beaker as can be seen from an example found in a 4th century grave at Junglinster, Luxembourg (Fremensdorf 1962, Taf 90) but again there is the possibility that it came from a jug with a narrow body towards the base. If these fragments do represent biconical beakers on high feet, it will be the first time that such vessels have been found on a British site although a similar reconstruction has been suggested for a base from Caerwent (Boon 1972-3, FIG 4/44).

On 4th century British sites bowls and cups with fire rounded rims like Nos 40 to 44 are not so common as vessels with cracked off rims. There is, however, a growing body of evidence, to which these may now be added, to show that they had come into use by the mid 4th century. Examples have been found at, for example, Park Street villa St Albans (Harden 1945, FIG 11/5), Gadebridge Park (Charlesworth 1974, FIG 92/t and u) and Bradwell, Milton Keynes (Price 1975, FIG 33/1-3).

Nos 45 and 46 have come from vessels which have been optic blown to produce a faintly corrugated effect that can be felt on both the inside and the outside of the vessel. The optic blowing process consists of blowing a partially inflated gob of glass first into a ribbed mould and then into a plain mould. In the 4th century this process was used to produce a variety of vessels such as conical beakers, biconical jugs and cylindrical bowls. Four sherds with indented decoration have been catalogued under No 47. In none of these cases can the type of vessels they came from be suggested. Again the technique was used on a variety of 4th century vessels but especially on hemispherical bowls of Isings Form 117, as on one from Hucclecote, Glos (Clifford 1933, FIG 10). The colourless base fragment No 3 also has indented decoration in an elongated, slightly diagonal form. The fragment, which probaly came from a cup and bowl, is rather unusual and does not appear to be paralleled.

No 48 is a fragment of the neck of a triple bottle of Morin-Jean Form 63. Such bottles were in use in various parts of the Empire from the mid 1st century onwards but they were never a common form. One variant of the triple bottle with a foot-ring and an applied collar around the necks was in use during the 4th century in the north-western provinces and it is possible that No 48 is another example of this type. Such bottles have been found at Trier, Bonn and Cologne (Morin-Jean 1913, 120) and in a mid 4th century grave at Krefeld Gellup (Pirling 1967/68, Abb 9/1a). The small trailed coil No 49 may have come from the neck of a similar triple bottle or from a flask of Isings Form 129 as has been found at Frocester Court and several other sites in Roman Britain (Price 1979, FIG 18/43-45 and references).

The fragment of a dolphin handle, No 51, probably came from a bottle of Isings Form 100; an example has been found at Frocester Court and others are also known from Roman Britain (Price 1979, FIG 17/42 and references).

A wide variety of jugs was in common use during the 4th century (see Isings Forms 120 to 124) and the bases Nos 53 to 56 probably came from such vessels. Unfortunately none of these bases retain sufficient amounts of the body to allow a more precise identification to be made. The handle fragment No 52 will also have come from a 4th century jug. In this case the small amount of the shoulder that has been retained suggests that the jug had a globular body.

Mould-blown cylindrical bottles such as Nos 57 to 60 were popular during the later 3rd and 4th centuries in the north-western provinces (Price 1978, FIG 61) and they were not uncommon in Britain (Price 1979, 45). They occur in both a one- and two-handled form (Isings Forms 89 and 128) but it is not possible to say to which variety the examples from this site belong. The bases of these bottles often have names in low relief, the most frequently encountered name being FRONTINUS, often abbreviated to FRON or FRO. No 60 is a fragment of such a base which retains the letters R and O. Similar bases with the name FRONTINUS which have come from British sites include an example from Butts Road, Colchester (unpublished), one from Silchester (Boon 1974, FIG 36/117), one found in a lead coffin at Bexhill, Milton-next-Sittingbourne (Thorpe 1935, PL IIb), one from Dorchester, Oxon (unpublished British Museum 1867 7-25 1 and 2) and an example from Colliton Park, Dorchester, Dorset where the name is in retrograde (unpublished Dorset County Museum, Dorchester).

One annular bead (No 61), three small biconical beads (Nos 62 to 64) and three segmented beads (Nos 65 to 67) were also found. Annular beads such as No 61 have a long history of use in Britain dating from the 6th century BC and they were still in use during the 4th century as an example from Grave 323 at Lankhills, Winchester shows (Guido 1978, 67 and 157). Segmented and biconical beads are both primarily a 4th century form in Britain (*ibid* 92 and 97).

CATALOGUE

FIG 46

Colourless

1 SF 195. Context 17. Phases 4a and b. Fragment; side and base of bowl. Occasional small bubbles; surface affected by heat. Thick, convex-curved side; base applied as a pad from a separate blown paraison, edges missing. Two close-set, horizontal, deep, wheel-cut incisions separated by narrow cordon on lower body. Present height 30mm, thickness of wall 4mm.

2 SF 214. Context 3. Phases 4a and b. Fragment; rim of cylindrical cup. A few small bubbles. Vertical rim edge cracked off smoothly but not ground. Four clearly defined bands of abraded lines on upper body. Present height 22mm, rim diameter 90mm, thickness 1.5mm.

Also five similar body fragments each with an abraded band.

2b SF 225. Context 3. Phases 4a and b.

2c SF 134. Context 3. Phases 4a and b.

2d SF 262. Context 6(1). Phase 4b

2e SF 346. Context 31(1). Phase 4b

2f SF 438. Context — Alchester road surface; unphaseable

3 SF 158. Context 14(2). Phase 4b. Fragment; side and base of cup or bowl. Many small to medium bubbles. Sloping body curves into base, mostly missing. Vertical and slightly diagonal indentations on body. Present height 20mm, thickness 2mm.

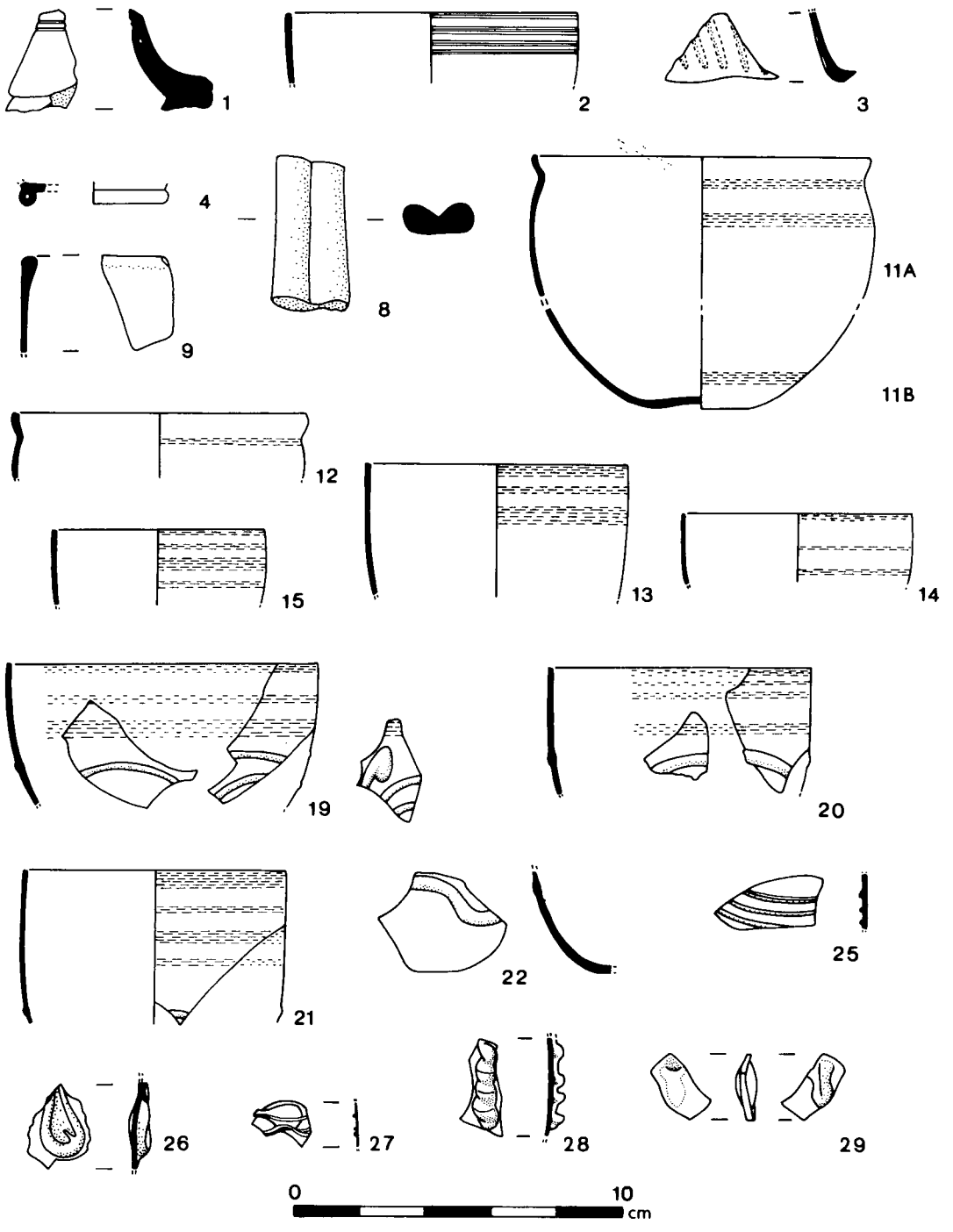


Fig 46 Towcester, Alchester road suburbs: glass (½).

4 SF 703. Context 66. Phase 4b. Fragment: base of cup or bowl. Small bubbles. Pushed-in tubular base ring and part of flat base. Junction of base with lower side of vessel grozed. Base ring diameter 45mm.

5 SF 509. Context 59. Phases 4a and b. Fragment; lower body and base, probably from conical beaker. Some small bubbles. Part of side tapering into concave base. Dimensions 36 x 20mm, thickness *c* 1.5mm.

6 SF 259. Context 12. Phases 4a and b. Fragment; base of conical beaker. Small bubbles and strain crack. Side tapers into shallow concave base with marked central thickening. Dimensions 20 x 14mm, thickness 4 to 1.5mm.

Also ten colourless vessel body fragments.

6b SF 773. Context 169. Phase 2 or 4b.
6c SF 417. Context 3. Phases 4a and b.
6d SF 512. Context 61. Phase 4a.
6e SF 326. Context 38. Phases 4a and b.
6f SF 385. Context 31(3). Phase 4a.
6g SF 337. Context 14(1). Phase 4b.
6h SF 140. Context 14(2). Phase 4b.
6i SF 93. Context 6. Phase 4b.
6j SF 599. Context 66. Phase 4b.
6k SF 262. Context 6. Phase 4b.

Blue-green

7 SF 518. Context 66. Phase 4b. Fragment; perhaps from jug. Some small bubbles. Part of curved body with vertical trail in low relief. Dimensions 25 x 19mm, thickness 2mm.

8 SF 801. Context 172. Phase 4b. Fragment; handle. Elongated bubbles, drawn. Part of straight strap handle divided into two ribs by deep central indentation. Length 48mm, section (maximum) 24 x 9mm.

9 SF 615. Context 66. Phase 4b. Fragment; rim and body of cup or bowl. Some small bubbles. Fire thickened rim, vertical upper body. Present height 30mm, thickness (body) 1.5mm.

Also five blue-green vessel body fragments.

9b & c SF 826. Context 169(2). Phase 2 or 4b.
9d SF 519. Context 63. Phase 3.
9e SF 621. Context 83. Phase 4b.
9f SF 569. Context 66. Phase 4b.

10 Bottle fragments

10a Rim fragment. SF 13. Surface find.
10b Neck fragment. SF 194. Context 2(1). Phases 4a and b.
10c Handle fragment. SF 211. Context 3. Phases 4a and b.
10d Handle fragment. SF 144. Context 3. Phases 4a and b.
10e Handle fragment. SF 698. Context 83. Phase 4b.
10f Shoulder fragment. SF 794. Context 160. Phase 4a.
10g Wall fragment, cylindrical bottle. SF 14. Surface find.
10h Wall fragment, angle of hexagonal bottle. SF 535. Context 59. Phases 4a and b.
10i Wall fragment, square bottle. SF 800. Context 175(2) Phase 4b.
10j Wall fragment, square bottle. SF 804. Topsoil, Area 4.
10k Wall fragments (4), square bottle. SF 700, 703. Context 66. Phase 4b.
10l Wall fragment, square bottle. SF 824. Context 176(1). Phase 2.
10m Wall fragment, square bottle. SF 698. Context 83. Phase 4b
10n Wall fragment, square bottle. SF 118. Context 3. Phases 4a and b.
10o Wall fragment, square bottle. SF 830. Context 169. Phase 2 or 4.
10p Wall fragment, square bottle. SF 200. Context 3. Phases 4a and b.
10q Wall fragment, square bottle. SF 423. Context 31(2). Phase 4a.
10r Wall fragment, square bottle. SF 204. Context 3. Phases 4a and b.
10s Wall fragment, square bottle. SF 223. Context 18. Phases 4a and b.

Nos 10a, l, m and n have been affected by heat. No 10s has been grozed down one side and No 10r has possibly been deliberately cut to a trapezoidal shape.

Pale green

11a SF 260. Context 3. Phases 4a and b. Fragment; rim and side of hemispherical bowl. Pale greenish colourless with many small bubbles. Curved rim, edge cracked off smoothly but not ground; convex — curved body. Two bands of abraded lines below rim on upper body. Present height 43mm, rim diameter 105mm, thickness 1 to 2mm.

11b SF 197, 198. Context 3. Phases 4a and b. SF 367, 368 Context 44. Phase 4b. Four joining fragments; lower body and base of hemispherical bowl. Colour and bubbles as in 11a above. Convex-curved side joining small concave base. One band of abraded lines on body above base. Present height 30mm, thickness 1 to 2mm.

12 SF 93. Context 6. Phase 4b. Fragment; rim of hemispherical bowl. Pale greenish colourless with many small bubbles. Curved rim, edge cracked off smoothly but not ground; convex-curved body. Narrow abraded band below rim. Present height 20mm, rim diameter 90mm, thickness 1 to 1.5mm.

13 SF 659. Context 83. Phase 4b. Fragment; rim and body of hemispherical bowl. Pale greenish colourless with many small bubbles. Vertical rim, edge cracked off smoothly but not ground; convex-curved upper body. Three bands of abraded lines on body. Present height 41mm, rim diameter 80mm, thickness 1.5mm.

14 SF 840. Context 177. Phase 4b. Fragment; rim of hemispherical bowl. Pale greenish colourless with small bubbles and some black inclusions. Vertical rim, edge cracked off smoothly but not ground; convex-curved body. Three bands of abraded lines. Present height 22mm, rim diameter 70mm, thickness 1mm.

15 SF 250. Context 3. Phases 4a and 4b. Fragment; rim of hemispherical bowl. Colourless with greenish tinge; small bubbles. Vertical rim, edge cracked off but not ground. Slightly convex-curved body with four bands of abraded lines below rim. Present height 23mm, rim diameter 65mm, thickness 1mm.

16 SF 698. Context 83. Phase 4b. Two joining fragments; rim of hemispherical bowl. Pale greenish colourless with many small bubbles. Vertical rim, edge cracked off but not ground; slightly convex-curved body. Three bands of abraded lines below rim. Present height 24mm, thickness 1mm.

17 SF 8. Surface find. Four fragments, two joining; body of hemispherical bowl. Pale greenish colourless with small bubbles. Convex-curved body with one band of abraded lines. Dimensions 26 x 37mm, 51 x 15mm, 40 x 11mm, thickness 1mm.

18 SF 18. Surface find. Fragment; body of (?) hemispherical bowl. Pale yellowish colourless with some small bubbles. Convex-curved body. Two bands of abraded lines. Dimensions 24 x 15mm, thickness 1.5mm.

19 SF 83. Context 5. Phase 4b.
SF 156. Context 14(1). Phase 4b.
SF 249. Context 16(2). Phase 4a.
SF 366. Context 44. Phase 4b.
One rim and five body fragments (not joining) of hemispherical bowl. Pale greenish colourless with many small bubbles and some black inclusions. Vertical rim, edge cracked off but not ground; convex curved body. Three bands of abraded lines below rim, below these applied trails in high relief. The pattern of these cannot be reconstructed but probably consisted of loops and spirals around the side. One fragment retains a blob-like terminal to a trail. Present height 41mm, rim diameter *c* 95mm, thickness 1 to 1.5mm.

20 SF 149. Context 3. Phases 4a and b.
SF 156. Context 14(1). Phase 4b.
One rim and one body fragment (not joining) of hemispherical bowl. Pale greenish colourless with small bubbles and occasional black inclusion. Vertical rim, edge cracked off smoothly but not ground; convex-curved body. Three bands of abraded lines below rim with a fourth band on upper body. Below abraded bands an applied thick, curving trail in low relief. Present height 38mm, rim diameter 80mm, thickness 1.5mm.

21 SF 249. Context 16(2). Phase 4a. Two rim and one body fragments (not joining) of hemispherical bowl. Pale greenish colourless with small bubbles and occasional black inclusions; surface dulled. Vertical rim, edge cracked off smoothly but not ground; convex-curved body. Four bands of abraded lines on upper body, below these an applied thick trail in shallow relief. Present height 46mm, rim diameter 80mm, thickness 1mm.

22 SF 122. Context 16. Phase 4a. Fragment; body and base of hemispherical bowl. Pale green with many small bubbles and occasional black inclusions. Convex-curved body curving into beginning of flattened base. Thick trail in shallow relief applied in a reverse 'S' pattern. Present height 31mm, thickness 1 to 2.25mm.

23 SF 538. Context 58. Phase 4b. Fragment; base of hemispherical bowl. Pale greenish colourless with small bubbles and strain cracks. Lower body curving into very shallow, concave base. Dimensions 37 x 16mm, thickness 2mm.

Also one fragment of a similar base

23b SF 60. Surface find.

24 SF 262. Context 6(1). Phase 4b.
SF 156. Context 14(1). Phase 4b.
Four fragments (not joining); body of hemispherical bowl. Pale greenish colourless with small elongate bubbles. Convex-curved body. Very narrow trails in high relief applied approximately parallel to each other. Dimensions 31 x 18mm, 19 x 9mm, 20 x 8mm, 10 x 6mm, thickness 1mm.

25 SF 12. Surface find. Body fragment. Pale greenish colourless with small bubbles and strain cracks. Curved body. Three narrow, unmarvered, spiral trails in high relief. Dimensions 32 x 25mm, thickness 1.5mm.

26 SF 837. Unstratified. Body fragment. Pale greenish colourless with small bubbles and strain crack. Applied tear-drop-shaped blob pressed down centrally to produce round raised edges; upper part of blob develops into two broken trails. Dimensions 24 x 19mm.

27 SF 60. Surface find. Body fragment. Colourless with greenish tinge; small bubbles. Curved body fragment with parts of three unmarvered, spiral trails in low relief including a blob-like terminal. Dimensions 18 x 13mm, vessel thickness 0.5mm.

28 SF 135. Context 3. Phases 4a and b. Pale greenish colourless with some small bubbles. Slightly curved body with thick, applied, vertical trail in high relief; slashed to produce ridged effect. Dimensions 29 x 12mm, thickness of vessel 1mm.

29 SF 229. Context 3. Phases 4a and b. Body fragment. Pale green with some small bubbles. Body decorated by part of its wall being pushed in with fine pointed implement and attached to inside of vessel further down. Dimensions 20 x 11mm, thickness of vessel 2mm.

Also six body fragments with one applied trail

29b SF 538. Context 58. Phase 4b.
29c SF 198. Context 3. Phases 4a and b.
29d SF 341. Context 22. Phases 4a and b.
29e SF 614. Context 66. Phase 4b.
29f SF 45. Surface find.
29g SF 61. Surface find.

FIG 47

30 SF 149. Context 3. Phases 4a and b.
SF 156. Context 14(1). Phase 4b.
One rim and one body fragment (not joining) of conical beaker. Pale greenish colourless with small bubbles and some black inclusions. Curved rim, edge cracked off smoothly but not ground; straight side tapering inwards. Two bands of abraded lines below rim, upper one not parallel to rim. Present height 52mm, rim diameter 85mm, thickness 0.8mm to 1mm.

31 SF 569. Context 66. Phase 4b. One rim and two body fragments (not joining) probably from conical beaker. Colourless with green tinge; very small bubbles. Curved rim, edge cracked off smoothly but not ground. Narrow band of abraded lines below rim. Present height 12mm, rim diameter *c* 65 to 75mm, thickness *c* 1mm.

Also three rim fragments as No 31 above; No 31b having an abraded band below rim.

31b SF 58. Surface find.
31c SF 60. Surface find.
31d SF 158. Context 14(2). Phase 4b.

Also four curved rims, edges cracked off smoothly but not ground, either from hemispherical bowls or conical beakers; No 31h having an abraded band below rim.

31e SF 152. Context 2(1). Phases 4a and b.
31f SF 175. Context 12. Phases 4a and b.
31g SF 225. Context 3. Phases 4a and b.
31h SF 173. Context 14(1). Phase 4b.

32 SF 385. Context 31(3). Phase 4a. Body fragment from

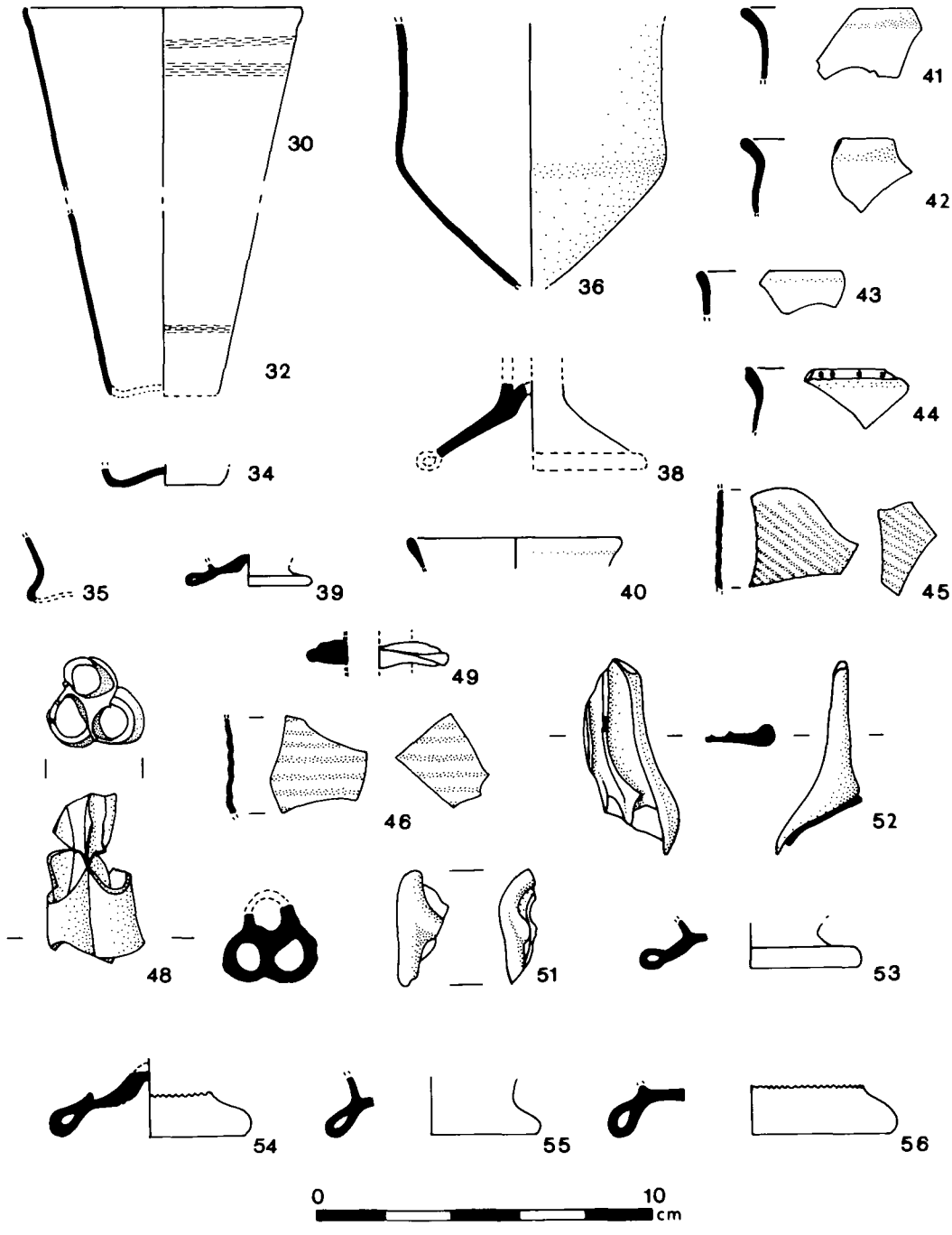


Fig 47 Towcester, Alchester road suburbs: glass (½).

just above base of conical beaker. Pale greenish colourless with small bubbles and some black inclusions. Straight side tapering inwards and beginning to curve into base. Narrow band of abraded lines on lower body. Present height 54mm, thickness 1 to 1.2mm.

33 SF 206. Context 14(1) Phase 4b. Fragment; body of conical beaker. Pale greenish colourless with small bubbles; straight side. Narrow, slightly meandering wheel-cut line. Present height 22mm, thickness 1.2mm.

Also six body fragments with an abraded band probably either from hemispherical bowls or conical beakers.

33b SF 92. Context 3. Phases 4a and b.
33c SF 262. Context 6(1). Phase 4b.
33d SF 540. Context 66. Phase 4b.
33e SF 569. Context 66. Phase 4b.
33f SF 509. Context 59. Phases 4a and b.
33g SF 58. Surface find.

34 SF 6. Surface find. Fragment; base of conical beaker. Greenish colourless with small bubbles. Straight side curving into concave base. Present height 6mm, base diameter 35mm, thickness 2.5 to 2mm.

35 SF 509. Context 59. Phases 4a and b. Fragment; side and base of beaker. Pale greenish colourless with small bubbles and strain crack. Curved body with part of the side of an open, tubular, pushed-in base ring. Dimensions 20 x 19mm, thickness 1.5mm.

36 SF 249. Context 16(2). Phase 4a. Two body fragments (not joining) of biconical beaker or goblet on high foot. Pale greenish colourless with many small bubbles. Cylindrical body with slightly concave sides bending through an abrupt carination into a conical lower part. Present height *c* 80mm, diameter at carination *c* 80mm, thickness 1.5 to 2mm.

37 SF 508. Context 58. Phase 4b. Fragment; possibly from body of vessel similar to No 36. Pale greenish colourless with small bubbles. From carination between cylindrical upper part and conical lower part. Dimensions 35 x 14mm, thickness 1.5mm.

38 SF 230. Context 3. Phases 4a and 4b. Fragment; base of (?) beaker or goblet similar to No 36. Pale greenish colourless with many small bubbles and some strain cracks. Broken fragment of a high, outsplayed, tubular base ring with concave base and central kick; tubular edge missing. Wall of vessel rises from near to central kick of base. Present height *c* 20mm, present diameter of base *c* 55mm.

39 SF 416. Context 38. Phases 4a and b. Fragment; base of (?) conical beaker. Pale greenish colourless with small bubbles; surface dulled. Outsplayed, tubular base ring; concave base with central kick. Base ring diameter 38mm.

40 SF 149. Conext 3. Phase 4a and b. Fragment; rim of (?) cup. Pale greenish colourless with streaky yellow discolouration due to an inclusion in the metal; some elongated bubbles mainly at rim. Slightly everted rim with fire thickened edge. Present height 9mm, rim diameter 65mm, thickness 1mm.

41 SF 15. Surface find. Fragment; rim of cup or bowl. Pale greenish colourless with small bubbles and black inclusions. Everted rim, edge fire thickened; cylindrical body. Present height 18mm, thickness 1mm.

42 SF 667. Context 83. Phase 4b. Fragment; rim of hemispherical (?) bowl. Pale greenish colourless with small elongated bubbles and some black inclusions. Everted rim, edge fire rounded; convex-curved body. Present height 19mm, thickness 2mm.

43 SF 97. Context 7(3). Phase 4b. Fragment; rim of (?) bowl. Pale greenish colourless with small bubbles. Everted rim, edge fire rounded. Present height 14mm, thickness 1.5mm.

Also one other rim fragment as No 43

43b SF 569. Context 66. Phase 4b.

44 SF 795. Context 175. Phase 4b. Fragment; rim of bowl. Yellowish green with some small bubbles, some of which are elongated. Everted rim, edge fire thickened; outer edge of rim broken resulting in a shallow channel immediately below rim — possibly deliberate secondary working. Present height 18mm, thickness 1mm.

45 SF 116. Context 3. Phases 4a and b.
SF 209. Context 14(1). Phase 4b.
Two fragments (not joining) of body of beaker. Pale greenish colourless with small bubbles, sometimes elongated. Optic blown. Convex-curved body with close set, diagonal corrugations fading out towards one side; corrugations and elongation of bubbles approximately parallel to each other. Dimensions 28 x 31mm, 28 x 16mm, thickness 1 to 1.5mm.

46 SF 93. Context 3. Phases 4a and b.
SF 369. Context 44. Phase 4b.
Find Nos 8, 46 — surface finds. Five fragments (two joining) of body of (?) bowl. Pale greenish colourless with small to medium bubbles, sometimes elongate. Optic blown. Vertical side with curve near bottom of fragment and with widely spaced corrugations. Corrugations and elongation of bubbles approximately parallel to each other. Dimensions 30 x 28mm, 37 x 24mm, 25 x 22mm, 21 x 8mm, thickness 1.5mm.

Also 16 similar body fragments

46b SF 550. Context 63. Phase 3.
46c SF 538. Context 58. Phase 4b.
46d SF 119. Context 3. Phases 4a and b.
46e,f SF 134. Context 3. Phases 4a and b.
46g,h SF 139. Context 12. Phases 4a and b.
46i SF 683. Context 97. Phase 4a.
46j SF 851. Context 44. Phase 4b.
46k SF 346. Context 31(1). Phase 4b.
46l SF 796. Context 159(2) Phase 4b.
46m,n SF 509. Context 59. Phases 4a and b.
46o SF 831. Context 169. Phase 2 or 4.
46p SF 510. Context 57. Unphaseable
46q SF 60. Unstratified.

47 Four body fragments with indented decoration

47a SF 538. Context 58. Phase 4b.
47b SF 202. Context 14(1). Phase 4b.
47c,d SF 5, 42. Surface finds.

48 SF 521. Context 3. Phases 4a and b.
SF 489. From surface of road in Area 3. Unphaseable. Two joining fragments from neck of triple bottle. Pale greenish colourless with many small to medium bubbles, some elongated; strain cracks. Drawn. Three approximately circular-sectioned necks united at central spine which contains many large elongated bubbles. Present height 49mm, approximate circumference *c* 29mm.

Also two body fragments possibly from an internal division in

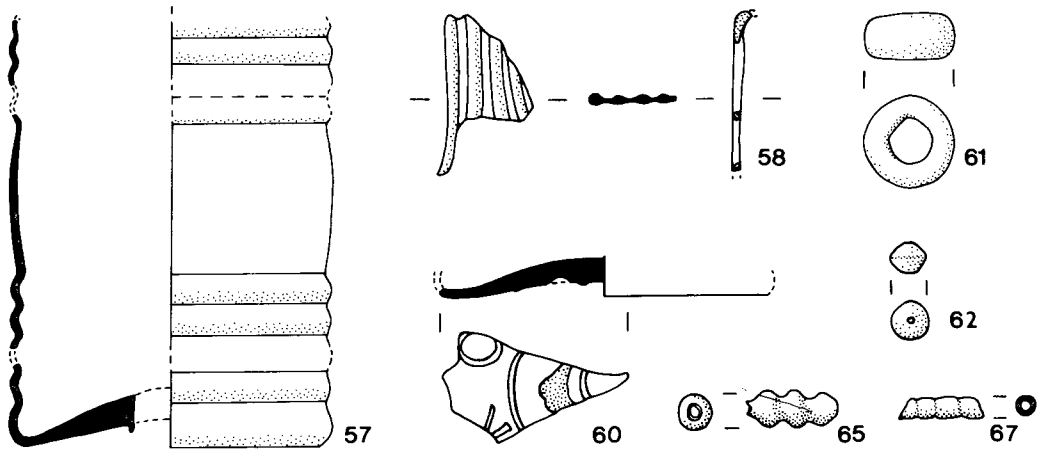


Fig 48 Towcester, Alchester road suburbs: glass (1/1).

a similar bottle.

48b SF 321. Context 31(1). Phase 4b.

49 SF 134. Context 3. Phases 4a and b. Fragment from neck and neck-ring of flask. Pale greenish colourless with elongate bubbles. Very small portion of neck remains with thick horizontal ring applied in coils showing the tapering end of trail lying along top of main coil. Diameter of neck *c* 20mm.

50 SF 122. Context 16. Phase 4a. Fragment; neck of (?) flask. Pale greenish colourless with occasional small bubbles, some elongated; surface dulled. Diameter of neck (external) 30mm, thickness 3mm.

51 SF 229. Context 3. Phases 4a and b. Fragment; dolphin handle. Pale greenish colourless with small bubbles. Small portion of shoulder of flask, handle had claw-like projection onto shoulder. Dimensions 36 x 14mm.

52 SF 266. Context 19 — recent land drain. Fragment; handle and body of jug. Pale green with small bubbles, elongated in handle. Body blown, handle drawn. Angular ribbon handle with one side missing. Handle has pronounced side ridge and two ridges in lower relief in centre, each ridge ends in a claw-like elongation at the attachment to the curving shoulder. Present height of handle 57mm, present width of handle 20mm.

Also two small fragments of similar handles

52b SF 228. Surface find.

52c SF 491. Surface of road in Area 3 — unphaseable.

53 SF 145. Context 3. Phases 4a and b.
SF 203. Context 7(2) Phase 4a.
Two joining fragments of jug base. Pale greenish colourless with many small bubbles. Body (majority missing) tapers into high, outsplayed, pushed-in base ring with tubular edge and pronounced concavity; central part of base missing. Base ring diameter 66mm.

54 SF 251. Context 3. Phases 4a and b. Fragment; jug base. Pale greenish colourless with many small bubbles; strain crack. High, outsplayed, pushed-in base with tubular edge and high concave base with central kick and pontil scar; grozed side. Base ring diameter 60mm.

55 SF 490. Surface of road Area 3 — unphaseable. Fragment; jug base. Pale greenish colourless with small bubbles. Body (majority missing) tapers into high, outsplayed, pushed-in base ring with tubular edge and concave base, central part of base missing. Base ring diameter 65mm.

56 SF 295. Context 29. Phases 4a and b. Fragment; jug base. Pale greenish colourless with small bubbles and many strain cracks; surface dulled. Outsplayed, tubular base ring with majority of central part of base missing; side grozed. Base ring diameter 85mm.

FIG 48

57 SF 40, 41, 43, 59. Surface finds.
SF 92. Context 3. Phases 4a and b.
SF 334. Context 30. Phase 4a and b.
Three joining base fragments and 11 body fragments (four joining) of cylindrical bottle. Pale green with many small bubbles and streaky yellow inclusions. Mould blown in two-part mould with separate base piece. Vertical side with a zone of horizontal corrugations above and below a plain zone, two vertical mould ridges. Concave base with traces of pontil scar. Present height *c* 95 to 100mm, body diameter *c* 85mm, maximum wall thickness 2mm.

58 SF 8. Surface find.
SF 535. Context 59. Phases 4a and b.
SF 262. Context 6(1). Phase 4b.
Six fragments of body and one fragment of handle (not joining) of cylindrical bottle. Pale greenish colourless with many small bubbles and some black inclusions. Mould blown as No 57. Vertical side with one zone of horizontal corrugations and one plain zone. One fragment retains vertical mould ridge and body is slightly distorted at junction. Broken handle with vertical ribs bending through 90° at top and expanding in width towards bottom. Dimensions 45 x 30mm, 49 x 25mm, 50 x 27mm, 30 x 15mm, 25 x 15mm, 29 x 13mm, maximum

thickness of wall 1.8mm, handle dimensions 43 x 24mm maximum width.

59 SF 213, 215. Context 3. Phases 4a and b. Two joining neck fragments from cylindrical bottle similar to Nos 57 and 58. Pale greenish colourless with small to medium elongated bubbles. Cylindrical neck with remains of mould mark at base where it joined the shoulder. Present height 37mm, neck diameter (external) 25mm, thickness 2.5mm.

60 SF 212. Context 3. Phases 4a and 4b. Fragment; base of cylindrical bottle as Nos 57 and 58. Pale greenish colourless with many bubbles. Mould blown. Concave base with parts of letters 'R' and 'O' in shallow relief on underside placed between a shallow circular moulding and edge; a second circular moulding near centre. Pontil scar. Base diameter *c* 90mm.

Also eight fragments of corrugated body

60b SF 134. Context 3. Phases 4a and b.
60c SF 152. Context 2(1). Phases 4a and b.
60d SF 301. Context 25. Phase 4b.
60e SF 173. Context 14(1). Phase 4b.
60f SF 321. Context 31(1). Phase 4b.
60g SF 761. Context 148. Phase 4b.
60h SF 340. Unstratified.
60i SF 60. Surface find.

Also one fragment possibly from shoulder of a mould blown cylindrical bottle.

60j SF 118. Context 3. Phases 4a and b.

Objects

61 SF 636. Context 97. Phase 4a. Large annular bead; translucent sapphire blue; wear has distorted large central perforation. Weathered. Diameter 12mm, thickness 6mm.

62 SF 516. Context 63. Phase 3. Small biconical bead; translucent green; small central perforation. Diameter 5mm, thickness 4mm.

63 SF 612. Context 83. Phase 4b. Description as No 63. Diameter 4.5mm, thickness 3mm.

64 SF 580. Context 66. Phase 4b. Description as No 63; translucent sapphire blue. Diameter 4.5mm, thickness 2.5mm.

65 SF 676. Context 129. Phase 4b. Segmented bead, three segments; opaque blue/green with winding marks; oval-sectioned, small central perforation. Diameter 5 x 4.5mm, length 12mm.

66 SF 21. Surface find. Segmented bead, two poorly formed segments; opaque green with winding marks; oval-sectioned; small central perforation. Diameter (maximum) 5 x 4mm, length 7.5mm.

67 SF 549. Context 63. Phase 3. Segmented bead, 3½ segments in shallow relief; opaque mid-blue with winding marks; large central perforation. Diameter 3mm, length 10.5mm.

68 Window glass.

Two fragments of matt/glossy

68a SF 598. Context 66. Phase 4b.
68b SF 38. Context 96. Phase 4b.

13 fragments of double glossy

68c SF 615. Context 86. Phase 4b.
68d SF 511. Context 58. Phase 4b.
68e,f SF 423. Context 31(2). Phase 4a.
68g SF 560. Context 65. Phase 4b.
68h SF 150. Context 12. Phases 4a and b.
68i SF 717. Context 61. Phase 4a.
68j SF 254. Context 3. Phases 4a and b.
68k SF 539. Context 66. Phase 4b.
68l,m SF 797. Context 156. Phase 4b.
68n,o SF 830. Context 169. Phase 2 or 4b.

OBJECTS OF STONE (FIG 49)

1 Intaglio: Dr Martin Henig reports as follows:
Physical description: cornelian ringstone, cloudy orange in colour. Oval and convex on both faces (more markedly so on lower, non-engraved surface).
Shape: A2 (27)
Dimensions: 12 x 10 x 0.5mm
Condition: very good, but slight wear around intaglio, concomitant on its use as a signet.
The device: an impression taken from the intaglio shows a cock with a prominent comb standing in profile to the right above a cornucopia. Gough records an onyx from Silchester showing 'a cock picking out of a cornucopia' but this is no longer extant (28). The device occurs on a cornelian now in Braunschweig and on a plasma in Vienna (29).
Date: the somewhat disorganised and hasty style of cutting, and the use of deep gouge-like strokes to impart texture to the bird's plumage confirms the archaeological evidence for dating. Comparison may be made with the Eagle and Standards intaglio from Witcombe and a similar stone in Munich, both of late 3rd century date and with an intaglio from Catsgore (showing Minerva) which may have been cut in the 4th century (30).

With the exception of cameos, glyptic art was in decline (at least quantitatively) from the age of the Severi. The Towcester stone is one of the few from British sites which can be ascribed with some degree of certainty to the age of the Tetrarchy when, it must be remembered, the jet industry was at its apogee (31).
Interpretation: the cock was a bird of good omen and is frequently encountered on gems with symbols of prosperity (corn-ears or, as here, a cornucopia)(32). A nicolo in Aquileia shows a cock with a cornucopia, as well as with a ram's head and a caduceus, reminding us that the bird is specifically associated with Mercury, a deity much concerned in the fortunes of the individual (33). 3, yard, Building 4/5, Phases 4a and b. 1974 SF 73.

2 Stone axe, Neolithic. Dr W A Cummins, Department of Geology, University of Nottingham, reports that it is made of a fine grained epidotised volcanic tuff, petrological Group VI, from Great Langdale. 66, Building 4/2b, Phase 4b. 1975 SF 551.

Hones. Mineralogical identifications by Dr D T Moore, Department of Mineralogy, British Museum (Natural History).

3 Kentish Ragstone. 282(1), Alchester road side ditch, Phase 2.

4 A muscovite bearing grit, unknown source. 202, ditch, Phase 4a.

5 A low grade metamorphic rock rich in muscovite. The harder minerals are ore and perhaps quartz. 'A makeshift hone'. 83, Building 4/2b, Phase 4b. 1975 SF 611.

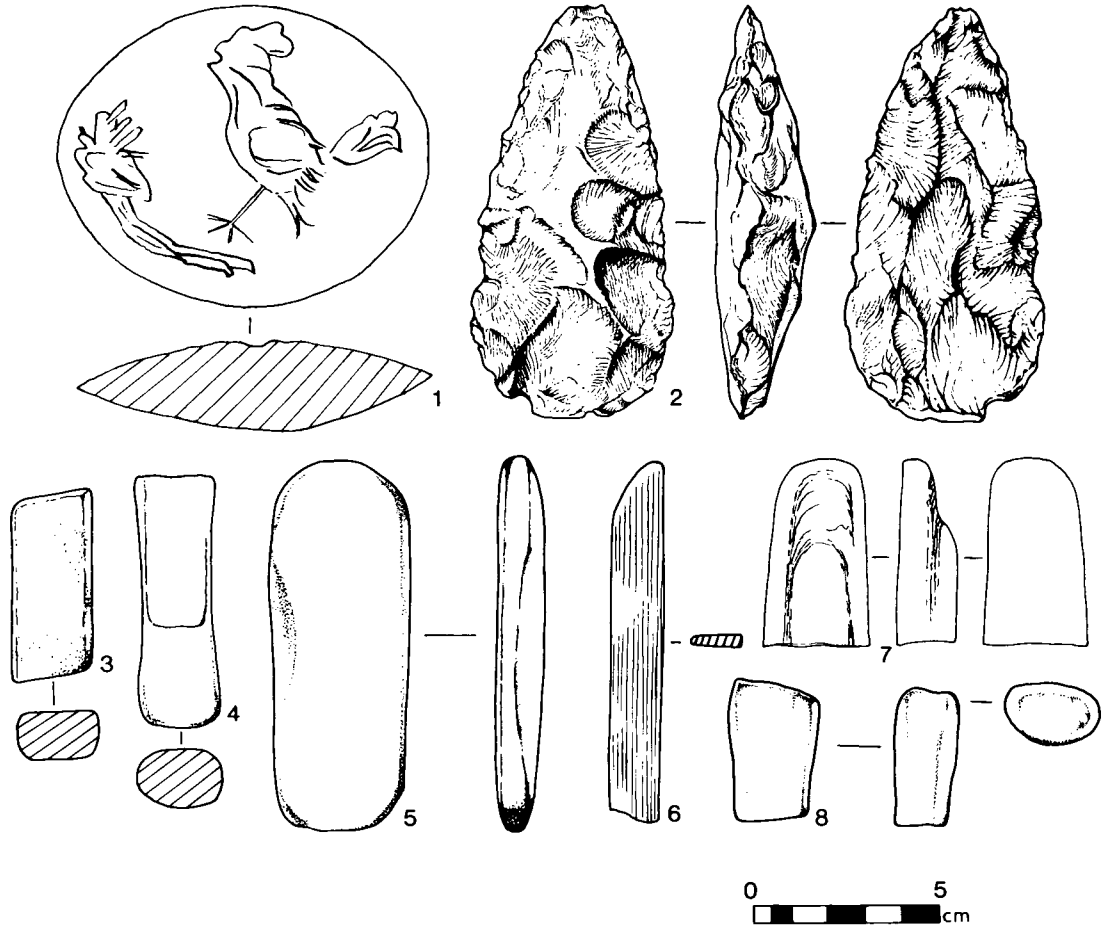


Fig 49 Towcester, Alchester road suburbs: objects of stone (all ½ except No 1 which is x 5).

6 Kentish Ragstone. 327, Alchester road side ditch, Phase 2. 1967 SF 17.
7 A fine grained quartzite. 169, Building 2/1, Phase 2, or Building 4/6c, Phase 4b. 1976 SF 774.
8 A quartz-glauconite limestone, Kentish Rag. 173(2), pit, Phase 4b.
9 Piece of fine Jurassic limestone containing much argillaceous material. Tool scratches on surface of both sides. 205, plot side ditch, Phase 4a. (FIG M11, 9).

For the quernstones, see M59-62.

WOOD (FIG 50)

by G C Morgan, Department of Archaeology, University of Leicester

1 Basket handle, of twisted, unidentifiable small twigs. The traditional material is willow. Ditch 44, Building 4/5, Phase 4b.
2 Flat piece of wood 65mm long, 30-33mm wide, 2-4mm thick, pine type. ?writing tablet fragment. Ditch 14(2), Building 4/5, Phase 4b. 1974 S49.

For identifications of the other pieces of wood found, M76-83.

BONE AND ANTLER (FIG 51)

1 Iron razor in bone handle. 83, Building 4/2b, Phase 4b. 1975 SF 610.
2 Fragment turned bone handle. 3, yard, Building 4/5, Phases 4a and b. 1974 SF 146.
3 Antler hoe, points worn (as Rees 1981, FIG 14). 83, Building 4/2b, Phase 4b. 1975 SF 666.
4 Worked *Cervus* antler. 3, yard, Building 4/5, Phases 4a and b. 1974 SF 853.
5 Fragment sawn antler. 66, Building 4/2b, Phase 4b. 1975 SF 854.
6 Bone awl made from sheep metacarpal (information from Mrs C Orr). 170, pit, Phase 4b. 1974 SF 81.

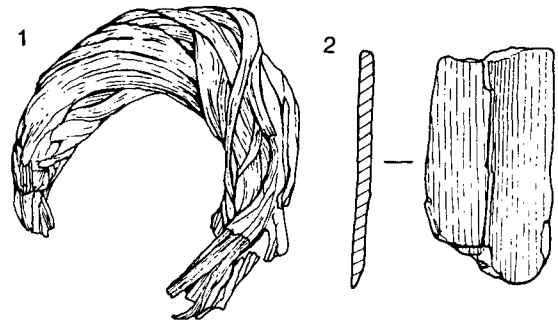


Fig 50 Towcester, Alchester road suburbs: objects of wood (No 1, 1/1; No 2, ½).

METALLURGICAL SPECIMENS

by G C Morgan, Department of Archaeology, University of Leicester

PHASE 2

Upper part of fill, Alchester road side ditches
i) Eastern side
4. Four fragments 20mm across, of partially reacted vesicular slag or iron ore (1974, S 18).
ii) Western side
123 (1). Piece of light vesicular fayalite and fused clay, 42 x 32mm (1975 S235).
282 (2). Vesicular fayalite slag; several small pieces. Also two pieces of fired clay: from a low temperature furnace, or possibly daub.

Structures
329. Plot 2/7, area of Building 2/9, several lumps, 70-40mm across of iron slag, vesicular. Could be the result of smithing or smelting operations (1967 IS3).

PHASE 4(a)

Ditch, east of Alchester Road
97. Small piece of vesicular fayalite and iron 53mm long, with rippled surface: tap slag from smelting (1975 S 247).

Ditch, west of Alchester Road
319. Small plano-convex cake of iron slag, 70 x 50mm across plus smaller ones. Smelting or smithing debris (1967, IS4).

Structures and other features
154(1). Plot 4/1, Building 4/6b. Piece of sandy haematite, 40 x 30mm (1976 S 320).
31(2). Plot 4/8, furnace in Building 4/5. Rounded lump 80mm across of burnt white sandy clay: a section of furnace lining (1974 S168).
31(3). As above. Two small rounded lumps of burnt white sandy clay (1974 S 173). S134 consists of seven similar lumps up to 40mm across.

PHASE 4(b)

Structures and other features
169. Plot 4/1, Building 4/6 (could also belong to Plot 2/1, Building 2/1 because of lack of clear stratigraphy at this point). Lump (90mm long) of sandy partly sintered haematite (1976 S307).
181 (as above). Sandy haematite lumps; largest is 120 x 100m (1976, S 321)
175. Plot 4/1, internal boundary ditch. Piece of hammer slag 50mm long and piece of fayalite slag 110mm long (1976 S 316).
180. Plot 4/2, furnace inside Building 4/1b. Several small pieces of sandy white clay, burnt, with smooth surfaces. Used for moulds or for furnace lining (1976, S 324).
66. Plot 4/3. Stone floor, Building 4/2b. Tiny (9 x 8 x 7mm) fragment, partially fired micaceous clay. Mould fragment? (1975 S 198).
130. As above. Pieces of hammer slag (1976 S 249).
105(1). Gully fill, Building 4/2a. Quantity of hammer slag (1975, S 243).
336 and 338. Fourth century deposit in Area 5 (alternatively could belong to Building 2/7, Period 2, because of lack of clear stratigraphy here). Lumps of fayalite iron slag up to 100 x 80mm across from furnace bottoms — sections through them show the vesicular basal structure typical of smelting slags. Also a piece of limonitic iron ore (1967, IS 1 and 2).
1. Plot 4/8. Drainage ditch S of Building 4/5. Lump 50mm across of vesicular fayalite and charcoal (1974, S 184).
28. As above. Lump 90mm long of vesicular fayalite and charcoal. (1974, S 131).
31(1). Furnace, Building 4/5. Fragments of hazel charcoal, white clay and iron oxide.

Unstratified
Found when building operations watched between Features 186 and 200. Vesicular fayalite slag with corroded iron.

General comments
Generally this material suggests iron smelting and forging. The white sandy clay, which is the same as that dug from pit 166-173 etc in Plot 4/1 would have been suitable for furnace lining.

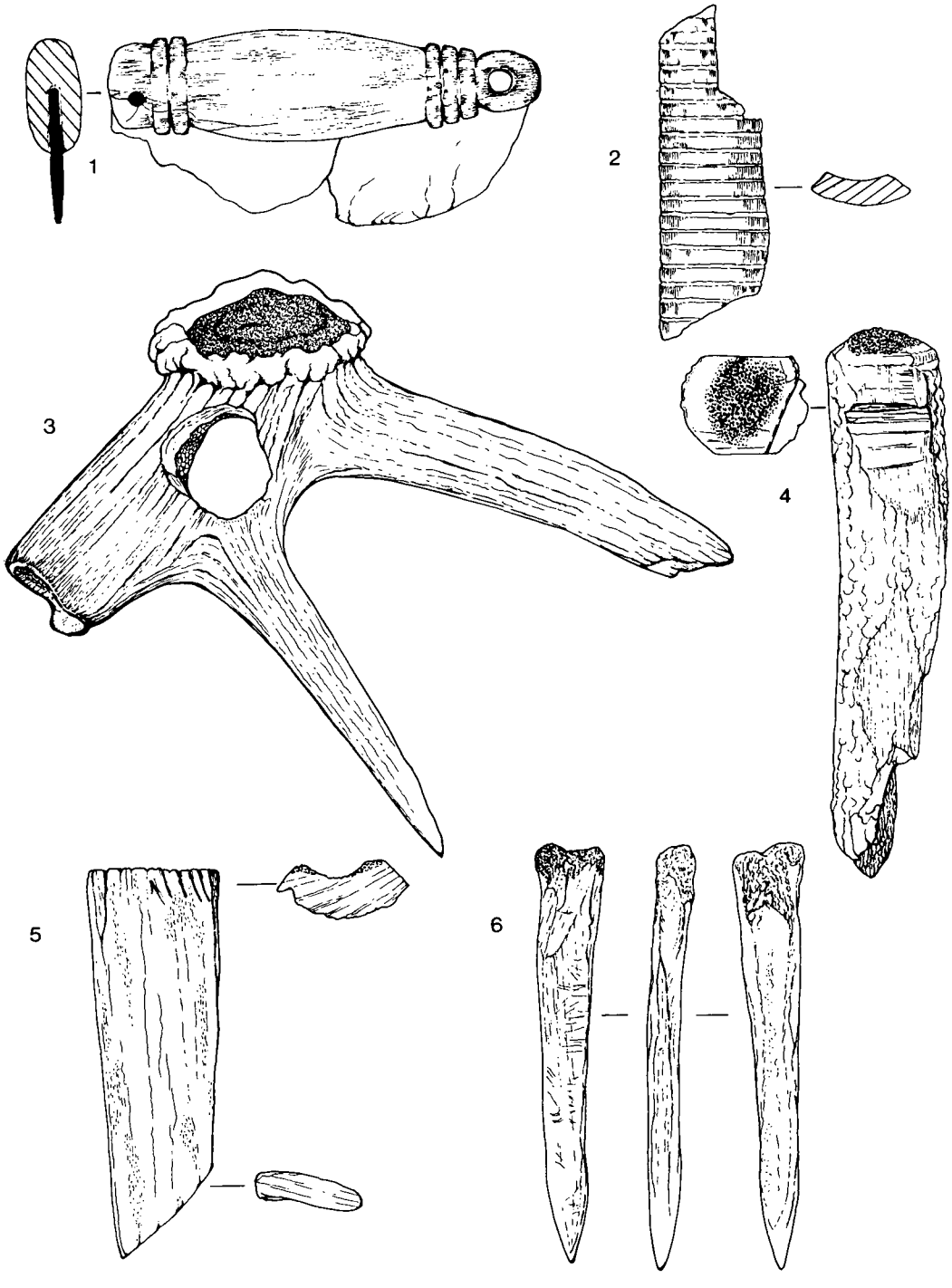


Fig 51 Towcester, Alchester road suburbs: objects of bone and antler (No 1, 1/1; remainder, ½).

S 198 from Feature 66 is a fragment of fine micaceous clay suitable for mould making. The white sandy clay (eg S 168, 324) would also have been suitable for making coarse moulds for say the casting of ingots or of objects not requiring fine detail. These moulds would not have been associated with the working of iron.

For an analysis of smithing slag remains from Ditch 282(2), see M128-130.

THE ENVIRONMENTAL IMPLICATIONS OF THE EXCAVATIONS OF 1974-76

by Maureen A Girling, with seed identifications by Pamela Paradine

Eight samples were investigated from the following locations (all from Phase 4 and mostly from 4b):

14 (1): ditch around Building 4/5.
38 (1): upper fill of timber sided culvert, Building 4/5.
38 (2): lower fill of timber sided culvert, Building 4/5.
3 (1): cobbled working area, Building 4/5.
16 (1): ditch under wooden planks, Area 3.
16 (2): base of ditch, Area 3.
7 (3): fill from Ditch 7, Area 3.
7 (3): sludge piled against obstruction blocking ditch, Area 3.

Beetle and seed assemblages were analysed from these samples and the identified taxa are listed in M131. Amongst the insect remains preservation varied from over 50 taxa in a single sample to a few fragmentary remains in the poorest material. The seeds, however, appeared to be more resistant throughout the samples. Despite the variation in preservation, the beetle assemblages extracted from individual samples display considerable overlap, and it is valid, therefore, to describe the Towcester fauna as a whole and then to discuss the variations between the archaeological contexts. The beetles can be grouped into two faunal associations which are not wholly exclusive; those typical of synanthropic, or man-made, habitats and those usually found in natural surroundings. These associations can be subdivided to illustrate the major ecological elements of the Roman settlement with slight bearings on its vicinity. These subdivisions show a trend of decreasing dependence upon man.

Synanthropes

1 Imported species normally found indoors.
2 Other species favoured by man and usually found indoors.
3 Dung/rubbish fauna resulting from animal husbandry and accumulating domestic rubbish.

Natural habitats

4 Ground/soil species.
5 Vegetation feeders.
6 Aquatic/waterside species.

The occurence within these groups of the named beetle species is given in M131.

1. Imported beetle species

Six of the imported species are pests of stored food. *Sitophilus granarius*, 'the grain weevil', is a serious food pest which mainly attacks wheat grain but it also infests oats, barley and, in recent centuries, rice and maize. The species is flightless, therefore its dispersal is largely dependent upon transportation of infested goods. *S granarius* is moderately cold susceptible (Solomon and Adamson 1955), and in temperate regions it is tied to the protected environment of granaries and stores. *Oryzaephilus surinamensis*, 'the saw-toothed grain beetle', is better able to survive British winter temperatures and successfully overwinters in unheated buildings. It usually multiplies rapidly under the higher summer temperatures leading to the build up of large populations within buildings. The species is often associated with processed cereals such as flour as it is generally unable to infest whole, undamaged grains although it occurs in such stores once other insect or fungal attack has taken place. Two species of 'flour beetles', *Tribolium casteneum* and *C confusum*, are present in the Towcester samples. The latter species is the more cold tolerant of the two but both species are able to survive British winters only within heated buildings or materials (ie rotting grain residues or in the case of *T casteneum*, poultry manure (Jones 1967)). Both breed successfully in a variety of stored foods, especially grain and cereal products. *T casteneum* is common in damaged grain where it often occurs as a secondary pest but it will occur in whole grain if the moisture content is high. *T confusum* is more successful in whole grain and also in foods of lower nutritional value.

The remaining food pests, *Cryptolestes ferrugineus* and *C turticus* are commonly associated with processed cereals and occur in whole grains only where these are sufficiently damaged, for example during threshing, to allow their entry through the pericarp. The species are particularly known to infest flour and *C turticus* occurs especially in flour mills. The development of an infestation will be especially favoured by mould due to any combination of poor storage, damp conditions and prior infestation by beetles or the other food pests; moths, mites and small mammals.

The association with man of the two remaining imported pests is due to the provision of suitable habitats at settlement sites, and their transportation to Britain was most likely accomplished by their repeated inclusion in materials stored where they lived. The ground beetle *Laemostenus terricola* occurs in stores, cellars and caves. Although like most members of its family it is a predator on small arthropods, it has been observed to damage stored fruit: apples, pears and currants (Hinton 1945, Massee 1946). *Aglenus brunneus* lives cryptically in a variety of decaying materials. It occurs in granaries, usually in spoiled cereals, haystacks, stables, dung heaps and mushroom beds (Hinton 1945).

Archaeological records summarised by Buckland (1981) for seven of the species and the Towcester record for *L terricola* indicate that the eight imported species have been present in this country since Roman times. Isolated instances of prehistoric transport of insect pests are probable; Osborne (1969) suggests such a mechanism for *Dermestes lanarius* at Bronze Age Wilsford and *Stegobium paniceum*, a less injurious food pest than those listed above, occurred at Iron Age Tattershall (Girling and Greig in press). *Aglenus brunneus* has been recorded by Robinson (1977) from an Iron Age ditch at the Iron Age and Roman sites of Farmoor. The overwhelming number of Roman arrivals suggests however, that the major transport of imported species, including serious food store pest beetles, was concomitant with Roman expansion of trade.

2 Other species favoured by man

The second faunal group might loosely be termed 'household' pests. It is composed of species which were present in the indigenous British fauna (although the status of *Ptinus subpilosus* remains doubtful) but were greatly favoured by the activity of man and whose numbers have increased, often dramatically, with the advent of settlement sites. An example is provided by *Anobium punctatum*, 'the woodworm beetle', as it favours dry wood, a comparatively rare commodity in closed forests where dead, fallen, trees rot amongst the damp leaf mould, but which is abundantly provided by man as timber and firewood. Although not strictly an indoor species, at the site it was perhaps infesting timber in the buildings or ditch woodwork. *Ptinus* species do frequently occur indoors where they are found in dry food, wood or general rubbish. *Lathridius* and *Enicmus* are fungus feeders, frequently occurring in buildings on moulds.

3 The dung rotting vegetational/rubbish fauna

The assemblage of beetles associated with these related habitats constitute the most important group, both in terms of species numbers and totals of individuals represented. Many of the beetles listed in M131 are usually found in dung, notably *Aphodius* spp, *Oxyomus sylvestris* and *Sphaeridium* sp whose larvae are typically dung feeders, and *Platsystetus* and *Anotylus* spp predators frequently in dung. Other species in the group occur in the whole range of dung, rotting vegetation such as accumulations of animal bedding and other rubbish including carrion. *Rhizophagus perforatus* is known from corpses, an association more frequently displayed by *R parallelocollis* Gyll a common inhabitant of graveyards (Peacock 1977). The importance of the dung/rubbish element suggests that herbivores were present at the site. In comparison, the paucity of species of open ground, described in the next section, which suggests a small 'external' element contributing to the overall fauna, argues that the animals were actually stalled or stabled and are not simply grazing nearby with their dung beetles flying to the site.

4 Ground/soil fauna

The very small proportion of Carabidae (ground beetles) from the Roman deposits, four species plus the synanthrope *L terricola*, accords well with the archaeological findings of a cobbled area and a wooden bridge covering the ground at the 'dry' sample locations. (Other samples were recovered from ditches and a culvert). Of the four, *Pterostichus versicolor* occurs in all types of open fields, *P nigrita* and *Agonum albipes* are usually found near water and *Nebria brevicollis* is very common in almost every type of ground.

5 Vegetation cover

Excluding beetles which feed on waterside or aquatic vegetation, members of this category are restricted to six species. *Hypera punctata* feeds on *Medicago* (medick) and related weeds and *Gymnetron veronica*, as implied by its specific name, lives on *Veronica* (speedwell), a very common weed of all types of ground including gardens. *Chaetocnema concinna* feeds on various Polygonaceae but the beetle must be considered to be too widespread to be of interpretative value in assessing vegetation cover. The other phytophages are Scolytidae (bark beetles). *Phloeophthorus rhododactylus* is a Ulex/gorse feeder, *Scolytus intricatus* lives on a variety of deciduous trees including oak, elm, beech, birch and willow and *Hylesinus olieperda* excavates into small twigs of ash trees, often attacking decayed trees. Whilst the three latter disperse by flight and hence might reflect vegetation in the surroundings, it is equally possible that trees, gorse and weeds at the site provided suitable hosts as there is little evidence for much external derivation of the fauna.

6 Aquatic/waterside species

Notably absent in the fauna are any carnivorous water beetles (Dytiscidae), but sufficient numbers of water edge Hydraenidae and feeders on pond plants indicate that at some time the ditches held water. The species which live at pond edges are *Ochthebius bicolon*, *O minimus*, *Limnebius truncatellus*, *Helophorus aquaticus* and *H brevipalpis*, although the two latter species are strong fliers and are often found away from this habitat. *Lesteva heeri*, *L longoelytrata*, *Corylophus cassidoides* and *Dryops* sp live in wet vegetation and mud and at the sides of water. The growth of duckweed (*Lemna*) on the surface of the water is indicated by the presence of the weevil *Tanysphyrus lemnae*. Water buttercups (Ranunculaceae) and kingcup (*Caltha palustris*) provide hosts for the leaf beetles *Hydrathassa marginella*, with reedmace (*Typha*) and sedge (*Carex*) included in the food plants of *Notaris acridulus*.

Note on the implication of the seed assemblages

Seeds of a number of weeds were extracted from the samples, many of which suggest open grassland, and were perhaps brought in with hay. Other weeds, such as the nettles, often present in number, are likely to have grown at the site. The aquatic/waterside habitat accounts for a significant element of the flora, with representative species including *Potamogeton* sp (pondweed), *Brassica nigra* (black mustard), *Mentha aquatica* (water mint) and numbers of *Carex*, *Juncus* and *Scirpis* species (sedge, rush and bullrush).

The assesment of the environment from individual contexts

14 (1): ditch around Building 4/5.

This fauna provides evidence of some water in the ditch which provided a habitat for *H brevipalpis*, *H aquaticus*, and *Ochthebius bicolon*, with *L longoelytrata* and *Stenus* spp living in the saturated vegetation in the ditch sides. *A albipes* also favours this waterside location. *S intricatus* provides slight evidence for some nearby deciduous growth. The overwhelming evidence, however is for the dung/rubbish complex. Dung is implied by *Aphodius* spp, *O sylvestris*, *Platystethus arenarius*, *P nitens* and *P cornutus* or *degener*. A number of records point to a domestic origin for much of the rubbish, with the grain pest *O surinamensis* and *S granarius* and three species of *Ptinus*. Discarded wood might have been included in the rubbish as *A punctatum* is present. *R perforatus* is possibly associated with the disposal of meat or a small corpse, alternatively, mould growth in the rubbish generally might have provided its food source. It is likely that the ditch provided a convenient area for the disposal of settlement rubbish, although the fauna provides no clue to the use of the workshop specifically.

38 (1) and 38 (2): upper and lower fill of the timber sided culvert, Building 4/5.

Woodworm present in the upper fill were perhaps infesting the wooden culvert sides, although this would require some drying

out of the timber. Aquatic species constitute a small proportion of the fauna which is again dominated by rubbish dwellers. The record of *O surinamensis* might imply a domestic origin of the culvert fill. The sample of the lower fill contained only four beetle taxa but these give an impression of similar reconstruction.

3: cobbled working area, Building 4/5.

The assemblage from this location was badly degraded and appeared to represent a poorly preserved remnant of much richer fauna. With the exception of a single elytron of an aquatic species, the strong flier *H brevipalpis*, all the beetles present belong to the dung/rubbish complex. The absence of any ground beetle or plant feeder would support a conclusion that the area was covered. Attempts to explain the use of the workshops are prevented by the poor preservation, but it is likely that refuse, possibly some of it originating from stalled animals, accumulated over the cobbled area.

16(1): ditch under wooden planks, Area 3.

The sample produced the richest fauna, with over 50 taxa identified. The presence of several aquatic and wet ground beetles argues that the planks served to cross a flooded area, with standing water colonised by duckweed and water buttercups or kingcup, both possible food plants of *H marginella*. The hosts of *P rhododactylus* and *H olieperda*, gorse and ash, might have grown in the vicinity. Animal dung, inferred from the presence of *Aphodius* spp, *O sylvestris*, *P arenarius*, *Anotylus complanatus*, *A nitidulus*, *A rugosus* and *A sculptus* could indicate that the planks crossed an area trampled by animals and was possibly constructed for them. Two faunal elements are not represented in this sample; the imported species and the indoor group. As the sample lies below, and could pre-date the planks, it is possible that its construction coincides with the first phase of building; alternatively if the settlement was in use at the time, that no dumping of domestic rubbish took place in this area.

7 (3): fill from Ditch 7, Area 3.

The ditch inhabitants *H brevipalpis*, *L truncatellus* and *L longoelytrata* are greatly outnumbered by members of the dung/rubbish fauna and in addition there are records of the imported pests *S granarius* and *T confusum*.

7 (4): sludge piled against obstruction blocking ditch, Area 3

The ditch element is represented by *N acridulus* which includes sedge and reedmace amongst its host plants, *H brevipalpis* and *O bicolon*. The other named species from the sample are mainly associated with dung and there are no domestic species records. It is tempting to suggest that the composition of the sludge was dung.

16 (2): base of ditch, Area 3

With records of *S granarius*, *O surinamensis*, *C turticus*, *T casteneum* and *L terricola*, this sample produced the highest total of imported species at the site. Overall, the synanthropic fauna is rich, indicating that the ditch received drainage and/or rubbish from buildings which probably acted as food stores. The dung/rubbish complex is represented, again suggesting disposal of dung or animal bedding. The original ditch fauna forms a small proportion of the fauna, with *H fuscipes* and *L heeri* living at and near the water edge and *H marginella* feeding upon the aquatic vegetation.

DISCUSSION

PHASE 1 – late Flavian to *c* 170 AD

The Alchester road. The work reported on here provided no direct dating evidence for the construction of the road, but the pottery from the lower silts of the side ditches does not suggest that they began to silt up until towards the end of the 1st century at the very earliest; this might imply that the construction of a properly metalled road on this line did not take place until thirty or forty years or so after the Roman conquest. This is in accord with the conclusion arrived at on the Park Street site in Towcester where the start of Phase 4, which embraces the silting up of the side ditches, is placed *c* 75 AD. At that site, close to the centre of Roman Towcester, a section (Lambrick 1980, FIG 2.1) indicated many resurfacings and several ditch recuttings throughout the first half of the 2nd century, evidence for careful maintenance which is in complete agreement with the ditch recuttings found by us during the excavations of 1974-76. The line of closely set stakes found along a recut of the eastern roadside ditch on the Park Street site (*ibid* 42, F254, FIG 4) can now be seen as a revetment comparable with that noticed along the side of the road itself in Area 3 (FIG 12) (34).

Ditches, land drains. These were found only on the western side of the Alchester road and are best thought of as relating to the agricultural exploitation of the land around Towcester in the later 1st-earlier 2nd centuries. Most of them are on the same alignment, or a very similar alignment, to the buildings and ditches belonging to the villa at Wood Burcote, *c* 1km to the south west on the same side of the road. Our Towcester enclosures could therefore represent a portion of the fields of the estate centred on the villa, which, on the evidence of carbonised deposits was much concerned in the early Roman period with the growing of grain (Turland 1977). The fact that no comparable features were found on the eastern side of the road may be significant in the light of developments in Phase 2 (below).

A temple? A reference to the small finds report (p 102) will show that a silver votive axe and a silver spoon were both found in 1966-7 in the area of 1-3 Link Way (FIGS 3, 34). This general area has also produced another silver axe, a silver openwork disc brooch, a silver ring (in private

hands) and two silver coins (both now lost); the unusual, probably continental, 1st century bronze brooch (FIG 35, 1); and a quantity of 2nd century decorated Samian including an unusual East Gaulish plate or stand (Samian from drain trench, M37). This combination of finds may represent nothing more than coincidence; but the discovery of human bones in this area, at SP 69054823, hints at the possible presence of a cemetery, although no cremation burials, chronologically more appropriate to the finds, were noted.

However, when the area was dug over to receive the foundations of houses, services, etc, the foundations of a stone building of massive mortared masonry were seen at SP69094834 to the west of the Alchester road, just south of the point at which it crossed the Silverstone Brook, probably under its present battery of council house garages. Fragments of worked stone were noted 120m further south, on the same side of the road (SP69064818; FIG 1). A large rectangular stone with a dished top, *c* 600mm x 260mm x 260mm, just conceivably an altar, was also unearthed by the contractors and left lying about; it subsequently disappeared (35). A possible explanation for these pieces of evidence for masonry structures, which might account also for some of the unusual finds, might be the presence of a temple somewhere in the area immediately to the south of the Silverstone Brook. The fragments of good quality re-used carved stonework which appeared in the latest phase of the site (M72-73) might not be irrelevant here (36).

If the temple existed, then it might have had some connection with the petrifying stream which ran to the south of the western end of Solly Way (SP69114800) and then ran northwards along the line of the curved hedge towards the Silverstone Brook (FIGS 3 and 11). The presence of any stream with this faculty seems to have been entirely forgotten in modern Towcester, although members of the farming community along the valley of the Silverstone Brook are aware of the existence of such streams, flowing into that brook. However, it is clear that it was a notable feature of earlier periods. One of the writers (CW) was visited in the summer of 1977 by Mr G W Groos, who was then engaged in translating the diary of Baron Waldstein, whose name in Czech was Zdenek Brtnicky z Valdstejna. This gentleman visited Towcester on the 15th July, 1600, and wrote: 'the old Roman Praetorian Way is said to have run through Towcester. Three streams intersect the place, the largest of them running outside the town and the two smaller ones flowing through it. Although these are quite shallow streams, according to the local inhabitants they never run dry, and they say that if a piece of wood is thrown into one of them, then after a time it will turn to stone' (Groos 1981) (37). The writer was unable to help Mr Groos in his search for this stream, but on visiting the building site later that morning discovered the ancient hedge to the south of Swinneyford Road in course of being destroyed by the developers. For the first time the course of the little stream became visible, and the bed was found to be thick with twigs and modern rubbish all coated with a deposit (calcium carbonate with traces of silica and iron) (38) which gave them the appearance of being made of limestone. Professor Leo Rivet comments that 'the Romans are sure to have noticed and honoured or placated a petrifying stream' adding that it could well have been a source of terror (*in litt* 1982).

PHASE 2 (*c* 170-270 AD)

Phase 2 represents a dramatic change in the character of the occupation along the line of the Alchester road. This occupation can be characterized by: (a) a degree of planning. It can hardly be a coincidence that all three excavations produced evidence for a boundary ditch some 19-20m in from the western side of the Alchester road and parallel with it (this measurement is not from the side ditch which had largely silted up by now). There is some evidence for a further additional boundary ditch to the west, twice the distance from the edge of the road as the first (Plot 2/5, FIG 3; note also the information about the distribution of occupation scatter) — about 40m. Along the eastern side was a comparable boundary ditch, but half the distance from the edge of the road as the initial western one, giving shallow plots averaging about 9-10m in depth. This difference rather suggests speculative development by two owners (the evidence suggesting that the road remained, as in Phase 1, an estate boundary).

Squarish plots were laid out on an alignment not quite at right angles to the western side of the Alchester road. Because of the relatively

imprecise quality of the evidence it is impossible to be absolutely certain whether the plots originally had regular frontages. However, a suggested width module of 19m± for the plots, with one small plot (Plot 2/5, *c* 12m), fits all the known plot boundaries of this phase. This would give six equal sized plots between ditches 317 and 198 (including Plot 2/6). Moving south, from the small 12m Plot 2/5, Plot 2/4 is module width, and Plot 2/3 is triple module width (perhaps representing the amalgamation of a single and a double module plot, below), and Plot 2/2 double module width. This does seem to suggest a standard approach to planning involving fixed units, but the point cannot be pressed far. Plots 2/1 and 2/2 may have been later additions; the ditch which separates them, 152 (Area 1) (FIG 8) is set more at a right angle to the road, and they do not have back boundaries (but this may be due to the presence of a marsh).

This kind of regular arrangement of ditched plots has been noted alongside roads outside other walled towns in Roman Britain — at Silchester (Boon 1974, 246), where the plots alongside the road to Bath were considered to be horticultural; at Brampton, Norfolk, (C Green 1977, Edwards 1977) where pottery kilns were present and one of the excavated buildings might have been connected with ironworking; at Leicester, where there was evidence for a number of industrial processes (Frere 1977, 392). More exact parallels for the double banked enclosures at Towcester come from Ilchester, where the north west side of the Fosse Way south of the town was lined with a system of two deep enclosures *c* 28m across (Leach 1982); and Water Newton, where the road to Irchester seems to have had similar double plots along one side of it (Mackreth 1979); and at *Magiovinium* where the suburban layout there excavated furthest from the town was two plots deep (closer to the town the plots were four deep) along the northern side of Watling Street (pers comm D Neal).

(b) Buildings of timber and of ?cob on unmortared stone walls. The buildings of Phase 2 fall into two types:

i). Those of timber construction with earth-fast frames of relatively light construction (Buildings 2/1, 2/2, 2/7, 2/8, 2/9). In no case was the plan of one of these buildings completely recovered, but what remains we have suggested that with the exception of Building 2/1 (possibly a later addition) they were set parallel with the road and not at right angles to it as was commonly the case with roadside settlements elsewhere (eg Brampton, Norfolk, (C Green 1977, FIG 14); the *vicus* at Manchester (Jones and Grealey 1974, FIG 21); *Durobrivae* (Greenfield 1958, FIG 14); *Margidunum* (Todd 1969, FIG 23); Ware, Herts (Partridge in Goodburn 1978, FIG 12); Hibaldstow, Lincs (Smith in Frere 1977, FIG 17); Dragonby, Lincs (May 1970, FIG 4), generally Camerton, Somerset (Wedlake 1958, PL 11). Building 2/7 appeared to consist of two *c* 5m square bays, with bowed ends (there was no evidence for more than two bays with any of these buildings). Building 2/9, and possibly also Building 2/8, could also have had bowed ends; note however that they were on a different alignment from the buildings on the west. The bowed ends would make it easier to construct a hip gable, helpful for a thatched building (pers comm Brian Giggins).

ii). Buildings with unmortared stone walls, and possibly superstructure of cob and stone (Buildings 2/5, 2/6, 2/10 and possibly 2/3). The walls of buildings 2/5, 2/6 and 2/10 were of rough unmortared stone set in clay (some 500mm wide). Building 2/3 and Building 2/5 apparently lay at right angles to the road; Building 2/10 if originally two-cell as the plan, partly destroyed by ridge and furrow, suggests, also did so. The floor of Building 2/5 was of cobble and small limestone set in clay; that of 2/1 of cobble. It is possible that these buildings were partly of timber and were tiled, but this is uncertain. Building 2/3 survived, after clearing for road construction in very wet weather, as a sandy clay burnt floor with the possible ploughed out remains of unmortared walls giving a building of some 5m or more width. These buildings could have been of the common Romano-British strip type. Diagonal stonework in building 2/10 suggested some sort of drains or even heating channels, perhaps secondary, but these remain uncertain. The floor of Building 2/3 appeared to overlie a filled in boundary ditch, which may represent the original southern one third of Plot 2/3 and may indicate an early amalgamation of properties, but this remains unproven.

c) Industrial activity. The evidence is again poor, but iron-working debris from the top of the western road ditch fill, and from plots 2/3, 2/6 and

2/7 indicates the smithing of iron. It is also possible that pottery was being manufactured in the area at that time. In about 1964 what was clearly a pottery kiln, aligned north-west south-east with its flue to the north-east was uncovered during building work where Nos 17-19 Sandy-holme Road now stand and in 1966 part of a kiln plate, some 70 x 50mm in size and 5-8mm thick, with grass impressions on both sides, was recovered from the area (39); (for location see FIG 3; p 80). It was producing coarse dark grey jars. If these were in pottery fabric 35a, then the kiln would have belonged to the earlier part of the 2nd century and would have been producing pottery in this ware for the town, where it is found in abundance (Brown and Alexander 1982, 36, 44-5), ie it would have belonged to Phase 1. But the nature of the pottery made is not known for certain and a small-scale pottery undertaking would fit in quite well with the industrial activity on the site, for which we have evidence at this time.

Dating. The beginning of the Phase. This has been discussed on p 52. A point to be considered here is the range of pottery fabrics which characterize this phase compared with those most commonly represented in Phase 2 of the Grammar School site (Brown and Alexander 1982, 44-5). At the latter site the fine burnished reddish-buff ware (Fabric 1) was common, forming some 5% of the pottery found in Phases 1 and 2, analysed by sherd count; the comparable figures for Fabrics 35a (a rough, early version of the common soft greyish buff grogged ware) and 36 (orange-buff sandy ware) were 11% and 18%. Yet on the Alchester road sites these fabrics are scarcely noticeable in Phase 2, consisting only of 0.8%, 3.5% and 0% respectively of the sherds found. Taken together with the dating evidence supplied by the pottery, particularly the Samian and the black burnished ware category 1, it might be reasonable to suggest that Phase 2 along the Alchester road began somewhere in the 170's, more or less when Phase 2 on the Grammar School site ended, ie when the defences of Towcester were constructed.

The regular layout of this apparently industrial suburb suggests a piece of conscious planning. But there were differences in approach between the layouts on either side of the Alchester road, suggesting perhaps that two different estate owners were involved, the boundary between them being the road. Their motive was presumably commercial. This was a time of expansion and development; much building was taking place at the Wood Burcote villa, including the construction of a large aisled barn. There may even have been a very direct connection between the walling of Towcester with the development of this industrial suburb. We know that buildings were demolished to make way for the massive defences; perhaps the plots now laid out were intended to accommodate those who were displaced at that time.

The intense activity of the late 2nd and early 3rd century seems to be followed by an interval for which there seems to be no stratigraphical and very little ceramic evidence. It may be that the recession caused a decline in the outer suburbs, and it must be said there is no evidence from the walled town, nor for that matter from Wood Burcote, for building activity during this period.

PHASE 3 *c* 270-330 AD.

The new road to Fleet Marston and the extensive alterations and improvements to the Alchester road can be matched by signs of renewed activity within the defended area of Towcester in the early 4th century where, on the Grammar School site, a sequence of substantial timber buildings makes an appearance (Brown and Alexander 1982, 29). Occupation along the line of the Alchester road did not cease now on the Park Street site (Lambrick 1980, 49, Phases 6 and 7) but was at a lower standard than before and no evidence was recorded of repairs to the road: perhaps after the walling of the central portion of Towcester this particular length within the defended area had become something of a backwater.

The new road is on the same alignment as the stretch of Roman road running NNE from the settlement at Fleet Marston, 4km west of Aylesbury. Its destination was presumably that settlement, but there are certain difficulties which can only be resolved by further work. In the first place, a more economical way of constructing a road from Fleet Marston to Towcester would have been to take advantage of the existence of the last few miles of the Alchester road as it approached Towcester from the south, as Margary has suggested (note 3, p 136). Also what information we have about the Fleet Marston settlement

suggests that there was considerable occupation, if not its main period of prosperity, in the late 1st and 2nd centuries (pers comm Andrew Pike), and a road of that date is therefore to be expected. On the other hand, the new road with a width of 6m, is a highway and not a track, and is presumably heading for some substantial settlement. If it was the Fleet Marston road, then it is an example of long-range setting out comparable with that of Stane Street in its course from London to the east gate of Roman Chichester (Margary 1948, 49).

A growth in trade and population was either taking place or was anticipated, as new plots are hinted at on the eastern side of the new road. The evidence is unfortunately thin, but suggests plots some 15m square with a back plot of 10m in depth.

The recutting of the Alchester road ditches over the site of many of the Phase 2 buildings confirms the suggestion that the area had become largely derelict in the middle four decades or so of the 3rd century. One would have expected signs of further activity in this phase, but if the buildings had been of timber sill construction (of which there are slight hints in Area 5, south east of building 4/4, the narrow reserved areas on the plan) they would have left very little trace. The ditch draining the back of Plot 4/3 appears to have been recut in this phase, and a small pit (F294) which appeared to contain smithing furnace debris and an apparent purse loss of coins of Claudius Gothicus can also be placed here.

PHASE 4 *c* 330-370+ AD.

This saw a renewal of intense activity on the site, activity which continued at least into the last quarter of the 4th century. This parallels the situation on the Grammar School site where the sequence of substantial timber and stone buildings went on until the end of the 4th century and possibly beyond (Brown and Alexander 1982, 29). The character of the Phase 4 occupation offers many parallels with that of Phase 2.

i) Planning. Once again there is evidence for a continuous rearward boundary ditch along both sides of the Alchester road; that on the west side, slightly sinuous, was *c*.25m from the new side ditch, that on the east some 10m away, continuing that side's tradition of the narrower plot. A new, or more probably, recut ditch, F283/5 to the north, falls on the postulated Phase 2 spacing of 19m, but Plots 4/3 and 4/4 suggest perhaps a new layout of a 25m square plot in this particular area. Any planned layout, however, appears to break down during Phase 4 as the line of the back boundary is broken through to the west, there is some erratic sub-division of plots, and the area of the road junction and the extreme south-west of the excavated site eschew any attempt at formal plot division.

ii) There is evidence for a certain uniformity in the type of building erected at the beginning of Phase 4, primitive though these structures may be. These Phase 4a buildings are characterised by the irregularity of their plans, more probably D-shaped than circular, set inside drainage ditches (Buildings 4/1a, 4/2a, 4/6a and b, 4/5 and 4/7). The apparent diameter or widest measurement varies from about 6 to about 12m. No trace of the method of construction of these buildings survived unless the few fragments of daub-like material found in Phase 4b contexts in fact come from them (M124). Cob, or even turf, may be a possibility. The open ends lie directly towards the road. They had earth floors. These structures find interesting local parallels in the Iron Age buildings recently uncovered at Great Oakley and discussed by P J Drury in the light of other similar Iron Age structures (Drury in Jackson 1982, 10-13). His suggestion that such buildings would have been particularly useful for smithing, and for tasks requiring light and air, is particularly relevant to the Towcester structures. Their erection well on in the 4th century and their apparent maintenance (or at least one of them, Building 4/5) until almost its end is a striking instance of the survival of prehistoric building forms in this region.

In Phase 4b the style of building changes. Now rectangular buildings, with internal uprights resting on a pair of stylobates, often of re-used architectural masonry, are encountered (although the earlier buildings continued in use along the eastern side, where no stylobate buildings were found; yet another example of the differences in approach adopted along each side). In the case of Building 4/6c, 4/2b and 4/4 all that remained were a pair of stylobates, 3.6-3.7m apart, consistently with a furnace to one side. It may therefore be that this constituted the norm and that we had rather simple buildings with a roof supported by a pair of internal wooden uprights. But the spread of stones in the case of Building 4/2b and the size of the

sand area of Building 4/4 might suggest that we have the battered and plough damaged remains of aisled buildings, gable on to the road in the case of Buildings 4/6c, and 4/2b, and apparently parallel to the road in the case of Building 4/4. It is almost impossible to give meaningful measurements for buildings so ephemeral and so damaged by ploughing, but what is left could suggest in the case of Building 4/2b, a minimum number of four bays with a minimum length of 13.5m and width of 7.5m; Building 4/4, a minimum number of four bays, a minimum length of 11.5m, and a width of 6.75m; Building 4/6c, a minimum number of four bays, a minimum length of 10m and a width of 6m. Although these are very approximate, based on the position of known stylobates and indications of floor surfaces, they do seem to indicate a common pattern. Yet again, these buildings could however be no more than small open sheds. No direct evidence for the method of walling was found, if indeed they were not open sheds, but the evidence of clenched nails (M51) might suggest weather boarding possibly on timber sills of some sort.

Building 4/1b falls into a slightly different pattern. In this case, rather than true stylobates, the building contained mortared square to rectangular post pads. Three of these were recorded in 1977, a fourth having been recorded previously in 1976. This provides evidence for another four bay building, in this case certainly aisled, with a width of some 7.2m and a length of some 11m, set rather far back on the plot, but this may be due to the known marshiness of the terrain at this point. In addition another possible stylobate was recorded to the north west, which could indicate the presence of a six bay building some 18m long, but this remains uncertain. The *c* 13.5 x *c* 8m postulated aisled barn/smaller shed excavated at Lynch Farm, Orton Longueville, must have resembled these structures (Wild and Dannell 1974).

iii) Evidence for industrial processes. This was abundant. There was evidence for iron smithing from Plots 4/1, 4/2 and 4/7 in the form of hammer scale and slag, which was particularly plentiful in the case of Building 4/2a. Some pieces of tap slag and furnace bottom slag derived from the smelting of iron ore were also found, but there is no absolutely conclusive evidence for smelting on the site: the quantities were small and no furnaces were discovered. There was ample evidence for the working of lead, and the working of pewter is a possibility. Some of the odd broken fragments of bronze might have been scrap (eg the cart fitting, FIG 35, 6, and the fragment with moulded decoration, FIG 37, 35) and these, together with the small ?mould fragment from Building 4/2b (p 126) might suggest the working of bronze; positive evidence is, however, lacking. The manufacture of irregular small change was another possible activity.

Farming. The alignment of drainage ditches in the rearward portion of Plots 2/4 and 2/5 suggests that some form of agricultural activity went on behind the industrial frontages in Phase 2 (FIG 2). The evidence for Phase 4 is better, since the preservation of organic remains on the waterlogged portions of the site makes it possible to demonstrate that, in addition to metalworking, the keeping of animals (presumably cattle and sheep; bone report, M85) formed a significant part of the economy of the 4th century inhabitants of the suburb (environmental report, p 128). The presence of dung beetles in Yard 3, and Ditches 7, 14 and 16 (Plot 4/8) clearly shows that animals were kept; Yard 3 might have had covered stalls for them, although no structural evidence for them was recovered. The footbridges over Ditches 26 and 27 and the terraced path along the northern side of Ditch 11 can now be seen as aids to getting across the shallow but no doubt muddy ditch behind Building 4/5 to the narrow triangular field formed by Ditch 11 and the southern side ditch of the Fleet Marston road, where a certain amount of grazing would have been available, as would have been the case elsewhere behind the rearward plot boundary ditches. Grain growing could also have been practised; pests typical of stored grain came from Ditch 16(2). Certain of the small finds point to an interest in farming — the ox goad and hook (FIG 39, 7, 6) and the rake (FIG 51, 3). This aspect of the economy of the site may well have outlived the archaeologically more obvious metalworking until close to the end of the 4th century, perhaps on a subsistence basis, or controlled from elsewhere. This would help to account for the paucity of later Roman coinage, which is in very sharp contrast to the abundant issues of the period 330-360 when industry and presumably trade flourished on the site.

LIST OF MICROFICHE FIGURES

1. Optical and electron micrographs, the mirror. M45
2. Optical and electron micrographs, the mirror. M46
3. Optical and electron micrographs, the mirror. M47
4. Flints. M49
5. Ironwork. M52
6. Ironwork. M53
7. Ironwork. M54
8. Objects of jet and shale. M56
9. Shoe from Ditch 207, Phase 4b. M58
10. Querns. M61
11. Querns and stone object. M62
12. Discs of stone and pottery, and spindle whorls. M64
13. Tiles. M71
14. Sketch plan to show location of wood. M82
15. Wood. M83
16. Cockerel skeleton from Pit 171(1). M119
17. Plot of oyster shell dimension. M122
18. Medieval and post-medieval finds. M133

NOTES

1. Eg, those taken by Northampton County Council during the 1974 excavations.
2. Particularly Mr D Smith of Duston and Mr T Shirley of Towcester.
3. Margary did not think that this road ran so far to the north and regarded its junction with the Alchester road as somewhere near SP684411 (route 162A). See also The Viatores 1964, 306-309.
4. The builders' heavy machinery wallowed and sank in this very damp area, and the deposits were much damaged and destroyed by this process. However it was clear that there had been many hearths, much burning, and much industrial activity in the area marked by the gap in the modern hedge. The fill of ditches 196 and 207 was also of an intensely black industrial nature.
5. *cf Northamptonshire Archaeol,* 14, 1979, 109. The burials were there thought to relate to the Pest House Field at NGR 68774807.
6. This burial is stated to have been lifted, *op cit,* 109, and was thought to have been female.
7. A sherd of a storage or heavy jar in Fab 35b (Phase 2 to 4b) came from grave A, but a slipware sherd of 17th century date was also present in what were clearly disturbed levels. A sherd from an Ecton dish (Fab 22, Phase 2), the base of a small beaker (Fab 9, Phase 2), and a pipe bowl of late 16th/early 17th century type were handed in by the workmen and stated to have been found in the area. No other material was recovered.
8. For an account of other discoveries of burials in the area, see RCHM 1982, 156.
9. These numbers will differ in some cases from those on the pictorial chart (FIG 18). This is because the chart deals with vessels of which the whole or major part of the form is known (and includes some unstratified vessels of which the date cannot reasonably be in doubt), while this list is concerned with vessel numbers based *inter alia* on small rim and base sherds, etc, where insufficient is known about the form to place the vessel on the visual chart.
10. This material was fired in special kilns built of prefired curved fire bricks. The excavation of a kiln of this nature making imitation Rhenish beakers was supervised at Chesterton by the writer (CW) for Dr Graham Webster and the Water Newton Excavation Committee in 1958 (Artis 1828, PL XL, 3).
11. Sherd percentages are not given for parchment wares owing to the difficulty of identifying this ware, especially in bad condition, without the assistance of form.
12. The Rainsborough Roman material is unpublished, but is lodged at the Ashmolean and has been examined by the writer.
13. By the Upper Nene Archaeological Society, directors Roy and Diana Friendship-Taylor, Paul and Charmian Woodfield.
14. Information from Mr Terry Shirley, who saw the kiln being excavated in or about 1964. Both the excavators, apparently a married couple, and all the finds have disappeared. The kiln plate recovered from the area by Mr David Smith has recently been examined by one of the writers (CW).
15. Much published Roman pottery in Northamptonshire from what are stated to be late 3rd and 4th century groups is not only partly but in some cases almost entirely residual. In some cases the percentage of residual pottery appears to be over 95% or even 100%, a source of much confusion.
16. It should be noted that all the owner's marks are illiterate; but see the possible writing tablet p 125.
17. For example, the classical collection in Leiden has eight examples from North African sites collected mainly by E W van den Bosch; No 254 Archäeologisches Seminar, Universität Marburg, comes from Smyrna, with a further example now in the RGZM Mainz No 0.38115; No C 22735 Nationalmuseet, Copenhagen, comes from Karolinehøj, Stilling, in Skanderborg county of Denmark.
18. LLoyd-Morgan 1977, Group A, p233 and appendix pp243-251. A further example from a building site in Chester is now in the Grosvenor Museum, acc no 46.R.1978.
19. Down and Rule 1971, from Grave 60, p97 FIG 5.21: from Grave 87, p80, 100. The latter is said to have been in a wooden frame secured by iron studs to a wooden back, and with traces of a leather case. This item was not available for inspection during a visit made in January 1973 and the description cannot be confirmed.
20. Vermeulen 1932, Grave 26 No 10, p133, 157 PL XIII.
21. Plesnicar-Gec 1972, p242 Taf CLI No 10 Grave 656.
22. Simonett 1941, Grave 12, No 35; Villa Liverpool, Muralto, p78-80, Abb 62; Grave 4 No 1, Muralto Passalli, p45-6 Abb 21; Grave 5 No 3 Minusio Cadra, p137, 141, Abb 118-119. Dating evidence is discussed fully in N Lamboglia's review in *Rivista di Studi Liguri,* 9, No 2-3, 1943, p165.
23. Simonett *op cit;* Grave 2 Muralto Branca, p115-7 Abb 95; Grave 15 Minusio Cadra, p152-4, Abb 129-130, Lamboglia *op cit* p166-7.
24. Singer, Holmyard, Hall and Williams 1956, Vol I p692; Vol II p233.

25. Webster 1969, p128; Connolly 1975, p18, 50 with figs.
26. Petru 1972, p24, 151 Grave 16 Taf XII No 14.
27. Henig 1974, Vol I, FIG 1.
28. *cf ibid*, Vol II, 90, No 680.
29. Scherf 1970, 49 and PL XXI, No 170. Imhoof-Blumer and Keller 1889, 133 and PL XXI, No 45.
30. Henig *op cit*, Vol II, 93 No 707, PL XXII; Brandt 1972, 113 and PL CCLXXII, No 2865.
31. RCHM 1962, 141-144. Note especially the style of the pendants on PL LXVIII.
32. Henig *op cit*, Vol II, 90, No 678f: also No 684, in combat with the powers of evil here represented by a serpent.
33. Chiesa 1966, 393 and PL LXVIII, No 1343.
34. Prince Yuri Galitzine informs us that when the Alchester road was sectioned by boys from Stowe School in the close vicinity of that establishment before World War 2 the side ditches were found to have been revetted with stakes.
35. Information from Mr D Smith and Mr T Shirley. Mr Smith commented further on the exceptionally large number of what he took to be horse skulls on the site in 1966. It cannot be proved that these were Roman, although the great majority of finds were. It is just possible that these might have had some Roman cult significance.
36. But note that more than one building seems to have been involved as a source for these stones, and most imply a building of full classical type, relatively rare in temple architecture in Britain. Good stone mouldings have also been found on the site of the Wood Burcote villa, and elsewhere in Towcester (CTP Woodfield 1978).
37. The writer is grateful to Mr Douglas Matthews of the London Library for tracking down this diary.
38. Information from Mr G C Morgan, Department of Archaeology, University of Leicester.
39. Information from Mr T. Shirley.

ACKNOWLEDGEMENTS

In 1967 permission to excavate was given by Towcester Rural District Council, Northamptonshire County Council and the Towcester Working Men's Club and Institute Ltd. Plans of the estate were supplied by both local authorities and backfilling was also undertaken by them as part of their site development. The Site Assistant was Richard Griffiths and the Site Surveyor Peter Donaldson. Several local volunteers, in particular Mr Oliver Ransome, helped over two weekends.

In 1974-76 permission to excavate was given by the developers, Abbey Homesteads Ltd. Much helpful assistance was given by the then County Archaeological Assistant, Mr Paul Everson. The work force consisted in the main of volunteers from the South Northamptonshire Archaeological Society; a particular debt is owed to Mr B C Hastings, the then Secretary of the Society, for help in very many ways in the matter of local arrangements. His work was invaluable. Mr Stan Stenton performed sterling service as the main digger driver. The late Mr Don Swaddle made a valuable photographic record.

In 1977-78 permission to carry out the watching brief was again given by Abbey Homesteads Ltd. Thanks are due also to Mr Barry Richardson, of Midland Construction, the contractors, and their employees. Mr Terry Shirley was a tower of strength throughout and did much of the small-scale excavation as circumstances permitted. The South Northamptonshire Archaeological Society also helped with excavation, and Alan Hannan and the Northamptonshire Archaeological Unit with back-up.

During the work on the pottery much benefit was derived from discussion particularly with Pauline Marney, and also with Yvonne Parminter and Rob Perrin. Diana Friendship-Taylor, Robin Howatson, Marjorie Mackintosh and Sue Marshall all conserved and restored material. Help on specialist matters was also given in discussion and correspondence by Bob Croft, Brian Dix, Francis Grew, Philip King, Bill Manning, Douglas Matthews, Jeffrey May, D T Moore, David Neal, Gordon Osborne, David Smith, and Graham Webster. The watching brief pottery and small finds were drawn by June Burbidge, and also by C T P Woodfield who also helped with the surveying and was supportive throughout. Mr D E Worby drew attention to the ring held by Mr Newman. Mr D B Johnson of the South Northants District Council kindly supplied maps. Mrs J Hastings did much work on the tiles.

Mr David Smith of Duston recorded several finds from the site during its initial development and originally brought it to the notice of the Northamptonshire County Council.

The drawings in this report are the work of June Burbidge, Davina Longmuir, Susan Phillips and Paul Woodfield. Some of the small finds were drawn by David Neal. The MSS was typed by Lesley Hand and Doreen Eley.

ABBREVIATIONS

S	Figure-type in Déchelette, J, *Les Vases céramiques ornées de la Gaule romaine*, tome ii, Paris, 1904.
H	Hermet, F, *La Graufesenque (Condatomago)*, 1934.
O	Figure-type in Oswald, F, *Index of figure-types on terra sigillata*, Liverpool, 1936-7.
O & P	Oswald, F and Pryce T-D, *An introduction to the study of terra sigillata*, London, 1920.
RCHM	Royal Commission on Historical Monuments (England).
S & S	Stanfield, J A, and Simpson, Grace, *Central Gaulish potters*, London, 1958.

BIBLIOGRAPHY

Artis, E T, 1828, *The Durobrivae of Antoninus*

Bate, D, 1933, The domestic fowl in pre-Roman Britain, *Ibis*, 39

Beltrán, M, 1970, *Las anforas Romanas en Espana*, Zaragoza

Bird, J, Graham, A H, Sheldon, H and Townend, P, 1978, *Southwark excavations 1972-4*, 1, Joint publication No 1, London and Middlesex Archaeological Society and Surrey Archaeological Society

Birley, R G, 1963, Excavation of the Roman fortress at Carpow, Perthshire, 1961-2, *Proc Soc Antiq Scot*, 96, 184-207

Boon, G C, 1972-3, Roman glassware from Caerwent, 1855-1925, *Monmouthshire Antiq*, 3(3), 111-123

Boon, G C, 1974, *Silchester, the Roman town of Calleva*

Bohme, A, 1972, *Die Fibeln der Kastelle Saalburg und Zugmantel*, Saalburg Jahrbuch, Bericht des Saalburg Museums, 29

Brailsford, J W, 1962, *Hod Hill, volume 1, antiquities from Hod Hill in the Durden Collection*, British Museum

Brandt, E, 1972, *Antike Gemmen in Deutchen Sammlungen*, 1, part 3, Munich

Brodribb, A C C, Hands, A R, Walker, D R, 1972 and 1978, *Excavations at Shakenoak Farm, near Wilcote, Oxfordshire*, 3 and 5

Brown, A E and Alexander, J A, 1982, Excavations at Towcester 1954, the Grammar School site, *Northamptonshire Archaeol*, 17, 24-59

Brown, P D C, 1973, A Roman pewter hoard from Appleford, Berks, *Oxoniensia*, 184-206

Buckland, P C, 1981, The early dispersal of insect food pests as indicated by archaeological records, *Journal of stored products research*, 32, 1-10

Casey, P J, 1980 *Roman coinage in Britain*

Charlesworth, D, 1971, A group of vessels from the commandant's house, Housesteads, *J Glass Stud*, 13, 34-37

Charlesworth, D, 1972, The glass, in Frere, S S, *Verulamium excavations I*, Reports of the Research Committee of the Society of Antiquaries of London, 28, 196-215

Charlesworth, D, 1974, The glass, in Neal, D S, *The excavation of the Roman villa in Gadebridge Park, Hemel Hempstead 1963-8*, Reports of the Research Committee of the Society of Antiquaries of London, 31, 203-7

Charlesworth, D, 1980, Glass, in Stead, I M, *Rudston Roman villa*, 124-5

Chaplin, R E, 1969, The use of non-morphological criteria in the study of animal domestication from bones found on archaeological sites, in Ucko, P J, and Dimbleby, G W, eds, *The domestication and exploitation of plants and animals*, 231-46

Chiesa, G S, 1966, *Gemme del Museo Nazionale di Aquileia*, Aquileia

Clarke, G, 1979, *The Roman cemetery at Lankhills*, Winchester Studies 3

Clifford, E, 1933, The Roman villa at Hucclecote, *Trans Bristol Gloucestershire Archaeol Soc*, 55, 323-76

Connolly, P, 1975, *The Roman army*

Corder, P (ed), 1951, *The Roman town and villa at Great Casterton, Rutland*, first report

Cunliffe, B, 1975, *Excavations at Portchester Castle, Vol 1, Roman*, Reports of the Research Committee of the Society of Antiquaries of London, 32

Curle, J, 1932, An inventory of objects of Roman and provincial Roman origin found on sites in Scotland not definitely associated with Roman constructions, *Proc Soc Antiq Scot*, 66, 277-397

Darling, M J, 1977, *A group of late Roman pottery from Lincoln*, C B A for Lincoln Archaeological Trust Monograph Series 16/1

Delacour, J, 1964, *Waterfowl of the world*, Vol 4

Down, A, 1978, *Chichester excavations III*

Down, A and Rule M, 1971, *Chichester excavations*, 1

von den Driesch, A, 1976, *A guide to the measurement of animal bones from archaeological sites*, Peabody Museum Bulletin 1, Harvard University

Eastham, A S, 1971, The bird bones, in Cunliffe, B, *Excavations at Fishbourne 1961-1969*, Report of the Research Committee of the Society of Antiquaries of London, 27

Eastham, A S, 1975, The bird bones, in Cunliffe, B, *Excavations at Porchester Castle*, Vol 1, 409-415

Edwards, D, 1977, The air photograph collection of the Norfolk Archaeological Unit, second report, *East Anglian Archaeol*, 5, 225-37

Fowler, E, 1960, The origins and development of the penannular brooch in Europe, *Proc Prehist Soc*, 26, 149-177

Fremersdorf, F, 1962, *Die Denkmaler des Romischen Koln: VII Die romischen Glaser mit aufgelegten Nuppen*

Frere, S S, 1972, *Verulamium excavations I*, Reports of the Research Committee of the Society of Antiquaries of London, 28

Frere, S S, 1977, Roman Britain in 1976, *Britannia*, 8, 356-425

Friendship-Taylor, R M, 1979, The excavation of the Belgic and Romano-British settlement at Quinton, Northamptonshire, *J Northampton Mus Art Gallery*, 13, 2-176

Gillam, J P, 1976, Coarse fumed ware in north Britain and beyond, *Glasgow Archaeol J*, 4, 57-80

Goodburn, R, 1978, Roman Britain in 1977, *Britannia*, 9, 404-472

Grant, A, 1975, The animal bones, in Cunliffe, B, *Excavations at Portchester Castle, Vol 1, Roman*, Reports of the Research Committee of the Society of Antiquaries of London, 32, 378-450

Green, C, 1977, Excavations in the Roman kiln field at Brampton 1973-4, *East Anglian Archaeol*, 5, 31-95

Green, H S, 1974, Early Bronze Age burial, territory and population in Milton Keynes, Buckinghamshire and the Great Ouse Valley, *Archaeol J*, 131, 75-139

Green, M, 1975, Romano British non ceramic model objects in South East Britain, *Archaeol J*, 132, 54-70

Green, M, 1981, Model objects from military areas of Roman Britain, *Britannia*, 12, 253-269

Greenfield, E, 1958, Note in *J Roman Stud*, 48, 139-40

Groos, G W, 1981, *The diary of Baron Waldstein, a traveller in Elizabethan England*

Guido, M, 1978, *The glass beads of the Prehistoric and Roman periods in Britain and Ireland*, Reports of the Research Committee of the Society of Antiquaries of London, 35

Harden, D B, 1945, The glass, in O'Neil, H E, The Roman villa at Park Street, near St Albans, Herts, *Archaeol* , 1 2, 68-72

Harden, D B, 1957, Four Roman glasses from Hauxton Mill, Cambridge, *Proc Cambridge Antiq Soc*, 51, 12-16
Harden, D B, 1960, The Wint Hill hunting bowl and related glasses, *J Glass Stud*, 2, 45-81
Harden, D B, 1962, Glass, in *Eburacum, Roman York*, RCHM, 136-141
Harden, D B, 1967, The glass jug, in Biddle, M, Two Flavian burials from Grange Road, Winchester, *Antiq J*, 47, 238-40
Harden, D B, 1973, The glass, in Brodribb, A C C, Hands, A R, and Walker, D R, *Excavations at Shakenoak Farm, near Wilcote, Oxfordshire*, 4, 98-107
Harden, D B, 1975, The glass, in Cunliffe, B, *Excavations at Portchester Castle, Vol I, Roman*, Reports of the Research Committee of the Society of Antiquaries of London, 32, 368-74
Harden, D B, 1979, Glass vessels, in Clarke G, *The Roman cemetery at Lankhills*, Winchester Studies 3, 209-220
Harden, D B, Painter, K S, Pinder-Wilson, R H and Tait, H, 1968, *Masterpieces of glass*.
Henig, M, 1974, *A corpus of Roman engraved gemstones from British sites*, Brit Archaeol Rep, 8, 2 vols
Hinton, H E, 1945, *A monograph on the beetles associated with stored products*, British Museum (Nat Hist), London.
Howe, M, Perrin, J R and Mackreth, D R, 1980, *Roman pottery from the Nene valley: a guide*, Peterborough City Museum occasional paper No 2
Imhoof-Blumer, F and Keller, O, 1889, *Tier und Pflanzenbilder auf Munzen und Gemmen des Klassischen Altertums*, Leipzig
Isings, C, 1957, *Roman glass from dated finds*
Jackson, D A, 1982, Great Oakley and other Iron Age sites in the Corby area, *Northamptonshire Archaeol*, 17, 3-23
Johnston, D E, 1969, Romano-British pottery kilns near Northampton, *Antiq J*, 49, 75-97
Jones, B E, 1967, *Tribolium casteneum* (Herbst) (Coleoptera Tenebrionidae) observed flying from an unusual habitat in Britain, *Journal of Stored Products Research*, 3, 185-187
Jones, G D B and Grealy, S, 1974, *Roman Manchester*
Kenyon, K M, 1948, *Excavations at the Jewry Wall site, Leicester*, Reports of the Research Committee of the Society of Antiquaries of London, 15
Knight, J K, 1967, Excavations at the Roman town of Irchester 1962-3, *Archaeol J*, 124, 100-128
Lambrick, G, 1980, Excavations in Park Street, Towcester, *Northamptonshire Archaeol*, 15, 35-118
Leach, P, 1982, *Ilchester excavations*, Vol 1, Western Archaeological Trust monograph 3
Lloyd-Morgan, G, 1977, Mirrors in Roman Britain, in *Roman life and art in Britain*, (ed Munby, J, and Henig, M), Brit Archaeol Rep, 41
London Museum, 1954, *Medieval catalogue*
Lowe, P R, 1933, The Tarso Metatarsa of *Gallus* and *Phasianus* as they bear on the problem of the introduction of the pheasant into Europe and the British Isles, *Ibis*, 332
Lyne, M A B, and Jefferies, R S, 1979, *The Alice Holt/Farnham Roman pottery industry*, C B A Research Report, 30
Mackreth, D, 1979, Durobrivae, *Durobrivae*, 7, 19-21
Manning, W H, 1974, Objects of iron, in Neal, D S, *The excavation of the Roman villa in Gadebridge Park, Hemel Hempstead, 1965-8*, Reports of the Research Committee of the Society of Antiquaries of London, 31, 157-182
Manning, W H, 1976, Blacksmithing, in *Roman crafts*, (ed Strong, D and Brown, D), 143-53
Margary, I D, 1948, *Roman ways in the Weald*
Margary, I D, 1967, *Roman roads in Britain*
Massee, A M, 1946, Notes on some interesting insects observed in 1945, *33rd Report of the East Malling Research Station 1945*, 90-95
May, J, 1970, Dragonby, an interim report on excavations at an Iron Age and Romano-British site near Scunthorpe, *Antiq J*, 50, 222-45
Moorhouse, S, 1971, Finds from Basing House, Hampshire (*c* 1540-1642): Part two, *Post Medieval Archaeol*, 5, 35-76
Morin-Jean, 1913, *La verrerie en Gaule*.
Osborne, P J, 1969, An insect fauna of late Bronze Age date from Wilsford, Wiltshire, *Journal of Animal Ecology*, 38, 555-566
Payne, S, 1973, Kill-off patterns in sheep and goats: the mandibles from Asvan Kale, *Anatolian Studies*, 23, 281-303
Payne, S, 1975, Partial recovery and sample bias, *Archaeozoological studies*, (ed Clason, A T), Amsterdam/Oxford/New York, 7-17
Payne, S, 1980, Towcester Park Street: the animal bones, in Lambrick, G, Excavations in Park Street, Towcester, *Northamptonshire Archaeol*, 15, 105-112
Peacock, D P S, 1971, Roman amphorae in pre-Roman Britain, in *The Iron Age and its hill-forts*, (eds Jesson, M, and Hill, D), Southampton, 169-188
Peacock, D P S, 1974, Amphorae and the Baetican fish industry, *Antiq J*, 54, 232-243
Peacock, E, 1977, *Rhizophagidae. Handbooks for the identification of British insects*, Royal Entomological Society, London
Petru, S, 1972, *Emonske Nekropole*, Ljubljana
Pirling, R, 1967/8, Neue Funde Romischer Glaser aus Krefeld Gellep, *Kolner Jahrbuch*, 9, 34-41
Plesnicar-Gec, L, 1972, *The northern necropolis of Emona*, Ljubljana
Price, J, 1975, The glass, in Green, M J, *Excavations at the Bradwell Roman villa 1973-4: first interim report*, Milton Keynes Development Corporation occasional papers in Archaeology No 1, 12-14
Price, J, 1978, Trade in glass in *Roman shipping and trade: Britain and the Rhine provinces*, (eds du Plat Taylor, J and Cleere, H), CBA Research Report 24, 70-78
Price, J, 1979, The glass, in Gracie, H A and Price, E G, Frocester Court Roman villa: 2nd report 1968-77: the courtyard, *Trans Bristol Gloucestershire Archaeol Soc*, 97, 37-46
Price, J, 1982, The glass, in Webster, G, The excavation of a Romano-British rural establishment at Barnsley Park, Gloucestershire, 1961-1979, *Trans Bristol Gloucestershire Archaeol Soc*, 100, 176-187
Promptoff, A N, 1928-29, Inheritance of structural types in domestic poultry, *Journal of Genetics*, 20
Pryor, F M M, and Cranstone, D, 1978, An interim report on excavations at Fengate, Peterborough, 1975-77, *Northamptonshire Archaeol*, 13, 9-27
Pryor, F M M, 1984, *Excavation at Fengate, Peterborough, England, the fourth report*, Northamptonshire Archaeological Society Monograph 2
Ravetz, A, 1965, Fourth century inflation and Romano-British coin finds, *Numismatic Chronicle*, 7th series, 15

RCHM, 1962, *Eburacum, Roman York*
RCHM, 1982, *An inventory of archaeological sites in South West Northamptonshire*
Rees, S, 1981, *Ancient agricultural implements*
Ricken H, 1934, Die Bilderschusseln der Kastelle Saalburg und Zugmantel, *Saalburg Jahrbuch*, 8, 130
Robinson, M, 1977, The biological evidence, in Lambrick, G and Robinson, M, *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire*, 77, 133, CBA Research Report 32
Rogers, G B, 1974, *Poteries sigillées de la Gaule centrale*, tome i, *Les Motifs non figurés*, XXVII[e] Supplément à Gallia, Paris, 1974
Scherf, V, 1970, *Antike Gemmen in Deutschen Sammlungen III*, Wiesbaden
Saunders, C, 1974, The Roman coarse pottery, in Niblett, B R K, Excavations at Bradwell Abbey Barn, Bucks, *Rec Buckinghamshire*, 19(4), 489-500
Silver, I A, 1969, The ageing of domestic animals, in *Science in archaeology*, (eds Brothwell, D, and Higgs, E S), 2nd edition, London, 283-302
Simonett, C, 1941, *Tessinger Graberfelder*, Basel
Simpson, G, and Rogers, G B, 1969, Cinnamus de Lezoux et quelques potiers contemporains, *Gallia*, 27, 3ff
Singer, C, *et al*, 1956, *A history of technology*
Solomon, M E and Adamson, B E, 1955, The powers of survival of storage and domestic pests under winter conditions in Britain, *Bulletin of Entomological Research*, 46(2), 311-355
Terrisse, J R, 1968, *Les ceramiques sigillées gallo-romaines des Martres-de-Veyre*, XIX[e] Supplement à Gallia, Paris
Smith, I F, 1965, *Windmill Hill and Avebury*
Thornton, J H, 1973, The examination of early shoes to 1600, *Transactions of the Museums Assistants' Group*, 12
Thorpe, W A, 1935, *English glass*
Todd, M, 1968, The commoner late Roman coarse wares of the East Midlands, *Antiq J*, 48, 192-209
Todd, M, 1969, *The Roman settlement at Margidunum: the excavations of 1966-68*
Toynbee, J M C and Wilkins, A, 1982, The Vindolanda horse, *Britannia*, 13, 245-252
Turland, R E, 1977, Note in *Northamptonshire Archaeol*, 12, 218-223
Vermeulen, W G J R, 1932, *Een Romeinsch Grafveld op den Hunnerberg te Nijmegen*, Amsterdam
Viatores, The, 1966, *Roman roads in the south east Midlands*
Webster, G, 1950, A Romano-British burial at Glaston, Rutlandshire, 1947, *Antiq J*, 30, 72-3
Webster, G, 1969, *The Roman imperial army*
Wedlake, W J, 1958, *Excavations at Camerton, Somerset*
Wheeler, R E M and T V, 1932, *Report on the excavation of the Prehistoric, Roman, and Post-Roman site in Lydney Park, Gloucestershire*, Reports of the Research Committee of the Society of Antiquaries of London, 9
Wild, J P, 1974, Roman settlement in the lower Nene valley, *Archaeol J*, 131, 140-70
Wild, J P, and Dannell, J, 1974, Note in *Northamptonshire Archaeol*, 9, 92-5
Woodfield, C, 1977, A Roman site at Walton, Milton Keynes; the pottery, *Rec Buckinghamshire*, 20(3), 354-377
Woodfield, C, 1981, Finds from the Free Grammar School at the Whitefriars, Coventry, *c* 1545 - *c* 1557/8, *Post-medieval Archaeol*, 15, 81-159
Woodfield, C T P, 1978, Roman architectural masonry from Northamptonshire, *Northamptonshire Archaeol*, 13, 67-86
Woods, P J, 1970, Excavations at Brixworth, Northants, 1965-1970, Part 1, The Roman coarse pottery and decorated samian ware, *J Northampton Mus Art Gallery*, 8
Young, CJ, 1977, *Oxfordshire Roman pottery*, Brit Archaeol Rep, 43

This article has been published with the aid of a grant from the Department of the Environment. The finds etc have been deposited with the Northamptonshire Archaeological Archive.