Rescue Excavation in Dorchester-on-Thames 1972

By Richard Bradley
With Annie Grant and Sue Sheridan

Introduction

THIS paper is the record of a month's excavations on the east side of the Roman town of Dorchester-on-Thames (Fig. 1). The site straddled the suggested line of the town defences and was occasioned by the imminent redevelopment of a small plot behind the car park of the Old Castle Inn. The work took place in July 1972 under the writer's direction. Permission to excavate was given by Osney Associates Ltd. and the work was financed through the Upper Thames Archaeological Committee. In the later stages of the work much of the day to day running of the site fell to Sue Sheridan and this paper relies so extensively on her records that she must be regarded as one of its authors. A second site at Beech House was dug under the direction of Trevor Rowley. This will be published separately.

It was with some misgivings that the writer agreed to undertake this project which lies well outside his field of study, and limits of time, labour and finance ensured that the work was not undertaken with the thoroughness that the site deserved. Since 1972 the project has undergone some vicissitudes. A few of the small finds which were sent for conservation have now disappeared and arrangements for specialist publication of the other artefacts have twice broken down. Much of this paper was written in 1973. David Brown, Tania Dickinson, Michael Fulford, David Hinton and Christopher Young have all helped to make up for the writer's ignorance, but they cannot be implicated in any errors that remain.

The excavation was located in a disused garden at the edge of raised ground above the River Thame (Fig. 1). The break of slope to the east was believed to mark the line of the town defences. To the west is an area of allotments which were the scene of an earlier series of excavations.[1] Before work commenced, it was known that part of the site had been occupied by a cottage. It appeared from surface finds that this had been no more than two centuries old.

An area of 91 m.[2] was excavated in advance of building. Restrictions of time and of depth did not allow the clearance of the whole site to the natural gravel which lay as much as 2·7 m. below the existing surface, and for this reason two points were given especial prominence. First, it was hoped to define and to date the eastern town defences ; and, secondly, it was planned to devote time to the latest Roman layers. This decision was based upon the important structural evidence already recognized in the allotments to the west.[2] An initial area of

[1] S. Frere, ' Excavations at Dorchester on Thames, 1962 ', *Archaeol. J.*, 119 (1962), 114–49.
[2] *Ibid.*

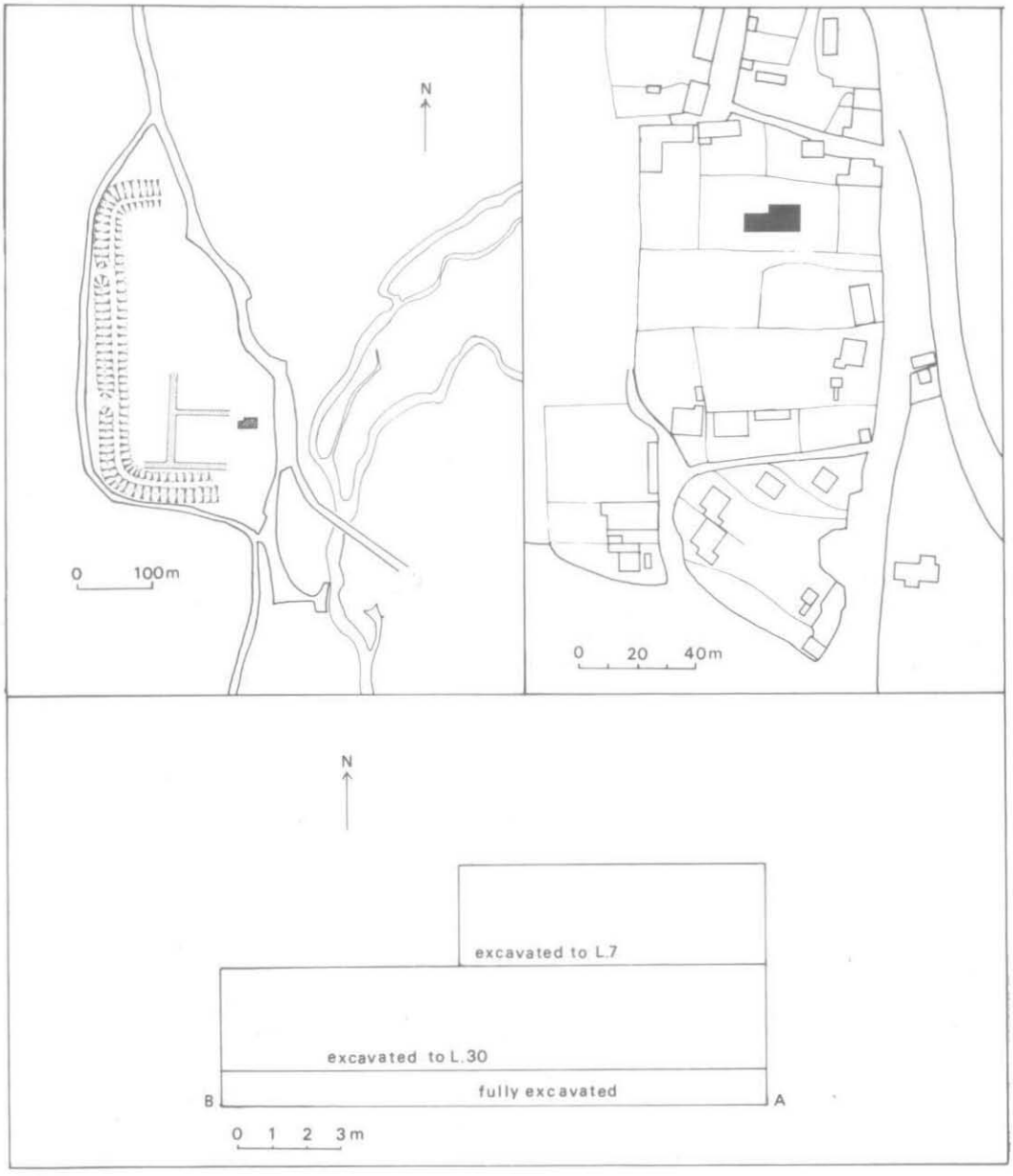

Fig. 1

(Top left) : the location of the site in relation to the Roman town defences, the Roman streets, the principal modern streets and the river. (Top right) : the location of the site in relation to modern development. (Below) : the extent of excavation. Drawing : Joanna Bacon.

64 m.² was cleared to the earliest levels of the Roman town and an extension of 27 m.² was confined to its uppermost layers (Fig. 1). The existence of a deep deposit of make-up precluded the clearance of large areas to the natural gravel and this was explored in a narrow section along the main axis of the site, dug partly by hand and partly by machine. When it became clear that surface levels to a depth of 1·2 m. had been totally disturbed within the last two centuries, this soil was also removed mechanically. The remaining levels retained some evidence of occupation from the early Roman to the early medieval periods. This will now be described in chronological order.

THE EXCAVATED FEATURES (Figs. 2–4)

Phase 1 (Figs. 2 and 4). The earliest occupation of the site was represented by scattered post-holes (F110–13, 115 and 116), a shallow hollow (F109) and a curving slot (F114), all cut into the natural gravel. A single post pipe could be seen within the filling of the slot. No floor levels survived and so much of the area had been removed by a later feature that no interpretation is possible.

Phase 2 (Fig. 4). The earlier features were directly sealed by layers of clay between 70 and 115 cm. in thickness (L30, 32 and 33). These had been deposited while the hollow (F109) remained open. The dumping of this clay had the effect of counteracting a slope of 1 in 24 towards the river. Although this material was made up of several horizontal layers, there was no sign of any ground surface within this mass and each tip may have been levelled off separately. The only object from the clay was a single animal bone. There is evidence that a shallow deposit of loamy silt (L16) had built up over the earlier make-up before the west part of the site was occupied.

Phase 3 (Figs. 2 and 4). As a result of deep disturbance by later features the eastern and western parts of the excavated area must sometimes be considered separately. In each area there is evidence for phases of timber building but in no case were the traces extensive enough for detailed analysis. The fuller sequence is in the western part of the excavated area :

Phase 3a The earliest structural feature was a short length of slot (F105) which defined two superimposed spreads of fine gravel (L15) and which was dug into the underlying silt and clay (L16 and 32). After it had been dug, silt continued to accumulate to its east. It is not certain if this slot was part of a structure but the abrupt edge to the gravel might mark the position of a sill beam.

Phase 3b Structural evidence was limited to further slots (F102 and 104), each retaining evidence of uprights. These slots remained in use long enough for individual posts to be replaced. No floor levels were preserved except for a thin lens of grit (L14). Since F104 was truncated by a later intrusion, the full outline was far from clear, although the limited space between F102 and F104 might suggest some form of corridor. Relative dating was provided by F104 which cut or abutted a tip of orange clay sealing a slot of phase 3a (F105).

Phase 3c The principal features assigned to this phase were an oven with a stoke hole to the north (F98) and a semicircular gully (F99). The latter may have taken upright posts and could perhaps have screened the oven. Two shallow pits also belonged to this phase : F101, which cut the earlier slot (F102) ; and F100 which cut the oven itself.

Subphase uncertain To the east phase 3 was represented by only three features, all cut into the earlier make-up (L30, 32 and 33) and sealed by patches of later metalling (L9). A slot 3·3 m. in length (F106) was cut by an isolated post-hole (F107). F108 was the base of a shallow pit. These cannot be related to the subphases already outlined, although the major slots of phase 3 shared a common alignment.

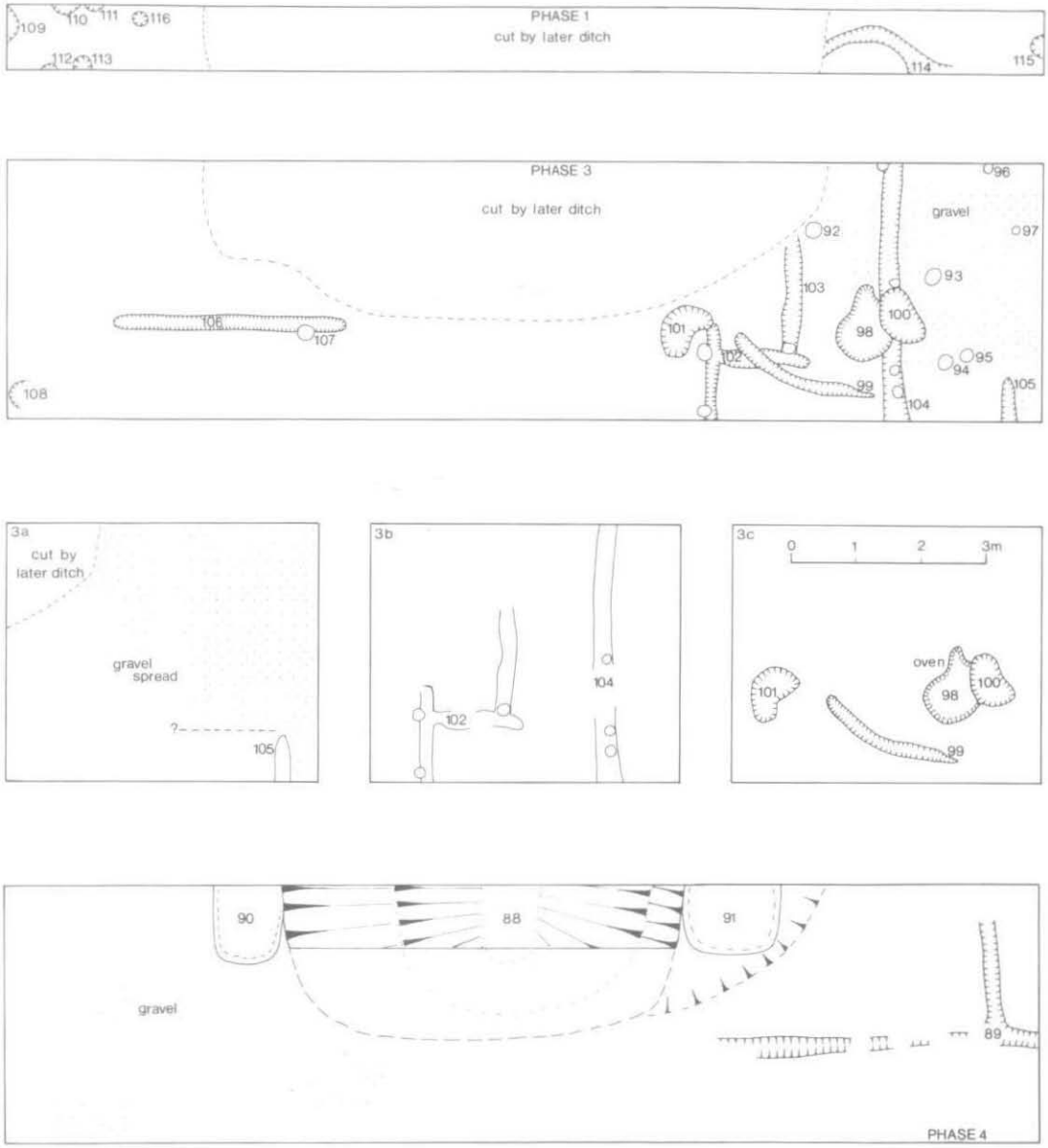

Fig. 2
Features of Phases 1–4. Drawing : Joanna Bacon.

Phase 4 (Figs. 2 and 4). In this phase areas of the site seem to have been consolidated by the addition of small patches of orange clay (L12) or gravel (L9). One large rubbish pit (F90) was dug at this stage. This might belong to the period of use of another timber building, represented by two beam slots meeting at right angles and maintaining the east/west alignment of the buildings of phase 3 (F89). It is clear that this structure must have gone out of use before a massive pit or ditch was dug (F88), since the latter clearly impinged upon it. Only a limited area of this feature was examined and its filling was so loose that for safety reasons the bottom could only be cleared by machine. It had cut the rubbish pit F90, but it is not certain whether it should be interpreted as a ditch terminal or as a very large pit, possibly dug for gravel extraction. There was no evidence of an associated bank or of any post-holes of the same date. It was probably cut by a second rubbish pit (F91), which was re-excavated in this or the succeeding phase (F91a). These features included a large number of animal bones.

Phase 5 (Figs. 3 and 4). The gravel to the west was locally consolidated by the addition of patches of clay, and a single timber building was erected. Only a partition slot belonging to this structure was traced (F86), but the distribution of associated plaster suggested that its outer wall had been removed by a modern ditch crossing the site 4 m. further east. If this is correct, the new building would not have impinged on the hollow left by F88. It is not known if the recut pit (F91a) was related to this structure, but this does not seem likely. Within this suggested building was a patch of woodash which could represent an internal fireplace. It seems that the exterior wall has been painted and a large area of fallen plaster was recognized. This had fallen face downwards and was extremely poorly preserved. All that could be achieved under the hurried conditions of excavation was to record all the painted fragments on a 20 cm. grid, and by this means it has been possible to work out the original pattern, even though the pieces were too badly damaged to be re-assembled (Fig. 9).

It is possible that this building was deliberately demolished before large parts of the site were again consolidated by metalling (L7, 10 and 11). This metalling sealed the earlier pit or ditch (F88), where the gravel was augmented by clay (L7), and continued across the filling of the two rubbish pits (F90 and 91a). It also impinged on the site of the phase 5 building. To the east this material replaced the more local metalling of phase 4 (L9). At the western limit of excavation part of the building was also put out of use by an irregular hollow used for rubbish disposal (F85).

Demolition continued in this part of the town and an extensive layer of broken plaster, daub, nails and domestic rubbish spread across much of the site (L6), completely sealing the position of the phase 5 building and accumulating over the gravel and clay in the filling of F88, where it was succeeded by a midden deposit (L4). This material respected the area of metalling in the eastern part of the site. The area of gravel which remained free of rubbish is shown in Fig. 3.

Phase 6 (Figs. 3 and 4). After this period of demolition more of the site was used for rubbish disposal, and the midden which had originally filled the hollow over F88 now spread across the whole area, putting the earlier metalling out of use (L1–3). These later deposits were marked by their high humic content, compared with the loam of the earlier midden (L4).

It was difficult—and at times impossible—to distinguish features cut through this layer, and the whole deposit, which was up to 30 cm. thick, showed little internal stratigraphy. It had clearly been much disturbed, although the absence of medieval and later artefacts in it suggests that most of the disturbance was ancient. This layer was cut by a series of medieval pits, but was only really distinctive where it filled the hollow left by F88. Only here and in occasional features could the association of different artefacts have any significance. It also follows that different features recognized at this level may not all be contemporary. These features fall into four groups.

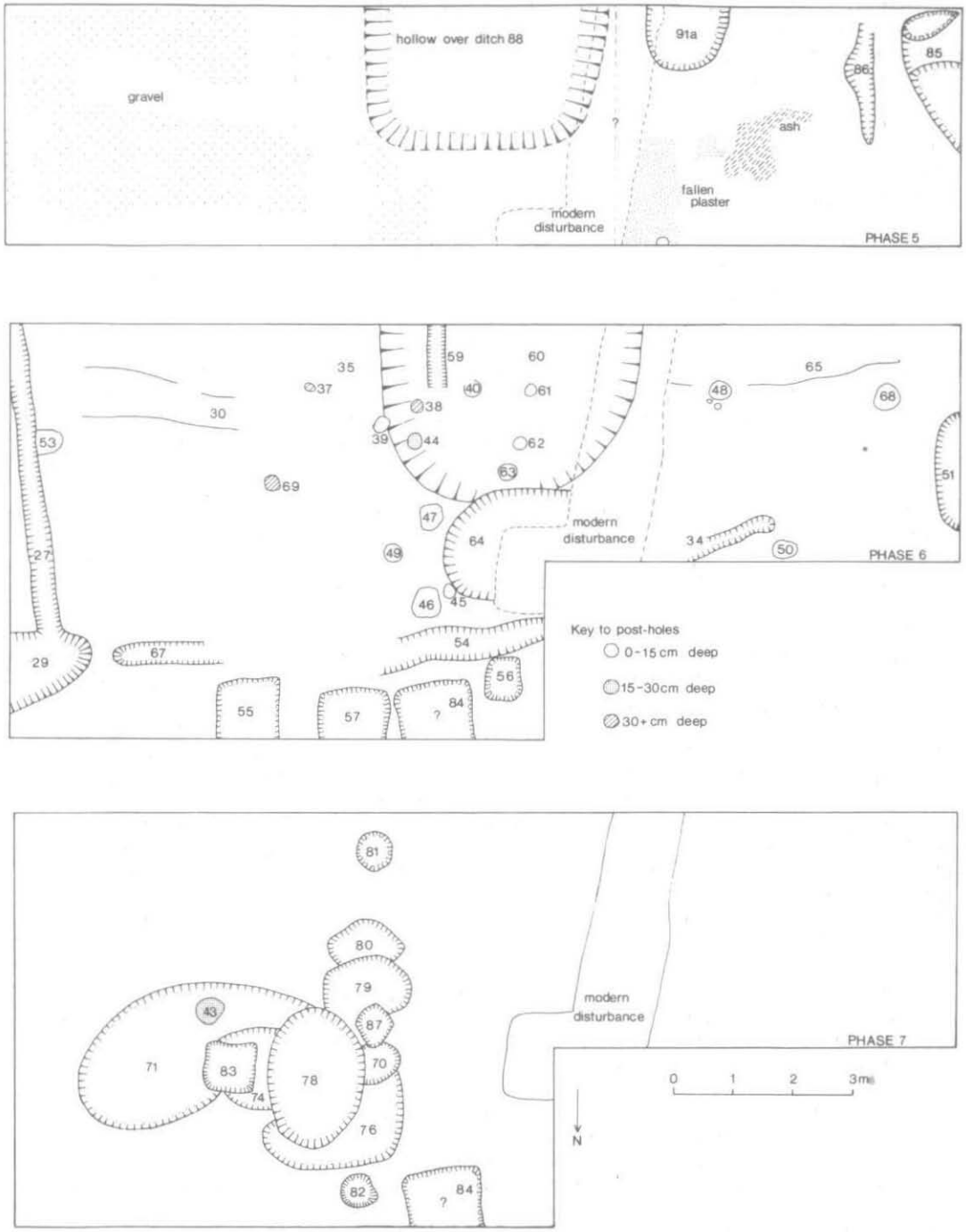

Fig. 3
Features of Phases 5–7. Drawing : Joanna Bacon.

The first features to be considered are two shallow, flat- or round-bottomed pits cut into the general rubbish deposit of phase 5 and the underlying layers (F51 and 64). These are fairly substantial features and may originally have measured 2 to 3 m. across, but neither survives complete. These appear to have been oval or subrectangular in outline. Their filling was completely homogeneous and no tip lines could be discerned. F64 was sharply cut, but had been damaged by a recent animal burial. It had been dug into the phase 5 metalling to a depth of 30 cm. and was filled with a compact clayey gravel ; whilst F51 on the western edge of the excavated area was filled with a dark brown humus, hardly distinguishable from the rubbish deposit through which it was cut. It was 40 cm. deep. Because of the lack of clear stratigraphy at this level, it is uncertain whether any post-holes were associated with these particular features, but this is possible in the case of F49. It is also possible that the sheltered hollow over F88 (F60) might have been used in the same way, particularly in view of the amount of occupation debris that it contained. These pits are regarded as possible grubenhäuser.

The second group consisted of gullies (F34, 54, 67, 27, 29 and 59) or linear scarps which probably represent the edges of similar features, all but removed in later disturbance (F30 and 65). The gullies were normally flat bottomed but varied in profile, dimensions and depth. They had apparently filled up naturally and, with one exception (F59), there is no evidence that they had ever held posts. Their surviving depths were between 25 and 50 cm. In two cases their bottoms were sloping. F27 and F29 were clearly contemporary and may have formed part of a rectilinear enclosure with F67, 54 and 34 ; these combined to form a continuous gully later cut by medieval pits. If so, the enclosure apparently possessed a corner entrance 40 cm. across. F30 and F65 may represent the last traces of a similar gully running east/west. These features showed few relationships. F59 was cut from a high level of F60 and through much of the debris of this phase. F27 and F30 were unlikely to have been contemporary, and F34 could have impinged on F51. If F64 represented a grubenhäus, F54 would have impinged on its superstructure. F27 cut an isolated post-hole (F53).

The main relationships were with a third group of features, four roughly square pits between 30 and 70 cm. deep which seemed to respect the line of one of the gullies (F55, 56, 57 and 84). All these pits were evidently dug for rubbish disposal. F84 included one medieval sherd as well as a quantity of Saxon pottery. The area was so badly disturbed that the later sherd could be intrusive. The bases of a number of post-holes were also recognized but formed no coherent pattern. In most cases their age is uncertain and some might be medieval. One impinged on the linear scarp (F48), and a whole series cut the hollow F60.

F55, F60, F64 and F84 contained sherds in a shell gritted fabric ; and F30, F49, F55, F60, F65 and F84 contained sherds in a grass tempered fabric.

Phase 7 (Fig. 3). In this final phase the eastern half of the site was taken up by a series of intercutting rubbish pits, containing a little medieval pottery and large quantities of residual Roman material. F71 was cut by one deep post-hole (F43), whilst the western limit of this group was marked by a line of large post-holes or post pits (F81, 82 and 87). F87 cut through the filling of two of the pits (F70 and 79).

THE FINDS

POTTERY

Despite the number of features on the site, the great majority of the Roman and Saxon pottery was clearly residual, and so much disturbance had taken place that a full quantitative analysis would produce a quite spurious sequence. The account that follows is confined to reliably stratified groups, to direct dating evidence and to a few other sherds of intrinsic interest. The exact chronological sequence of late Roman fine wares, shell gritted pottery and grass tempered wares is still so controversial that these sherds are published by their associated groups and no attempt is made to illustrate the nominally

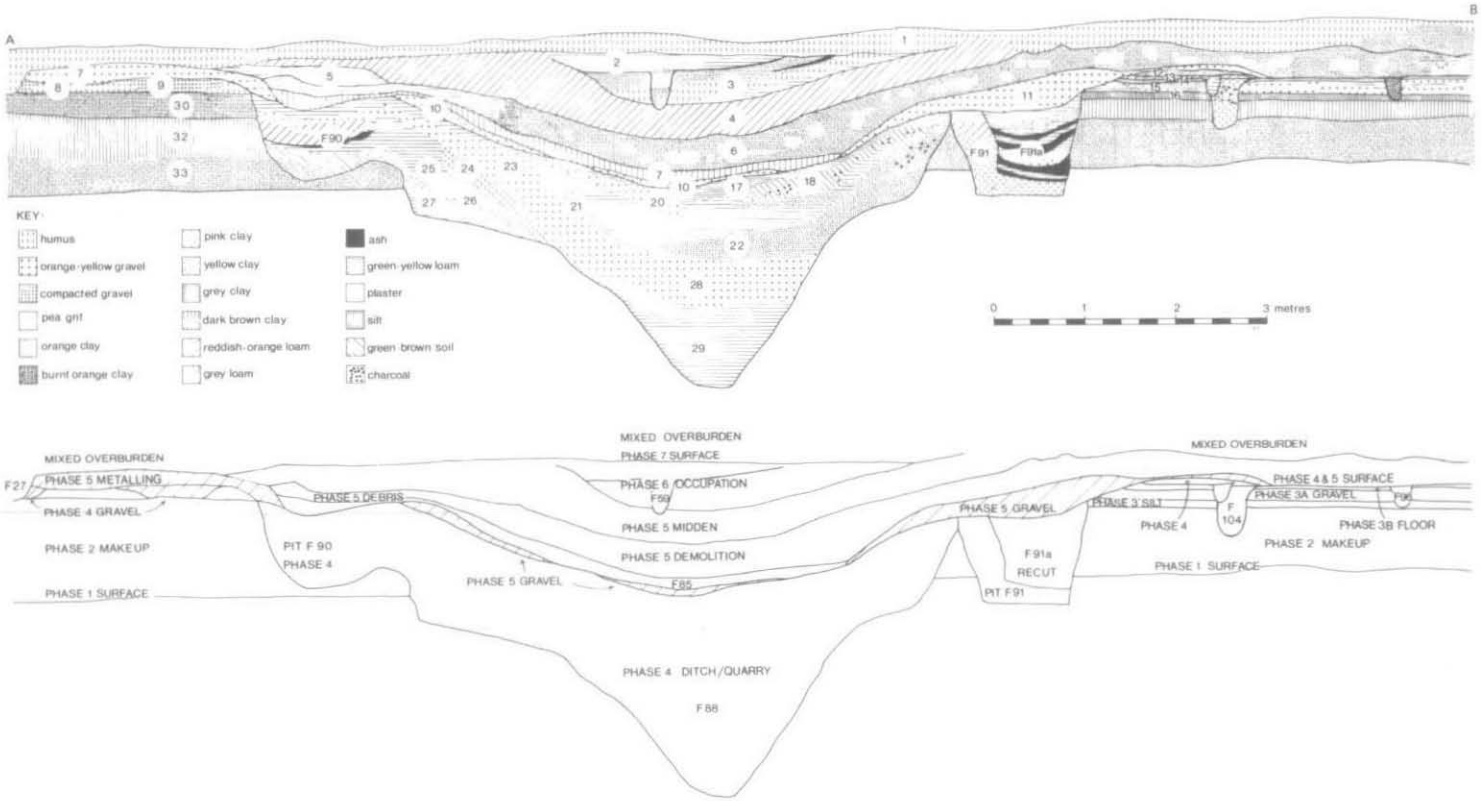

Fig. 4
(Above) Section along the south face of the excavation. (Below) Outline interpretation. Drawings : Joanna Bacon.

Roman, sub Roman and Saxon material separately. This does not imply that these items were necessarily in *use* together. The medieval pottery, which does not raise the same problems, is treated on p. 30.

Phases 1–6

The pottery occurs in 25 type fabrics which also embrace the well stratified body sherds. These are lettered a–z. To avoid confusion with the numbering in Figs. 5–7, there is no fabric i. The fabric of each sherd is given in the illustrations. These fabrics are defined as follows :

(a) Hard grey ware with large and medium sand filler. Phase 3.
(b) Hard, finer grey ware with fine sand filler. Phases 3, 5 and 6.
(c) Grey-black body with some fine sand filler and fine voids ; smoothed exterior surface. Phase 3.
(d) Thin grey-black body with much fine to medium shell filler ; smoothed surfaces. Phases 3 and 5.
(e) Rough soft black body with some fine sand filler. Smoothed surfaces. Phases 3 and 5.
(f) Soft black to buff body with sparse fine sand filler. Smoothed surfaces. Phase 3.
(g) Fine hard cream gritless body. Phases 3 and 5.
(h) Very hard smooth grey ware with rare fine sand filler. Phases 3 and 6.
(j) Hard ' bricky ' gritless body ; orange buff surfaces. Phase 5.
(k) Hard rough grey-white body with medium sand filler and medium voids. Phase 5.
(l) Hard buff body, fine sand filler and fine voids ; hard smooth black exterior surface. Phase 5.
(m) Body as j, but with brown colour coat. Phase 5.
(n) Hard ' bricky ' red-brown body with cream paint. Phase 5.
(o) Hard gritless body with grey or black smoothed surfaces and cream to light grey core. Phase 5.
(p) Hard red gritless body ; cherry red colour coat. Phases 5 and 6.
(q) Soft brown to buff body with fine sand filler. Phases 5 and 6.
(r) Rough body with medium shell tempering. Phase 6.
(s) Black burnished ware. Phase 6.
(t) Soft grass tempered ware with ?mica inclusions. Phase 6.
(u) Hard orange gritless body with cherry red colour coat. Phase 6.
(v) As t, but without mica inclusions. Phase 6.
(w) Cream body ; purple—black colour coat. Phase 6.
(x) ' Bricky ' body ; white paint on red. Phase 6.
(y) Hard mica dusted body with glossy orange to brown colour coat. Phase 6.
(z) Hard white ware. Unstratified.

Two sherds fall outside this scheme :

31. Orange-buff Oxford ware mortarium. Phase 5.
47. Fine pink-buff body with mica inclusions. Smoothed surfaces. ?Phase 5.

The illustrated sherds (Figs. 5–7) are from the following contexts :

1 *Phase 2* make-up (L30).
2–5 *Phase 3*. Surface of make-up cut by slots of phase 3a.
6 *Phase 3*. ?Floor of phase 3b building (L14).
7 *Phase 3*. Post-hole F95. Subphase uncertain.
17, 19–26, 30 *Phase 5*. Sealed by phase 5 floor.
8–16, 18 *Phase 5*. Associated with collapse of phase 5 building, scattered among the wall plaster.
27, 28 *Phase 5*. Sealed by fallen wall plaster.
29 *Phase 5*. Incorporated in the fallen wall material.
31–40 *Phase 5*. General demolition debris (L6). *Terminus ante quem* for collapse of phase 5 building.
41–44 *?Phase 5*. Refuse layer filling upper part of ditch/gravel pit (F88–L4).
45–47 *?Phase 5*. *Terminus ante quem* for the upper metalling (L7) in the east area of excavation.
48, 50, 52 *Phase 6*. Pit or ?grubenhaus F64.
49 *Phase 6*. ?Gully F65.
51 *Phase 6*. Gully F29.
53, 54 *?Phase 6*. Pit F57. 54 is in fabric S.
55–58 *?Phase 6*. Occupation debris filling hollow F60 (L3).
59 *?Phase 6*. Post-hole cutting F60 (F44).
60–73 *Phase 6*. Mixed occupation debris (L1).
74, 75 *?Phase 6*. Surface of metalling (L7) in east area of excavation.
76, 77 *?Phase 6*. Pit F84.
78 Unstratified.
81 A residual find in a medieval pit (F80).
Fig. 8, 1. Decorated Samian bowl. Unstratified. South Gaulish, Drag. 30. Early Flavian.[3]

[3] Kindly identified by Dr. Michael Fulford.

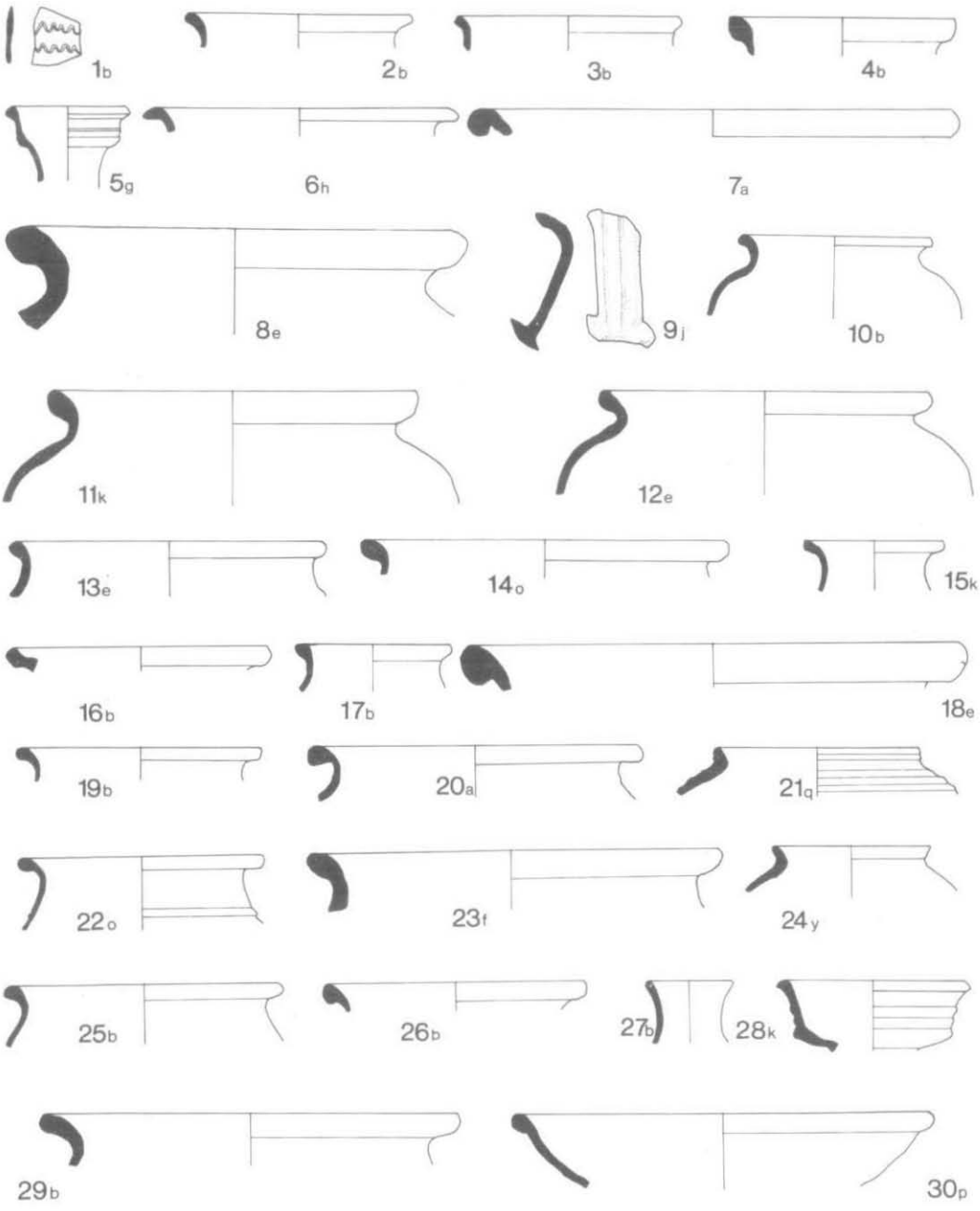

Fig. 5
Roman pottery. Scale ½. Drawings : Rachel Askew.

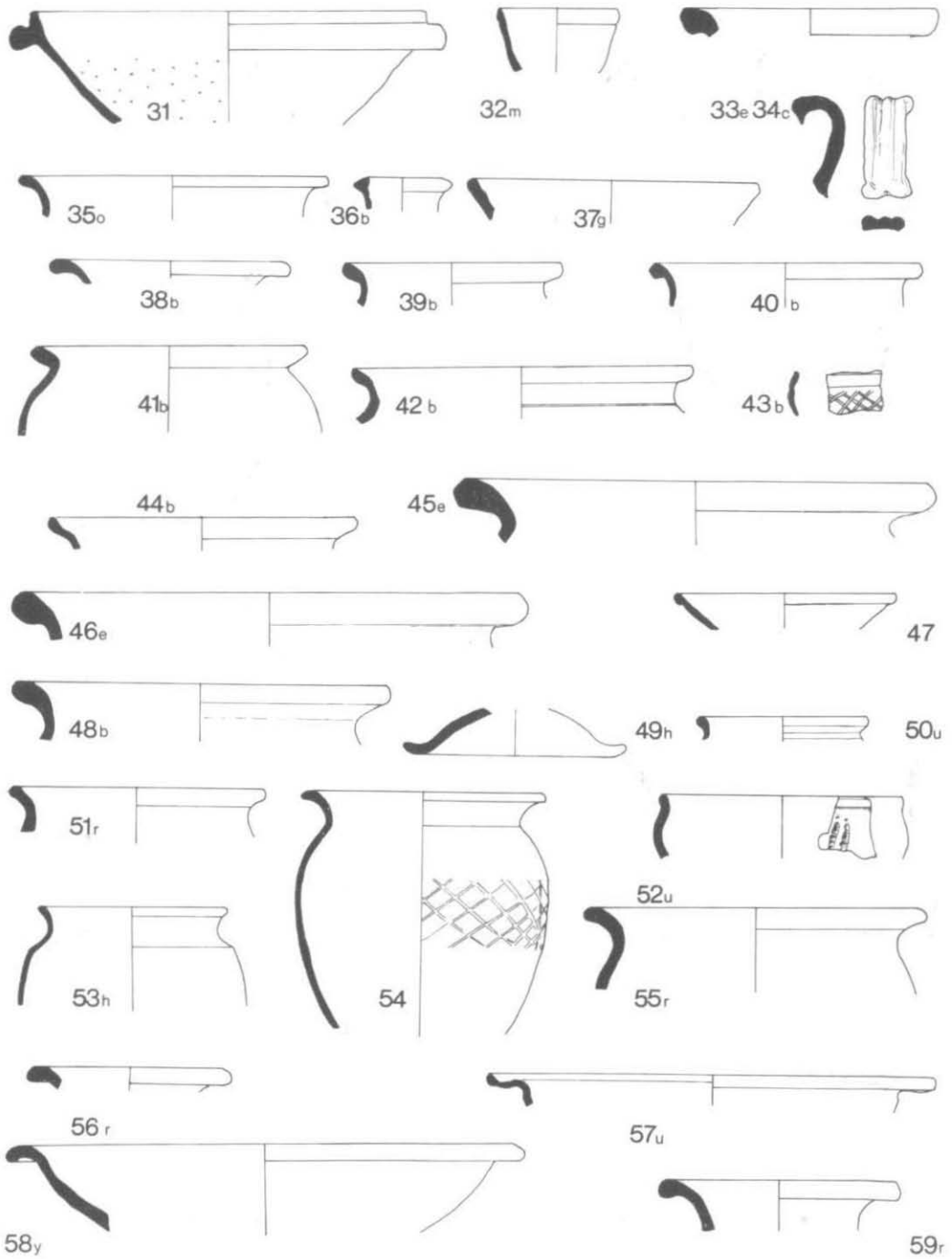

Fig. 6
Roman pottery. Scale ½. Drawings : Rachel Askew.

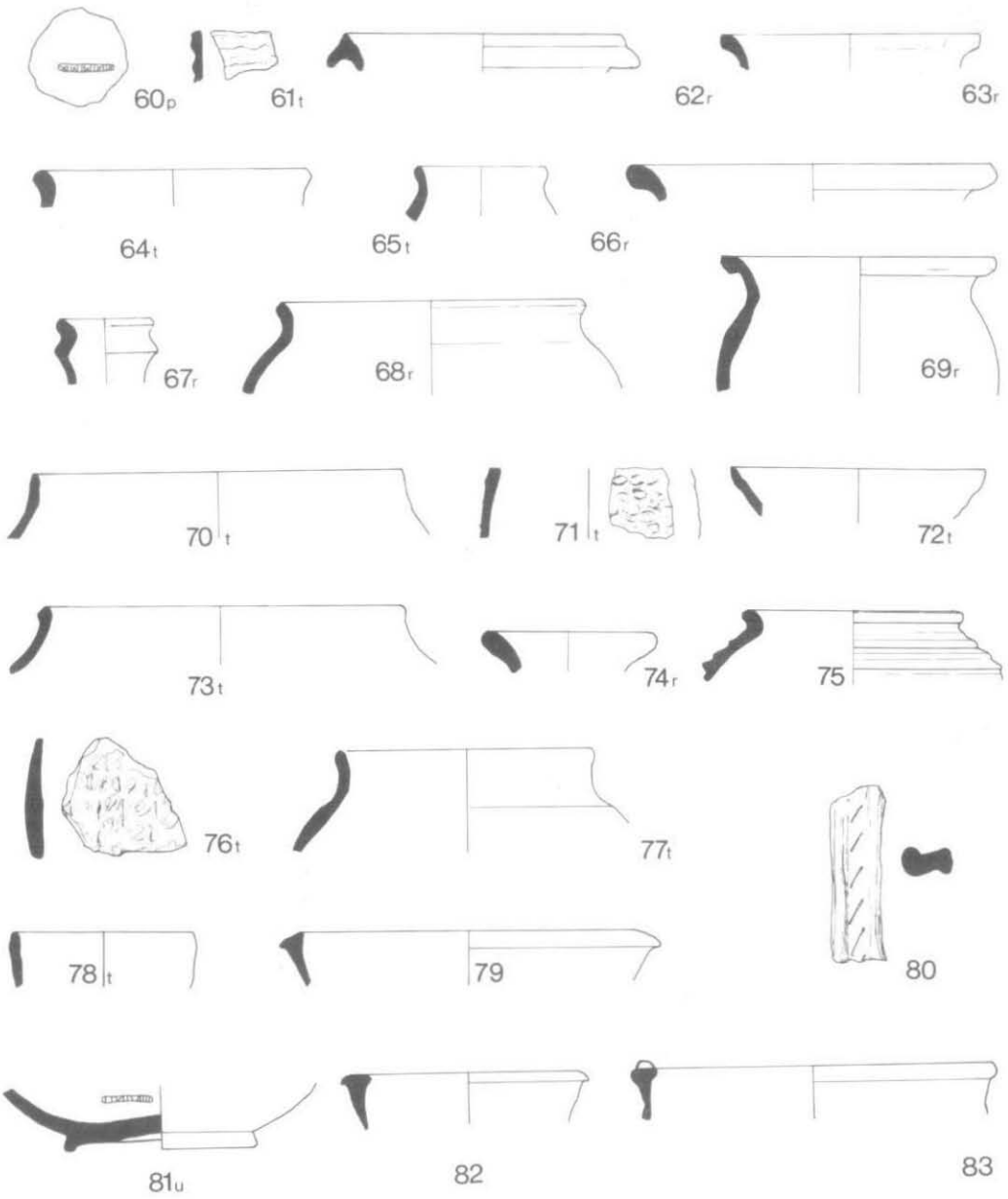

Fig. 7
Roman, Saxon and Medieval pottery. Scale ½. Drawings : Rachel Askew.

Fig. 8
Small finds. Scales : 1–5 : ½ ; 6–13 : ¼. Drawings : Joanna Bacon.

Most of this material belongs to local types, but the high proportion of coarse wares makes close dating very difficult.[4] Indeed most of these forms were in use throughout the Roman period. There is no dating evidence for phases 1 and 2, except by analogy with developments elsewhere in the town, and the dating of phase 3 is almost as difficult. Fortunately Fig. 5, No. 5 can be identified with an Oxford Ware form (W 6) for which Young suggests a date between A.D. 150 and 240. There is no pottery reliably associated with phase 4, and the layers of phase 5 still included a substantial residual element. The phase 5 floor, however, immediately sealed another Oxford form, Fig. 5, No. 30, which has a date range between *c.* 270 and 400 (C 45) ; whilst Fig. 5, No. 28, which was sealed by the fallen wall plaster, is another Oxford type (R 9) current throughout the 4th century. The pottery associated with the clearance of other buildings includes types with a similar date range, notably Fig. 6, No. 31, a form in use between *c.* 240 and 400.

There is still less stratification in the deposits of phase 6, and rather greater weight must be placed upon the fabrics. More of the Roman pottery, however, was of forms which did not start production until the 4th century and which then continued in manufacture until the Oxford industry came to an end. These include Fig. 6, No. 52 and Fig. 7, Nos. 62 and 67. Of the other distinctive sherds, Fig. 6, Nos. 54, 55 and 58 are all of types made in the late 3rd and 4th centuries. The shell tempered vessels in fabric r are only found in phase 6 but are often in forms which were already present in earlier phases. This distinctive fabric was used throughout the 4th century and perhaps earlier, and there seems no reason to date all this material later than the fine wares on the site. It may indeed have increased in frequency as large-scale production declined, but its overall currency is unknown and it is possible that less pottery of any kind was available by *c.* 400.[5] It has been claimed that shell tempered ' sub Roman ' pottery is associated with early Saxon material in a ditch on site F at Shakenoak, but the evidence for this interpretation has been convincingly dismissed.[6]

No such associations can be claimed in the extremely exiguous features of phase 6, and there is a little evidence to suggest the opposite view. There are two Saxon fabrics on the present site, t and v, both grass marked or grass tempered. Berisford has shown that these were not the earliest Saxon fabrics in the region, and the calcite gritted fabric which she places in the 5th century is not found among this material.[7] There are no sherds of the fine ware recognized by Professor Frere and dated by him to the 5th century,[8] and none of the grass tempered vessels in Fig. 7 are copying Roman forms. The only distinctive sherds are the two rusticated fragments, 71 and 76. These occur elsewhere in the region but cannot be closely dated. Berisford and Brown agree that grass tempering was not widely adopted in this area until the 6th century.[9] The technique then seems to have continued into the Middle Saxon period, but its full currency is still in doubt. There was no Late Saxon pottery on the present site.

Phase 7

Four medieval sherds are illustrated (Fig. 7, Nos. 79, 80, 82 and 83). They are in the following fabrics :

79. Hard body with fine to medium sand filler. Buff interior and black exterior. Pit F78.
80. Hard gritless buff body. Unstratified.
82. Hard body with shell filler. Buff interior and black exterior. Pit F78.
83. Hard buff body with fine sand filler. Pit F78.

[4] The main sources used were : C. J. Young, *The Roman Pottery Industry of the Oxford Region* (1977) and Frere *op. cit.* note 1, 133–46. The type numbers are Young's.

[5] This passage is based on discussions with Dr. Michael Fulford.

[6] A. Brodribb, A. Hands and D. Walker, *Excavations at Shakenoak*, III (1972), 16–23. *Cf.* reviews by Brown, *Britannia*, 3 (1972), 376–7 ; and Alcock, *Medieval Archaeology*, 17 (1973), 189–90.

[7] F. Berisford in Brodribb, Hands and Walker, *op. cit.* note 6, 56–66.

[8] Frere, *op. cit.* note 1, 147–9.

[9] Berisford, *op. cit.* note 7 ; M. Avery and D. Brown, ' Saxon features at Abingdon ', *Oxoniensia*, 37 (1972), 66–81.

There is too little of this material for useful discussion, but a date in the 12th or 13th centuries seems most likely.[10]

OTHER ARTEFACTS

The site produced very few small finds. Four Roman coins and four bone comb fragments were submitted for conservation and appear to have been misplaced. Fortunately none was well stratified.

Coin One Roman coin is available at the time of writing. This came from the phase 6 ?grubenhäus F64. Dr. Michael Fulford has identified it as a coin of the House of Valentinian. Reverse, Securitas Reipublicae. ?Arles mint 367–78.

Bronze objects Fig. 8, No. 6. Plain bronze ring. Unstratified.

Fig. 8, No. 7. Head of bronze pin with grooved decoration. Unstratified.

Iron objects Fig. 8, No. 2. Iron point. Its function and date remain obscure. Phase 6 occupation refuse (L1).

Fig. 8, No. 3. Iron fitting. Phase 6 occupation refuse (L1).

Lead objects Fig. 8, No. 5. ?Lead weight fragment. Phase 6 gully F27.

Fragmentary lead sheet, partly melted by fire. Phase 6 occupation layer (L1). (Not illus).

Glass Fig. 8, No. 4. Fragmentary rim of bowl of uncertain diameter. Roman, but found in an intrusive modern pit.

Bone objects Fig. 8, No. 8. Bone pin. Phase 6 occupation refuse (L1).

Fig. 8, Nos. 9 and 10. Bone fragments with incised spiral decoration.[11] Phase 6 occupation refuse (L1).

Fig. 8, Nos. 11, 12 and 13. Bone comb fragments. 11 probably belongs to a double ended bone comb and again comes from the phase 6 occupation refuse (L1). 12 is the central piece of a composite comb and retains what were probably rivet-holes to attach the decorated outer plates, as on Fig. 8, No. 13. This was found in the east area of the excavation on the surface of the phase 5 metalling (L7). The third example, 13, is a fine triangular comb, made of three plates of bone held together by five bronze rivets. The central plate has been cut to form the teeth, now largely broken, and a series of perforations around the outside edge of the comb. It is decorated on both outer faces with incised ring and dot ornament. It was found in the phase 6 occupation refuse (L1) on the edge of the possible gully F65.

Stone (unillustrated). Small fragments of Mayen Lava, apparently from quernstones, were found amidst the occupation refuse of phase 6 and in two modern pits cutting into this layer.

The stratification of these artefacts leaves much to be desired and very few of them assist with the site's chronology. The bone objects are the most informative. The decorated pieces resemble the one complete comb from the site and similar fragments are known from the late Roman period. The combs themselves are not easy to date. The double ended comb is of a type known for most of the Saxon period and is well represented at Shakenoak, where it is associated with grass tempered pottery.[12] On the other hand, the triangular form represented here by 13, and possibly by 12, seems to have an earlier origin and was already made in the 4th century, although it certainly continued in use into the Saxon period. It is known from the late Roman occupation at Richborough[13] and is securely associated with Saxon pottery, some of the 5th century, at Mucking and again at West Stow.[14] The missing fragments from this site all belonged

[10] I am grateful to David Hinton for examining these sherds.

[11] I am grateful to David Brown for advice on the bone objects.

[12] Brodribb, Hands and Walker, *op. cit.* note 6, 118–23.

[13] J. P. Bushe-Fox, *Richborough*, IV (1949), Pl. LVI.

[14] M. U. and W. T. Jones, ' The crop-mark sites at Mucking, Essex, England ', in R. L. S. Bruce-Mitford (ed.), *Recent Archaeological Excavations in Europe* (1975), Fig. 55 ; S. West, ' The Anglo-Saxon village of West Stow : an interim report of the excavations 1965–8 ', *Medieval Archaeology*, 13 (1969), Fig. 10.

to double ended combs and were found in L1. It is possible that these forms were in use at the same time as the grass tempered pottery and that the more elaborate combs belong with the late Roman material.

Painted wall plaster (Fig. 9). One wall of the phase 5 building had fallen face downwards. As mentioned earlier, it was only possible to retrieve the fragments of plaster on a 20 cm. grid, and the separate pieces were far too eroded for systematic treatment to be justified. Instead all the fragments which retained any paint, in particular those in which adjacent zones met, were recorded in detail for each grid square. On this basis it has been possible to reconstruct the pattern on this area of wall without reassembling the separate fragments. The reconstruction in Fig. 9 should be correct to about 15 cm. It reveals a dark red wall with two distinct panels, one blue grey and the other dark green, each surrounded by an area of yellow cream paint and further defined by white lines roughly a centimetre wide. It is possible that the base of this wall had been painted dark green. Apart from the red paint, however, the colours were badly faded.

ANIMAL BONES. By ANNIE GRANT

This report discusses the animal bones found only in the well stratified and undisturbed layers of the site. Over 3,000 bones were examined, but approximately 30% of these were not positively identified. The 2,219 bones that were identified were divided into 5 groups, related to the various phases of occupation at the site. None of these came from layers in which a strong residual component is likely.

Bones were recovered from the following animals : cattle, sheep and/or goats, pigs, horses, dogs, cats, hare, fallow deer, birds and a small mammal that was not positively

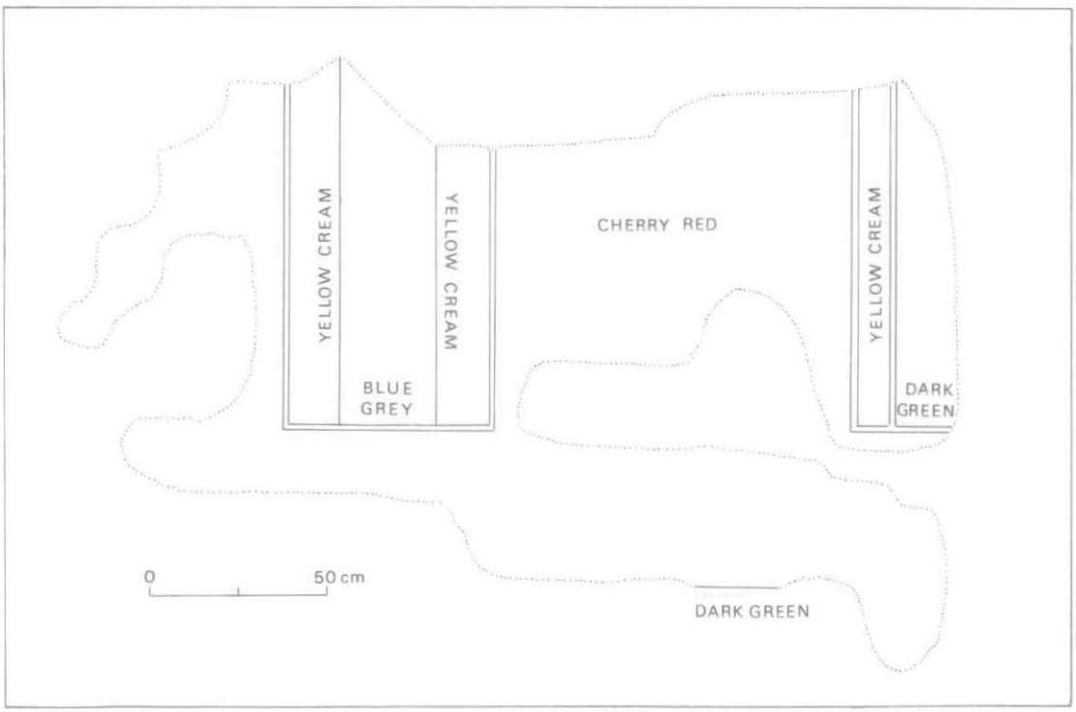

Fig. 9

Reconstruction of the Roman plaster wall. The thin strips defining the panels are white.

TABLE I

Percentages of species represented

Phase	2 and 3		4		5		6		7		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
(a) epiphyses only												
Cattle	26	60	73	34	11	46	237	56	21	48	368	49
Sheep	10	23	68	31	13	54	90	21	8	18	189	25
Pig	6	14	34	16	—		58	14	4	9	102	14
Horse	—		2	1	—		2		—		4	1
Dog	1	2	31	14	—		10	2	1	2	43	6
Cat	—		2	1	—		2		—		4	1
Fallow deer	—		—		—		—		—		—	
Hare	—		—		—		1		—		1	
Bird	—		6	3	—		19	5	10	23	35	5
Small mammal	—		—		—		2		—		2	
Total	43		216		24		421		44		748	
(b) Total numbers of fragments												
Cattle	62	57	193	39	23	46	532	58	55	65	865	52
Sheep	21	19	136	28	24	48	231	25	14	16	426	26
Pig	12	11	67	14	2	4	115	13	6	7	202	12
Horse	—		1		—		7	1	—		8	
Dog	13	12	88	18	1	2	11	1	4	5	117	7
Cat	—		1		—		1		—		2	
Fallow deer	—		—		—		1		—		1	
Hare	—		—		—		2		—		2	
Bird	—		5	1	—		19	2	6	7	30	2
Small mammal	—		—		—		1		—		1	
Total	108		491		50		920		85		1654	
'Total fragments'	108	77	491	78	50	62	920	73	85	77	1654	74
Ribs	27	19	128	20	23	28	305	24	20	18	503	23
Skull fragments	6	4	13	2	8	10	30	2	5	5	62	3
Total	141		632		81		1255		110		2219	

identified. Table 1 gives the numbers and percentages of bones recovered from each species in each of the five groups. Two methods were used for calculating the percentages. Full details of these methods are given elsewhere.[15] Briefly, 'epiphyses only' includes only the epiphyses or fusion surfaces of long bones, and mandibles with at least one tooth present. 'Total fragments' includes all bone fragments recovered except rib and skull fragments—these are shown separately. The 'epiphyses only' method is thought to give a more accurate picture of the differences between species when small and large animals are represented. However, with a small sample, the differences between the two methods may not be very significant. The proportions of species vary quite considerably from group to group, but since the number of bones recovered varies too, these differences must be treated with caution.

In all phases except phase 5 cattle bones are the most numerous, but their relative importance varies. In phase 6 they form nearly 60% of the total, while in phase 4 they form less than 40%. Sheep are the next most commonly represented animals, and form

[15] A. Grant in B. Cunliffe, *Excavations at Porchester Castle*, I (1975), 378–408.

around 20% of the bones in phase 2, 3, 6 and 7. In phase 5 sheep bones are more numerous than cattle bones, but very few bones were found dated to this phase. In phase 4 sheep bones were almost as numerous as cattle bones and form around 30% of the total.

In all periods except phase 7, pigs are the third most commonly represented animals, and form around 15% of the bones recovered. In phase 7 fewer pig bones were found.

Horse bones were found only in layers dated to phases 4 and 5, while dog bones were found in all phases except phase 5. The relatively high numbers of dog bones in phase 4 include a dog burial. Only two cat bones were found and the only deer bone was a piece of fallow deer antler in phase 7.

Bird bones were found in layers dated to phases 4, 6 and 7. In phase 7, using the ' epiphyses only ' results, 23% of the bones identified were from birds, a very large increase. A similar increase in the numbers of bird bones was seen at Porchester Castle.[15] In the late Roman period at Portchester 10% of the bones were bird bones, while in the 12th-century layers 41% of the bones were bird bones. At the Beech House Hotel site at Dorchester, where the majority of bones were from Saxon contexts, only 3% were from birds.

Minimum numbers of individuals were calculated for cattle, sheep and pigs for phases 4 and 6. The method used was to divide by two the number of the best represented bone for each animal in each phase. The results are shown in Table 2.

TABLE 2

Minimum numbers of individuals

Phase	No.	%	No.	%
	4		6	
Cattle	4	31	9	37
Sheep	4	31	10	42
Pig	5	38	5	21
Total	13		24	

This method gives rather different results to those given by the other two methods. All three animals are fairly evenly represented in phase 4, while in phase 6 cattle and sheep are equally represented, and there is a higher percentage of pigs than that given by the ' epiphyses only ' method. The numbers involved are of course very small.

The reason that this method gives such different results to the first two methods used for percentage calculation is that the representation of individual bones varies greatly from species to species. In the smaller animals, sheep and pigs, mandibles were the best represented bones and, especially in the case of pigs, the numbers of mandibles recovered were much greater than the numbers of any other bones. A possible reason for this is that mandibles, being formed of dense bone and strengthened by the teeth they support, seem to survive well, and, being conspicuous, have a good chance of recovery. The limb bones of the smaller animals and especially of pigs may not survive as well as those of cattle. Large numbers of mandibles, or of any other bone, may of course be due to some human activity, such as butchery or bone tool manufacture. Thus an assessment of the results of a calculation of ' minimum numbers of individuals ' depends in part on the interpretation of the analysis of the representation of the individual bones. Such an analysis was carried out on the bones of cattle, sheep and pig for phases 4 and 6. On the whole, the best represented bones were those that fuse early in the animal's life and are made of compact bone, while those that were least well represented were small bones and those that fuse late and are composed of thinner and more porous bone. Certainly there was no strong evidence to suggest that the pattern of representation was affected by either butchery or bone tool manufacture. The samples were of course fairly small, but the

results of the calculation of the minimum numbers of individuals suggests that both pigs and sheep may have been present in larger numbers than the results given in Table 1 suggest.

Several of the bones showed evidence of butchery in the form of knife or chopper marks. Marks on cattle bones were generally those of heavy chopping tools around the epiphyses of the bones. A cattle skull dated to phase 3 had chop marks indicating that it had been cut from the neck by a chop between the occipital condyle and the atlas. Five articulating cervicle vertebrae had had their side extremities cut from the ventral side, as if the meat had been removed from either side of the vertebral column. A femur, also dated to this phase, had cut marks indicating that the meat had been removed by cutting with a heavy tool along the length of the bone, removing with it the projecting parts of the epiphyses. The bone appeared to have been separated from the pelvis by cutting through the neck of the head of the bone, and from the tibia by a chop across the distal epiphysis of the bone.

Amongst the bones dated to phase 4 were two bones that had been split longitudinally, possibly for the removal of the bone marrow. This practice of splitting bones for marrow removal is usually associated with Saxon and medieval butchery techniques.

Butchery marks on sheep bones were, in the early phases at the site, usually those of sharp knives. A group of sheep bones dated to phase 4 had very many knife marks on the epiphyses and shafts of the long bones and on the ribs. However there is some evidence that in phase 6 a heavier chopping tool was more commonly used on the sheep bones.

Pig bones were found with chop marks and less frequently knife marks. A horse metatarsal dated to phase 4 was chopped at the proximal end.

Many of the bones recovered had been gnawed, probably by dogs. Gnawed bones were found from all periods, and especially in phase 6, where, despite the smaller percentage of dog bones recovered, there was a higher percentage of gnawed bones than in phase 4.

The animal bones were examined for evidence of age at death, using the state of fusion of the long bones and the eruption and wear of the teeth. Full analysis was only possible for the bones of period 6, and even in this group the sample was not large enough to produce very detailed results.

The analysis of the cattle bones indicated that just over 50% were kept until they were at least four years old. The sheep bones indicated that about a third of the animals were kept beyond maturity, and that the remaining two-thirds were killed in their first, second and third years. However, the tooth wear analysis indicated that a fairly high percentage died in their first year. Only 14% of the pig bones were from mature animals, and approximately 50% were from animals in their second year.

Most of the bones recovered were from apparently healthy animals, but some evidence of disease was found. A pair of sheep mandibles from phase 4 showed signs of periodontal disease severely affecting the jaw around the 4th premolar and the 1st and 2nd molars. Several diseased bones were recovered dating to phase 6. A cattle pelvis was found with slight eburnation of the acetabulum. Two cattle metatarsals had extra boney growth at the proximal end, and a proximal phalange was found with arthritic lipping at the proximal end. One sheep mandible was seen with severe wear on the 4th premolar and the 1st molar, and the jaw below these teeth was considerably reduced ; while another sheep mandible was found with osteitis affecting the angle of the jaw.

Very little evidence was obtained of the breeds of animals represented in this collection of animal bones, partly due to the fragmentary nature of much of the bone material. Few measurements were possible ; where measurements of cattle bones were possible they fell within the range of sizes found at Portchester Castle in the Roman period.[16] A fairly complete cow skull was found dated to the 3rd century A.D. This skull had small horn cores, curving slightly forwards and had a fairly prominent frontal eminence. The

[16] *Ibid.*

horn cores recovered from phase 4 were of a similar type to those of the skull just described, but the horn cores from phase 6 were longer, with a larger basal circumference. The sheep bones dated to phases 2, 3, 4 and 6 were of two types. Some were small with slender shafts, while others were larger and generally more robust. Whether breed or sex differences were indicated was not clear.

Amongst the animal bones some human bones were found. Human neo-natal bones were found with the animal bones in layers dated to phases 5 and 6, and an adult metapodium was found in a layer dated to phase 6. The discovery of human neo-natal bones amongst animal bone refuse is not unusual in Roman contexts as the strict laws relating to the disposal of corpses did not apply to newly born infants.

The shortcomings of an analysis of a relatively small bone sample spanning several hundred years are evident, but the results of the analysis do give some idea of the type of animal husbandry at the site and of changes that were taking place during its occupation.

DISCUSSION

Only small areas of the early Roman deposits were examined and this work can shed little light on their nature. A similar sequence, in which 1st-century layers were sealed by a thick deposit of make-up has been observed in two other areas : in the allotments west of the present site, where this level buried traces of military occupation;[17] and beneath the south defences of the town.[18] There was no dating evidence on the present site but a coin of A.D. 78 is associated with the demolition of military structures elsewhere in the enclosed area;[19] whilst the first occupation is associated with pottery dating between *c.* A.D. 43 and 70. Pottery of the late 1st and early 2nd centuries is recorded from layers which seal the make-up.[20] It is not clear why such an extensive deposit was needed, and there is no evidence of the source of this material.

On the present site, in contrast to other areas, occupation did not resume for some time, and the only sherds of 1st- or 2nd-century date are residual items in much later layers. These occur in sufficient quantity to suggest that this part of the town was already in use. The surface of the clay make-up was sealed by a layer of fine silt, which was apparently laid down over an interval in which this particular site was deserted.

The first urban buildings in this area were probably constructed in the 3rd century, by which date the defences had been established. The fact that no rampart was present on the site implies that it must have lain further to the east, where it could have been eroded by the river. The actual character of the buildings was consistent throughout the occupation. All the structures were of timber, with patchy clay and gravel floors and evidence for daubed or painted walls. They shared a common east/west alignment and may have faced a street immediately north of the excavated area. This street was identified further to the west in 1962.[21] There is little evidence for masonry buildings in the east part of the town and the debris which was dumped over this area in the late Roman period had come from

[17] I am grateful to Professor Frere for this information.
[18] Frere, *op. cit.* note 1, Fig. 4.
[19] I am grateful to Professor Frere for this information.
[20] Frere, *op. cit.* note 1, 137–40.
[21] *Ibid.*, Figs. 2 and 5. *Cf.* this paper, Fig. 1.

structures of very similar character. There were few coins and there was little fine pottery. One fairly consistent feature of these phases was an open area of metalling east of the timber buildings. It would be tempting to interpret this as evidence for a road behind the defences, the counterpart of a street known in the south of the town,[22] but these thin patches of gravel can have been little more than a yard. The deep ditch terminal or gravel pit intrudes on this orderly sequence and cannot be interpreted on the information available.

This sequence of timber buildings seems to have ended in the 4th century with the collapse or demolition of the last house on the site. No attempt was made to clear the debris, although the gravelled area was still respected. It is evident that demolition was now in progress more widely, and debris from rather similar buildings soon spread over part of this area. This may have been a deliberate policy, but it is only possible to speculate on the reasons for reorganization. Dorchester is, however, one of the few towns with a high incidence of late Roman coins, and Professor Frere excavated one masonry building which must belong to the 5th century A.D.[23]

By this all-important period the whole site was being covered by a uniform deposit of occupation refuse, which eventually contained a quantity of late Roman shell gritted pottery and a few Saxon sherds. It is the counterpart of the refuse layer which sealed the southern defences of the town.[24] The date of this deposit raises crucial questions, but the absence of internal stratigraphy rules out a decisive answer. Whilst Saxon sherds did occur on the site, they were absent in the corresponding layer behind the town defences, which contained a coin of Theodosius and entirely similar Roman pottery. There is no agreement on the extent of ceramic continuity between the 4th and the 6th centuries A.D. and the material from the present site does nothing to resolve this problem. The associations of the shell gritted pottery are with the Roman fine wares rather than the Saxon fabrics, and there is little to suggest an association between grass tempered ware and the products of the Oxford industry. Berisford's early Saxon calcite gritted fabric did not occur on this site. Only one grass tempered sherd, found in 1962, seems to copy a Roman form,[25] and the bone combs are as hard to date as the pots. In fact the Saxon pottery may be 6th century or later.

There is, however, one clue which has not been adequately explored. This is a clear increase in the proportion of animal bones in the features of phase 6. This might mark a period in which arrangements for systematic refuse disposal had broken down, but, if so, it would be represented by an increased amount of *both* bones *and* sherds and not by a change in the ratio of one to the other. The same would apply if this material was residual. This pattern has also been noticed at Wroxeter,[26] where the question of early Saxon settlement does not arise, and can be traced still more clearly in the ' post villa ' phases at Latimer.[27] Latimer is particularly useful

[22] *Ibid.*, Figs. 1 and 4.
[23] *Ibid.*, 121–3.
[24] *Ibid.*, Fig. 4, L2 ; *cf.* 119 and 143–5.
[25] *Ibid.*, Fig. 21, 20.
[26] P. Barker, *Excavation on the site of the baths basilica at Wroxeter 1974 : interim report* (1975).
[27] K. Branigan, *Latimer* (1971), 129 and 164.

in this respect, since it contains a high proportion of shell gritted pottery in its latest layers but has produced little or no Saxon material. It is likely that these patterns reveal the decline of the Roman pottery industry before Saxon material was available. If this applied to the present site, continuity of occupation could not necessarily be shown from ceramic evidence. On the other hand, this argument also suggests that occupation continued after the supply of Roman pottery had diminished. A general decline in the quality of life may be implied by the greater incidence of diseased animals in this phase.

The excavated features of phase 6 continue this ambiguity and contain a similar mixture of pottery to the occupation refuse. The residual element is so high that few sherds can be used as dating evidence. The plan offers several clues. It seems likely that the gullies and the pits were in use together and that these are later than the possible grubenhäuser, one of which contained a coin of the later 4th century. A post-hole perhaps associated with the latter structure contained grass tempered pottery, as did two of the pits and one possible gully. All these features were disturbed in the medieval period.

Fortunately these features find their counterparts in the more extensive excavations of 1962. The most convincing connections are between the gullies which divide up this site and a series of features recorded in the earlier work. These were interpreted as ' Saxon timber building ?bedding trenches ',[28] but only one of them showed any evidence of posts and they do not resemble structures in plan. One of these trenches ran continuously for 16 m. On the present site the gullies showed local variations of profile, filling and depth. They are better regarded as internal divisions within the walled area.

If this connection is accepted, the dating evidence is usefully increased. The gullies excavated in 1962 were cut through the Roman streets. One disturbed a hoard of coins, mainly of Honorius and Arcadius, and another cut through a masonry building, itself of 5th-century date.[29] Almost all the pottery associated with these gullies was late Roman, but one sherd identified as St. Neots type ware was recovered from the feature which cut the stone building.[30] It now seems just as likely that this was a coarse late Roman shell gritted vessel, very similar to those on the present site.

Horizontal relationships may be more informative. The gullies do not seem to be related to a grubenhäus in this area, which respected the Roman street, but one of these trenches seems to abut the timber house that replaced this building.[31] There is a break in another trench opposite the east entrance to the later house. It is clear that some time had elapsed between the use of the grubenhäus in the 6th century and the erection of this structure ; the published section seems to show that a period of soil formation had intervened.[32] The excavator assigned the second building to the late Saxon period, but all the associated pottery was of earlier date.[33] He drew attention to two sherds of Badorf Ware found in a robber trench nearby,

[28] Frere, *op. cit.* note 1, Fig. 5 and pp. 125–8.
[29] *Ibid.*, 128 ; *cf.* Figs. 5 and 6.
[30] *Ibid.*, Fig. 21, 19. The original sherd has not been traced.
[31] *Ibid.*, Fig. 5.
[32] *Ibid.*, Fig. 9, L1.
[33] *Ibid.*, Fig. 21, 6–12, 20.

but it is likely that these sherds, which belong to the 8th or 9th centuries, only provide a *terminus ante quem* for the system of gullies. This is because the trench which was cut through the 5th-century building defined the area from which stones were taken.[34] It follows that this gully already functioned as some type of boundary.

The elements of this layout may be paralleled on other sites. The timber building excavated by Frere is unlikely to be very early since wall trenches were not in use. The change in constructional method came in the Middle Saxon period,[35] and the best equivalent of this building, with its mixture of post-hole and trench construction, is probably at Maxey.[36] It is also apparent that early Saxon settlements do not include a network of internal boundaries. These also occur from the Middle Saxon period and have been recorded on well dated sites at Maxey,[37] Eynsham,[38] Chalton[39] and possibly Catholme.[40] There are rather similar features on record from two urban sites : at Winchester, where they may belong to the 8th and 9th centuries;[41] and at Exeter, where they are later than the Roman period and earlier than the 12th century.[42] If an earlier dating for the Dorchester system is allowed, the best comparison would be with the first occupation at North Elmham, where a number of boundary ditches of Middle Saxon date have been found.[43] This revised sequence would perhaps allow some hiatus between late or sub Roman occupation in this part of the town and reorganization of the walled area at some time between the 6th century and the beginning of the late Saxon period. There are rich unprovenanced finds of the 7th century from Dorchester[44] and the town was the see of Wessex in the earlier part of that period. This was also the time when the cathedral at North Elmham may have been built.

There is no evidence of late Saxon occupation on the present site and the remaining features belong to the early medieval period, when a market may have developed outside the bounds of the abbey.[45] A cluster of rubbish pits, confined by a fence, may mark the limit of one tenement. If this were the case, the associated buildings could have impinged on the Roman defences to the east. It is known that the town wall was being robbed at this date.[46] Alternatively these pits could have spread out from a plot to the west. This accords better with Rowley's reconstruction of the town plan.[47]

A Department of the Environment grant for this paper is acknowledged with gratitude.

[34] *Ibid.*, Figs. 5 and 6.
[35] P. V. Addyman, 'The Anglo-Saxon house : a new review', *Anglo Saxon England*, 1 (1972), 273–307.
[36] P. V. Addyman, 'A Dark Age settlement at Maxey, Northants', *Medieval Archaeology*, 8 (1964), 20–73.
[37] *Ibid.*
[38] S. Hawkes and M. Gray, 'Preliminary note on the early Anglo-Saxon settlement at New Wintles Farm, Eynsham', *Oxoniensia*, 34 (1969), 1–4.
[39] T. Champion, 'Chalton', *Current Archaeology*, 59 (1977), 364–9.
[40] S. Losco-Bradley, 'Catholme', *Current Archaeology*, 59 (1977), 358–64.
[41] M. Biddle, 'Excavations at Winchester 1971 : tenth and final interim report : part 2', *Antiq. J.*, 55 (1975), 295–337. The gullies are published pp. 326–8 and Fig. 19.
[42] J. Collis, *Exeter Excavations : the Guildhall Site* (1972), 10 and Fig. 3.
[43] P. Wade-Martins, 'Excavations at North Elmham', *Norfolk Archaeology*, 35 (1973), 416–28.
[44] T. M. Dickinson, *Cuddesdon and Dorchester-on-Thames, Oxfordshire : Two Early Saxon 'Princely' Sites in Wessex* (1974).
[45] T. Rowley, 'Early Saxon settlement in Dorchester' in *id.* (ed.) *Anglo Saxon Settlement and Landscape* (1974), 42–50.
[46] Frere, *op. cit.* note 1, 131.
[47] Rowley, *op. cit.* note 45, Fig. 5.