

The Roman Pottery Manufacturing Site at Between Towns Road, Cowley, Oxford

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SUMMARY

The extent of one of Oxford's better known pottery manufacturing sites has been further defined by a 'watching brief' which roughly trebled the investigated area. Oxford's only potter using a literate stamp (Vossullus) is shown to have been working at the edge of a probably 2nd-century ditched enclosure, and although his kiln is still elusive its approximate position can be predicted from a waster dump. The progressive southward expansion in the late 3rd to 4th century is confirmed. Within the obvious limitations of such salvage observations, it is now possible to envisage a workshop surrounded by puddling tables with kilns at a slightly greater distance.

INTRODUCTION

Substantial building work at Cowley on the eastern side of Between Towns Road (SP545041) provided the opportunity for further investigation of the known Roman pottery manufacturing site. In 1981 and 1982 a watching brief was carried out by Brian Durham for the Oxford Archaeological Unit on behalf of the Department of the Environment. He would like to acknowledge the co-operation of the Raglan Property Trust Ltd and Sir Robert McAlpine and Sons Ltd, particularly their site agent Steve Dann. We would jointly like to thank Christopher Young for his advice and encouragement.

The work at Between Towns Road illustrates the value of systematic 'salvage' recording when large scale excavation is not possible or desirable. As shown below, the series of running sections exposed by contractor's foundation trenches meant that few features of any size were missed; yet the recording could be carried out by one person making regular visits twice a week.

THE SITE (Figs. 1 and 2).

Fig. 1 represents a summary of all known and available evidence of the Roman kiln site. It was first discovered in 1934 when pottery of mainly 2nd-century date, including one 'distorted waster', was discovered during the building of the Cowley Conservative Club.¹ At that time it was believed to be a settlement site. In 1969 3rd - 4th-century pottery was found further east along St. Luke's Road.²

The first detailed investigation of this site was made in 1939-40 by Mr, now Professor, R.J.C. Atkinson.³ The excavation strategy is set out in his report, and his use of trenches laid out on a grid pattern consisting of 'a series of pits, 6ft. x 3ft.' was confirmed during the rescue work

¹ V.C.H. Oxon. i. 335.

² C.J. Young, 'The Roman Kiln Site at St Luke's Road, Cowley, Oxford' *Oxoniensia*, xxxviii (1973), 215.

³ R.J.C. Atkinson, 'A Romano-British Potters' Field at Cowley, Oxon.' *Oxoniensia*, vi (1941), 9-21.

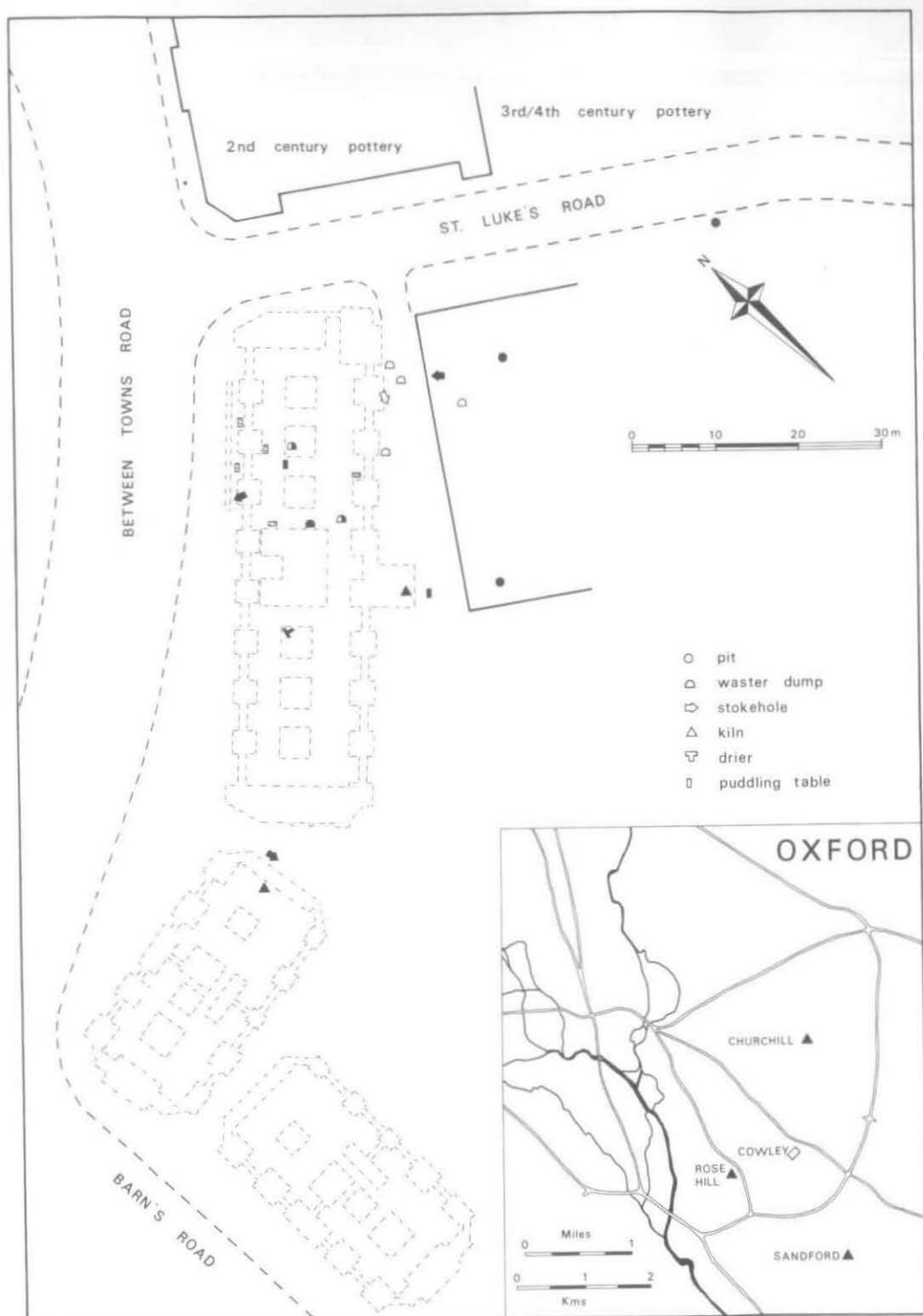


Fig. 1. Plan showing distribution of all finds and features relating to pottery manufacture at Cowley. Unshaded and shaded symbols represent 2nd-century and 3rd/4th-century features respectively; symbols are half shaded when the features contained over 60 per cent 2nd-century material and cross hatched when there is no dating evidence.

of 1981-2 when in several instances the new construction trenches revealed the old excavation. This was a bonus in the analysis of the area, as Atkinson's original site plans are unfortunately no longer available and interpretation has to be based on the published plan.

The features defined as a result of Atkinson's investigations include one kiln and evidence for another, waster clay dumps, puddling holes and a puddling table, producing material of 2nd - 4th-century date.

The known area of the kiln site was extended in 1972 when rescue work was carried out in the area now covered by the Telephone Exchange on the south side of St. Luke's Road. This work was undertaken by Christopher Young and the Oxford Archaeological Excavation Committee, who discovered features of 2nd-century and late 3rd-century date including a stokehole and waster dump.⁴

BETWEEN TOWNS ROAD 1981-2

In 1981, with the development of Cowley Centre Site 5 involving the construction of three large buildings along the eastern side of Between Towns Road and the north side of Barn's Road (Fig. 1), the opportunity arose for another watching brief. In June the digging of foundation trenches for Block C, the most northerly of these buildings, began and observation and occasional digging was possible until August. The following year a watching brief was carried out on Blocks B and A (the southernmost) from June until October.

A red/brown soil to a depth of c. 2 m. was present in many areas of the site, merging into yellow sand containing rafts of calcareous grit. Traces of the Roman ground surface were observed in many parts of the site at a depth of c. 0.8 m. Roman activity on the site can be divided broadly into 2 phases; the dating relies exclusively on the pottery.

Phase I: 2nd century

Phase I consists of 2 waster dumps (F20, F23), a stokehole (F24), and a series of ditches (F1, F2, F4, F12, F13, F21, F26) and an associated pit (F3).

F20 was a small waster dump, very approximately 2 m. in diameter, in the north-east corner of the site. Among the finds were numerous sherds of stamped 2nd-century mortaria and fragments of red fired clay. Some 9 m. to the south-west was another waster dump (F23), approximately 1 m. in diameter, from which small quantities of white (mainly 2nd-century mortaria) and grey wares were recovered. Between these was F24, a large shallow stokehole at least 4 m. in diameter and a maximum of 1.25 m. deep (Fig. 3, section 1). It was filled with a black ashy material containing much pottery, kiln debris and fired clay. It appeared to be shallower to the west where a dense patch of kiln debris, found at the end of the exposed section, suggests the area in which the putative kiln might lie. A large quantity of pottery was recovered from this feature, 97 per cent of it 2nd-century, mainly mortaria with many stamps. The remaining 3 per cent (a few sherds of late 3rd-century date) is presumed intrusive.

It is suggested that the ditches F2 and F12 running north-east/south-west in the north-west corner of the site also belong to this phase. F2 is the narrower with a fill of brown loam and sand approximately 0.35 m. wide. This feature was traced again in a sewer trench along the Between Towns Road frontage. F12 appears to be a recut of a broader

⁴ Young, 'St Luke's Rd', *Oxoniensia*, xxxviii.

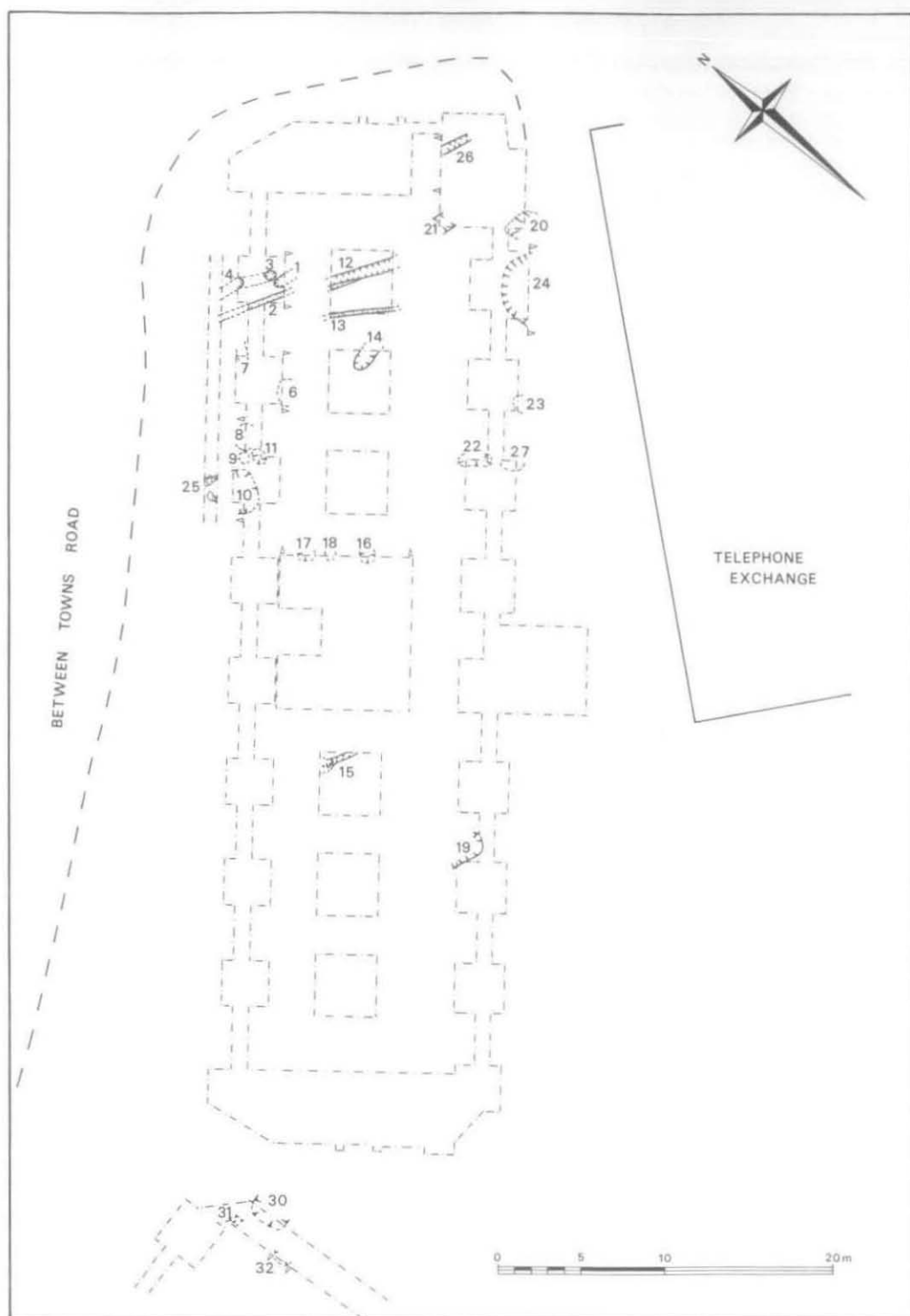


Fig. 2. Between Towns Road, Cowley: site plan.

ditch c. 0.80 m. wide with the presumed recut visible along part of its southern edge. The small amount of pottery found in these features suggests a 2nd-century date; this is to some extent supported by negative evidence, especially as there was no 3rd- or 4th-century pottery, although late material had been recovered from unstratified levels of the same trench. It is suggested that ditches F1, F4, F13, F21 and F26, which have the same or similar alignment with no pottery or undiagnostic pottery, are also of this phase. It also appears that ditch F2 cuts ditch F1 (Fig. 3, section 2). Pit F3 is assigned to this phase because of its association with this series of ditches, since it appears to be cut into a shallow gully connected to ditch F4. The upcast from F26 formed a bank on the south side, beneath which traces of the old ground surface survived (Fig. 3, section 3).

Phase II: late 3rd/4th century

To this phase are assigned the following features: stokeholes F10 and F30, flue F25, kiln F32, ditches F31 and F19, drier F15, waster dump F16, structure F18, puddling tables, F6, F7, F8, F17 and F22, an ash deposit F27 and pits F9, F11, F14.

F10 (Fig. 3, section 4) on the Between Towns Road frontage, consisted of a pit approximately 2.8 m. in diameter with a black ashy fill containing burnt clay, pottery and stone. It was interpreted as a stoke hole and towards its north-east end was a build up of ashy deposits, suggesting that any kiln might lie outside the excavated area towards the north-west. The ashy fill was sealed with a layer of brown sandy loam, possibly hill wash; the feature was cut into the original topsoil which is shown in the section. Pottery evidence suggests a late 3rd-century date. Corroboration of the position of the kiln is provided by F25, which appeared as a stone-lined structure to the west of F10 in the disturbed area of the sewer trench. It was cut into sub-soil and had a brown loam fill containing a few sherds of late 3rd/4th-century pottery. Its position and pottery suggest that it was in fact a kiln flue at least 1 m. long leading to a kiln outside the excavated area on the north-west edge of the site, belonging to the stokehole F10.

The second stokehole, F30 on the southern limit of the site, was approximately 2.4 m. in diameter and appeared to lie on a north-south axis (Fig. 2). The feature was deepest at its north end and sloped up to the south, possibly indicating the position of the kiln in this area. The black ashy fill contained lumps of fired clay and late 3rd/4th-century pottery. In the same area of the site the fragmentary remains of a kiln F32 (Fig. 3, section 5) were discovered. No finds were associated with this feature, but possibly it belongs to stokehole F30 on the opposite side of the trench. If so, F31, a small ditch which seems to run north/south, although it only appears in section, must either have cut or been cut by this structure, unless it butt ends in this area, as the pottery assemblages are similar in date and type.

F19 on the south-eastern side of the site was similarly difficult to define, first appearing as a pit cut into the section of the excavated area. It was at least 2.5 m. long and approximately 1.30 m. in breadth and is possibly better described as a gully with its butt end appearing in section, since no trace was found in the adjacent trench. It is dated by a few sherds of late 3rd/4th-century pottery.

Approximately 17 m. to the north were traces of what was interpreted as a pottery drier, F15. The feature lay on a south-east/north-west axis appearing, as the section was dug back, as a shallow trench containing tightly packed stones overlying a loamy fill with charcoal. In the north-east section of the completed trench the feature was seen to have widened, possibly into the end of a drier; but not enough was seen to determine whether the

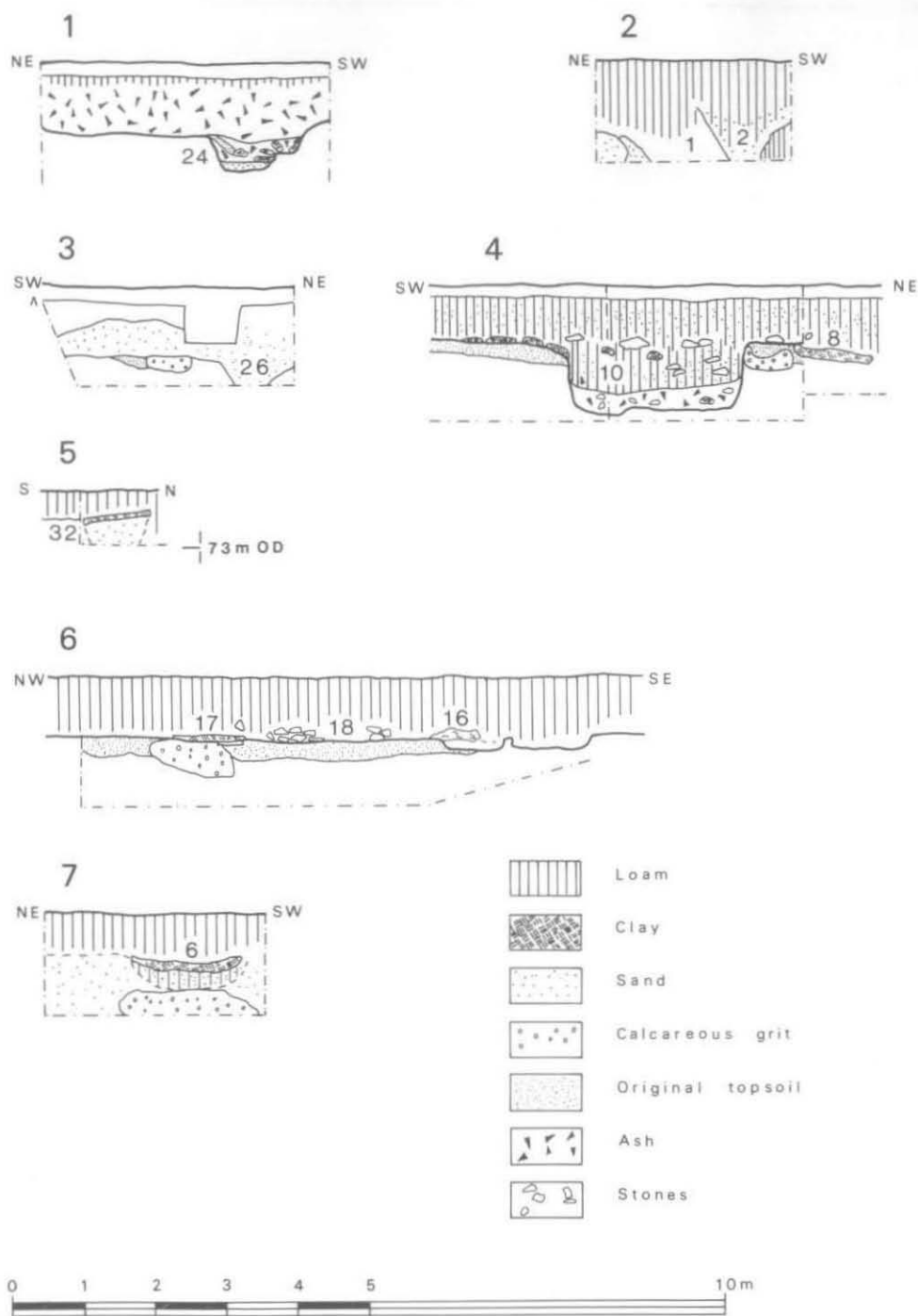


Fig. 3. Between Towns Road, Cowley: sections.

plan was that of a T-shaped drier or of one of its variants.⁵ The pottery suggests a late 3rd/4th-century date.

Roughly in the centre of the site are a group of features recorded in a north-east/south-west section (Fig. 3, section 6). The small waster dump F16 contained some of the latest dateable material on the site. Further north-west on the section, F18 consisted of two groups of stones which appeared to be pitched at right angles to each other. It is possible that this represents the corner of a structure appearing in section. The dating of this feature and the group of puddling tables, none of which contained any pottery, is discussed below.

F17 appeared in section, west of F18, as a grey clay layer approximately 1 m long and 0.1 m thick overlying a lump of calcareous grit. The one flat stone which appears in section is perhaps the remains of a stone platform upon which the clay was puddled.⁶ Of the other three features interpreted as puddling tables, F6 is the most positively identified (Fig. 3, section 7). It consists of a layer of puddled buff-white clay approximately 1.25 m. long and 0.10 m. thick, overlying layers of brown sandy loam which showed signs of previous puddling activity, and beneath which was calcareous grit. To the west, F8 had a clay layer over 1 m. long and c. 0.25 m. deep, of much greyer clay than F6. The interpretation of F7 as a puddling area is more tenuous; it appeared in section as well-laid stone slabs c. 3 m. across, cut into Roman ground level. To the east of this group, F22 appeared as a puddling area or possibly a dump of clay on flat stones c. 2 m. long and 0.8 m. in breadth, although the depth of the deposit was not recorded. At its eastern end it merged into F27, an area of ash deposit c. 1.5 m. in diameter.

Features 9, 11 and 14 were pits, of which F9 and F11 had no dating evidence, but are perhaps roughly contemporary with features 8 and 10 between which they lie.

THE FINDS

Apart from a few fragments of animal bone all the finds were ceramic.

Pottery was recovered from 26 contexts and is probably a representative sample of material present on the site. Mortaria were mainly forms M3 and M6; the descriptions of these forms and all others are taken from Young.⁷ The pottery from each context was divided according to fabric and form and quantified by sherd count and weight. It was then recorded on standard Oxford Archaeological Unit recording forms which make up the pottery archive; and complete archive is to be deposited with the Oxfordshire Department of Museum Services, Fletcher's House, Woodstock.

THE POTTERY FABRICS

The pottery was divided by macroscopic examination and with a X10 hand lens into 18 fabrics, summary descriptions of which are given below. As far as possible the fabrics were distinguished according to C.J. Young's descriptions;⁸ they were further described using the guidelines suggested by D.P.S. Peacock.⁹ There are 3 major groups and a further 5 individual fabrics; fabric descriptions will be found in Young's publication when none are given below. Percentages of the wares present are given in brackets. As the fabric subdivisions were originally worked out on a theoretical basis, it will be found that some numbers are missing from the series eg. 2.2 was white colour-coated oxidised ware of which none was identified from the site.¹⁰

1. White Wares (72.46 per cent)

⁵ C.J. Young, *Oxfordshire Roman Pottery*, (BAR 43), 1977, 204.

⁶ Atkinson, *Oxoniensia*, vi. 13.

⁷ Young, *Oxfordshire Roman Pottery*, 'The White Ware Mortaria' 56ff.

⁸ Young, *Oxfordshire Roman Pottery*, *passim*.

⁹ D.P.S. Peacock, *Pottery and Early Commerce: Characterisation and Trade in Roman and Later Ceramics*, (1977), 29-33.

¹⁰ Young, *Oxfordshire Roman Pottery*, 117.

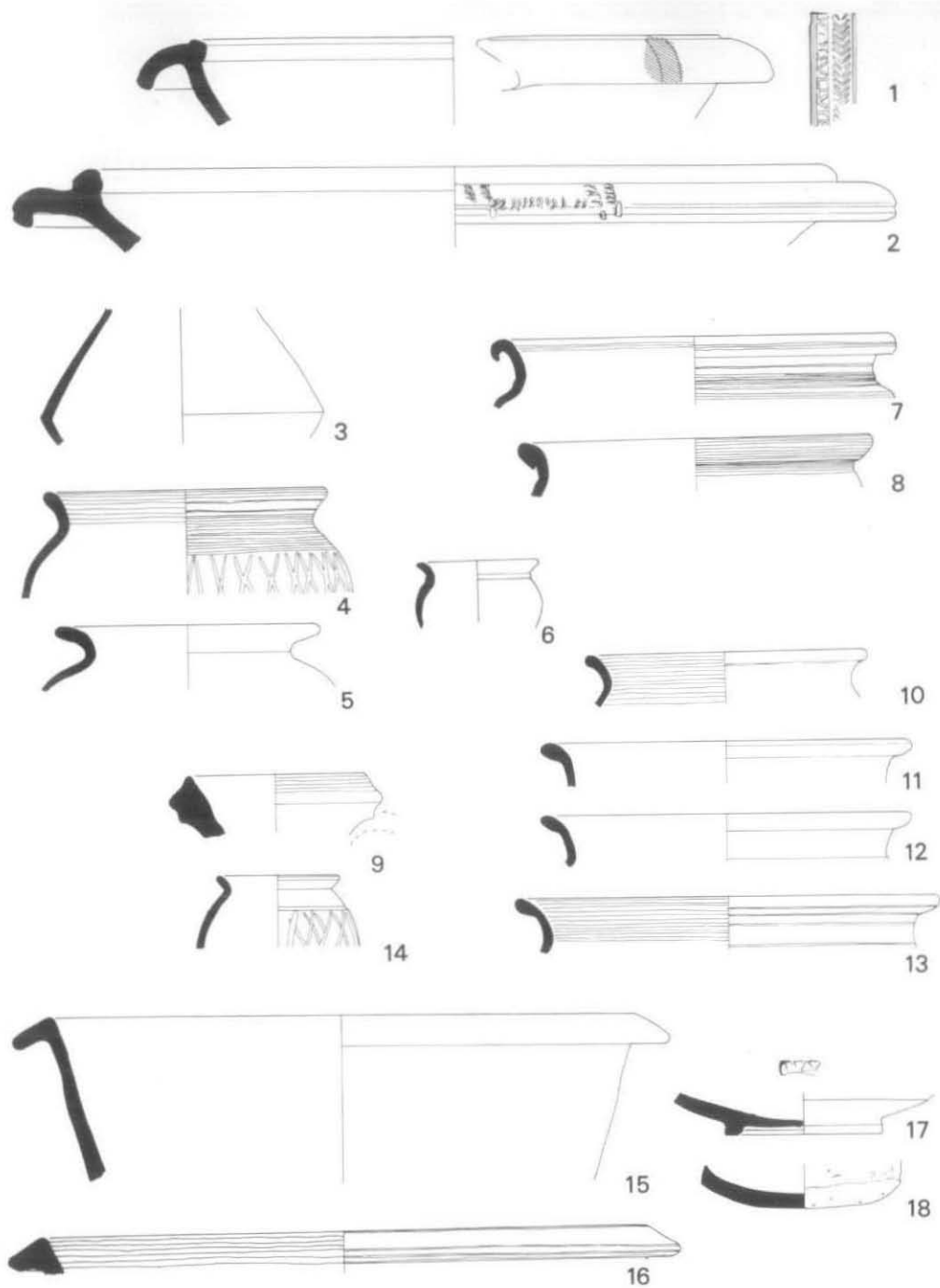


Fig. 4. Between Towns Road, Cowley: pottery 1:4; stamp 1:2.

- 1.1 White ware mortaria; forms M3, M6, M7, M10, M11, M17, M22, M23.
- 1.2 Parchment ware; form P24.
- 1.4 White firing ware with moderate amounts of quartz temper and small black and red inclusions; forms W3, W5, W8, W11, W33; see also drawing (3).
- 1.5 Similar to above but with more quartz; form W33.
2. Oxidised Wares (12.46 per cent)
 - 2.1 Red/brown colour coat; forms C8, C18, C23, C40, C45, C51, C55, C100; see also drawing (6).
 - 2.3 A moderately fine fabric with few visible inclusions; form 043.1.
 - 2.4 Similar to above but coarser with more quartz; forms 010, 018, 041, 044.
3. Reduced Wares (13.77 per cent)

It was more difficult in the case of the reduced wares to find exact parallels to the descriptions in Young 1977 so no reference is made here, although some of the fabric types are probably the same.

- 3.1 A fine hard fabric which is grey throughout with very few visible inclusions; forms R15, R46.
- 3.2 Similar to above but with sparse quartz temper; surfaces can vary in colour from light to dark grey and the fabric is either grey throughout or has a lighter or orange core; forms R9, R12?, R15, R24.
- 3.3 This fabric is distinguished by its dark surfaces and light core which can be light grey or very light orange/brown; forms R15, R16 (body sherds), R21, R24, R33.1, R46, R60.
- 3.4 Similar to above but coarser, having a moderate amount of poorly sorted quartz temper. The colours are also similar to 3.3, but the inner core is often light grey with red/brown margins; form R61?
- 3.5 A coarse fabric with abundant rounded quartz inclusions which protrude through the surface making it rough; forms - body sherds only.
- 3.6 Similar to above but with finer quartz; forms - body sherds only.

Other fabrics (1.3 per cent)

4. Shell tempered

Four body sherds only of this fabric are recorded; the temper is moderate in quantity and poorly sorted, the outer surface is grey/brown, the inner orange/brown with a heavy dark grey core.

5. The fabric contains moderate amounts of shell, limestone, quartz and ochre in a matrix that looks largely unprepared; represented by one hand-made base. See drawing (18).
10. Samian. A single sherd was recorded from an unstratified context.
99. Post Medieval. One sherd only was recorded.

THE FORMS

The form types are taken from Young's BAR with hitherto unpublished forms or variants described and illustrated (Fig. 4). The order of form and fabric in which they are presented follows that of Young.

THE ILLUSTRATED SHERDS

1. A variation upon M3.5 distinguished by the red paint which covers the stamp of Vossullus and extends over the whole interior of the vessel. It seems to be the first example in this form with red paint decoration (Fabric 1.1, F20.)
2. A variation of form M23; it is closest to M23.5 in its decoration, which consists of half moon shaped impressions across the width of the flange and along the outside edge. There are traces of red paint on the top and inside the rim (Fabric 1.1, F16.)
3. Part of the body of a laminated vessel in a fine white fabric. The closest parallels which could be found for this vessel were forms R25 and R26. (Fabric 1.4; F24.)
4. A variant of W33 with plain inverted rim. (Fabric 1.5; F24.)
5. Another variation of W33 with a sharply everted rim. (Fabric 1.5, F20.)
6. A miniature colour-coat jar. (Fabric 2.1, F30.)
7. A variant of 010 with an everted and hooked rim. (Fabric 2.4, F24.)
8. As above with everted, rolled over rim. (Fabric 2.4, F24.)
9. A variant of R9. (Fabric 3.2, U/S.)
- 10-13. Variants of R12. (Fabric 3.3, F20.)

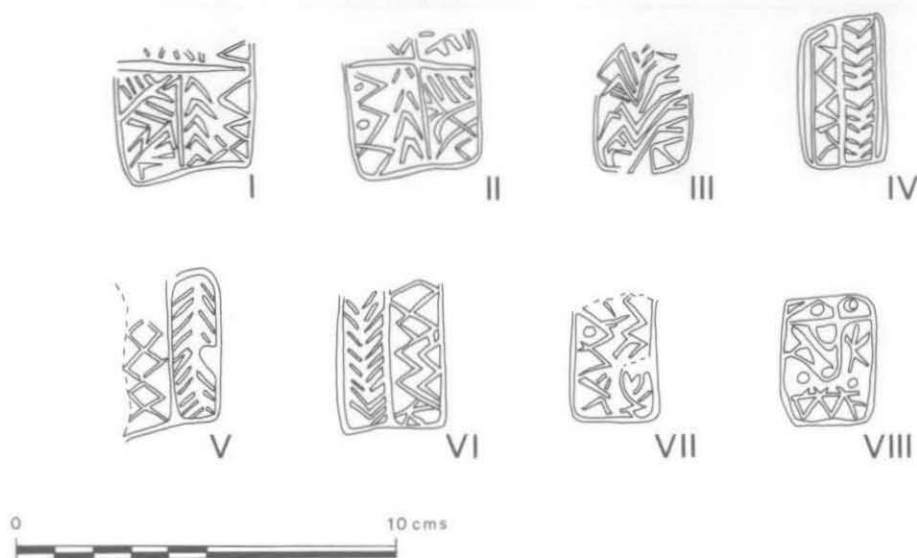


Fig. 5. Between Towns Road, Cowley: mortaria stamps 1:2.

14. A form very similar to R33.1; the only previously known example is from Allan's Pit, Dorchester.¹¹ It is however smaller and in a different fabric. (Fabric 3.3, F23.)
15. This appears to be a variation of form R46 with a much greater diameter and a different rim type to any previously illustrated. (Fabric 3.1, F16.)
16. Probably another variation of R46, again with a large diameter. The rim is triangular in section. (Fabric 3.1, F24.)
17. Form R60 showing part of illiterate stamp. (Fabric 3.3, F24.)
18. This appears to have been the base of a hand-made vessel, the walls of which seem to have been coil built. Nail marks and finger impressions can be seen inside where the clay has been pressed out. Could it be a potter's child at work? (Fabric 5, F24.)

THE MORTARIA STAMPS (Fig. 5)

Eleven mortaria with stamps of Vossullus, apparently all from the same die, and approximately 61 vessels with illiterate stamps were recovered. The Vossullus stamps were confined to the waster dump (F20) and occurred only on forms M3 and M6. The illiterate stamps fall into 8 types (see Fig. 5), some of which are already published by Young.¹² Types I, VI, V and III appear to correspond to numbers 5, 6, 7, 8 and 10 in Young; types II, VII and VIII are new.¹³

DISCUSSION

White ware mortaria of forms M3 with a few M6 formed the bulk of the pottery recorded, most of it coming from three contexts. F20 was a waster dump containing material with a possible date range from 50 to 250 AD; F24 was a stokehole whose fill contained material of a similar date range of 50–200 AD. In both cases the bulk of the

¹¹ D.B. Harden, 'Two Roman-British Potters' Fields near Oxford', *Oxoniensia*, i (1936), 81–93.

¹² Young, 'St Luke's Rd', 229.

¹³ Young, *Oxfordshire Roman Pottery*, Fig. 13, 59.

pottery lies roughly between the dates of 140 and 200 AD. Of the illiterate stamps, types I, II, III and IV, like the Vossullus stamps, are confined to F20 but there is as yet no discernible correlation between form and stamp type. All the vessels with illiterate stamps from F24 are of form M3.2 (this form is by far the most common in this feature). The stamps are of 4 types, V and VI being the most heavily represented. Of the other material in this context, the grey ware bowl copying Samian form Dr 18, with an illiterate stamp, is of interest (Fig. 4 no. 17.), the stamp being very similar to those appearing on later colour-coat bowls from the site. Young's suggested dating of 70-120 AD puts it among the earliest pottery in this context. The waster dump F23 contains a similar range of material, most of it again in the date range 140-200 AD. Other mortaria found on the site were generally single stray examples, but form M17 was exceptionally represented by 8 specimens, half of which were unstratified.

The latest dateable material (apart from unstratified sherds on the west of the site) was from a waster dump F16, and it is probable that the R46 in this context is residual. The range of late material was considerably extended by the pottery from F30 and F31 on the southern edge of the site. Colour coated pottery representing some of the most common types formed the bulk of the pottery from this area. It is tentatively suggested this was the major product of the kiln (F32), although actual sherd numbers are too small to give definite proof. Unfortunately no pottery came from the kiln to support or contradict the theory that F30, the stokehole, is part of this structure. Strangely, no colour-coated pottery was recovered from F16, the 3rd/4th-century waster dump, and one fragment only from the stokehole F10, suggesting perhaps colour-coated wares were not manufactured on the north part of the site.

SUMMARY LIST OF VESSEL FORM AND FABRIC BY FEATURE

- F2 body sherds (3.3)
 F10 M17 (1.1); W3 (1.4); C100 (2.1); 043 (2.3)
 F12 W8 (1.4); R15 (3.1; 3.3); R24/12 (3.2)
 F13 body sherds (1.1; 1.4)
 F14 body sherds (1.1; 1.4; 3.5)
 F15 body sherds (1.1; 2.1; 2.4; 3.2; 3.3; 3.5; 3.6)
 F16 M23 (1.1, 16), 044 (2.4); R16 (3.3); R46 (3.1, 15; 3.3) body sherds (1.4; 3.4; 4)
 F19 C40 (2.1); body sherds (2.4)
 F20 M3 (1.1); M6 (1.1); W3 (1.4); W5 (1.4), W33 (1.5, 5), 018 (2.4) R24 (3.3, 10, 11, 12, 13)
 F23 M3 (1.1, 1); M6 (1.1); 041 (2.4); R24 (3.2); R33 (3.3, 14) body sherds (1.4; 1.5)
 F24 M3 (1.1); M6 (1.1); M11 (1.1); M17 (1.1); W3 (1.4; 1.5) W31 (1.4); W33 (1.5, 4); C45 (2.1); C51 (2.1) 010 (2.4, 7, 8); R21 (3.3); R24 (3.2); R31 (3.3); R46 (3.1, 16); R60 (3.3, 17); hand made base (5, 18); body sherds (1.4, 3; 3.6)
 F25 M17 (1.1); W33 (1.4); C45 (2.1)
 F26 body sherds (1.1; 1.4; 2.4)
 F30 M17 (1.1); C45 (2.1); C51 (2.1); ? C113 (2.1, 6) body sherds (1.3; 2.4; 3.2)
 F31 C8 (2.1); C18 (2.1); C45 (2.1); R15 (3.2)

Fabric numbers are given in brackets followed by drawing number where relevant. Details of unstratified material can be found in the pottery archive.

GENERAL DISCUSSION

In all approximately 5000 sq. metres of the Roman pottery manufacturing area at Cowley have been investigated, that is, the total area excavated and observed since 1939. Fig. 1 shows the distribution of 2nd-century and 3rd/4th-century features. It shows that Young's theory that the area was used exclusively as a dumping ground until the 3rd/4th century is only partially correct.¹⁴ One structural feature, F24 (Fig. 2), was discovered, suggesting that the area is only just on the periphery of the 2nd-century manufacturing site. It is suggested that a kiln of Vossullus must lie in the vicinity, possibly slightly to the north, as the waster heap F20 contained a large number of mortaria with this stamp. A mortarium with the same stamp, apparently from the same die, was found in this area by Atkinson in 1939, sealed beneath a clay dump.¹⁵ The putative kiln is unlikely to belong to stokehole F24

¹⁴ Young, 'St Luke's Rd', 227-228.

¹⁵ Atkinson, *Oxoniensis*, vi. 14.

as this feature contained illiterate stamps only, which were of different types to those from waster heap F20.

The remaining 2nd-century features were the discontinuous series of ditches in the north and north-west of the site (Fig. 2). These appear to form boundary ditches, possibly field boundaries as at the Churchill Hospital kiln site,¹⁶ or an enclosure for the 2nd-century kiln site. It should be noted that very little of the unstratified pottery from the area was 2nd-century, which strongly suggests there was no appreciable activity at that time.

The 3rd/4th-century features, with the possible exception of the group of puddling tables, present a more diffuse picture. None of the puddling tables discovered during 1981-2 produced any pottery, and their dating relies on analogy with Atkinson's puddling table of apparently similar type which could be dated to this phase (Feature No.6), and on the theory of the 3rd/4th-century expansion into this area.

It is suggested that the south-western part of the site specialized in the production of red/brown colour-coated wares. These formed the bulk of the pottery from F30 and F31 (Fig. 2) and of the unstratified material around them. This area might have included drier F15 and gully F19 which both had a high proportion of colour-coated and oxidised pottery. Evidence of occupation areas within or near the manufacturing area remains inconclusive. The possible 3rd/4th-century occupation site excavated by Atkinson might be one trace, and would have been suitably positioned, being outside the immediate area of 3rd/4th-century activity (close to the two 2nd-century dumps in the north of the site). The only other possible evidence is F18, the corner of an undefined stone structure which might have been a workshop.

CONCLUSIONS

An examination of the total evidence available from the kiln site at Cowley has revealed further information on its chronological and spatial organisation.

A comprehensive watching brief in the south and west of the area (Fig. 1) produced no Roman features and no unstratified pottery, suggesting that the southern and western limits are now defined. The distribution of 2nd-century features and pottery suggests more activity both to the north and to the east of the excavated areas, whereas the axis of 3rd/4th-century features seems to be east-west with a concentration on the north-east side of the site.

There is evidence for some form of organisation within the site in both manufacturing and preparation processes. The south-west appears to specialise in oxidised wares, as does the area investigated in 1972, contrasting with the predominance of white wares from the 3rd/4th-century features excavated in 1939. The group of puddling tables in the north-west, one showing signs of several phases of puddling activity (F6, Fig. 2), suggests perhaps this was an area mainly used for the preparation of the clay.

The variety of stamps found on the mortaria from the 2nd-century features, F20 and F24, points to communal use of kilns in this phase. If a particular stamp type can be taken as being the personal property of one potter it follows that four were sharing the putative kiln belonging to stokehole F24, and that five, including Vossullus, were using F20 as waster dump.

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¹⁶ C.J. Young, 'Excavations at the Churchill Hospital, 1972: Interim Report', *Oxoniensia*, xxxviii (1973), 209-210.