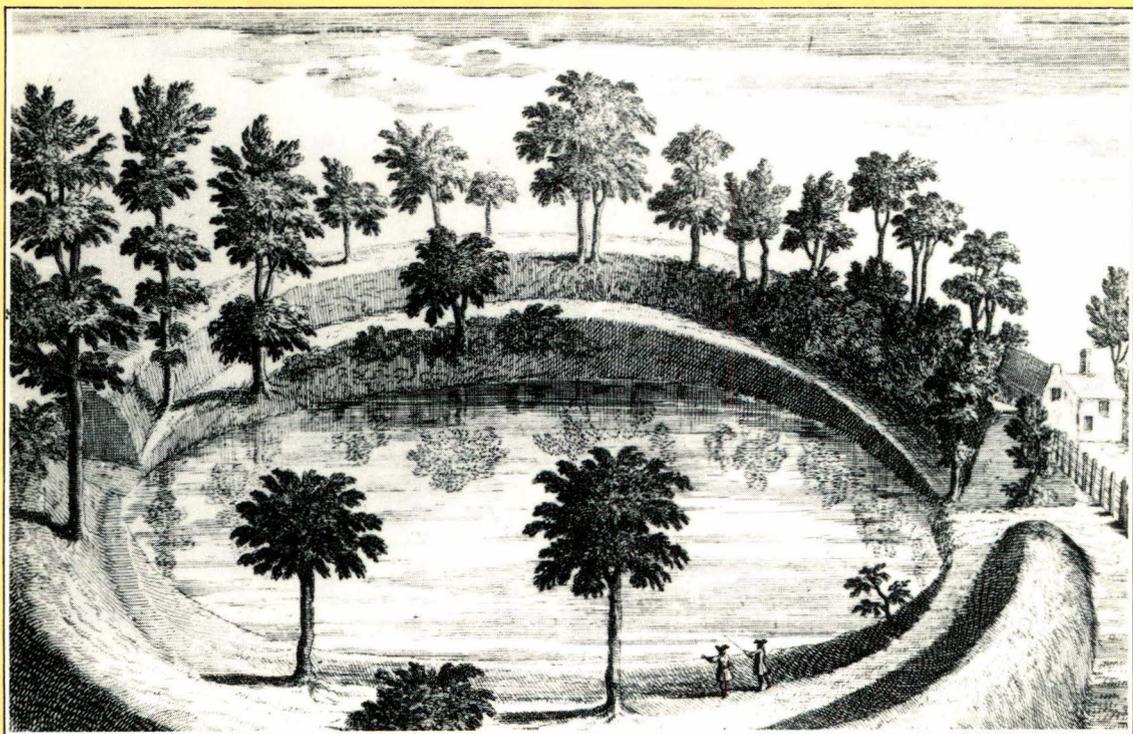


THE SILCHESTER AMPHITHEATRE

EXCAVATIONS OF 1979-85

MICHAEL FULFORD



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BY

Michael Fulford

With contributions from D. Allen, J. Bird, G.C. Boon, R. Bradley, P. Cannon,
M. Corney, A. Grant, B.M. Dickinson, D. Richards, B. Sellwood, N. Sunter,
J. Timby, A. van Scheepen, J. Watson.
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LIST OF CONTRIBUTORS

D. Allen	8 Windsor Road, Andover, Hampshire
J. Bird	14 Kings Road, Guildford, Surrey
G.C. Boon	National Museum of Wales, Cardiff
R. Bradley	Dept. of Archaeology, University of Reading
P. Cannon	Newbury Museum, Newbury, Berkshire
M. Corney	R.C.H.M., Rougemont House, Salisbury, Wiltshire
A. Grant	Dept. of Archaeology, University of Reading
D. Richards	Dept. of Archaeology, University of Reading
B. Sellwood	Dept. of Geology, University of Reading
N. Sunter	Blackwater Cottage, Blackwater Lane, Great Witchingham, Norfolk
J. Timby	1 The Grove, Dyehouse, Woodchester near Stroud, Gloucestershire
A. van Scheepen	Afdeling Palynology, Instituut voor Prehistorie, Rijksuniversiteit Leiden, Reuvenplaats 4, 2311 BE Leiden, Netherlands
J. Watson	H.B.M.C., 23 Savile Row, London, W.1.

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ABBREVIATIONS

<i>BMC</i>	<i>British Museum Catalogue, Mattingly 1936-</i>
<i>CBA</i>	<i>Council for British Archaeology</i>
<i>DOE</i>	<i>Department of the Environment</i>
<i>RE</i>	<i>Real-Encyclopädie Wissowa 1935</i>
<i>RIB</i>	<i>Roman Inscriptions in Britain, Collingwood and Wright 1965</i>
<i>RIC</i>	<i>Roman Imperial Coinage, Mattingly et al. 1923-</i>
<i>RRC</i>	<i>Roman Republican Coins, Crawford 1974</i>

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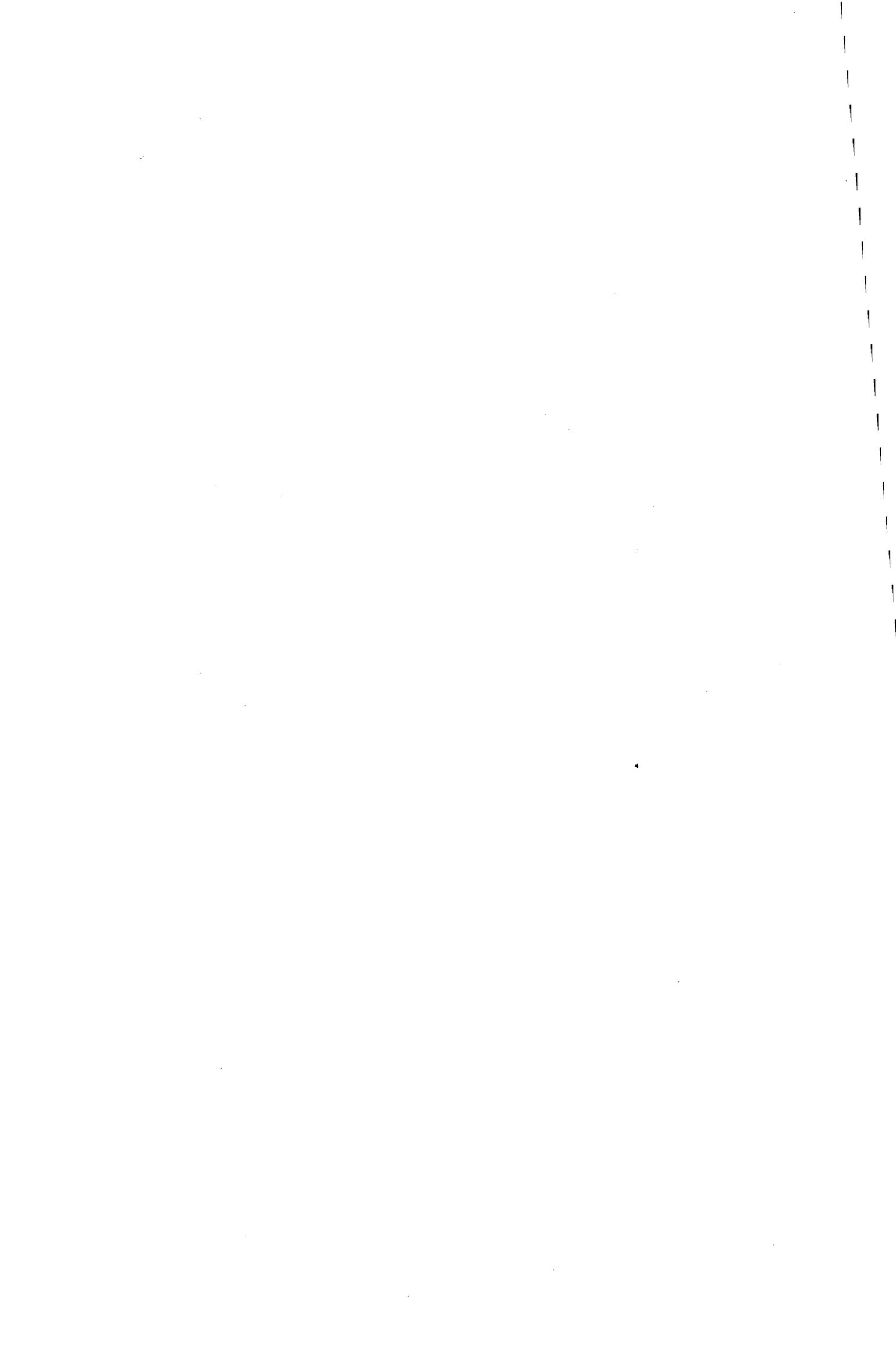
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PREFACE

The amphitheatre at Silchester was taken into Guardianship by the Secretary of State for the Environment in late 1979; through the generosity of the Englefield Estate excavation was allowed to proceed before the Guardianship agreement was finalised. Although a number of other amphitheatres are known from both civilian and military sites in Britain (see p. 177), only three of them had been thoroughly examined before the present excavations began. The earliest excavation had been that of Maumbury Rings (1908–13), the amphitheatre associated with the civitas capital of Dorchester, Dorset, followed by the total excavation of the amphitheatre attached to the legionary fortress at Caerleon in south Wales in 1926–7. That half of the Chester fortress amphitheatre which did not underly a Georgian listed building was mainly excavated between 1965 and 1969. Thus, Silchester's amphitheatre was only the second example associated with a civitas capital in Britain to be extensively explored. It had not previously been excavated, unlike the walled area which had been investigated on a large scale between 1890 and 1909.

Clearly, in the light of our ignorance of the 'civil' amphitheatres of Britain, major objectives were to establish the character and chronology of the monument and to examine its evolution through the Roman period. Also, like the two previous major amphitheatre excavations, the Silchester programme focussed on revealing those masonry elements that could be permanently displayed to the public. At the same time full account had to be taken of the post-Roman use of the monument, particularly the possibility of sub-Roman occupation as an easily defensible refuge. An inevitable consequence of this was that no resources could be devoted to the environs of the monument which, as opposed to the arena, might have been expected to provide more evidence of the frequency with which the monument was used as well, perhaps, as indications of the way in which it was used.

The excavation was carried out over seven years, in seasons of about five weeks each, with an average of about twenty-five volunteers and five staff. With support from the University of Reading the excavation was financed first by the Inspectorate of Ancient Monuments of the Department of the Environment and then by its successor, the Historic Buildings and Monuments Commission (England). As an indication of the cost of the excavation, the total grant made available for volunteers and day-to-day running expenses amounted to £21,850 over the seven years. This figure does not include staff fees and post-excavation fees and expenses. Altogether the cost of excavation and post-excavation is estimated as not having exceeded £50,000.

With a long-term seasonal excavation it is very important, but difficult, to ensure continuity of staff. In this respect I am very grateful to the following who returned – some for as many as four seasons – to supervise: Mark Bowden, Martin Cook, Nick Digby, Vince Gaffney, Paul Jarvis and Dave McDonnell. Other supervisors, many of whom began as volunteers, rendered invaluable assistance. These included Mark Birley, Charles Cottam, Steve Ford, Lorraine Mepham, Frances Raymond, Ian Sanderson, Don Truman, Leigh Turner and Steve Waltho. Likewise continuity was also established in the finds department, and I am particularly grateful to

Alison Taylor and Liz Wild who, successively, looked after this aspect of the excavation for five years. They were assisted tirelessly throughout by Helen Robinson. In the first two seasons the finds were managed by Jessica Vale and Mary Banfield. I am also grateful to Bill Ellison who looked after the survey for the first four years. Among those directly responsible for the success of the excavation I owe my greatest thanks to Brian Williams who was responsible for most of the planning and photography of the last three seasons. His high standard of recording has made the task of writing this report considerably easier.

Except for the first season when my wife willingly took charge of the cooking, the excavation ran alongside that of the forum-basilica and the task of catering for both teams was the responsibility, first of Jean Chapman and, secondly, of Lorraine Mephram. Despite fairly primitive conditions they managed magnificently, and much of the success of each excavation-season is attributable to their work.

We camped throughout the project; for the first two seasons in a field kindly made available by John Cook and his farm-manager Dan O'Connell, and subsequently beside the forum-basilica on land set aside by Hampshire County Council. I am grateful to the then tenant, Tony Wheeler, for all his assistance with our camp and the excavation. After running the finds department under canvas in the first two seasons, it came as a great relief to accept the hospitality of Nick and Biddy West and make use of their barns both for working on the finds and for storage. I am indebted to them for their generosity and forbearance. Others who rendered invaluable support for the excavation include Sir Leonard and Lady Atkinson, Eric Hatch, the Aldermaston Recreation Society and the Silchester Association.

Until their respective retirements in 1982 and 1983 Frank Rivers and the late Albert (John) Dowsett, who made up the D.O.E. (later HBMC) resident work-team, were responsible for the erection and dismantling of sheds, the building of shuttering, the management of pumps and many other essential tasks. I am grateful to them for all their help. The original initiative for the excavation was Jonathan Coad's and throughout the excavation and post-excavation period he has been a constant help in sorting out all the administrative problems that have arisen. George Boon was a regular visitor and has been an invaluable source of help and advice throughout.

The amphitheatre is remote from most of the inhabitants of Silchester, but it has two close neighbours, Mr and Mrs Briggs and Mr and Mrs Harcourt. I am grateful to them for tolerating our intrusion and noise with great forbearance while at the same time having the enthusiasm to encourage us in our work.

The writing of this report owes much to the specialists, all of whom have contributed to it promptly, as well as to those who have aided them. In particular we should like to thank Dr Alan Vince for his invaluable help with the medieval and post-medieval pottery report, and Susan Read and Leslie Cram of Reading Museum, Sarah Green, Peter Leach and Dr David Williams for their help in the preparation of other aspects of the pottery report. The report on the pollen was originally prepared by Antonie van Scheepen as part of a postgraduate research programme in the Department of Botany, University of Reading and her original, expanded submission is available there for consultation. We are very grateful for the help of Professor Heywood of that department as well as for the assistance of Dr C.C. Bakels of the University of Leiden. In particular, however, we wish to thank Dr. Michael Keith-Lucas, also of the Department of Botany at Reading, for his patient help in editing the original report for this publication. I am very grateful to David Bomgardner for allowing me to consult his unpublished doctoral thesis and to my colleague, Grenville Astill, for his help with the interpretation of the medieval phase of occupation. Finally, I wish to express my special thanks to Brian Williams who has produced the superb illustrations in this report (all except FIGS. 44-56 (J.R. Timby) and 67-75 (N.J. Sunter)). Brian Williams was also responsible for PLATES VII A - XXII B and XXVI B - XXX A inclusive; the author was responsible for the remainder.

It is sad to conclude this preface with the report that, more than three years after the completion of the excavation, very little has been done towards presenting the site to the general public. The arena has been drained and levelled, but little of the arena wall has been properly consolidated and most of it remains concealed beneath protective black polythene. The

seating-banks remain just as they were at the completion of the excavation – choked with vegetation, the edges around the arena gradually crumbling away.

The finds and archive of the excavation are deposited with the Hampshire County Museum Service in Winchester.

Department of Archaeology
University of Reading
March 1988

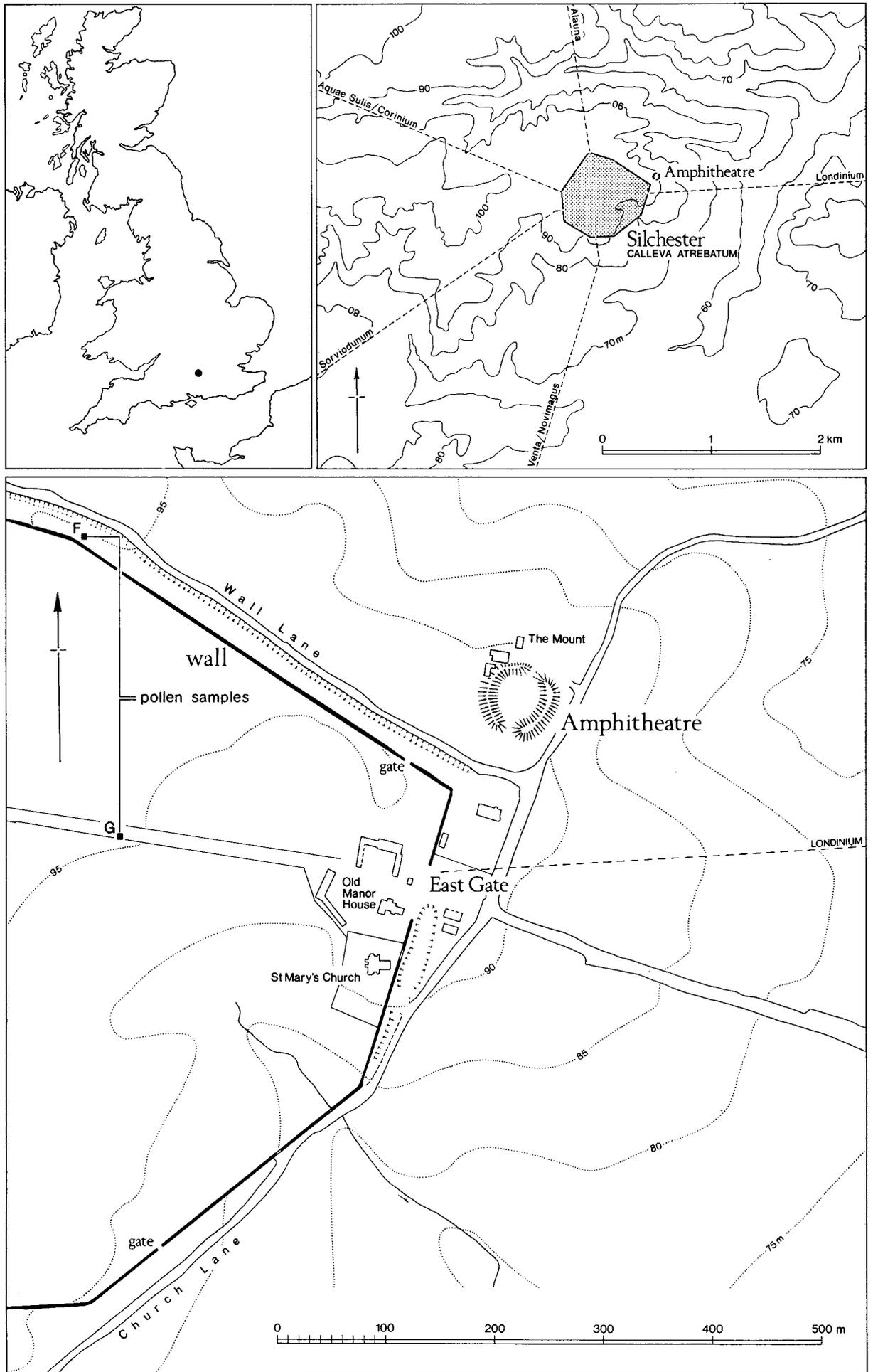


FIG. 1. Location of the amphitheatre (Scales, 1:10,000; 1:50,000 (inset)).

PART I

THE EXCAVATIONS OF 1979–85

1. INTRODUCTION

The small earthwork, which the excavations described in this report have confirmed as the site of the amphitheatre of *Calleva Atrebatum*, is situated on the eastern edge of the town, actually just within the parish boundary of Mortimer West End (FIG. 1). It lies just above the 90 m (O.D.) contour with the centre of the arena about 100 metres north-east of the easternmost angle of the third-century town wall and about 170 metres north of the East Gate, which was probably originally constructed towards the end of the second century (Fulford 1984, 235–6). The monument occupies a small finger on the eastern edge of the larger plateau-gravel spur upon which the Roman town lies. Beyond it to the north and east the land falls away, offering no other obviously suitable location for a monument of this size.

The site was first identified as an amphitheatre by William Stukeley in 1724 (i (1776), 178; ii, pl. XLIII), but no deliberate archaeological investigation is recorded before 1979 (Boon 1974, 148–50) (PL.I A). In particular the site did not lie within the Wellington estate and permission to excavate was refused the Society of Antiquaries during its research excavation on Silchester carried out between 1890 and 1909 (Hope and Stephenson 1910, 332). Mature trees, now mostly oaks and hollies, cover the seating-banks as they did in the early eighteenth century when Stukeley visited the site (PL.I B). It is likely that this tree-cover was established from the late thirteenth and fourteenth centuries after a short period of occupation between the eleventh and thirteenth century described below. Immediately to the north of the monument is a timber-framed house of late medieval origin, recently named 'The Mount', which was a working farm until the early 1970s. The arena, when it is dry, makes a natural enclosure for penning stock although, before 'The Mount' was abandoned as a farm, it had been used for keeping fowl. Without artificial drainage the arena also makes a natural pond and, until recently, has regularly filled with water in the winter to a depth of 0.5 m. The excavations revealed evidence of intermittent drainage-schemes from the initial construction of the amphitheatre in the first century A.D. up to the present century. Stukeley showed the arena as a pond in his drawing of 1724 (PL.I A). In the spring of 1987 the Historic Buildings and Monuments Commission completed extensive drainage works which now keep the arena dry throughout the year.

The monument measures overall about 90 m (east-west) by 75 m (north-south) and consists of two crescent-shaped earthworks enclosing an oval-shaped arena (FIG. 2). The banks slope steeply down to north and south to straddle the two presumed entrances on the long axis of the monument. At its highest point, the bank on the western side survived about 5.75 m above the base of the arena. At 94 m O.D. the highest point of the eastern bank is lower by about 1.25 m than the highest point on the western side. Before excavation, the base of the arena was about 1.75–2.0 m below the ground-level outside the South Entrance. Taking a mid-point through the presumed entrances the monument is orientated about 20° east of true north. At the 90 m contour the arena measures about 48.5 m by 33 m.



FIG. 2. Pre-excitation contour-plan showing location of excavation trenches (Scale, 1:600).

Excavation of the monument began when Guardianship arrangements were being finalised by the Department of the Environment in 1979. At that time the arena was colonised by marsh vegetation and elder while the banks, in addition to the mature oaks and hollies, were choked by dead elms, elder and bramble (PL.I B).

The Development of the excavations

The excavations were initiated in 1979 at the request of the Inspectorate of Ancient Monuments, to determine whether or not the monument was indeed an amphitheatre and to obtain information about chronology and structure. When it became clear that there was good preservation of the third-century arena wall and entrance-passages, the scope of the excavation was broadened in order to expose for permanent display the arena walls, the pair of recesses on the short axis and the opposing entrances on the long axis.

The excavations began with one trench on the presumed site of the South Entrance, while a second trench across the western bank was designed to discover evidence of seating, the structure of the bank, the means by which it was retained and the chronology. With the discovery of the third-century stone retaining-wall around the arena and the well-preserved walls flanking the south entrance-passage, excavation was extended in 1980–81 to locate the course of the arena wall in each quadrant of the arena and the site of the North Entrance, in order to gain an overall plan of the monument. The chance discovery of the well-preserved East Recess in 1981 led to the adoption of a policy of total excavation of the arena wall to the level of arena surface contemporary with its construction, with a view to placing the remains on permanent display to the public. Thereafter excavation was confined to the arena and entrance-passages. Since 1979 it has been the policy of the Inspectorate to retain the mature trees on the seating-bank; the extent of their cover was such as to prevent further area excavation of the surfaces of the seating-banks.

The arena presented considerable problems of excavation. At the start of each season the water which had accumulated over the arena surface had to be pumped out. The lack of natural drainage meant that progress was impeded by all but the slightest fall of rain. Equally frustrating were spells of dry weather which baked the surface hard and powdery, making features difficult to observe and excavate, even with frequent hand-watering. In 1981 almost half of the arena was cleared to the level of the post-medieval gravelled surface and, in the north-west quadrant, excavation proceeded to reveal the post-holes of a medieval hall-building. Further work in the arena was prevented by the growth of the spoil heap, which could not be removed until preliminary excavation of the South Entrance was completed in 1982. Thus, in that year, work continued on the North Entrance, the north-west quadrant, and the East Recess as well as the South Entrance. There, for the first time, evidence of the early Roman timber revetments of the entrance-passage was discovered.

During the autumn of 1982 the arena was cleared of spoil by machine, so that in 1983 it was possible to uncover the uppermost remains of the entire arena wall. At the same time it was decided to test for further post-Roman occupation in the arena as well as to search for central features of Roman date and to explore the depth of Roman silting and the sequence of surfaces. Given the disturbance caused by the removal of spoil the previous autumn and the difficulties of area-excavation in the arena, a series of 2 by 2 m trenches was dug across it as far as the spoil heaps would allow in order to determine whether total excavation by hand of the arena was justified (FIG. 81). Except for some additional post-holes of the medieval building on the west side, the results were confined to a series of demonstrations of the depth and character of the Roman silts and surfaces. More extensive trenching at the centre of the arena failed to produce any evidence either of drainage earlier than the nineteenth century or of other Roman features.

Meanwhile excavation of the silts and dumps that had accumulated against the arena wall continued to expose the surviving remains of the wall above its foundation offset. This continued until the end of the last season in 1985. It was combined with more selective, deeper excavation at the edge of the arena designed to determine its layout in the early Roman period. This had been prompted by the realisation in 1984 that there were two distinct periods of timber revetment

around the arena. By the autumn of 1985 total excavation had been achieved of the South Entrance, part of the south-west quadrant, the West Recess, part of the north-west quadrant, the North Entrance (within the limits of the Guardianship area) and the East Recess. This was sufficient to reconstruct the overall layout of the arena, its entrances and, to a more limited extent, its recesses throughout the life of the monument as an amphitheatre. At the same time the evidence for post-Roman occupation and use was documented. In the spring of 1987 drains were laid within the arena whose surface required further reduction in some places to make it level with the foundation offset of the wall. Thus, within the arena, except where features cut into earlier Roman silts and surfaces, all the stratigraphy post-dating the construction of the stone wall has been removed.

2. SCOPE OF THE REPORT

This report describes the evidence for seven main periods of activity:

- Phase 0: Pre-Amphitheatre occupation
- Phase 1: Amphitheatre, Timber Phase 1
- Phase 2: Amphitheatre, Timber Phase 2
- Phase 3: Amphitheatre, Stone Phase (including minor modifications)
- Phase 4: Post-Roman abandonment and robbing
- Phase 5: Medieval occupation
- Phase 6: Post-Medieval occupation

Within these periods the finds have been further sub-divided according to Context groups. These are listed at the end of Part I (p. 74), while the layers of which each group is composed are listed in the archive. The latter also comprises the primary record of contexts and features, site-drawings and photographic negatives.

3. PRE-AMPHITHEATRE OCCUPATION (FIG. 3)

3.1 Establishment of the original ground surface

Evidence of pre-amphitheatre occupation was recovered beneath the western seating-bank and beneath the bank terminals at the South Entrance. Information was obtained on the height above O.D. of the surface of the underlying ground and, with evidence recorded immediately to the north of the East Recess, it has enabled a partial reconstruction of the configuration of the ground-surface before construction of the amphitheatre. The ground appears to slope away to the north and east, with the highest points lying beneath the middle and southern parts of the western seating-bank (91.5 and 91.2 m O.D.). Further investigation beneath the eastern seating-bank would confirm the preliminary observation that, immediately adjacent to the East Recess, natural was recorded at about 89.23 m O.D. Here and at the North Entrance the old ground-surface itself was not observed. There is thus the slight possibility of some truncation of the natural.

3.2 Features beneath the western seating bank

At the western end of the trench through the seating-bank was a V-profiled ditch (F216), whose course runs approximately north-east to south-west (FIG. 6, PL. III A). It measures about 2.6 m wide and 0.9–1.0 m deep and, in the area excavated, was sealed by material that had either eroded from the seating bank, or formed a deliberate part of it (see p. 14). The ditch was filled with light brown sandy clay and gravel with charcoal flecks and contained a mass of pre-Flavian pottery. About a quarter by weight of the latter was of coarse-ware wasters (FIG. 48). The lack of slumping shows that the fill had largely consolidated by the time the ditch was sealed by the material which either formed part of the tail of the seating bank, or had eroded from it. Thus, although the excavated section of the ditch did not lie directly beneath the core of the seating-bank, it is reasonable to assume by extrapolation that the ditch was truncated by the excavation of the arena and that, elsewhere, it was sealed over, either at the time of construction or very soon after.

Other features in this trench included a shallow slot (F220), 0.25–0.3 m wide and 0.05 m deep, running eastward from the edge of F216 and containing burnt flint (p. 136). Adjacent and partly cut by F216 lay a shallow scoop (F217), 0.5 m deep, which was filled with turf and light grey sandy clay and was partly sealed by the construction of the seating-bank. It may have been of natural origin.

Another possible pre-bank pit (F1208) was observed at the base of the small trench cut into the face of the bank in the south-west quadrant (FIG. 7). This contained no finds.

The latest sherds from the features and from the old ground-surface beneath the bank include two pieces of Neronian to early Flavian South Gaulish sigillata as well as others of a more general pre-Flavian date. Some of the coarse wares are at present regarded as dating from the Neronian period. On the basis of the high proportion of sandy wares to coarse-tempered 'native wares', the assemblage as a whole would seem to be predominantly Claudio-Neronian. The pottery is discussed at greater length below (p. 82, 88 and 103).

3.3 Features at the South Entrance

A small amount of natural was exposed to west and east of the two flint retaining-walls of the stone-phase amphitheatre. On the western side there was evidence of a shallow cut running parallel with the wall and interpreted as part of the initial cutting-out of the entrance-way (below, p. 16, FIG. 8). On the east side a section of U-shaped ditch running almost parallel with the eastern wall was excavated (F46). This measured about 1.6–1.7 m wide, 0.4 m deep and was filled with dark gravelly soil (FIG. 4). It contained a sherd of pre- or early Flavian South Gaulish sigillata (below, p. 80).

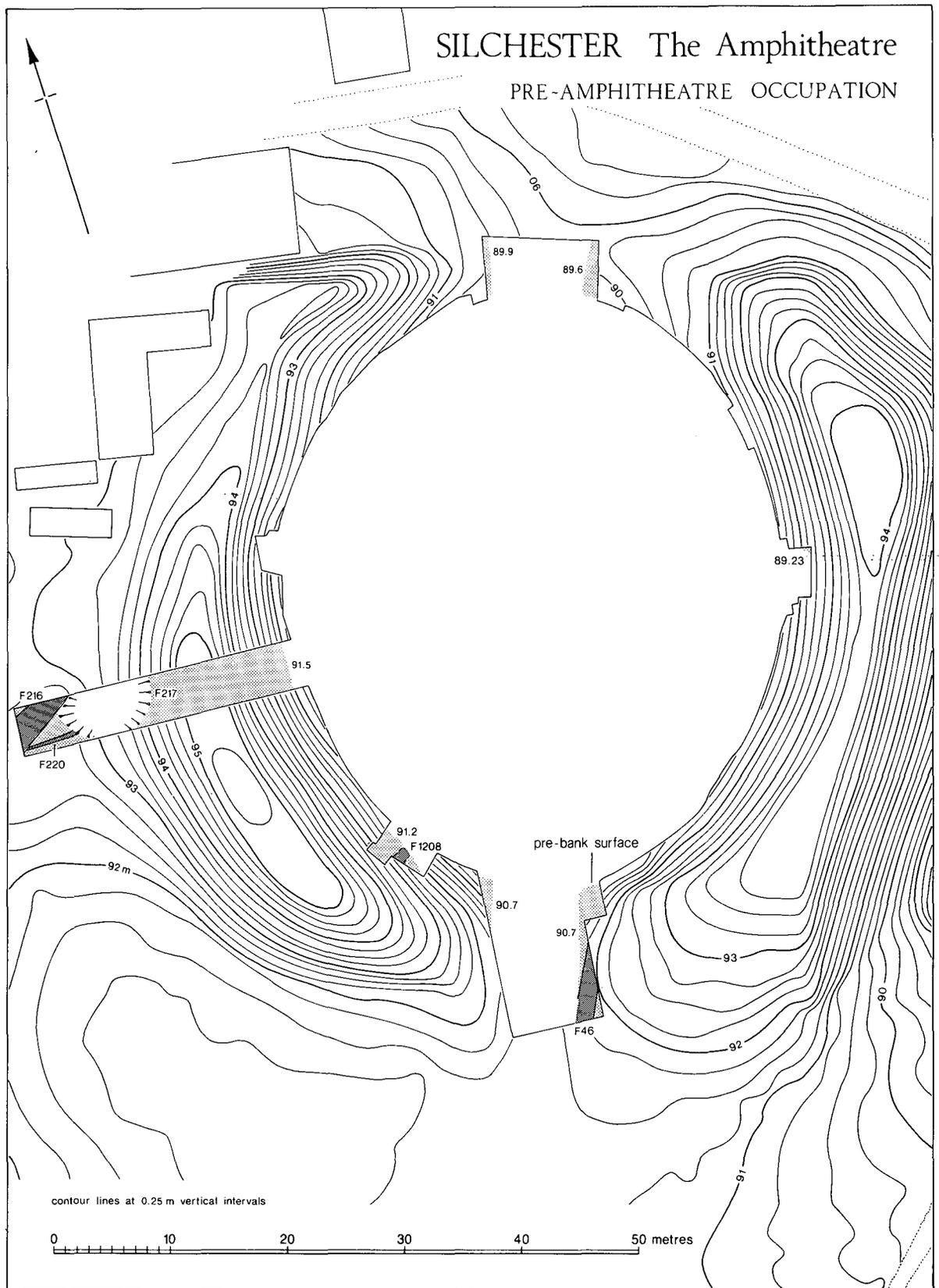


FIG. 3. Pre-amphitheatre occupation (Scale, 1:600).

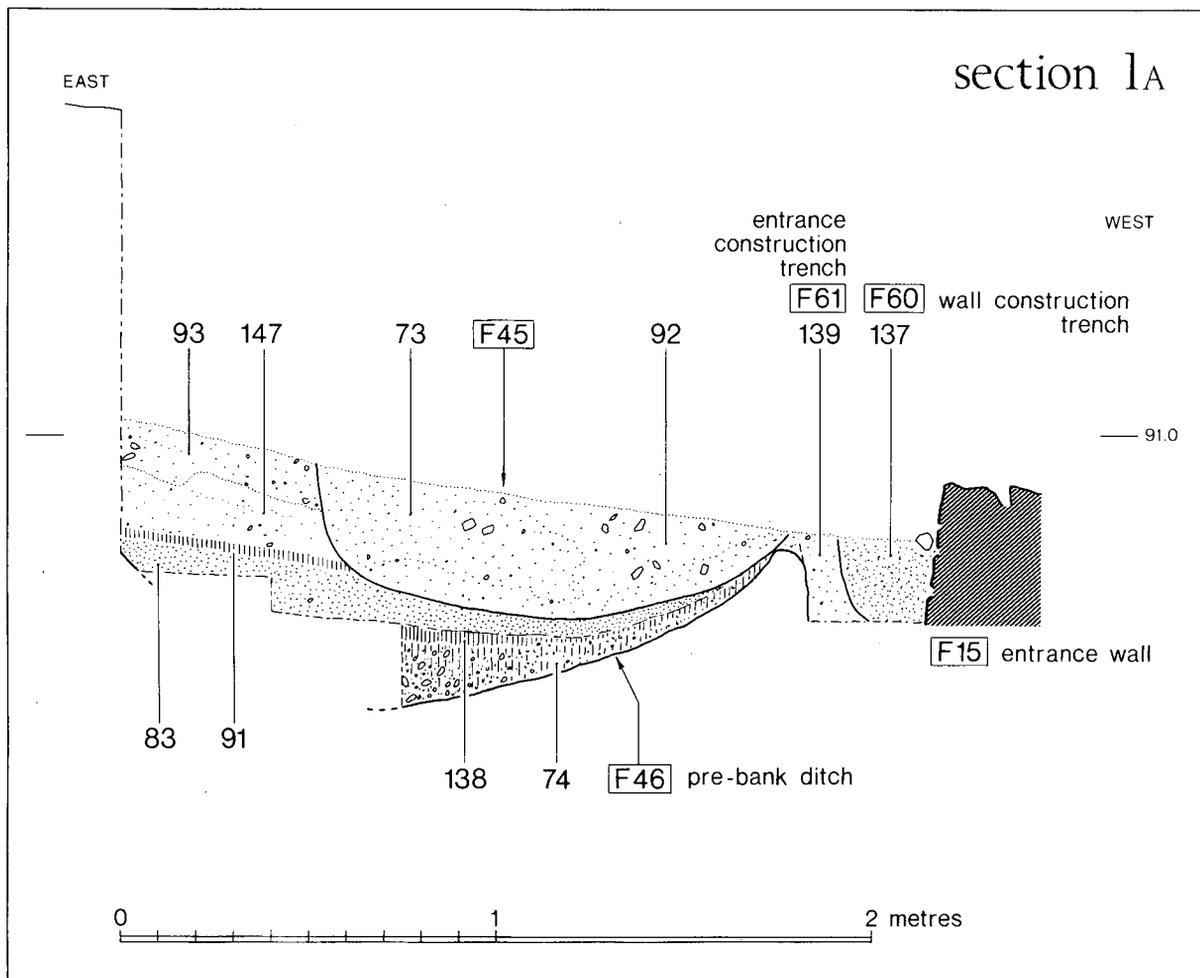


FIG. 4. Section of pre-amphitheatre ditch at South Entrance (F46).

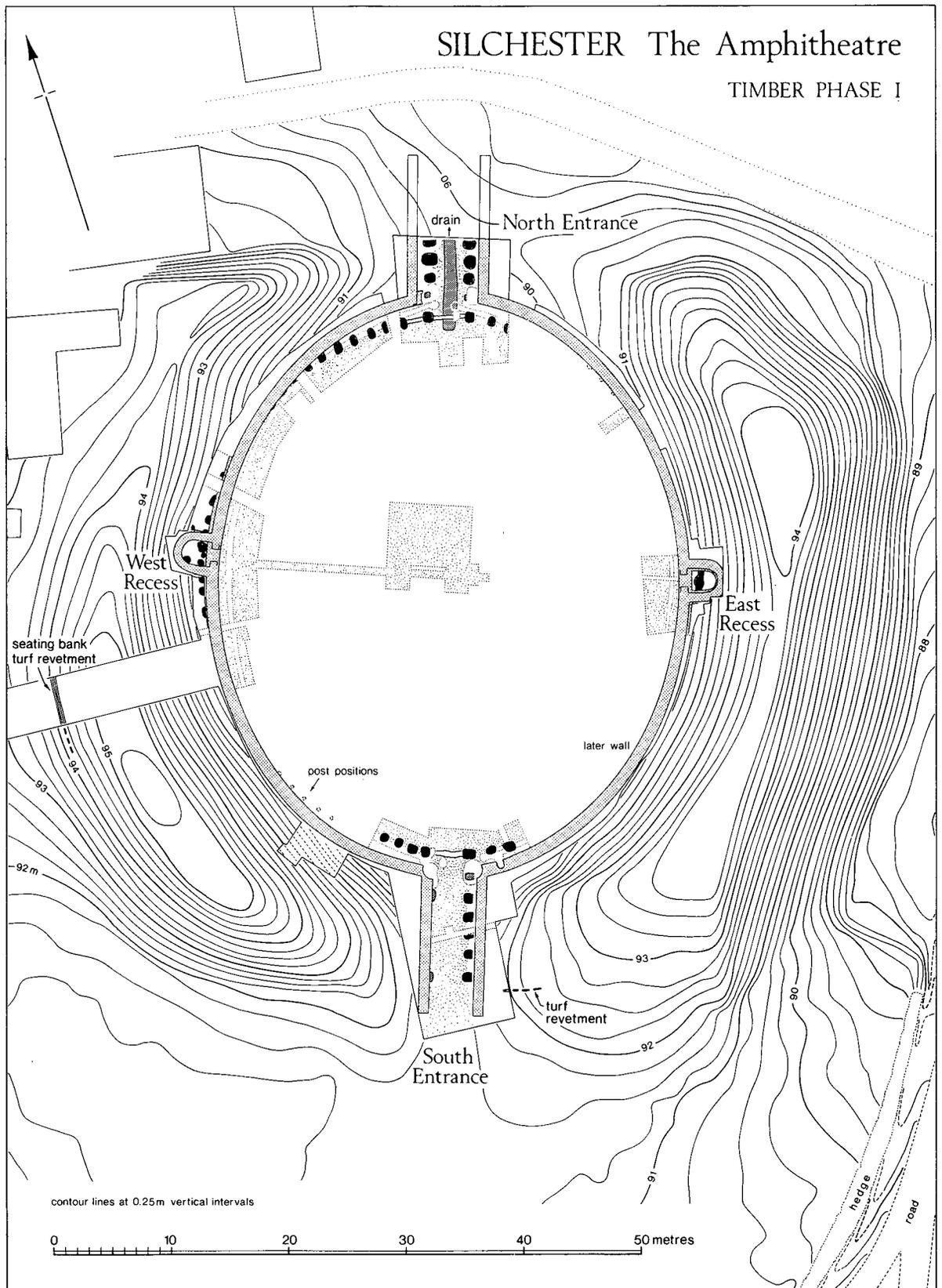


FIG. 5. Timber Phase 1: plan of amphitheatre (Scale, 1:500).

4. TIMBER PHASE 1 (FIGS. 5–13, 81)

4.1 Construction of the Amphitheatre

The basic character of the monument seems to have been determined by the need to give as much height as possible to the seating-banks by the excavation of the arena to an appropriate depth. The most accurate measurements for the original depth of the arena below the old ground-surface were obtained in the south-west quadrant. Adjacent to the section through the seating-bank the arena surface was at a depth of 2.97 m, while below the cut into the face of the seating-bank near the South Entrance the depth was up to 2.38 m. As has already been noted, the original ground-surface sloped down to the north and east from the high ground under the western seating-bank and less spoil was available for the formation of the eastern bank. Measurements from the eastern side suggest that the arena was initially excavated to an internally consistent depth lying at about 88 m O.D. However, in terms of the overall level of the arena, this represented a degree of over-digging, since the lowest surface on the western side was recorded at between 88.32 and 88.52 m. This discrepancy was subsequently compensated for by levelling up the eastern side. One explanation for the hollow between the eastern seating-bank and the modern lane is that it may have served as a quarry to provide spoil for the seating-bank. As Nigel Sunter's calculations have shown (p. 161), the excavation of the arena would have provided a little less than half of the spoil used in the banks as they survive today.

The arena was almost circular in plan, measuring about 43 by 42.2 m once the vertical timber revetments had been positioned. It was entered by two opposing entrances on the north-south axis, of which the southern sloped down at an angle of 10° into the arena from the undisturbed ground-surface to the south. The North Entrance sloped downwards very slightly into the arena (88.6 m at the north section; 88.2 m at the gate). Assuming symmetry, each entrance was about 10.5 m in length. Two opposing recesses, whose full dimensions are not known, were provided on the east-west axis.

After the stripping of turves which were used to provide a retaining-wall at the back of the seating-bank, the spoil was presumably excavated from the centre of the arena outwards. This would have enabled easy access to the seating-bank. As excavation moved outwards to the edge of the arena and downwards, it would have become more and more necessary to remove spoil through the entrances and take it along the spine of each bank, or to approach from their rear.

The differences between the axial measurements of the arena are so slight as to suggest that a more or less circular plan was intended from the start. Calculated in *pedes monetales* (0.296 m) the north-south axis inside the revetment wall measures 145.3 feet, while the short axis measures 142.5 feet. The equivalent measurements in *pedes Drusiani* (0.332 m) are 129.5 by 127.1 feet. Although the dimensions of the arena were established at an early stage, the evidence from the section across the seating-bank (FIG. 6), which shows dumping outside the turf stack, suggests that the calculation for locating the original revetment for the back of the bank may have been too conservative (see below, p. 14).

The stability of the monument rested on the retaining-wall lining the passage-ways and edge of the arena, and on the external turf-revetment of the seating-bank. The latter will be described first.

4.2 Seating Bank (*Cavea*) (FIGS. 6–7)

The seating-bank was investigated principally by a single cross-section 4.0 m wide towards the middle of the western seating-bank (FIG. 2). The precise location of the trench was determined by the absence of mature, living trees. Additional information was obtained from a small cut in the arena face of the bank in the south-west quadrant and at the South Entrance. Stukeley's depiction of the seating-bank with a prominent terrace can be shown to be false (Fulford 1985, 64).

From the base of the external turf-revetment to the timber revetment-wall of the arena the

measurement is 14 m. The exact position of the timber wall in this section had been destroyed by the construction of the later stone retaining-wall. The bank consists of dumps of gravel and clay deposited in an organised manner in the following way (FIG. 6).

Towards the edge of the arena-cut a low bank (F233) (0.7 m high and about 4 m wide) of mixed gravelly soil and grey sandy clay flecked with charcoal and rich in pottery finds was established. This may represent a marking-out bank before the outer limits of the arena-cut had been reached. Its composition is consistent with topsoil stripped off the surface of the gravel under the bank and over the surface of the arena before its excavation.

To the rear of the bank, the scoop F217 was filled with turf and light grey sandy clay (302) before a stack of turf, interleaved with lenses of gravel, was established as the rear retaining-wall of the *cavea* (PL. II). An iron-pan about 0.4 m above the natural was observed to extend into the core of the bank from the stack. While the outer edge of the turf stack can be seen as a distinct line, the inner edge is interspersed with substantial spreads of grey and orange gravel (305) between turves. Traces of a second iron pan were observed about 0.6–0.7 m above the natural, extending from the turf-revetment towards the arena in the southern section. The turves rose at an angle of about 70 degrees to the horizontal to a maximum surviving height of 2.3 m. They were clearly built up at the same time as the material which was dumped to form the foundations of the *cavea*. The external build-up (296, 225, 214), extending 7 m west of the turf stack, also appears to have been added as the stack rose in height or very soon after (PLS. III A, B). Clay, gravel and turves were dumped to the west of and outside the turf-revetment in almost horizontal layers at an angle of 11°, indicating that the formation as a whole was deliberate rather than the result of erosion or slippage. It is built from the same level as the main section of the bank and contains pottery of the same range and date. The character of the dumping and the incidence of turves in this material, outside the turf stack proper, support both the deliberate intent behind it and near contemporaneity with the main *cavea*. The lack of evidence for any but the slightest bulging in the outer face of the turf wall, which might reasonably have been expected if there had been no build-up against it, also strengthens the arguments for contemporaneity. This addition to the outside of the bank may be localised, as it corresponds with a general bulge in the contours to the west of this seating-bank (FIG. 2). Its purpose may have been to serve as a ramp to facilitate access to the back of the bank.

The base of the bank was initially built up from the rear towards the middle with tips of gravel at 15–20 degrees from the horizontal (PL. IV). When the bank was about one metre high at its western end, gravel (313) was dumped against the 'marking-out' bank and this was followed by more alternate dumping from the rear and front until the bank was about two metres in height. The intention seems to have been to keep the surface of the bank approximately level as it gained height. Above about two metres greater emphasis was given to the raising of the rear of the bank (293, 287, 301, 205). This coincides with a change in emphasis in materials: the base of the bank is largely composed of gravel while clay predominates higher up. This represents an inversion of the natural stratigraphy, where gravel caps the sandy clay of the Titchfield Complex.

At a height of about 3.2 m above the natural at the rear of the bank and running down the arena face of the *cavea* at an angle of 15–17 degrees from the horizontal is a band of yellow clay (281), about 0.4 m deep. The upper surface shows evidence of seven terraces, varying in height from 0.06 to 0.15 m and in width (east to west) from 0.55 to 1.1 m. The lowest surviving step is about 1.4 m above the original ground-surface. In the angle created by each step is a distinct patch of gravel, *c.* 0.4 m wide (east-west) and 0.2 m deep in cross-section (275, 276, 284). The interpretation of these gravel steps or terraces remains problematic. One explanation is that they were created by worm- or root-action on the decay of timbers laid in the angle of each step. A further band of clay (274), 0.3 to 0.4 m above the first, preserves less clearly the general form of the steps and may have resulted from a secondary heightening of the bank and a replacement of seating. The terracing or stepped effect is interpreted as evidence for the earliest surviving seating-arrangements of the amphitheatre (see below, p. 17). Apart from coarse wares, dating evidence is provided by two sherds of sigillata, one of Neronian, the other of Neronian to mid Flavian date.

WEST SEATING BANK

section 6

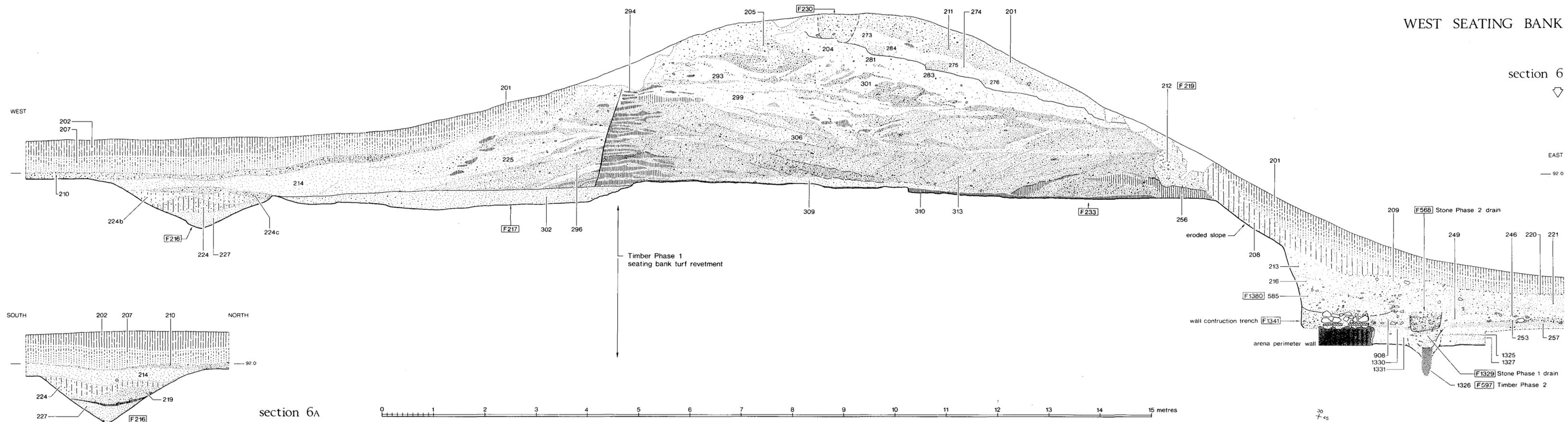


FIG. 6. West seating-bank of amphitheatre: north section and plan of features in the upper part of the bank (Scale, 1:60).

4.3 Secondary Heightening

The terracing described above is sealed by further dumps of clay and gravel (201, 211) which represent the latest surviving material of the *cavea* (PL. V). The uppermost layers were considerably disturbed by tree-roots and burrows and they provided no further evidence of terracing. If that described above relates to the earliest seating- or terracing-arrangements, these upper deposits represent a secondary addition to the *cavea*. In addition to the pottery evidence described below (pp. 81, 104) a quantity of stone of the types used in the arena wall was found in this deposit (204, 206, 211). Altogether 20,065 kg of building-stone were recovered, of which ironstone accounted for 73%, greensand for 26% and sarsen for < 1%.

As recorded in this one cross-section the crest of the bank rises 3.6 m above the natural and 6.57 m above the earliest arena surface.

4.4 Other Evidence for Seating Arrangements

The upper surface of the bank was badly disturbed by root-holes and burrows. Nevertheless a number of features were defined which were cut into the upper layers of the inner or arena face of the bank. Although elsewhere distinct post-Roman accumulations, such as the ploughsoil outside the amphitheatre and the silts towards the base of the arena face of the bank were recognised, the structure of the central section of the bank was essentially of Roman date throughout. In the absence of securely stratified post-Roman finds the dating of features cut into the surface of the bank must remain uncertain. Where, however, a feature cuts the 'secondary heightening', it, too, is clearly of contemporary or later date.

(a) Evidence for horizontal beams linking the *cavea* with the arena retaining-walls

The northern section (FIG. 6) clearly shows evidence for a transverse cut, concentric with the edge of the arena, in the lower face of the bank (F219). This was not convincingly identified in plan, because that section of the bank had been particularly badly disturbed by tree-roots and burrows. Indeed its position in the south section was completely obscured by a tree-root. However one clear feature (F212), filled with yellow sandy clay, was observed in plan (FIG. 6, PLS. VI A, B), close to the northern section and, therefore cutting the fill of the transverse feature. In order to ascertain whether other such features might be seen better in section, the lowest part of the bank, immediately inside the edge of the arena cut, was excavated to a vertical face. F212 showed as a slot 0.5 m wide with a maximum surviving depth of 0.8 m, extending about 1.5 m into the bank, and at right angles to the edge of the arena. This feature was interpreted as evidence of a beam, which, on the basis of the dimensions of the feature, probably incorporated a vertical as well as a horizontal element. The relative narrowness and straight sides of F212 seem to preclude it having resulted from the digging out of a timber. On decay the wood had been replaced by a fill of yellow sandy clay and gravel. The disturbed gravelly soil on either side of F212 probably represents the results of the wider cut or cuts – such as that evident in the north section and described below – into the face of the bank to insert one or more timbers. There was no evidence in the natural beneath the bank for posts which might have pinned down this or any other horizontal timber.

The clear recognition of the traces of other horizontal beams was made difficult by the dark gravelly soil (interpreted as the general fill of the transverse cut at the bottom of the arena face of the *cavea*). However, up to three other possible cuts in it were observed in the vertical face created at the bottom of the bank (F224, 225, 229), ranging in width from 0.7/0.8 m to 0.45 m at the top and narrowing towards the base (PL. VI A). While confidence can only be attached to F212 (described above) as evidence for the position of one timber, the cut (F219) along the lower part of the bank (and as seen in the north section) can be interpreted as evidence for the general insertion and replacement of timbers linked to the arena retaining-wall. Although it cuts the primary core of the *cavea*, F219 cannot be shown to cut the 'secondary heightening'.

Similar evidence for horizontal beams linking the base of the *cavea* with the arena wall was

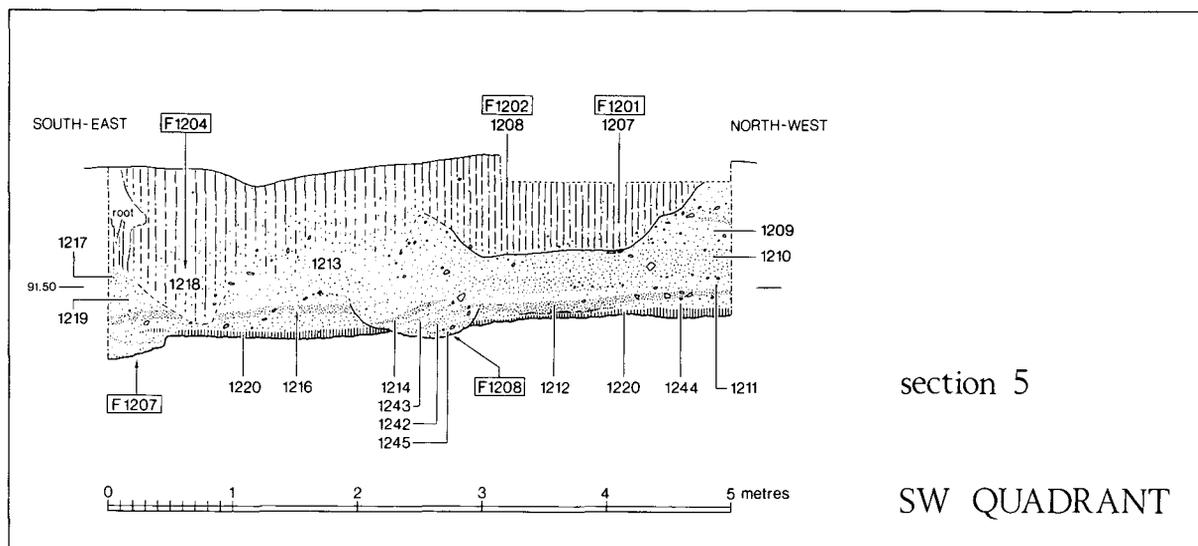


FIG. 7. West seating-bank: south-west quadrant. Transverse-section showing lower part of bank facing the arena, and evidence of cuts for possible beam-slots (F1201, 1202).

obtained from the small trench in the lower part of the seating-bank in the south-west quadrant. There a cut some 2.1 m wide penetrated about 2.2 m into the core of the bank (F1201, 1202) (FIG. 7).

(b) Evidence for a rear retaining wall for seating

On the top of the bank evidence was obtained for a trench running concentrically with its crest (F230) (FIG. 6, PL. V). This was only partially defined in plan as the fill was so similar to that of the bank itself. In section it showed as a cut about 0.8 m wide and 0.6 m deep. Within the trench, but only in plan, there were indications of a circular feature, c. 0.8–1.1 m in diameter (F201), which proved impossible to excavate as a distinct feature. Both features cut the 'secondary heightening' of the bank and could, therefore, be of post-Roman date (see below, p. 62). If Roman, the most likely interpretation is as a trench for the rear retaining wall of seating established on the arena face of the bank and later than the earliest terracing described above (p. 14). However, since there are grounds for supposing that F24 at the South Entrance is part of the same feature and that it is of medieval date, the same date is likely to apply to F230 (below, p. 62).

(c) Other features in the arena face of the cavea

A linear feature (F203) was traced running down part of the face of the bank towards the arena (FIG. 6). It measured c. 5.6–5.8 m long by 0.4–0.6 m wide, narrowing to 0.2–0.5 m and c. 0.1–0.2 m deep. It was filled with light brown sandy clay, very similar to the material of the bank. Although the relationship was not observed in excavation, F203 would appear to cut F230. It is thus likely to be of post-Roman date.

4.5 Seating-bank at the South Entrance

The excavation of the South Entrance clipped the eroded terminals of both seating-banks. Traces of the retaining turf stack were observed on the eastern side, but not to the west (FIGS. 8, 38). This makes the seating-bank here narrower than at the middle of the west seating-bank, but the line of the revetment does correspond with the end of the entrance-passage. Evidence from the west side intimates that the cut for the entrance-passage (F77) was originally much wider than that eventually defined by the retaining-walls (FIG. 8). This would have given more space for the positioning of the posts flanking the entrance.

One feature (F24) was observed in plan and section at the highest point of the western

bank-terminal here (FIGS. 35, 38). It was cut from the existing ground-surface, extended *c.* 0.7 m into the trench from the section and was about 1.1 m wide and 0.5 m deep. The fill of redeposited bank material also contained charcoal and crushed brick. In view of its stratigraphic position, it is uncertain whether this feature is of Roman or post-Roman date. If Roman it would have been cut from higher up, unless we are to assume that the bank had eroded to its present position before the fifth century. However there are difficulties concerning the interpretation of such a deep feature (over three metres if the bank had not eroded much) in this position so close to the passage wall. As excavated its character may be compared with F230 (above); indeed the two features may well be part of the same trench. A date after the removal of the stone walls, which would have allowed the bank to erode, seems much more likely, and the case for a medieval date for F24 and F230 is put below (p. 62).

On the eastern side F45 appears to be contemporary with the construction of the bank (FIG. 8). It is an irregular oval pit, measuring 0.9 by 1.6 m and 0.3 m deep, filled with brown clayey soil and apparently dug through the lowest layers of the bank which also seals it. It partly overlies the pre-bank gully F46. Elsewhere on the eastern side F51, described further below (p. 64), is clearly of post-Roman date.

4.6 Dating

The primary seating-bank (Context group 1.1) contained pottery no different in date or character to that obtained from the original ground-surface or pre-amphitheatre features. Thus the date of construction has a Neronian-early Flavian *terminus post quem*, say *c.* 55–75. The only Roman pottery of later date derives from the ‘secondary heightening’ (Context group 1.2), but from the disturbed superficial contexts contaminated with medieval and post-medieval sherds. Securely stratified sherds in 1.2 are solely of pre- or early Flavian date. The later, disturbed material includes samian of Trajanic and also of mid or late Antonine date. Sigillata of this date occurs in the dumps which raised the arena surface (Context groups 3.4–3.6) after the construction of the stone arena wall. More persuasive evidence for the date of the ‘secondary heightening’ are the quantities of the types of stone used in the construction of the arena-wall. This argues for it being broadly contemporary with the construction of the stone wall.

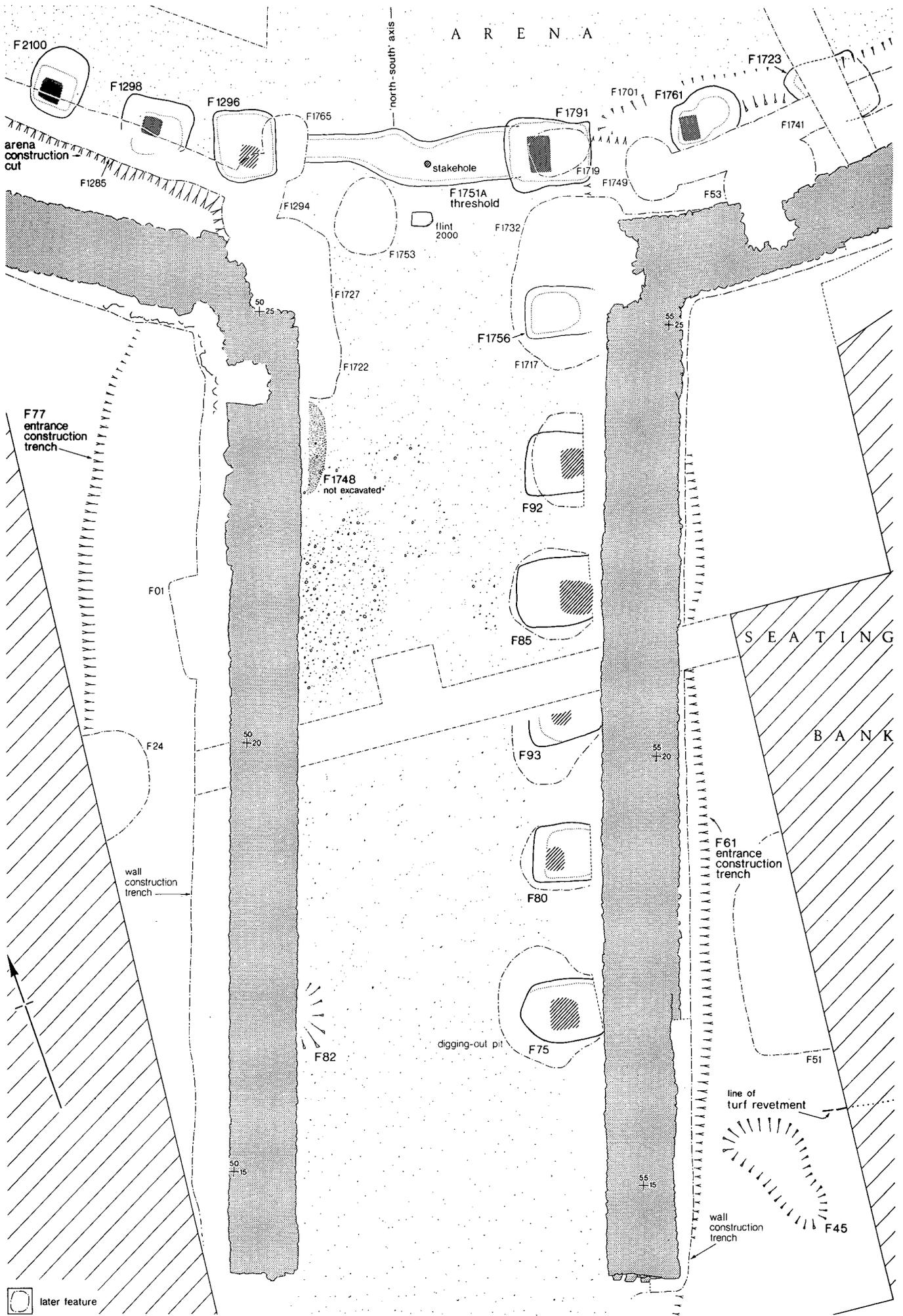
Some of the implications arising from the investigation of the seating bank are discussed here. Nigel Sunter develops these arguments further with detailed reconstruction-drawings on pp. 161–7).

4.7 Reconstructing the *Cavea*

As they survive today the seating-banks are at their highest in the middle (across the short axis of the amphitheatre), sloping steeply down to their terminals at each entrance. The situation at the North Entrance has been exaggerated by some post-Roman levelling-off of the terminals. With the original retaining-walls in place, the upper surface of the bank might have been more or less horizontal. If so there has been more erosion around the terminals of the banks at the entrances than from the middle sections. To judge by the accumulation of silt in the arena, the greatest period of loss took place during the life of the timber amphitheatre in the first and second centuries (see below, p. 27). Nevertheless the terracing from at least the end of the timber phase survives. The secondary addition to the bank would have compensated for some or all of the earlier losses, but it is difficult to establish how much of the addition has been lost, except that no certain evidence for the stone-phase seating-arrangements has survived.

Given the down-slope of the natural gravel to the north and east, the horizontal tie-beams from the timber wall of the arena into the heart of the bank would there have to have been secured within bank material, rather than to have rested on the natural as they do in our excavated sections. The undisturbed natural subsoil beneath the western bank does, therefore, provide us with the level from which the seating-arrangements, whatever form they may have taken, were

A R E N A



SOUTH ENTRANCE · Timber Phase I



FIG. 8. Timber Phase 1: plan at South Entrance (Scale, 1:60).

constructed around the rest of the *cavea*. The fact, as Nigel Sunter shows below (p. 161), that more than half of the material used in the existing seating-banks would have to have been brought in from other excavations besides that of the arena itself, leads us to the reasonable assumption that both banks were built up to a consistent height overall. Thus we may infer that the seating-arrangements as observed in the section through the west bank were the same throughout. There is no reason, therefore, to assume any substantial free-standing element in the seating or terracing above the upper surfaces of the banks. Apart from the tie-beams linked to the arena retaining-walls, only one small post-hole to the south of the West Recess (F1342, FIG. 9) (which cut into the natural gravel, but was truncated by the wall's construction-trench) may be connected with seating-arrangements. Conceivably it could be related to the *tribunalia* arrangements above the recess. Equally it could, however, pre-date the construction of the amphitheatre altogether.

ARENA, ENTRANCES, RECESSES

The structural arrangement of the arena, entrances and recesses in the first period of the amphitheatre will be taken clockwise, commencing at the south entrance.

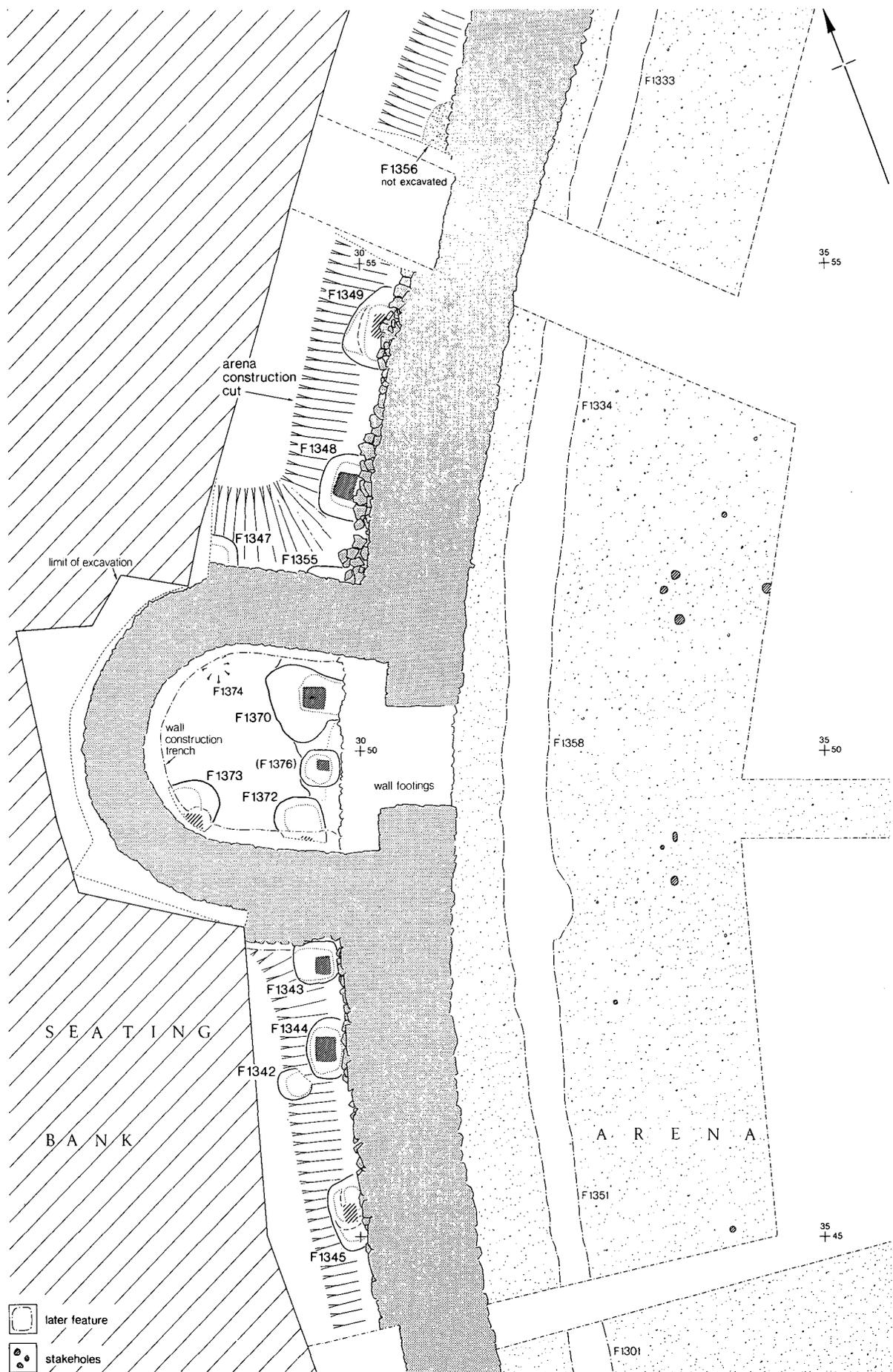
4.8 South Entrance (FIGS. 8, 38, 81, PLS. VII A; VIII A)

The south entrance-passage was excavated to reveal the gateway into the arena and the full length of the passage-way. The excavation took place in two stages: the bank terminals and the passage south of F1717/1756 were examined between 1979 and 1982: the passage and entrance to the arena north of F92 in 1985. Although the positions of the timbers retaining the terminal of the western *cavea* were largely obscured by the later stone wall, those on the eastern side survived almost completely. Between F1791 and F75 the entrance measures 10.35 m (approximately 35 *pedes monetales*) in length. The only post-position fully recovered on the western side is F1296; the edge of F82 was recovered at the southern end. The width of the gate, measured between the inside faces of F1296 and F1791, is 3.3 m (approximately 11 *pedes monetales*, or 12 *p.m.* between post-centres). The original plan then may have envisaged an entrance-way of 36 by 12 *p.m.*.

Originally there appear to have been seven pairs of posts (including the gate), although F1756 only survived as a shallow depression at the bottom of F1717. The spacing between post-centres on the east side varies between 1.35 and 1.8 m, with a tendency for the posts between the arena and the crest of the bank to be more closely spaced than the others. Of the posts themselves, only their impressions at the base of the post-pits were identified and these give measurements of 0.32–0.34 m square, or a little more than one foot scantling. The largest post of which definite traces survived was in F1791 and measured 0.28 by 0.37 m. The edges of the post-pits themselves were difficult to define accurately as their fills were so similar to the natural clay through which they were cut. Generally square with rounded corners, their dimensions in plan varied between 0.8 and 1.06 m and they were dug to a depth of 0.65–0.85 m below the surface of the natural. The original height of the posts is determined by a combination of the estimated height of the banks and seating and the corresponding depth to which the passage-way was excavated. Although we do not know exactly how much of the top of the bank has been eroded, if we extrapolate from the section through the bank (FIG. 6) we must assume a height for the uprights of about five metres. The tops of the posts were presumably raked down towards the arena in line with the profile of the seating.

The gate, which was compelled by the slope of the entrance to open into the arena, was located at the innermost or northern end between F1296 and F1791. The latter were linked by a shallow threshold (F1751A), which was recognised as a distinct feature above the natural and was partly retained in the second timber phase. Behind (i.e. to the south) and in the middle of the threshold was a squarish flint (2000), which may have served as a stop to prevent the gates from swinging back. It was set into the earliest metalling.

Slightly problematical is the interpretation of F1753 which, like all the features at the northern



WEST RECESS · Timber Phase I 0 1 2 3 4 5 metres

FIG. 9. Timber Phase 1: plan of West Recess and environs (Scale, 1:60).

end of the entrance, was only excavated in the last season. Measuring 0.7–0.9 m in diameter and 0.4 m deep, it contained a fragment of wood identified as cherry (*Prunus*) (p. 139). It does not make sense in terms of the structural arrangement of the entrance and cherry is not an obvious choice of wood for building-material, particularly given that none was recognised elsewhere. It may have been dug from higher up without being recognised and excavated in earlier seasons. Consequently it may relate to the medieval or post-medieval period and, in particular, to the stone-lined pit, F3. A less likely possibility is that it contained the remains of a cherry-tree, removed on the excavation of the entrance. Yet it would seem too low down for the roots of even a substantial cherry to have penetrated so deeply from the original ground-surface.

One stakehole was also recorded in the centre of the passage where it enters the arena. It is close to the north-south axis of the arena and may relate to the original laying out, rather than to the gate itself. Similar examples were also recorded outside the western recess (below, p. 22).

Replacements of posts

There is clear evidence from the gate for the replacement of posts F1296 and F1791 in association with the remodelling of the arena in Timber Phase 2. Elsewhere the evidence for replacement as opposed to removal of posts is ambiguous. The recognition of certain post-pits, particularly F85 and F92, occurred at the level of silts or surfaces above the natural subsoil. This indicates that posts had either been replaced or finally removed by digging out. Both of these are possible. The extensive 'weathering' cone around all the pits on the eastern side is, therefore, indicative of either their replacement or eventual digging out.

4.9 Arena:

South-West Quadrant (FIGS. 5, 8, 81, PL. VII B)

West of F1296 three post-pits of the arena retaining-wall were completely excavated. The shadow of a post, each approximately of nine inches scantling (0.24/0.26 m square), was observed in each pit, giving a spacing between centres of 1.25–1.3 m. The posts were positioned just inside the original cut for the arena. Further west the location of five other post-pipes was observed at a higher level.

West Recess (FIGS. 9–10, PL. VIII B–XII A)

Evidence for the entrance and side-walls of a recess was recovered behind the middle of the western revetment-wall of the arena.

The interior of the stone-phase recess and small areas behind the arena wall to north and south were completely excavated. Of the arena revetment two pairs of posts were revealed, F1348 and F1349 and F1344 and F1345, with a spacing of 1.7 m between each pair. Stains at the bottom of F1344 and F1348 indicated posts measuring, respectively, 0.22 by 0.26 m and 0.28 by 0.24 m. The depth of pits was between 0.85 and 1.0 m. Between these two pairs, the spacing of posts on the line of the arena retaining-wall changes. Both within the stone recess and to the north evidence was obtained for a timber-period recess, which clearly extended westwards beneath and, perhaps, beyond the back of the stone recess. The location of the north wall is given by F1347 and by F1355, which lies about 0.5 m south of F1348. There was insufficient space for excavation to show more than that these two posts existed. The south wall is more problematical. The spacing between the centres of F1343 and F1344 at 0.9 m is comparable to the likely spacing of the posts in F1355 and F1348, which would indicate that the south wall of the recess lies to the west of F1343, with a post to pair with F1349. However, this cannot be, as the natural intervened immediately to the west of F1343. Unless posts lay beneath the south wall of the stone recess, the position of F1372 and F1373 is suggestive of a south wall, even though lack of space prevented total excavation or recognition of post stains. F1372 was excavated to a depth of 0.65 m, while F1373 was only dug to a depth of 0.4 m below the natural. Interruptions in the footings suggest that the post in F1373 was not removed until the construction of the stone recess. This interpretation, with F1355 and F1347 forming the north wall of the recess and F1372 and F1373

acting as the south wall, precludes a symmetrical arrangement of the excavated evidence, since an intermediate post between F1343 and F1372 would otherwise seem warranted. Equally if F1372 is paired with F1370, which produced evidence for a post about 0.25 m square, then there is no equivalent to pair with F1373. F1374, which might appear to be an obvious candidate, was only 0.06 m deep. It also contained sherds of pottery and the jawbone of a horse sealed its upper fill (FIG. 10, PL. XII A). Although it could not be excavated completely, F1374 seems to relate to the use of the recess rather than to its structure. The same may, of course, be true of F1373, for no certain evidence of a post was recovered; but the more likely interpretation is that it was structural. The last feature to be discussed is F1376, which contained a small post, about 0.15 m square set in a pit about 0.34 m deep. It lies midway between F1355 and F1343 and may relate to the entrance arrangement of the recess. If entry was gained on either side, there would only be a gap of about 0.5 m, just sufficient to admit an adult. Alternatively, it too may be secondary and relate to the layout of the second timber phase (see below, p. 31).

Support for F1347 and F1355 and F1372 and F1373 acting as the side walls of the timber recess is provided by some evidence from the arena. Outside the mouth of the recess were two settings of three stake-holes, about 2.8 m between centres, or about 3 m between the most northerly and most southerly. Other stake-holes (see FIG. 9) were also recorded. This pair of settings does seem to relate to the recess and may well be connected with the original laying out. Each seems to line up with the recess walls to the west.

What were the original dimensions of the recess? On the basis of the recorded features a minimal estimate is that it measured 1.8 m in depth (to the west of F1376) and about 2.8 m in width between estimated centres, if we place F1373 in the primary phase as a major structural element to pair with F1347. Maximum dimensions would have been about 3 m in width (north-south) by about 3 metres east-west, on the assumption that the back of the stone recess is inside the back of the timber-phase recess. Except for the shallow pit F1374 the sequence within the recess consists of red-brown redeposited clay with few stones (1906) sealed by a charcoal spread (1902), 20 mm thick, on which lay the jawbone in association with F1374 (FIG. 10, PL. XII A). The charcoal, in turn, was sealed by more red-brown silty clay with few stones (1651 with 1644 above). As FIG. 10 shows, the charcoal was not continuous across the entire surviving surface of the recess and is likely therefore to represent residues of offerings for sacrifice or other activities carried on within it, rather than the remains of a major destructive fire.

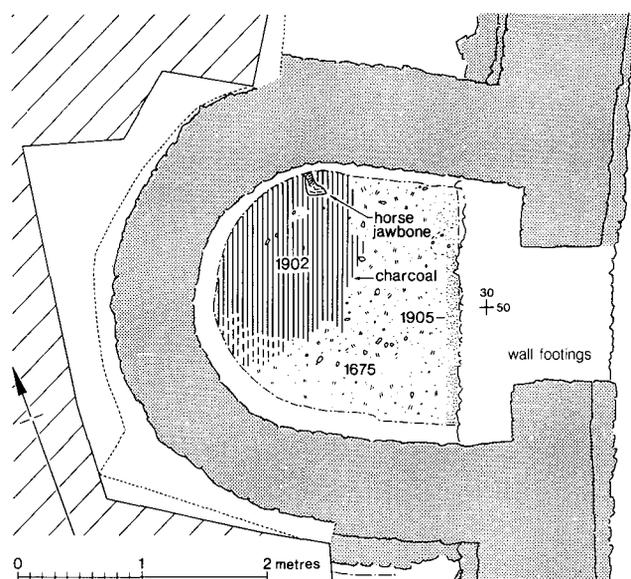


FIG. 10. Timber Phases 1 and 2(?): interior of West Recess showing charcoal spread (1902) and jaw-bone of horse (Scale, 1:60).

North-West Quadrant (FIG. 11, PLS. XIII A–XIV B)

Total excavation within part of the north-west quadrant revealed evidence of seven posts of the arena retaining-wall. The posts were spaced at intervals of *c.* 1.5–1.6 m between centres, in pits ranging in depth from 0.5 to 1.1 m below the level of the natural. The gap between F452 and the gate support F446 was 1.7 m. While part of the variation in the dimensions of the post-pits may be accounted for by the difficulty of distinguishing fills from the surrounding natural (occurrences of rare fine gravel being the main indicant of fill), the more southerly posts F1502, 1503 and 1504 (0.65, 0.85 and 0.9 m below the natural) were set more deeply than the rest (0.5, 0.7 and 0.75 m) except for F452 which was dug to a depth of 1.1 m. Distinct evidence for the size of four posts was recorded, although two of these (F1503 and 1504) were partly cut by the foundations of the stone retaining-wall. The post in F1502 measured 0.22 m square and that in F452, 0.22 by 0.23 m. Less distinct evidence suggested posts of a comparable size in the remaining post-pits. The pits themselves measured about 0.85 by 0.5 m.

The North Entrance (FIGS. 12, 41, PLS. XII B, XVII A)

The North Entrance was excavated over five seasons, 1980–4, with most of the evidence for the timber phases being recovered in the last of the seasons. Unlike at the South Entrance total excavation was prevented by the boundary between the Guardianship area and 'The Mount'. The total excavated length of the passage was 6.3 m, with a width between the inner faces of the five pairs of posts flanking the passage of 3.4–3.6 m (11.5–12 *p.m.*) and 3.6–3.8 m between centres. The slightly greater width of the North Entrance compared with the South was presumably to accommodate the axial drain, F634.

Distinct evidence of the remains of posts was only recovered from the gate, F446 (PL. XVII A),

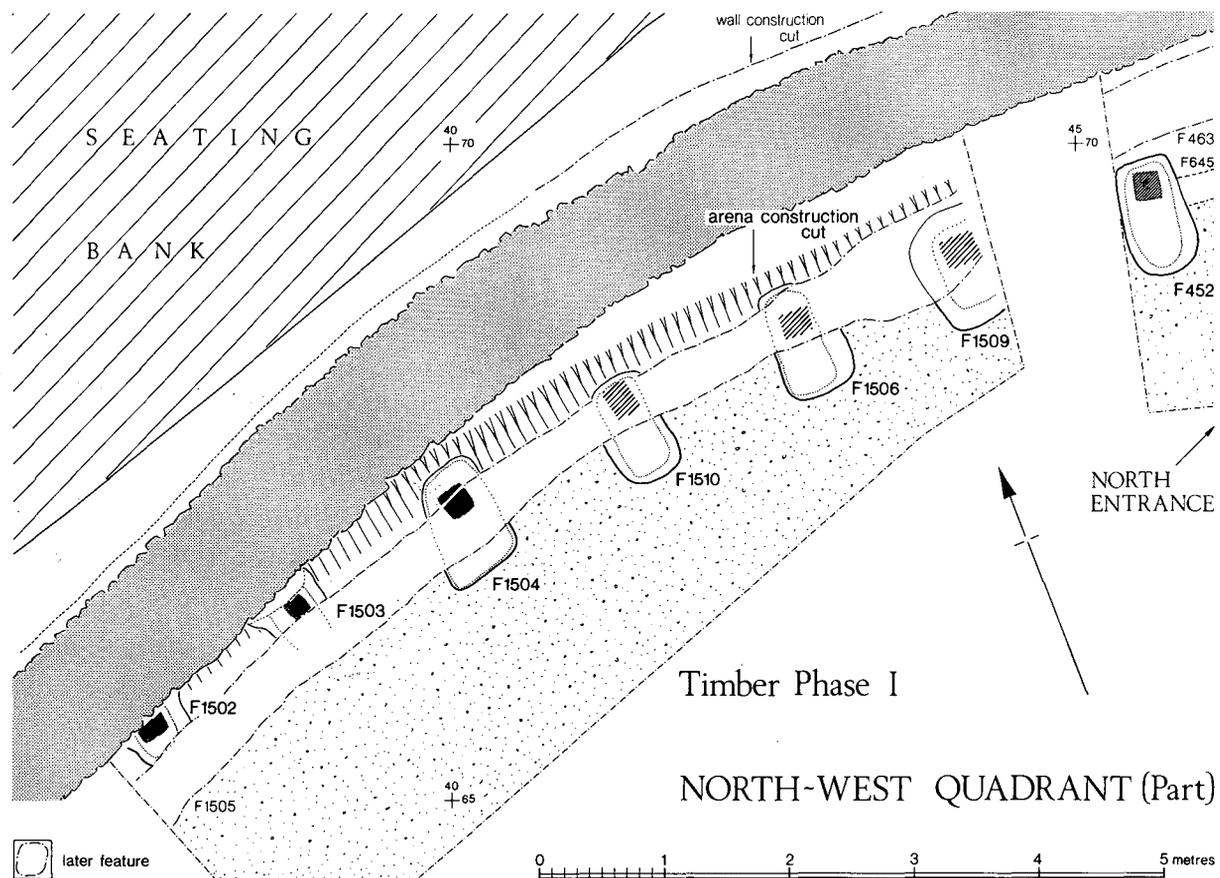
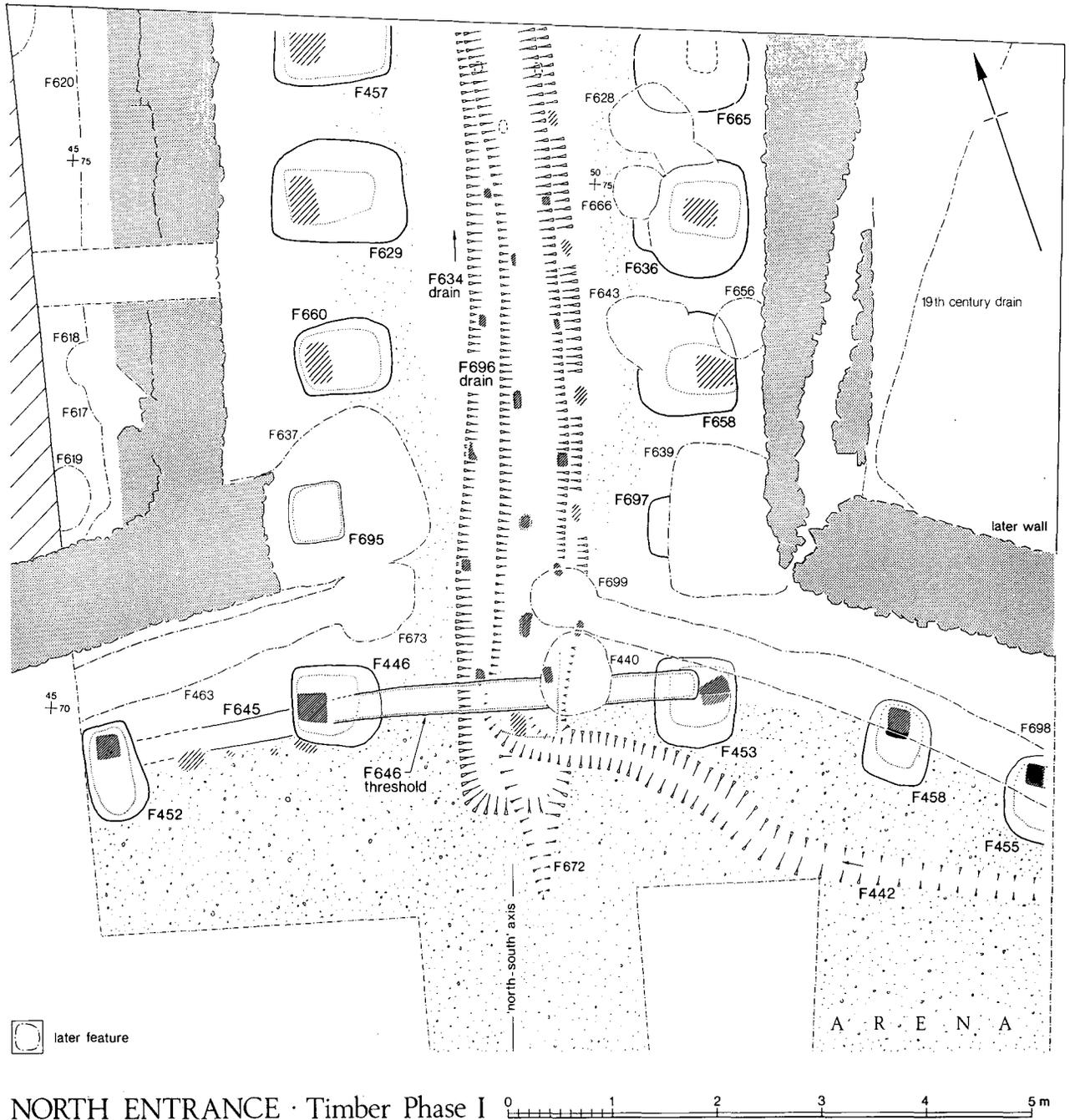


FIG. 11. Timber Phase 1: north-west quadrant (Scale, 1:60).



NORTH ENTRANCE · Timber Phase I 0 1 2 3 4 5 m

FIG. 12. Timber Phase 1: North Entrance (Scale, 1:60).

and F453, where the former measured 0.26 by 0.3 m, while similar dimensions are indicated for the latter. Impressions from the bottom of other post-pits indicated somewhat larger uprights: 0.36 m by ? (F457); 0.44 by 0.28 (F629); 0.26 m by ? (F660); 0.32 by 0.26 (F636); and 0.38 by 0.32 (F658). These dimensions correlate with a consistently greater depth (0.97–1.1 m) and size (1.0 m square (F658) and 1.0 by 1.3 m (F629)) of the post-pits than was found with those around the arena. Spacing between the centres or approximate centres of the posts varies between 1.3 and 1.5 m except between F695 and F446 (gate support) where the interval is 1.8 m. While the spacing of posts falls within the range encountered around the arena and at the South Entrance, the evidence for the size of timbers suggests that slightly larger examples than those around the arena itself were chosen for use here and at the South Entrance (see above, p. 19). Admittedly the evidence mainly derives from impressions rather than the stubs of the actual posts, but whereas the uprights around the arena were consistently less than 1 foot scantling, those from the entrances regularly measured in excess of this.

The location of a gate between F446 and F453 is confirmed by the presence of a shallow, straight-sided and flat-bottomed slot or threshold (F646/645), c. 0.3 m wide, which was defined in the silts and surfaces above the natural (FIG. 12). It ran between the gate-posts as well as appearing to extend further west towards F452. There is a slightly wider gap of 1.6–1.7 m between each gate-post and its immediate neighbour which might have allowed for pedestrian access between the entrance-passage and the arena or between the arena and the seating-banks. Both the wider gap recorded between F695 and F446, and the threshold F645 support the former interpretation.

Drain

Running through the middle of the entrance-passage is a drain (F634) which terminates 0.9 m inside the arena (FIG. 12). Within the area excavated it measures about 7.2 m long by 0.6 m in width at the bottom, widening to 0.8–9 m beneath a wider U-shaped cut, which was 1.5 m wide at the top. Altogether it was c. 1.2 m deep (FIG. 41). Two sets of paired posts to support a wooden cover were recorded. The proximity of these pairs to each other combined with the fact that they were also slightly off-set from each other indicates two structural phases before the second timber phase, one of whose gate-posts (F699) overlies the course of the drain. The north section (FIG. 41) also supports the idea of a re-cut and re-build of the original drain (F696). There is some evidence from the north section to suggest that the planking rested partly on a ledge defined at the base of the wider 'U' cut and about 0.6 m below the surface of the passage. The drain was therefore covered over by clay and gravel and thus largely invisible when the entrance was in use. Water would have drained from the arena more by seepage than by flowing along an open channel, and this was encouraged by the more gravelly nature of the fill at the arena end. One gully, F442, excavated into the surface of the natural, feeds into the drain, but would have rapidly filled and thus may only relate to the initial construction of the arena.

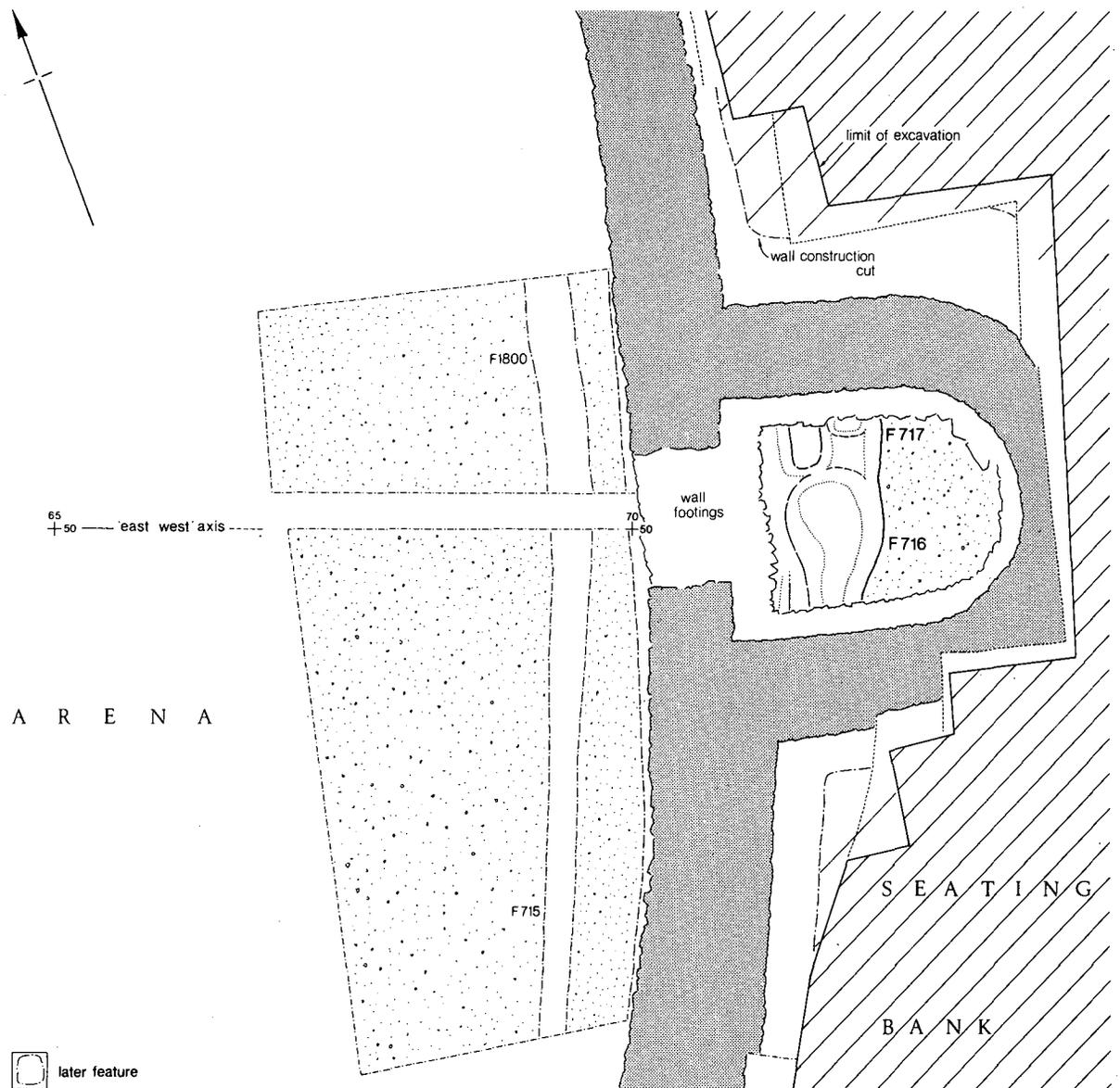
North-East Quadrant (FIGS. 12, 81)

Only two posts of the arena retaining-wall were identified and excavated in the north-east quadrant (F458, 455). Remains of the posts gave dimensions of 0.22 by 0.26 m (F458) and 0.2 m by ? (F455). They were set at depths of 0.5 and 0.7 m respectively, with a spacing of 1.4 m between centres. As on the western side there was a greater gap of 1.6 m between the gate-post and the first upright of the retaining wall. At a higher level to the south the indications of further post-pipes were recorded.

East Recess (FIG. 13, PL. XV A)

Excavation to the subsoil was completed within the eastern stone-phase recess and in a small area to the west of the arena retaining-wall. An accumulation of gravel lenses and clay sediments, which had been cut by the footings of the stone-phase recess, indicated that, as with the western side, the original recess was as large as, if not larger than the stone replacement. The only evidence for any structural arrangements derived from a trench (F716/717) about 0.4 m wide and 0.44 m deep, in the bottom of which there were two rounded depressions, possibly indicative of post-positions. The absence of early features to the west of the arena stone retaining-wall indicated that the feature (F716) within the stone recess marks the course of the timber-phase arena's retaining-wall and the entrance into the timber-phase recess.

The make-up of gravel lenses and redeposited clay within the recess (FIG. 43) indicates that the interior had a sequence of surfaces of similar character to the surfaces of the West Recess. There was no evidence of a similar spread of charcoal, or any other occupational material, such as was recorded on the western side.



EAST RECESS · Timber Phase I 0 1 2 3 4 5 metres

FIG. 13. Timber Phase 1: East Recess (Scale, 1:60).

South-East Quadrant (FIGS. 8, 81)

The course of the arena retaining-wall in this quadrant was only identified and excavated by the South Entrance, where two posts were identified (F1761 (c. 0.22 by 0.26 m) and F1723).

RECONSTRUCTING THE ARENA LAYOUT

The dimensions across the 'long' and 'short' axes of the arena indicate an almost circular plan. So far is the plan from the oval or elliptical plan usually to be found in amphitheatres, that we may assume that circularity was the original intention. Taking this to be so, it is difficult to be certain which was the preferred measurement; but, if each entrance measured about 35 *pedes monetales*, then their combined lengths would be half an arena-diameter of 140 *p.m.* These might have been the measurements the Romans worked from. If so the 'long axis' comes within 3.8% of that

figure, the 'short axis' within 1.4%. The suggested dimensions of the Western Recess are *c.* 3 by 3 m, or approximately 10 by 10 *p.m.*

Except for spacings of 1.6–1.7 m adjacent to the North Entrance, the interval between uprights varied between 1.25 and 1.5 m. Altogether between about 110 and 120 uprights would have been used in the retaining-walls of the arena, entrances and recesses, each of which would have been about 4.5–5.0 metres long. This assumes a constant height to the seating-arrangement, irrespective of the level of the top of the bank. Linking the uprights horizontally would have been some form of shuttering. Support for this comes from the North Entrance, where excavation revealed evidence of a shallow slot between uprights on the west side of the entrance (above, p. 25). Elsewhere the presence of elements of the second timber phase had destroyed any further possible evidence for such shuttering. Thus, on entering the arena, a participant would have been faced with a circular arena with wooden shuttering all around extending 3.5–4.0 metres above the initial arena surface.

The Arena and the Life of the First Timber Phase

During the first timber phase the arena silted up (Context group 1.4) between 0.4 and 0.5 m around the edge, but only about 0.18 m in the middle (FIGS. 38–43). With the exception of a few intrusive early to late third-century BB1 wares from the centre of the arena where disturbance and an absence of clear stratigraphy were recorded, the latest pottery to be associated with this period comes from the South Entrance, where six sherds of Trajanic-Hadrianic samian were recovered. This suggests that the original layout was retained, essentially unaltered, until towards the middle of the second century. In general very little material, and that largely pottery and brick and tile, was found to be associated with this period of the amphitheatre. Although most of the pottery is residual, the composition of the brick and tile assemblage (p. 143) is different from that recovered from the seating-bank itself and from pre-amphitheatre contexts. This would support the idea that there was a considerable lapse of time between the construction of the first and the second timber phases. Indeed there is no reason why those timbers which were not affected by the new arena design could not have been left *in situ*, as occurred in both entrance-passages. Given that most of the brick introduced to the arena was deposited in the stone phase, the presence of some brick in post-pits of the arena revetment is further circumstantial evidence for their retention through the second timber phase. Indeed, the fill of F1503 in the north-west quadrant is indistinguishable from the matrix of the foundations of the arena wall (PL. XIV A).

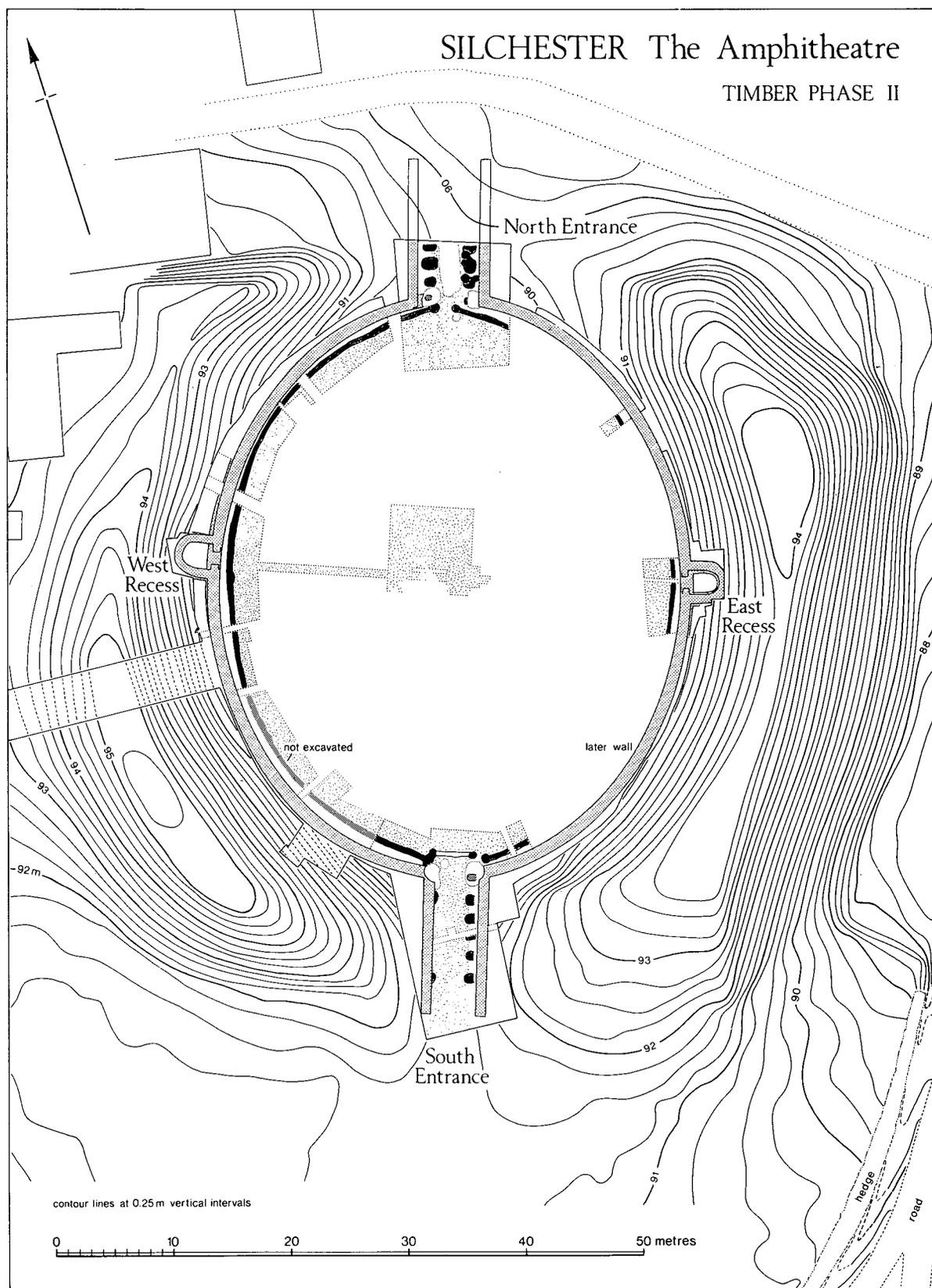


FIG. 14. Timber Phase 2: plan of amphitheatre (Scale, 1:100).

5. TIMBER PHASE 2 (FIGS. 14–19, 82)

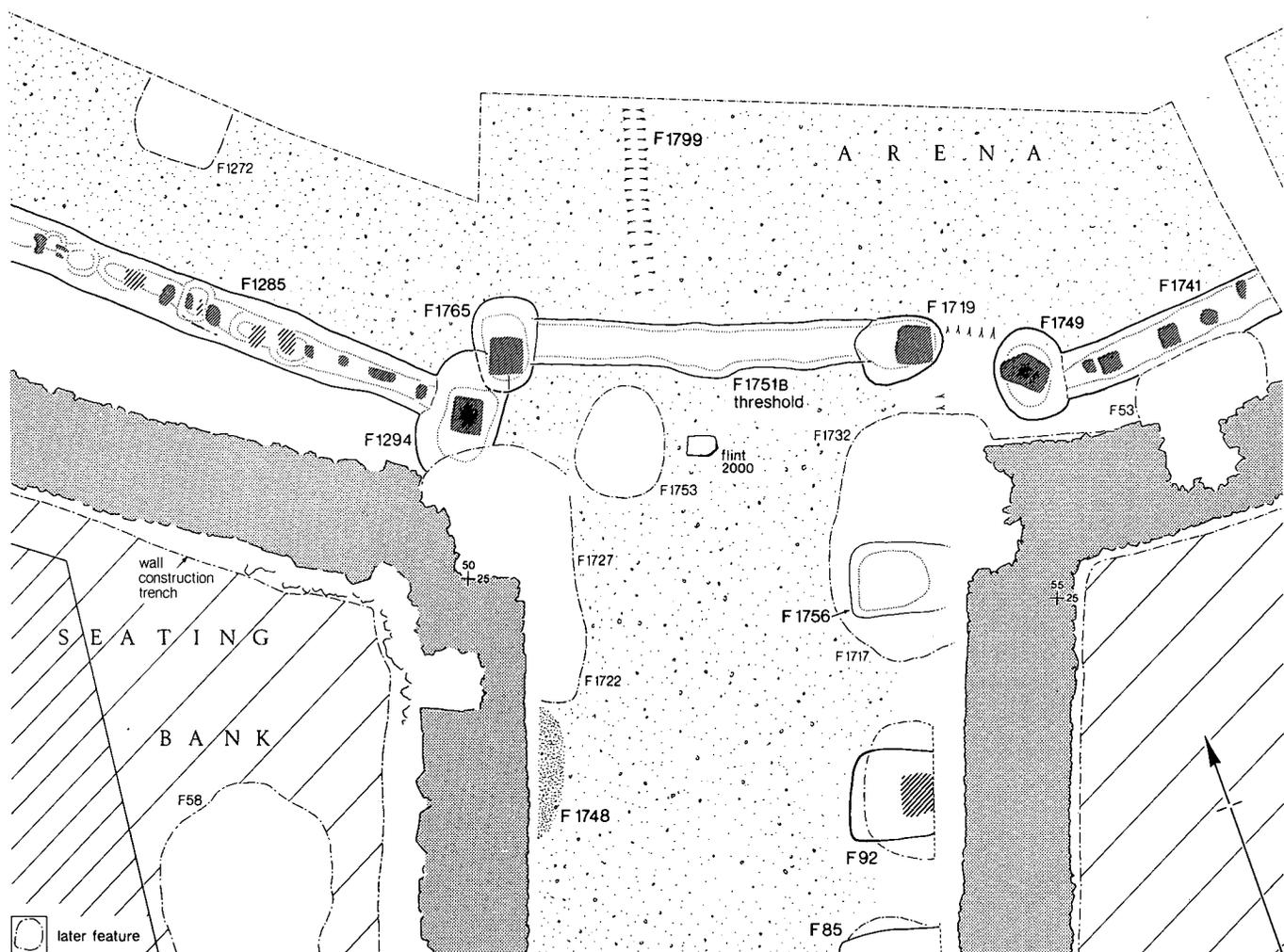
The second timber phase is represented with certainty only by alterations to the layout of the arena. These had a consequential effect on the entrance-passages, recesses and, probably, on the seating-bank.

The most important aspect of the developments noted in the arena is the change from a circular to an oval plan, where the arena measures *c.* 37.5 m by 44.40 m (126.7 by 150 *p.m.*). Intended dimensions therefore may have been 125 by 150 *p.m.*. To achieve this the position of the new retaining-wall was set behind that of the first timber phase at the north entrance in order to create the greater length required on the long axis, but in front of the recesses to create a shorter east-west axis. The choice of extending the arena to the north, rather than to the south, may well have been determined by the amount of spoil to be removed. The original ground-surface was lower here than at the South Entrance. As a consequence, the wholly made-up bank raised on top of it may have first eroded more easily and then stabilised at a lower level than elsewhere (see above, p. 17). The character of the new retaining-wall is quite different from its predecessors, consisting of generally small, closely-spaced posts (< 0.2 m square), partly placed in a continuous trench and partly driven into natural. This revetment was only broken for certain at the entrances to the arena. The apparent slightness of this wall raises questions about its sturdiness and its capacity to carry the lower tier of seating or an access passage in the way that is envisaged in the first timber phase. Except on either side of the North Entrance, where the old retaining posts had to be dispensed with, there is no reason why the old structure (for what it was worth) could not have been continued in use (p. 183). This does appear to have occurred at both entrances. Earthfast timbers of the size used in the first timber phase could well have lasted beyond the middle of the second century (Purslow *n.d.*, 1–2). The construction of the later stone retaining-wall would, of course, have removed any evidence that there might have been for infilling between the two timber revetment-walls, if the earlier was not retained. The second timber-phase layout seems to determine that of the stone phase.

Evidence for this period will be described clockwise beginning at the South Entrance.

Stratigraphic considerations (FIGS. 6, 38–43)

It is not easy to see the level from which the posts were inserted. There is a fundamental difficulty of distinguishing between an original construction-trench dug at one level and that left after the removal of timbers following a build-up of silt in the arena during the lifetime of the revetment. The fill of the continuous wall-trench (Context group 2.2) contained gravel, stone and tile fragments consistent with demolition of the timber screen as work began on the replacement-wall in stone. This would seem to suggest that it was a digging-out trench. However, as the trench is only a few centimetres wider than the timbers themselves, it would seem reasonable to interpret it as a constructional feature which had admitted some rubbish when the timbers were eventually pulled out. As a robber trench to lever out the uprights, we might expect it to have been considerably wider than the timbers as well as a little deeper. Furthermore, except in one section (FIG. 6) where differential colouring of the natural hinted at the possibility of a construction-trench as deep as the uprights, there is no other evidence for the existence of a trench which, in some form, was essential for the insertion of posts. Interpreting it as a constructional feature means that the timbers were inserted from more or less the same level as that from which the replacement arena wall in stone was built. This gives a depth for the posts in the ground of about 0.7 m, of which 0.25–0.3 m was inserted into the natural. This depth is a little shallower than that for the Phase 1 posts. Given that the level of the arena from which the second timber revetment was inserted is effectively the same as that for the stone wall, it would appear that the silting-up of the arena had virtually ceased by the time the new timbers were positioned.



SOUTH ENTRANCE · Timber Phase II

0 1 2 3 4 5 metres

FIG. 15. Timber Phase 2: South Entrance (Scale, 1:60).

The South Entrance (FIG. 15; PLS. XV B-XVI B, XVII B)

Evidence for the replacement (or removal) of posts flanking the passage has already been mentioned (p. 21). It is assumed that the passage-way was retained essentially unchanged through the second timber phase. The position of the gate was slightly altered on the western side where the gate-post in F1765, measuring *c.* 0.3 m square, was linked with a similar-sized post in F1719 (a recut of F1791) by the shallow slot formed by the threshold-beam (F1751B). The latter was flat-bottomed and straight-sided and measured *c.* 0.35 m wide and 0.15 m deep (PLS. XVI A, B). Between posts, the gate measured 3.2 m. The gate-structure itself appears to have been separated from the new arena wall, which terminated in two large posts (F1294 and F1749) west and east of the entrance (PLS. XV B, XVII B). At 4.8 m between their centres, these two terminal posts of the arena wall seem too far apart to have acted as gate-posts. If they had done so, the narrower gate, represented by F1765 and F1719, would have been secondary. However, given the size of the posts (*c.* 0.32 by 0.38 and 0.4 by 0.28) this possibility might, perhaps, have been entertained at some stage in the second period. There would have been awkward gaps between the end of the new screen wall and the line of the South Entrance, particularly on the eastern side. Better perhaps to interpret the new wall as respecting the original entrance and gate while leaving room for a small side gate on the eastern side.

A small gully, F1799, *c.* 0.2 m wide and 0.25 m deep, drained northwards into the arena. It may well represent a re-cut of a Phase 1 drain.

South-West Quadrant (adjacent to South Entrance) (FIGS. 15, 82; PL. XVII B)

The posts in F1285, which served as the second timber arena wall, at their largest measured *c.* 0.14 by 0.18 m; 0.16 by 0.2 m and 0.10 by 0.10, but otherwise were smaller (< 0.1 m square). These were set close to one another with intervals rarely in excess of 0.5 m (range of 0.3–0.5 m) and never more than 0.9 m. As a continuous feature F1285 was excavated to a depth between 0.15 and 0.35 m (on average about 0.3 m), but examination of the section (FIG. 38) suggests that the posts were driven to a depth up to 0.55–0.6 m. It was impossible to ascertain during excavation how much the irregular spacing might have been caused by subsequent replacements or additions and how much it reflects the original laying out.

Western Recess (FIG. 16; PLS. XVIII A, B; XX A)

There appears to be a gap in the new screen wall opposite the entrance to the recess of Timber Phase 1. It is argued that the original recess was retained through the second timber phase.

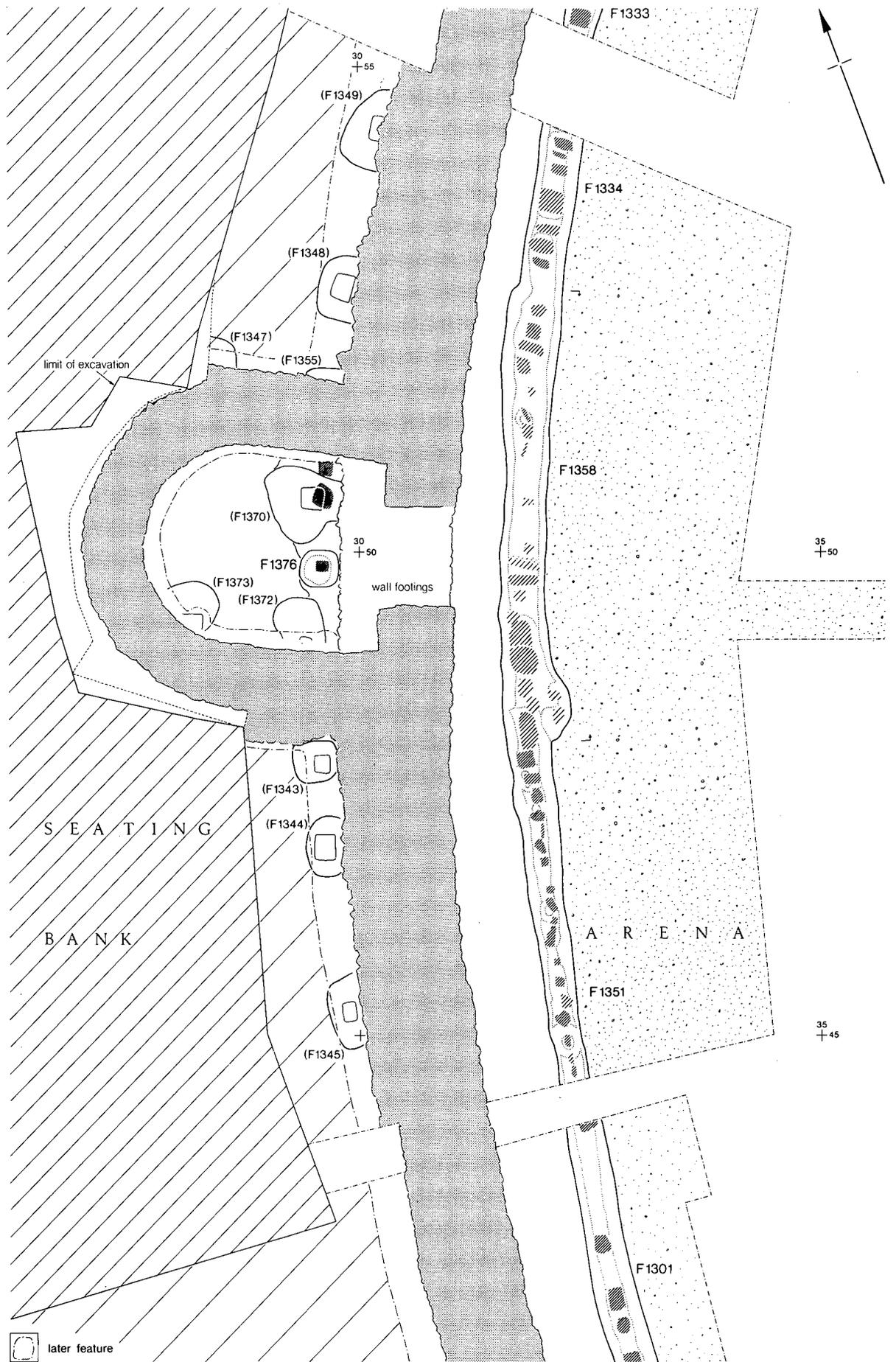
As at the South Entrance, the new arena wall, consisting of close, often contiguous, but irregularly-spaced small posts (associated with F1334, 1358, 1351 and 1301), emerged from excavation to north and south as well as outside the West Recess. One or two post-impressions, particularly opposite the south wall of the stone recess, suggest timbers as big as about 0.3 m square. South of this (F1351) dimensions up to 0.1 m square appear the norm. The gap south of the baulk between F1301 and F1351 is illusory, resulting from trial-trenching missing individual posts in plan. Opposite and to the north of the entrance to the West Recess (F1358) there is a lack of evidence for either post-impressions or the posts themselves. This and the fact that the trench (at 0.45 m) is slightly wider than to north and south is further argument against it being a robbing-out trench elsewhere (*cf.* above, p. 29). This 'gap' may coincide with an entrance from the arena into the area of the recess itself. To the north of the recess (F1334) the post-size is once more larger, generally between 0.2 and 0.3 m. A section (FIG. 6; PL. XX A) shows one of the posts (F597) in section. Although there is a suggestion in the differential colouring of the section that there may have been a deep construction-trench here, it seems more likely that the posts had been driven (0.6 m) into the natural. The post itself measures 0.2 m and is pointed.

Evidence for the recess itself is far from clear. First, there is the uncertainty whether there was an entrance from the arena. There are two small gaps in the line of posts, but the slot itself is continuous. This configuration of gaps (*c.* 0.45 m) divided by a central post recalls the arrangement on the course of the original retaining-wall (F1370, 1376, 1372). Second there is the evidence of F1373 and F1372 which suggests that the posts were not removed until the construction of the stone recess. The implication is that, even if F1372 and F1373 represented a modification of the interior, the recess was kept in its original state as far as was practicable. Further evidence for the renewal and retention of posts is provided by F1370, where the post-pit appears to cut the 'threshold' noted above. The position of secondary posts is marked on FIG. 16.

Given the absence of post-holes or slots linking the new wall, F1358, with the old recess to create a new chamber, the retention of the original structure seems plausible. It has to be said, however, that the presence of F1376 does reduce the width of the entrance to 0.5 m and thus inhibits movement to and from the recess. It is possible that it acted as a deliberate bar to access to the remains of the original recess as well as a support for new seating and circulation arrangements above. In this case the arrangements of the recess may have been very informal, occupying the gap between the old and new arena walls and, perhaps, amounting to a little more than a refuge from the arena.

North-West Quadrant (FIGS. 17, 82; PLS. XIX A, B)

The character of the second timber arena wall is maintained throughout the north-west quadrant with closely-spaced individual uprights measuring generally less than 0.2 m, but occasionally up



WEST RECESS · Timber Phase II 0 1 2 3 4 5 metres

FIG. 16. Timber Phase 2: West Recess (Scale, 1:60).

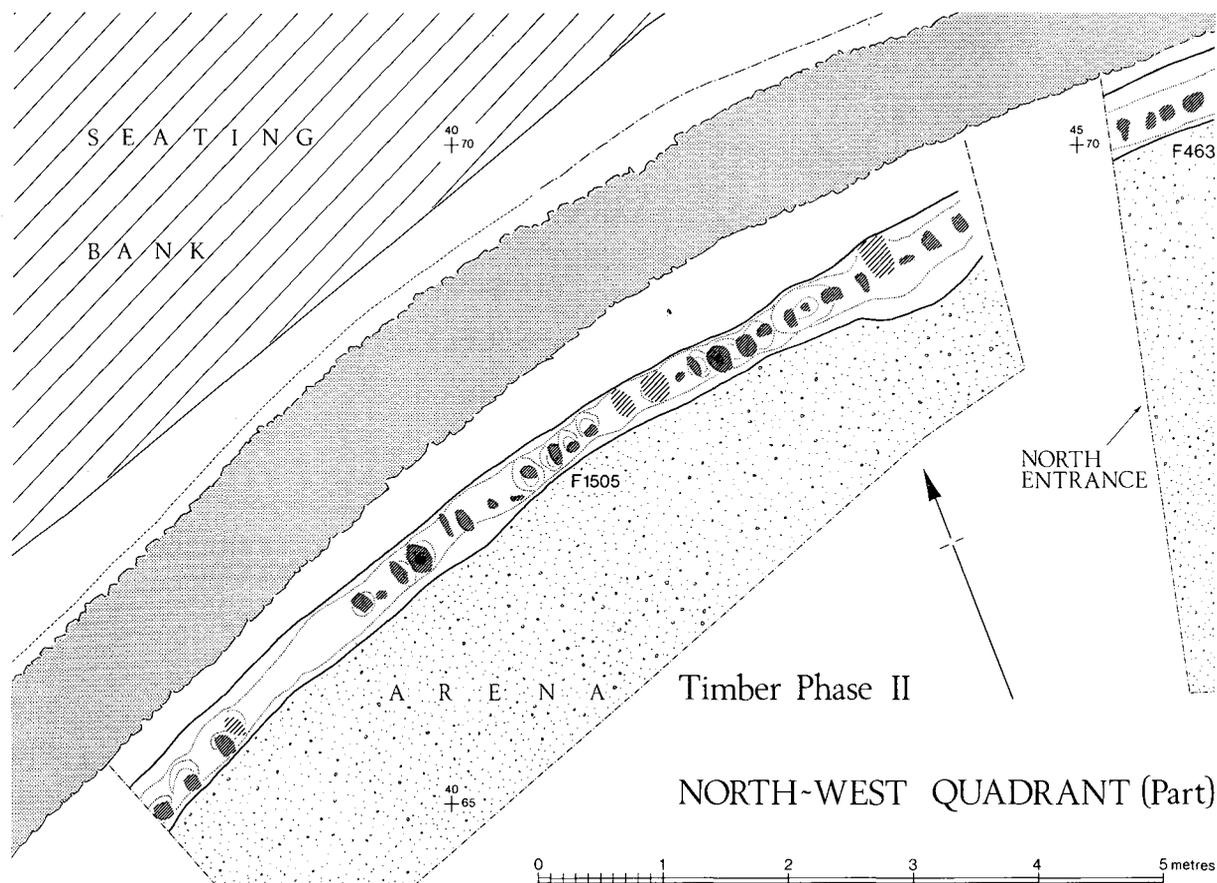


FIG. 17. Timber Phase 2: north-west quadrant (Scale, 1:60).

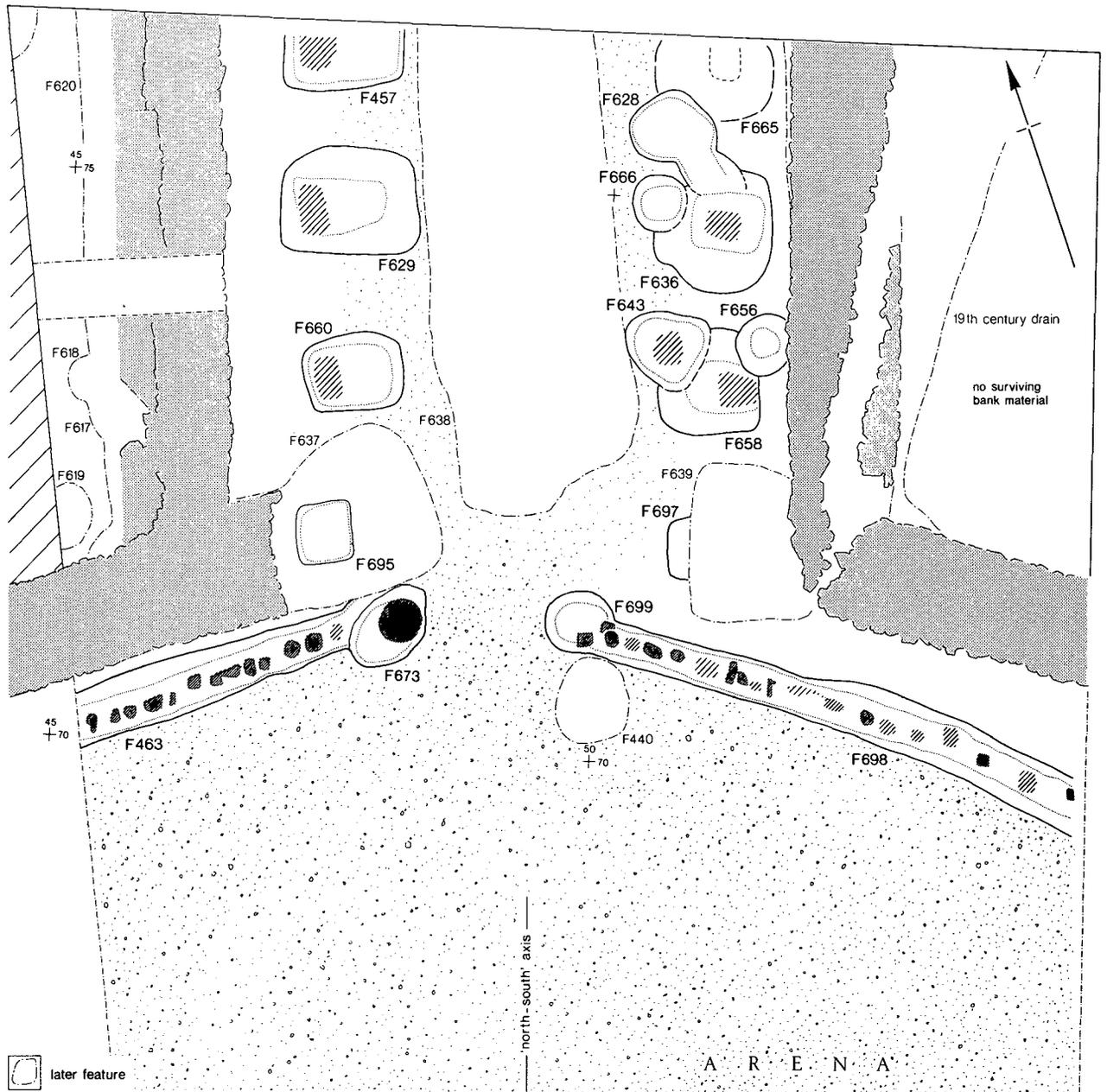
to 0.3 m across. The shallow trench cut into the natural (F1505, etc.), into which the posts were set, is about 0.3–0.4 m in width and cut 0.25–0.3 m into the natural. There are indications of a gap in the posts in F1505 of about 1.2 m, although the trench is continuous. This may have been deliberate in order to allow access to the seating.

North Entrance (FIGS. 18, 41; PLS. XII B, XVII A, XXX A)

The course of the second timber-phase wall was identified and excavated on both sides of the entrance. To the west it terminated with a large circular post (F673), *c.* 0.4 m in diameter. Between this and F699, the terminal on the eastern side, is a gap only 1.2 m wide. As has been observed above, the course of the second timber revetment and gate is set to the north of the line of the first gate and retaining-wall.

As at the South Entrance we assume that the posts were retained on each side of the passage. In fact there is clear evidence of secondary posts on the eastern side. F658 was cut by F643 and F656; the former *c.* 0.4 m deep with evidence of a post *c.* 0.3 m square, the latter *c.* 0.45 m deep with a diameter for the post of *c.* 0.26 m. F656 presents a problem since it is inside the line of the original posts of Timber Phase 1 and its positioning would have required some disturbance to the revetment as a whole. The possibility that it is post-Roman cannot be ruled out. F636 was cut by F666; it was 0.4 m deep with a maximum diameter of 0.3 for the post. F628 was *c.* 0.75 deep with a maximum diameter for the post-pit of 0.8 m. Whether these supported or replaced the original posts is not clear.

Since the gate-post F699 overlies the original drain F634 and its recut F696, it is unlikely, but not impossible, that the drain was retained in its re-cut state into the second timber phase. The north section (FIG. 41) reveals a shallow U-shaped cut (F638) *c.* 1.7 m wide with a maximum



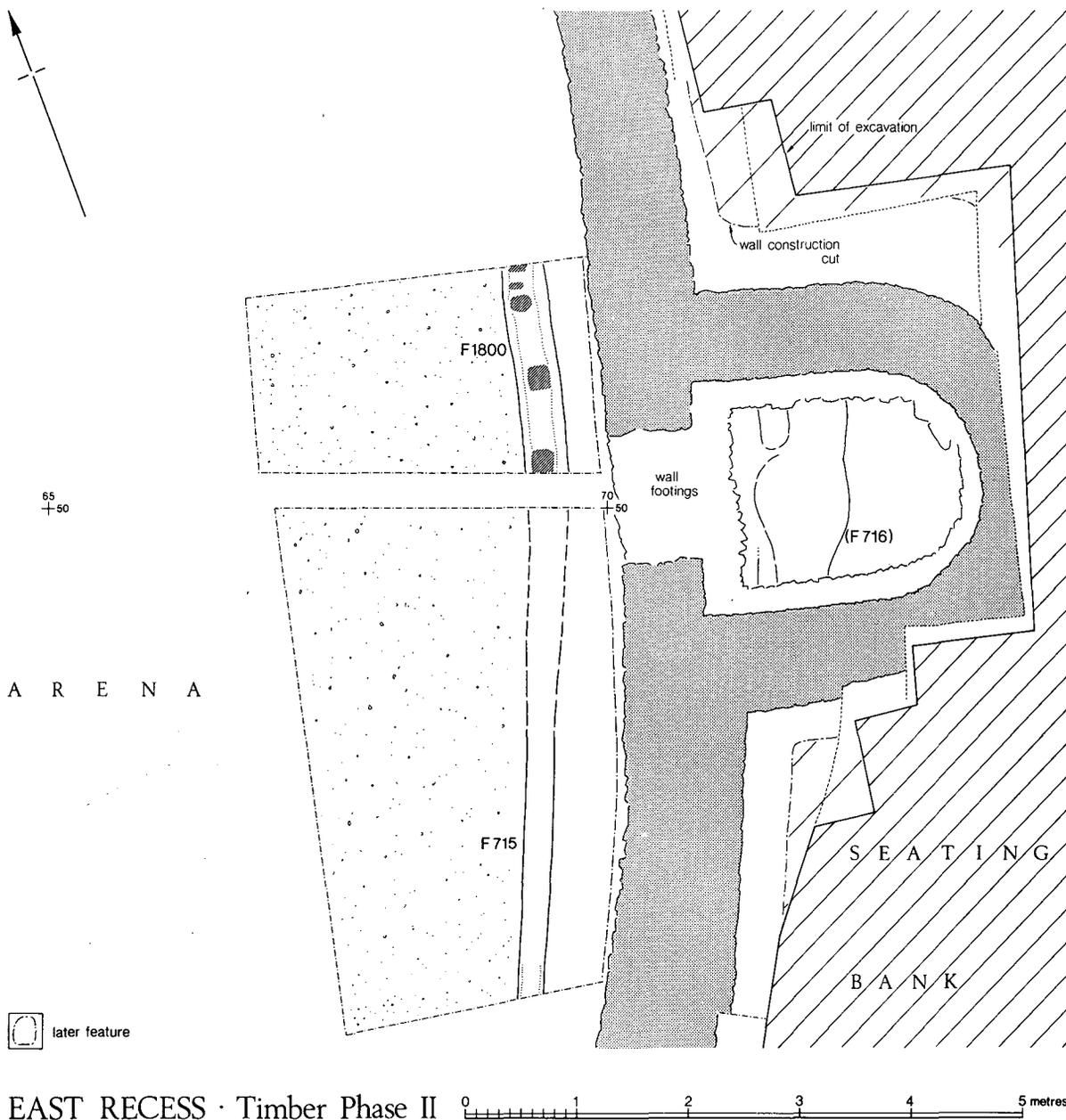
NORTH ENTRANCE · Timber Phase II 0 1 2 3 4 5 m

FIG. 18. Timber Phase 2: North Entrance (Scale, 1:60).

depth of 0.5 m and, although there was post-Roman disturbance in the centre of the passage-way, enough evidence suggested that the drain continued to a point just inside, i.e. to the north of, the position of the new gate. The cut appears to have been filled at the time of the construction of the stone arena-wall since the upper fill contained gravel, flint and greensand slabs of the type used in the wall. The gravelly fill of this presumed drain is similar to that of the upper part of the slot of the second retaining-wall of the arena. The fact that this drain was open at the time of the construction of the stone arena-wall strongly suggests that it was active during the second timber phase.

Eastern Side (FIGS. 19, 82; PL. XX B)

The course of the second timber retaining-wall was established by a section in the north-east quadrant and by a small area-excavation outside the East Recess which revealed five uprights, the



EAST RECESS · Timber Phase II 0 1 2 3 4 5 metres

FIG. 19. Timber Phase 2: East Recess (Scale, 1:60).

largest of which measured about 0.2 m square, with 0.6–0.7 m between centres and set in F1800/F715.

Similarly the course of the wall was established by a trial trench in the south-east quadrant and by the short length exposed east of the South Entrance. All the sections corroborated the evidence from the west side, indicating that the posts had been set up to about 0.7 m into the ground, of which about two-thirds is accounted for by the build-up of the arena surface which followed the original construction of Timber Phase 1.

There is insufficient evidence to determine whether or not the Eastern Recess was retained, let alone its character.

RECONSTRUCTING THE TIMBER PHASE 2 ARENA WALL

The second timber screen was quite different from its predecessor, with generally small uprights set side by side in continuous trenches. Although the size of most uprights was less than that of the first timber-phase posts, several were of comparable dimensions. The impression is of

different types of wood, perhaps reused in some cases, gathered up to make the new wall. Despite the variability in the dimensions of the timbers, they were driven solidly into the arena – usually to a depth of about 0.7 m and, in this respect, not so different to the depth of the posts of Timber Phase 1. What individual elements of the new wall might have lacked in terms of size when compared with the uprights of the old arena wall, they made up in quantity. Set firmly in the ground, there is no reason why the new wall could not have supported either a circulation-passage (*podium*) above, around the edge of the arena, at the level of the lowest row of seats, or some other arrangement to link it in with the seating. On the other hand, at the level of the arena, there would not have been space inside the new arena wall for a complete circulation-passage, although there is some opportunity for movement either side of the recesses. Although the new wall would have removed the need for the kind of horizontal shuttering that linked the uprights of the first timber-phase wall, it was probably necessary to have some form of horizontal bracing to hold it together. The possibility also needs to be considered that the wall was actually quite low, simply serving as a screen intended to keep activities within the arena in the view of more spectators, particularly those occupying the central sections of the seating-banks.

A question-mark hangs over the fate of the recesses in the second timber phase. On the western side there is evidence for the retention of the earlier structure, albeit in a modified form; but the eastern side yielded no helpful evidence. However, the fact that the stone amphitheatre boasted recesses on the short axis does suggest that they had been also retained in the second timber phase.

Besides the significant change in shape from a circle to an oval, the other important development affecting the use of the amphitheatre was the decision to reduce the North Entrance to a width of 1.2 m. This alteration would have made it difficult for use by any but the smallest animals. In other respects, particularly with the retention of the entrance-passages in their original state, the modifications of the second timber phase appear somewhat make-shift.

The layout of the arena of Timber Phase 2 paves the way for the stone-phase rebuild.

Dating

There is little to go on for the date of the second timber phase. Sigillata from the arena and Southern Entrance which was associated with the life of the amphitheatre of the first timber phase gives a *terminus post quem* of c. 125. Most of the pottery associated with the second timber phase is residual, but there is a sherd of Hadrianic-Antonine samian from the South Entrance which is associated with this period rather than with the life of the first timber-phase amphitheatre (p. 27). Evidence for the date of construction of the stone phase suggests that the second timber phase lasted into the third century. Assigning the second timber phase to about the mid second century would give a duration of about seventy years for each of the timber phases.

6. THE STONE AMPHITHEATRE

PHASE 1

Construction (FIGS. 20–7, 83; PLS. XXI A–XXXII)

The arena wall of the second timber phase was replaced in the third century by a stone wall whose course follows closely that of its predecessor. The arena measures 45.5 by 39.2 m (153.7 by 132.4 *p.m.*) and its surface at the time of construction was more or less the same as that when the wall-revetment of the second timber phase was built. At the level of the foundations, which penetrate *c.* 0.5 m below the contemporary surface of the arena, the wall is 1.2 m wide; above the foundation-plinth it measures *c.* 0.9 m, except at the recesses whose walls are only about 0.8 m wide. In the entrances, where they do not appear to have been built on a wider foundation, the walls have a width of about 1 metre. The wall generally survives *c.* 0.8 m high above the foundation-plinth around the arena (PLS. XXI A, B). This corresponds with the level of the latest Roman arena and entrance-passage surfaces. Some deeper robbing occurred in the south-west quadrant, but the two recesses are relatively well preserved.

The wall is built very largely of flint with occasional use of greensand and sarsen (below, p. 139). Within the arena a distinctive string-course of brown ironstone occurred four or five courses above the foundation-plinth (FIGS. 21–2, PLS. XXII A, B). It is assumed that a similar string-course was provided at comparable vertical intervals to the top of the wall. The course does not always occupy the full width of the wall, but appears to be composed of single slabs only, laid side by side. Brown ironstone was also employed, but not consistently, in the foundation-plinth. It is noticeable that neither in the entrances nor within the recesses was there a similar provision of this distinctive string-course. These elevations would not have been readily visible to the spectators. The passage walls employed flint throughout, while in the recesses flint was used with irregular string-courses of the less visually-distinctive greensand (FIGS. 39, 43, PLS. XXVII B, XXX B). Tile-quoining was used at the outer end of the west wall of the South Entrance (PL. XXIII A). Crushed tile may have been mixed in the mortar used to build the arena wall (see below, p. 171). Except for patches in both recesses, the mortar did not survive. At the time of excavation the arena wall was held together only by gravel (< 20 mm) mixed with some clay.

Drains (FIGS. 21–2; PLS. XXII A, B, XXIII B–XXIV B)

The arena wall was pierced by triangular drains at irregular intervals of between *c.* 1.8 and 2.8 m. These were made simply of three pieces of tile – two pieces of a tile broken in half leaning against each other, resting on a second, complete tile laid horizontally (PL. XXIII B). In the north-west quadrant there was one instance of a curved piece of ironstone resting on a broken tile to form the drain (PL. XXIVA). The provision of drainage at the South Entrance was slightly different. Two square-profiled drains of tile (*c.* 0.2 m square internally) were provided at the arena end of each passage-wall (PL. XXIV B). One piece of tile from the southern end of the western wall of the North Entrance might have been intended to make a similar arrangement. On the eastern side the robbing had been too severe to determine the character of the drain. Further evidence for drainage of the arena surface and entrances will be discussed below.

South Entrance (FIG. 23; PLS. XXIII A, XXIV B–XXVII A)

The South Entrance is 12.0 m (40.5 *p.m.*) in length to the inside face of the return into the arena and measures 3.8 m (12.9 *p.m.*) between the inside faces of the passage walls. Drainage through the wall has been described above.

The gate was provided at the arena end of the passage, although extensive post-Roman

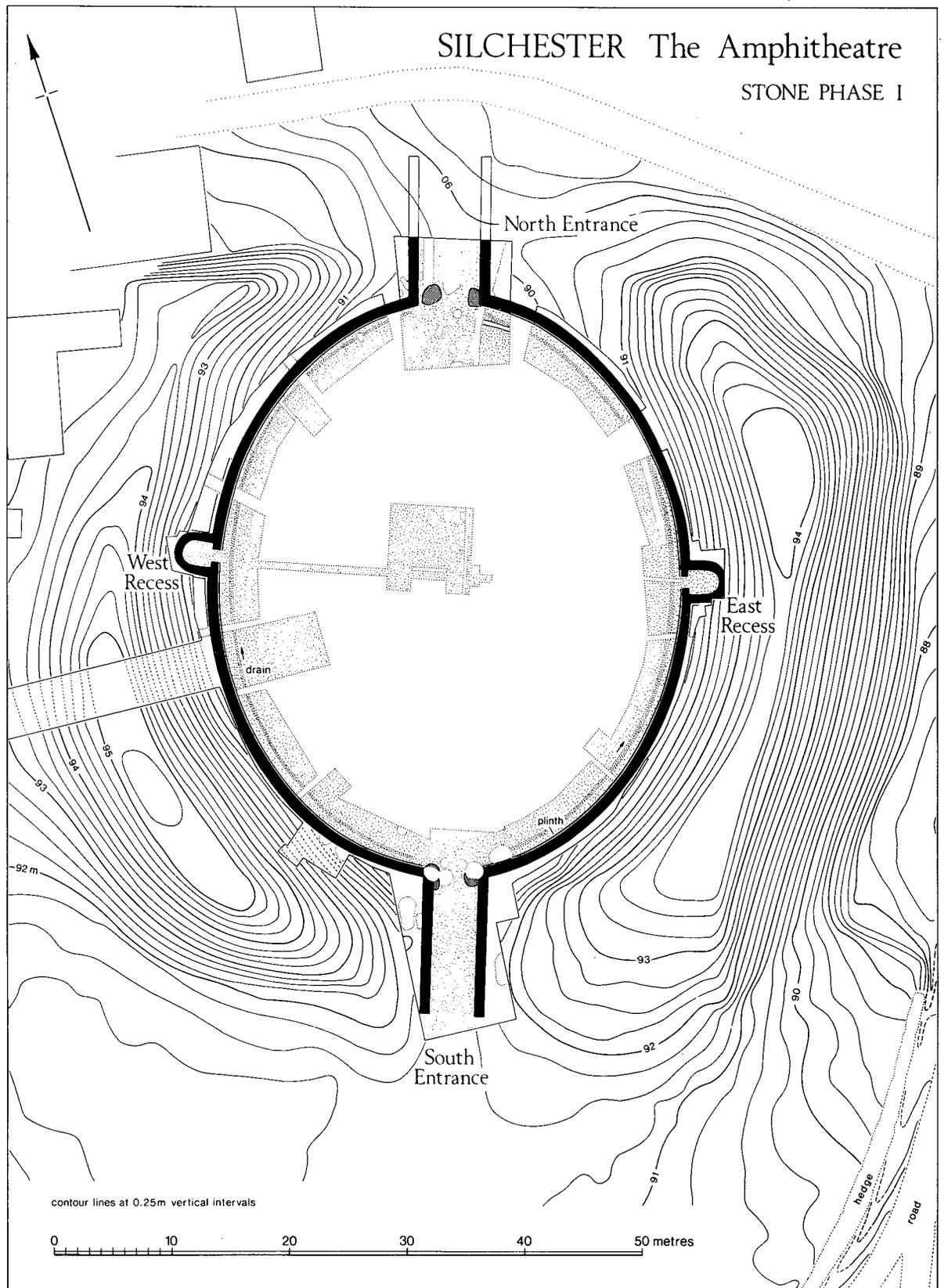


FIG. 20. Stone Phase 1: plan of amphitheatre (Scale, 1:500).

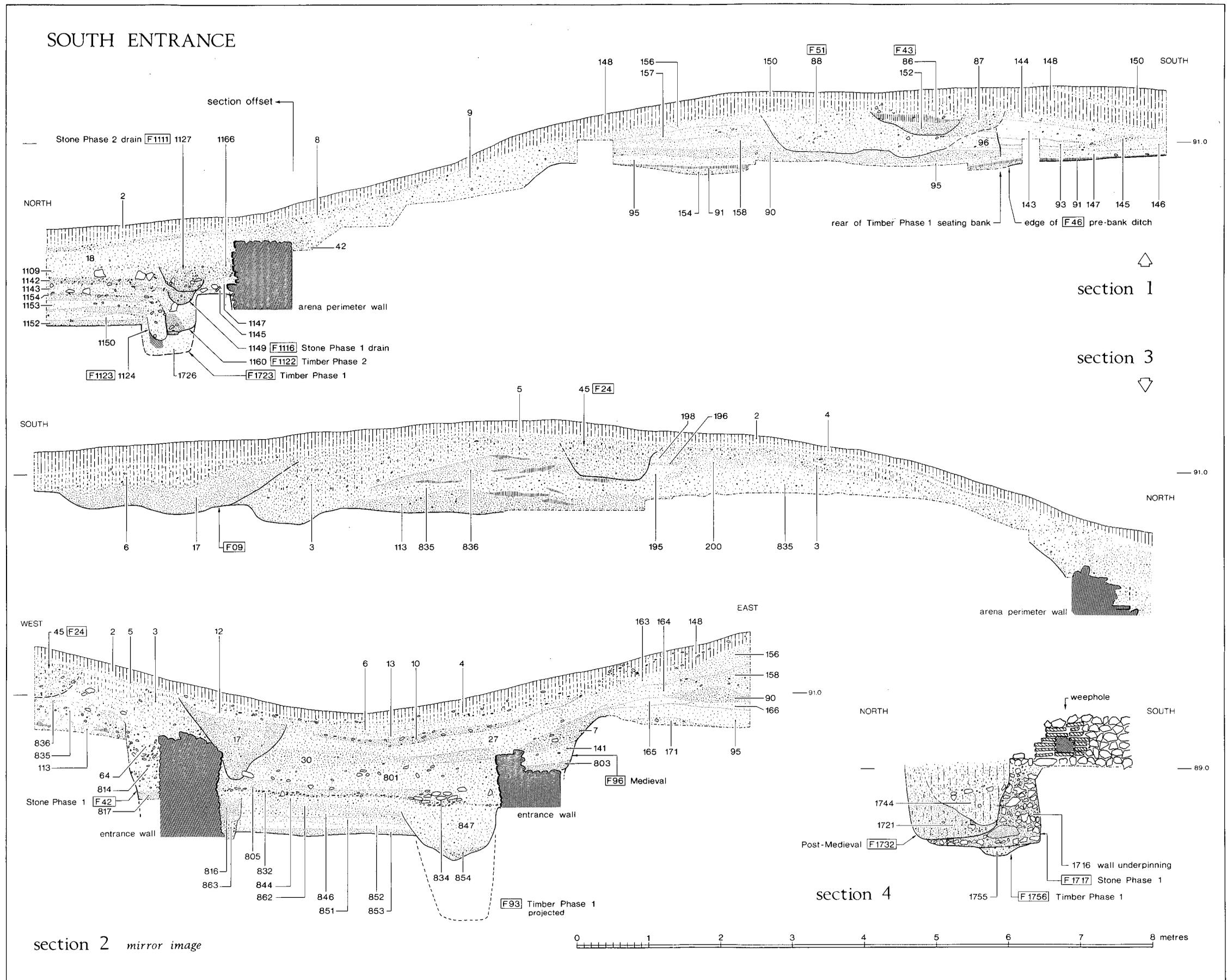


FIG. 38. Sections – South Entrance (Scale, 1:60).



excavations to place gate-posts in the same position have largely removed the evidence for the Roman post-pits. The gate itself measured between about 2.2 and 2.5 m wide between F1722 and F1717. On the basis of the similarity of the fill with that of the better-preserved gate-posts at the North Entrance, the flint and gravel at the southern end of F1722 (FIG. 38; PL. XXVI B) is interpreted as the fill of the Roman gate-post on the western side. On the eastern side the drawn section (FIG. 38) shows more clearly how the packing of flint, gravel and ironstone has been cut by post-Roman activity (PL. XXVII A). Although evidence for the exact positions of the posts themselves is unclear because of the degree of post-Roman robbing, that on the eastern side was set inside the line of the passage wall, while the other (F1722) was partly recessed into the wall. It is clear however that in both places post-pits of Timber Phase 1 had been reused. Both pits lay partly beneath the walls on each side and would have been excavated before construction of the walls. Consolidation and partial rebuilding of the arena ends of the passage-walls in 1982–3 prevented total excavation of the post-pits and leaves unresolved the extent to which the posts were recessed into the walls. The width between the gate-posts would have been between about 2.2 and 2.5 m. The presence of the entrance ramp ensured that the gate opened outwards into the arena.

West Recess (FIG. 24; PLS. XXVII B–XXIX A)

The internal dimensions of the Western Recess are 2.1 m for the width (north-south) and 2.6 m for the depth (east-west). The entrance is about 1.0 m wide with quoining of flint, ironstone and tile on each side. There was no firm evidence for a door, but indications of the edge of a threshold were seen inside the doorway. The foundations of the arena wall continue across the entrance. To the rear, the wall survives only to a height of 1.3 m above the floor, which was of flint cobbling. The masonry is very largely of flint with one greensand string-course partly surviving at the rear. Except for the bottom of a circular pit (F578), *c.* 0.5 m in diameter, cut from higher up through the cobbled floor to the underlying surface of the timber recess, there was no evidence relating to the use or function of the stone recess. It is likely that the pit results from post-Roman robbing which penetrated deep within the recess. Mention should also be made of the two interruptions of the foundations on the southern side of the recess which coincide with timber-phase post-pits F1372 and F1373. Although the possibility should be considered of posts standing inside the recess to support the roof, etc., an alternative explanation is that the disturbances were created by subsidence into earlier post-pits.

In the angle between the recess and the arena wall to the north, and within the foundation-trench behind the wall, were found three pieces of worked stone (PL. XXIX A, below, p. 136). These may have been used in the timber-phase recess.

North Entrance (FIGS. 26, 41, PLS. XXIX B, XXX A)

Only 5.3 m of the length of the North Entrance was excavated. At the base of the walls on each side the entrance is *c.* 5.2 m wide internally, 1.4 m more than the width of the South Entrance. Whereas the passage walls at the North Entrance straddle the timber-phase retaining-posts, at the South Entrance the western wall overlies the post-pits, and is thus not directly opposite its counterpart at the North Entrance. The decision to avoid both sets of post-pits seems to account for the disparity in width at the North Entrance. Although the eastern wall is largely robbed away by a nineteenth-century drain, the western wall leans inwards at an angle of 30 degrees. This will be discussed further below (p. 57).

The post-pits and remains of the gate-posts themselves were recorded (F637, 639). The post on the eastern side originally measured *c.* 0.5 by 0.6 m and was of oak. It was set into a pit which was packed with gravel and larger flint. Although the pits on each side were dug to a depth of about 1.0 m, the posts themselves rested a little higher, at a depth of about 0.7 m.

The surviving post (F669) on the western side is set at the innermost (eastern) edge of the

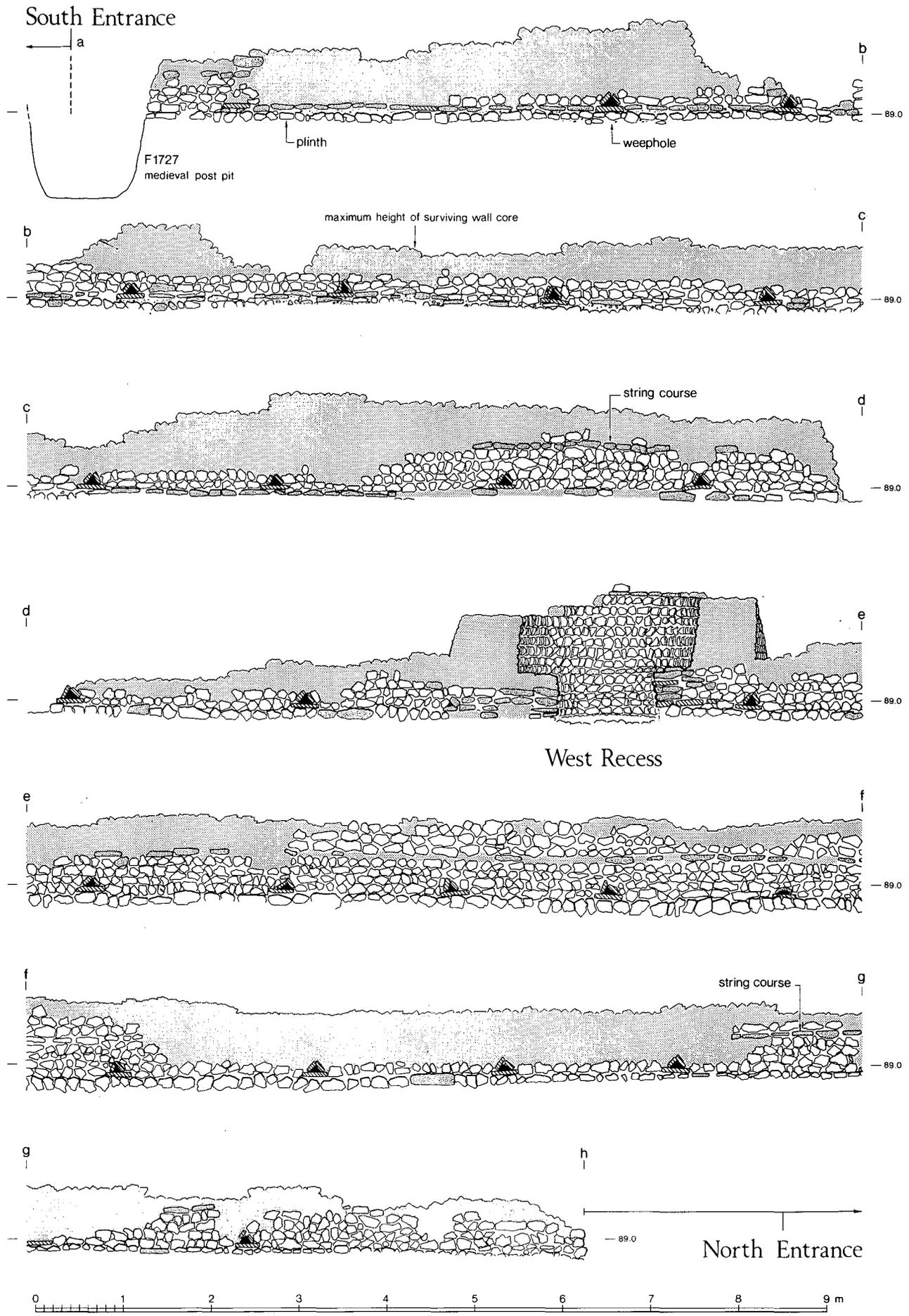


FIG. 21. Arena wall: elevation of west side (Scale, 1:60).

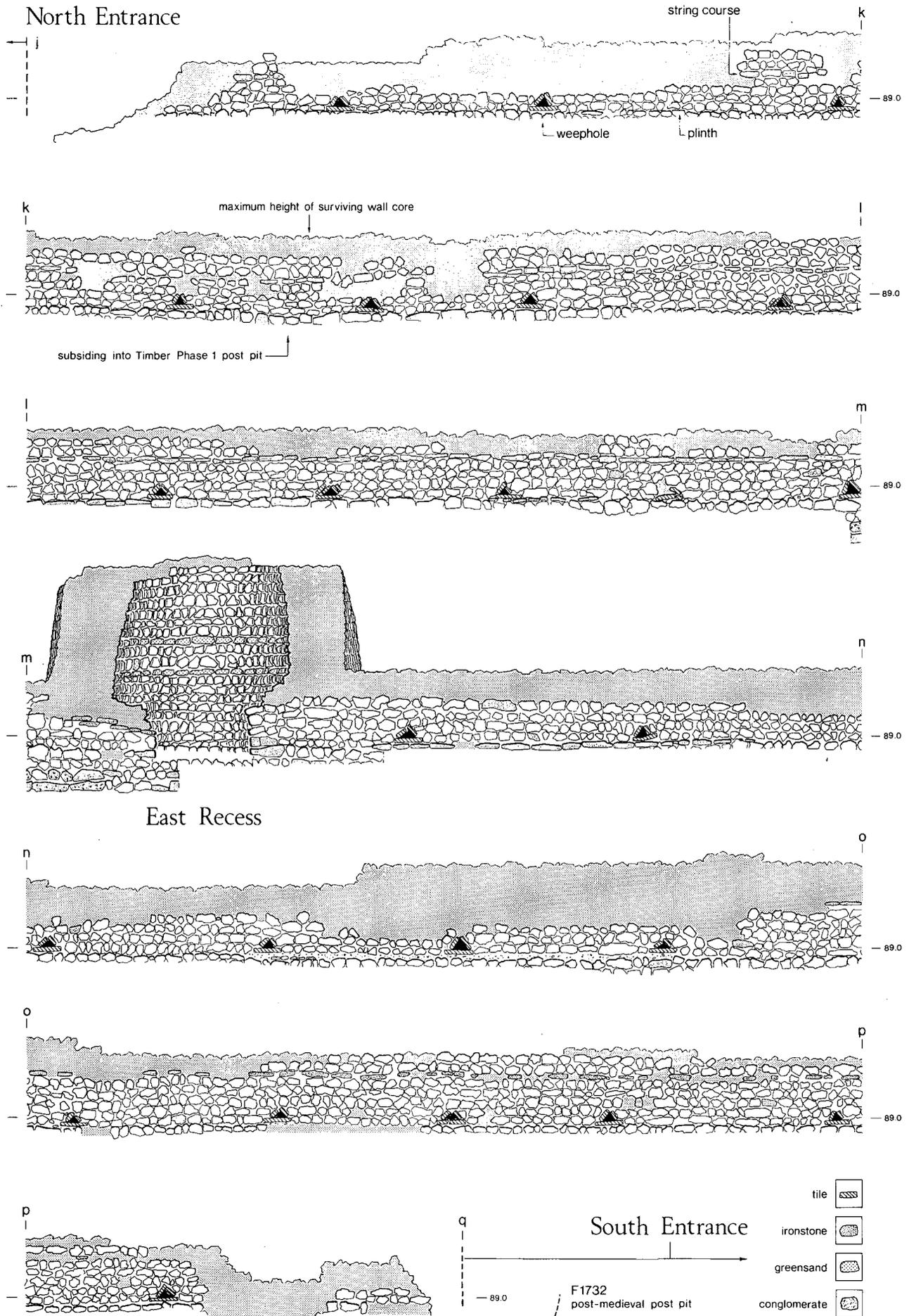
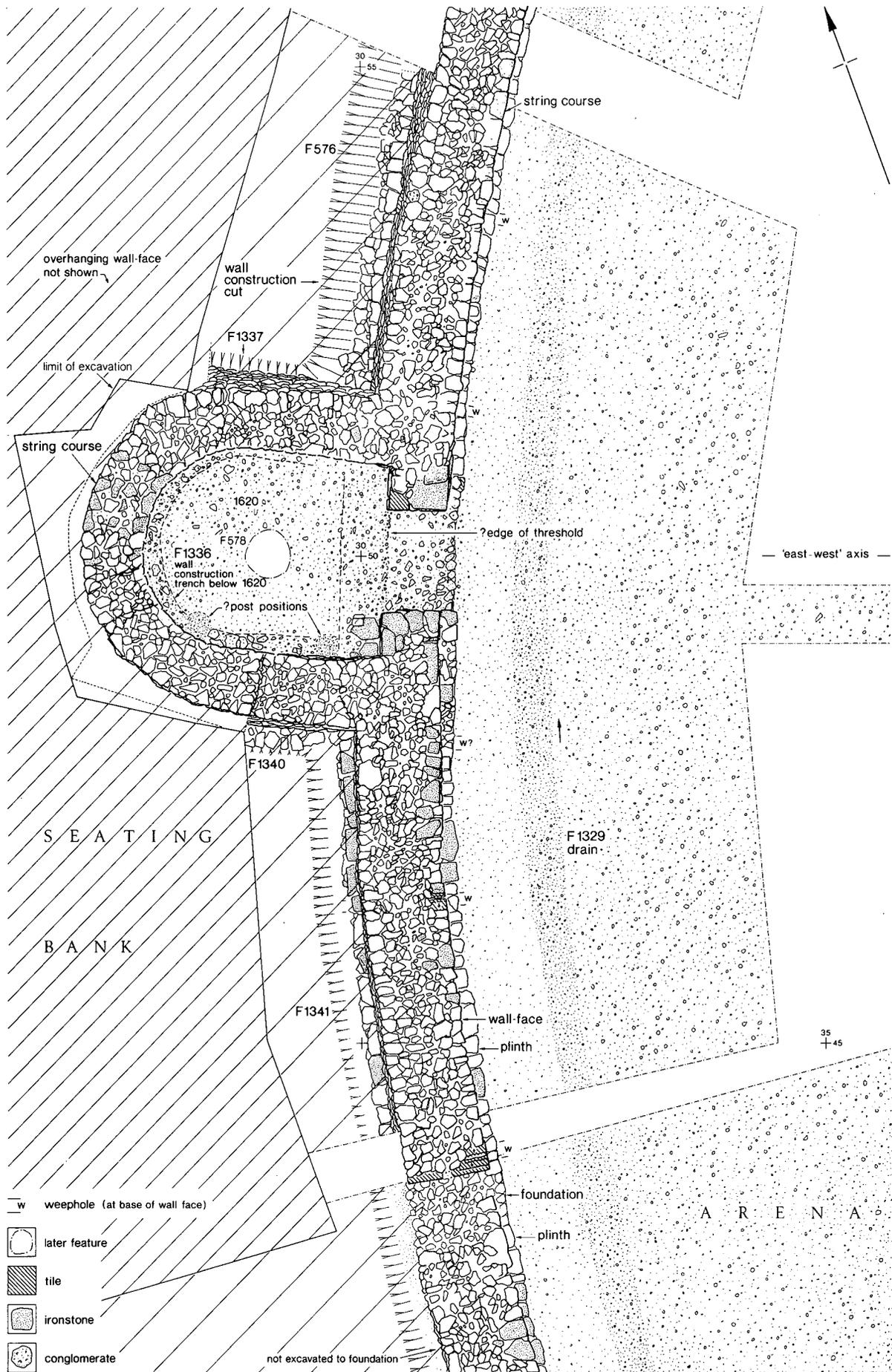


FIG. 22. Arena wall: elevation of east side (Scale, 1:60).



WEST RECESS · Stone Phase I
 FIG. 24. Stone Phase 1: West Recess (Scale, 1:60).

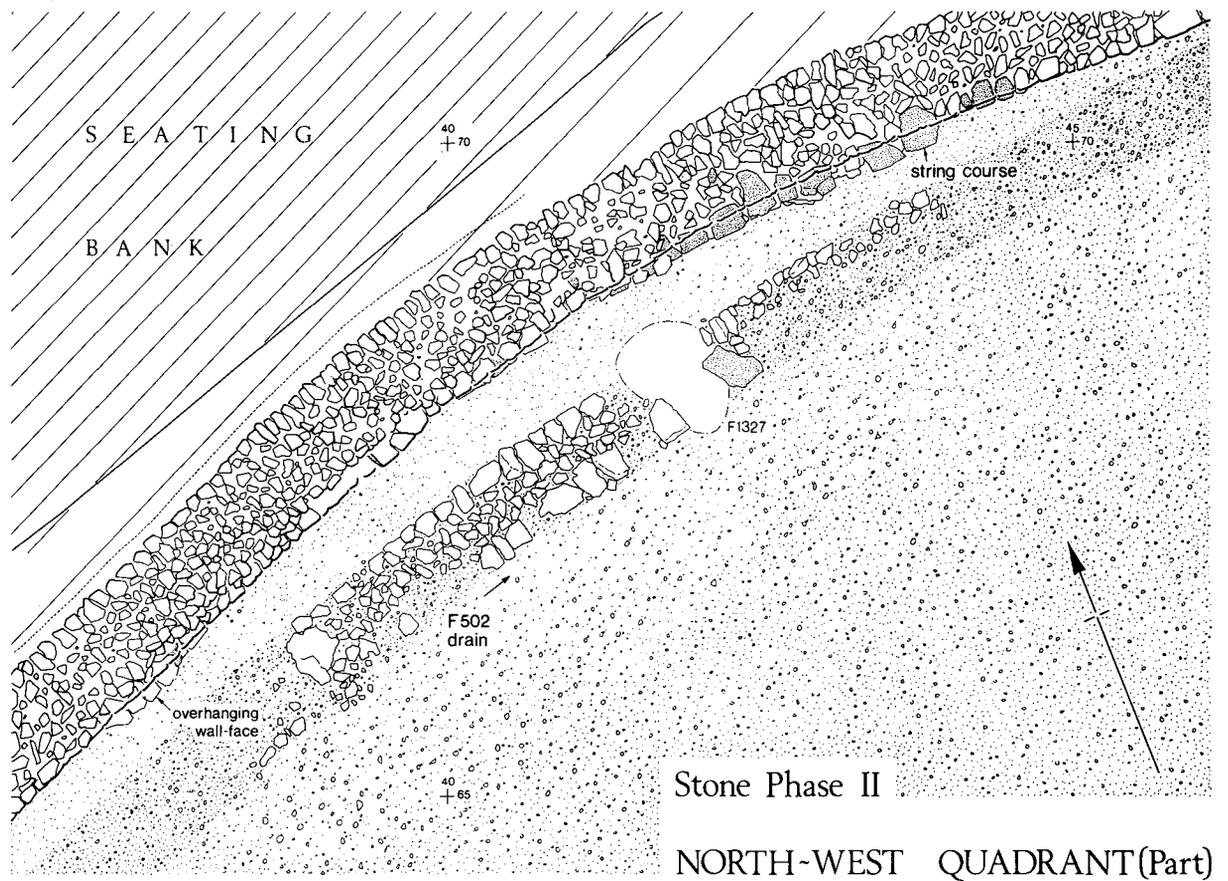
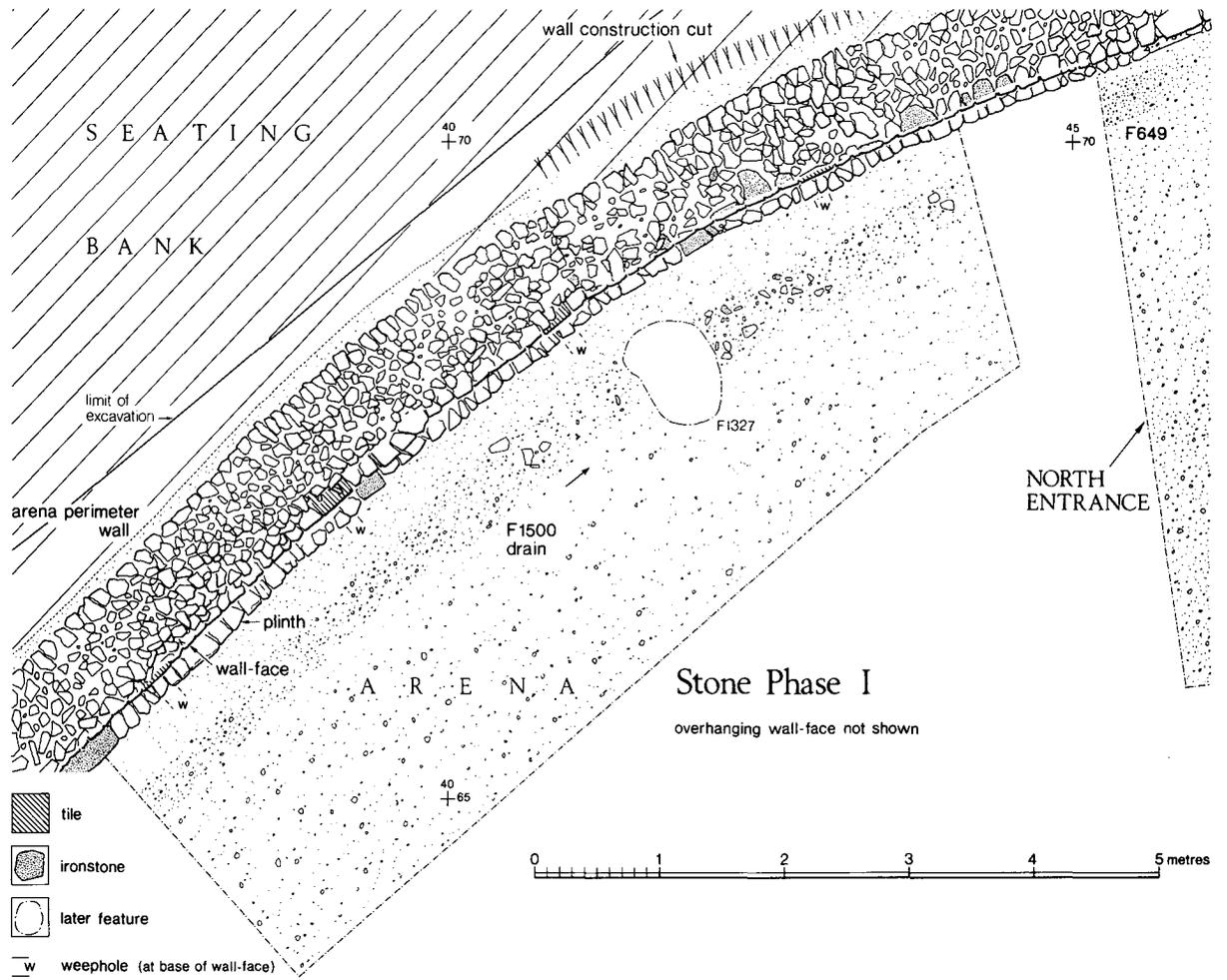
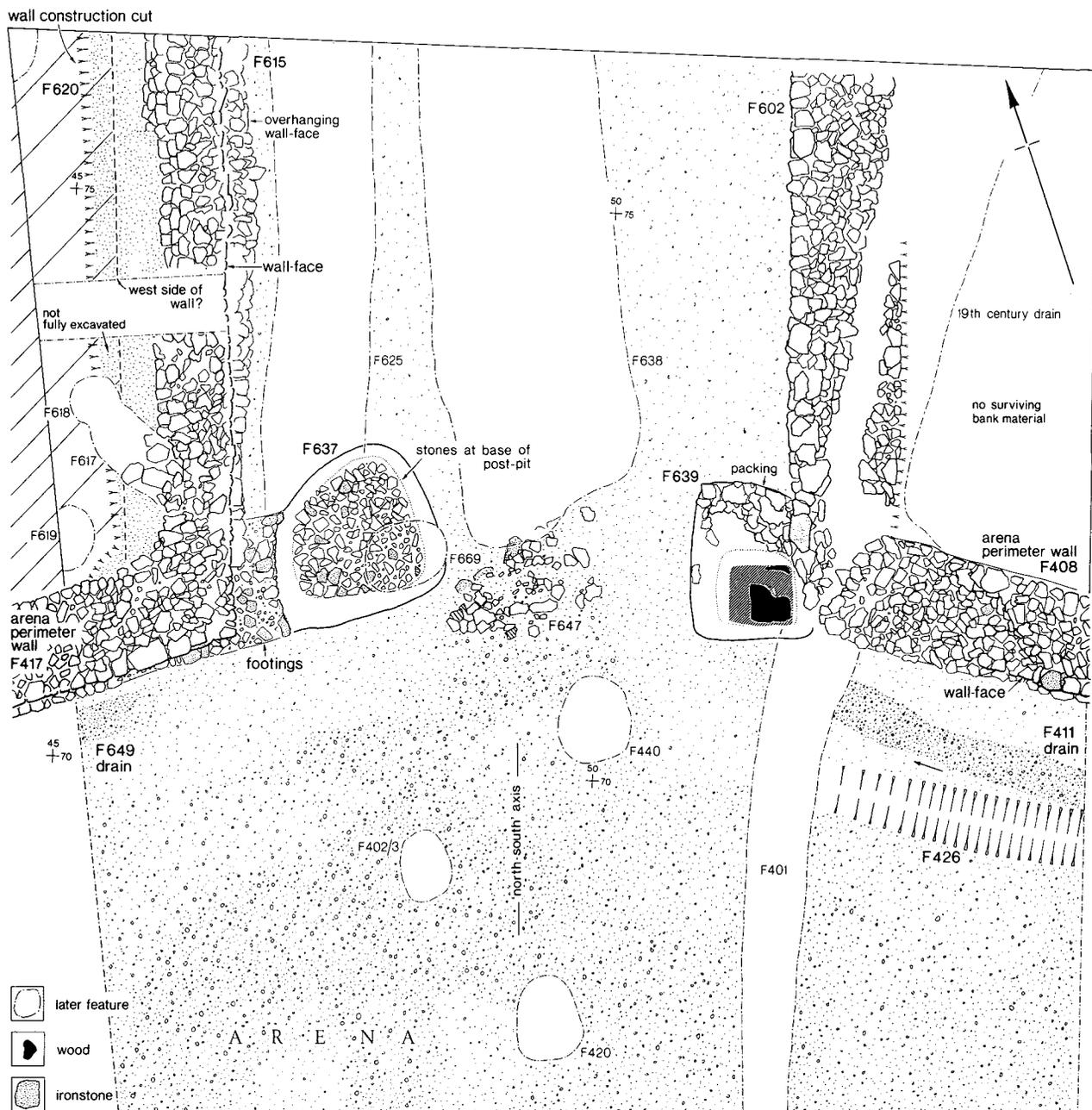


FIG. 25. Stone Phases 1 and 2: north-west quadrant (Scale, 1:60).



NORTH ENTRANCE · Stone Phase I 0 1 2 3 4 5 metres

FIG. 26. Stone Phase 1: North Entrance (Scale, 1:60).

post-pit in a similar gravel- and flint-packed pit (F637). The remains suggested a circular post *c.* 0.45 m in diameter, set about 2.7 m from its eastern partner in F639. It is noticeable that the western post respects the line of the drain, F625, which is likely to be secondary. Thus F669 may also be secondary and the cutting of the drain may explain why it is set some 1.5 m inside the line of the passage wall.

What provision was initially made for drainage through the North Entrance is not clear. It has already been suggested that a wide U-shaped gully (F638) may have served the needs of the second timber phase. At the southern end the upper fill of this contained flint, greensand and gravel consistent with it being levelled over at the time of the construction of the stone walls. However this rubble would have enabled it to have continued to serve as a soakaway as it had done earlier.

East Recess (FIGS. 27, 43; PLS. XXX B–XXXI B)

The internal dimensions of the East Recess are 2.0 m for the width (north-south) by 2.45 m for the depth (east-west). The entrance is 1.1 m wide with evidence of flint quoining on each side. As with the West Recess, the flint foundations of the arena wall are continuous across the entrance, and once again there is no firm evidence for a door. To the rear the wall survives to a height of 2.2 m above the flint foundation-plinth. The recess is built of flint with greensand used for string-courses. The internal stratigraphy had been seriously disturbed so that the fill was a fairly uniform sandy clay, presumably derived from the bank. The only find was a very weathered trapezoidally-shaped greensand slab resting against the foundation-plinth at the back of the recess (PL. XXXI B). Although this could have been derived from the side or back wall, it appears to have been deliberately shaped and so might possibly relate to a fixture, such as an altar, placed within the recess. The date when the interior was disturbed is unclear, but it is likely to have been either before or at the time when the arena wall was robbed.

Arena (FIGS. 23–7, 38–43, 83)

The arena surface at the time of the construction of the arena wall in stone was at about the same level as it was at the time of the construction of the second timber-phase arena wall. Drainage provision was minimal. On the western side the upper fill of the second timber-phase wall-trench was filled with gravel, small pieces of ironstone, small flint and broken tile, perhaps derived from the preparation of the triangular weep-holes through the arena walls. This gully seems to have served as a soakaway, although in the south-west quadrant there is a suggestion of a separate small gully (F1276) (*c.* 0.25 m wide), some 0.7 m inside the line of the wall, which was filled with gravel and could also have served as an additional soakaway.

On the eastern side (FIGS. 27, 83) there does seem to have been a consistent attempt to provide a soakaway besides that offered by the fill of the second timber-phase arena wall. In the north-east quadrant a gully (F1019, 1020), *c.* 0.5 m wide and 0.15–0.2 m deep and filled with gravel, was traced at a distance of some 0.3–0.4 m from the arena wall. In the south-east quadrant a gully *c.* 0.4 m wide (F1116) and 0.2 m deep, filled with gravel, ran *c.* 0.4 m inside the arena wall.

On either side of the North Entrance there was also limited evidence for the provision of shallow drainage-gullies (FIGS. 26, 41). On the eastern side F411, about 0.3 m wide and 0.2 to 0.25 m deep and filled with gravel, ran *c.* 0.6 m inside the foundation-offset and was additional to the feature formed by the back-fill of the second timber-phase arena wall (F426). On the western side the evidence is less clear: first, there was an accumulation of fine gravel and crushed tile against the foundation-offset and, secondly, a narrow gully (F648) filled with fine gravel and measuring some 0.3 m wide and 0.4 m deep, running *c.* 0.3 m inside the arena wall.

The accumulation of sand and crushed tile was noted against the foundation-offset in many places around the arena. Although it would allow water to drain through it and so may have been deliberately dumped for that purpose, it may also be interpreted as the casual residue of the mortar-mix used in the arena wall. Mortar itself did not survive at any point within the surviving matrix of the arena wall.

Seating-Bank

The heightening of the seating-bank described earlier (p. 15) can probably be associated with the rebuilding of the arena wall (FIG. 6). A certain amount of spoil was excavated for the foundations of the wall, and the banks were an obvious place for dumping it and surplus stone. The timbers (in F212, 1201, 1202, etc.) located in the inner or arena face of the bank and running from it towards the arena wall are also as likely to have belonged to this period as to either of the timber phases (FIG. 7).

RECONSTRUCTING THE STONE PHASE

Given the height of the undisturbed natural sealed beneath the seating-bank and the position of the horizontal beams which projected towards the arena wall, we can reconstruct the height of the arena wall at about 2.75 m above the foundation-offset. The height of the back of the East Recess gives a minimum height of 2.2 m for the wall. The provision of a parapet might have given the wall an overall height of 3.75 m above the foundation-plinth. There was no evidence for plastering on the face of the arena wall; given the distinctive brown ironstone string-coursing this is, in any case, inherently unlikely. The recesses were vaulted over; indeed, as far as it survives, the back of the east recess appears to be curving inwards as if to form such a vault. The entrance to the recesses might have been about 2 m in height and finished above with either an arch or a horizontal lintel. There is no evidence whether they were gated. The better-preserved entrance of the West Recess provides no evidence for post-sockets or a wooden door-frame, but the latter is quite possible.

Whether the North and South Entrances were vaulted and whether the seating ran over them is unclear. The evidence of collapse at the North Entrance (to be described below, p. 57) could be consistent with the thrust generated by the span of seating, particularly given the greater width of this compared with the South Entrance. As with other stone amphitheatres (e.g. Pompeii) one might have expected the gates to have been set back at the point where the seating was carried across. In fact at Silchester the height of the arena wall was such that there would have been sufficient elevation to carry the seating across the entrance right down to the gate and the edge of the arena. Given the lack of an external retaining-wall around the *cavea*, the seating could not, in any case, have been carried back the full length of either passage-way. On balance, it is unlikely that the seating was carried across the entrance-passages.

Except for the horizontal beams at the base of the seating-bank to provide support for the *podium* and lower tiers of seating, there is no firm evidence on which to base a reconstruction of the seating-arrangements in the stone phase. Sufficient survives of wall and bank to reconstruct the rake of the seating at an angle of about 25 degrees. On the crest of the bank, cutting the secondary addition to the bank, is the trench (F230) which could have carried the rear support for the seating. Surviving to a depth of *c.* 0.6 m and a width of 0.8 m, it could have taken a series of substantial timbers sufficient to bear the weight of the seating. If we allow for some post-Roman erosion from the top of the bank, this trench could have been as much as 1.2–1.3 m deep. However the corresponding trench, F24, at the South Entrance is unlikely to be as early as the construction of the stone wall of the arena. The problem of the date of this and F230 is discussed above (p. 17). Architectural considerations are discussed below by Nigel Sunter (p. 171).

Dating

There are few contexts which are certainly associated with the construction of the arena wall, recesses and entrance-passages. Seven sherds of BB1 (p. 105) were found embedded among the upper flints of the surviving arena wall where it turns to form the East Recess. These are types dated to the late third century or later: but as they were among the topmost, unmortared flints little certainty can be attached to them. Thus the dating rests on the latest sherds associated with the use of the timber-phase arena. This includes one piece of Hadrianic–Antonine samian from the South Entrance which complements the early second-century sigillata noted in association with the use of the first timber-phase amphitheatre. One datable coin of A.D. 100 was also recovered from Context group 2.3 (p. 78). However, since there are strong arguments for believing that modification to the arena (Stone Phase II) took place very soon after the initial construction of the wall, the evidence for date will be discussed further below (see pp. 82, 105 for details of pottery evidence).

It remains however to advance some stylistic arguments. The use of stone for the string-courses of the arena wall can be paralleled in the town wall of Silchester which is dated to *c.* 260–80 (Fulford 1984). The masonry gates (South, South-east Gates) are, however, earlier and

they conspicuously employ tile for bonding-courses or for facing. These gates belong to the period of the earthen rampart and are dated to the end of the second century. A similar use of tile can be noted in the masonry of the forum-basilica which was built towards the middle of the second century. Thus it would seem that the use of stone as a bonding material is not evidenced at Silchester before the third century. Although the choice of stone employed in the town wall is consistently more catholic than that used in the amphitheatre, the choice of stone *per se* is suggestive of a third-century date. This argument is developed further below (p. 55).

STONE PHASE 2

Modifications within the Arena (FIGS. 28–32, 34–43, 84; PLS. XXXIII A–XXXV B)

The arena wall may not even have been completed to its full height when the arena surface was deliberately raised by the dumping of sand, clay and gravel. This was deepest against the wall, but fell away sharply (within 3–5 m) towards the centre of the arena to give it a saucer-profile (FIGS. 38–43). The composition of this deposit (sand, sandy clay and gravel) suggest that it (together with the finds within it) was deliberately introduced into the arena. A ring-drain, filled with large flints and gravel was cut through this deposit close to the arena wall and capped by large stones: sarsens, gravel-conglomerate blocks and flints. Some sections of the arena wall show that the face of the wall had been eroded, with the loss of the outer facing of flints, before the arena surface was raised. This is likely to be the result of a combination of water and frost-action, as the winters of 1983–6 produced a similar effect on the lower courses of the freshly-consolidated south-east quadrant, which stood in water for much of the time. The erosion of the wall through poor drainage may well explain why the decision was taken to raise the surface and provide a more substantial ring-drain for the arena. The late accumulations against the arena wall are generally sealed by a gravel surface, but it was not possible consistently to differentiate this from the underlying gravelly deposits.

These developments in the arena are considered clockwise starting at the South Entrance.

South Entrance (FIG. 29; PL. XXV A)

In order to accommodate the raised surface of the arena there was corresponding dumping in the entrance-passage so that the surface was raised by about 0.7 m. Towards the southern end a small amount of the latest Roman metalled surface survived intact sealing this deposit. The secondary dumping concealed virtually all of the passage walls that are now visible.

South-West Quadrant (FIG. 84; PLS. XXXIII A, B)

The drain (F22, F568, etc.) was *c.* 0.6 m wide and 0.4 m deep, with vertical sides and a flat bottom. It ran up to the arena wall itself by the South Entrance, but elsewhere continued at a distance of *c.* 0.8–1.3 m from the wall-face. Although partly robbed in this quadrant in the post-Roman period (below, p. 62), the top of the drain was capped with a mixture of large sarsens, gravel-conglomerate and flints.

West Recess (FIG. 30; PL. XXXIV)

Corresponding with the rise of the arena surface, the interior of the recess was also heightened with gravel, clay, flint and fragments of tile. Outside the recess and between it and the drain was a spread of tile and some flint. The drain itself was lined with large flints; capping stones did not survive here.

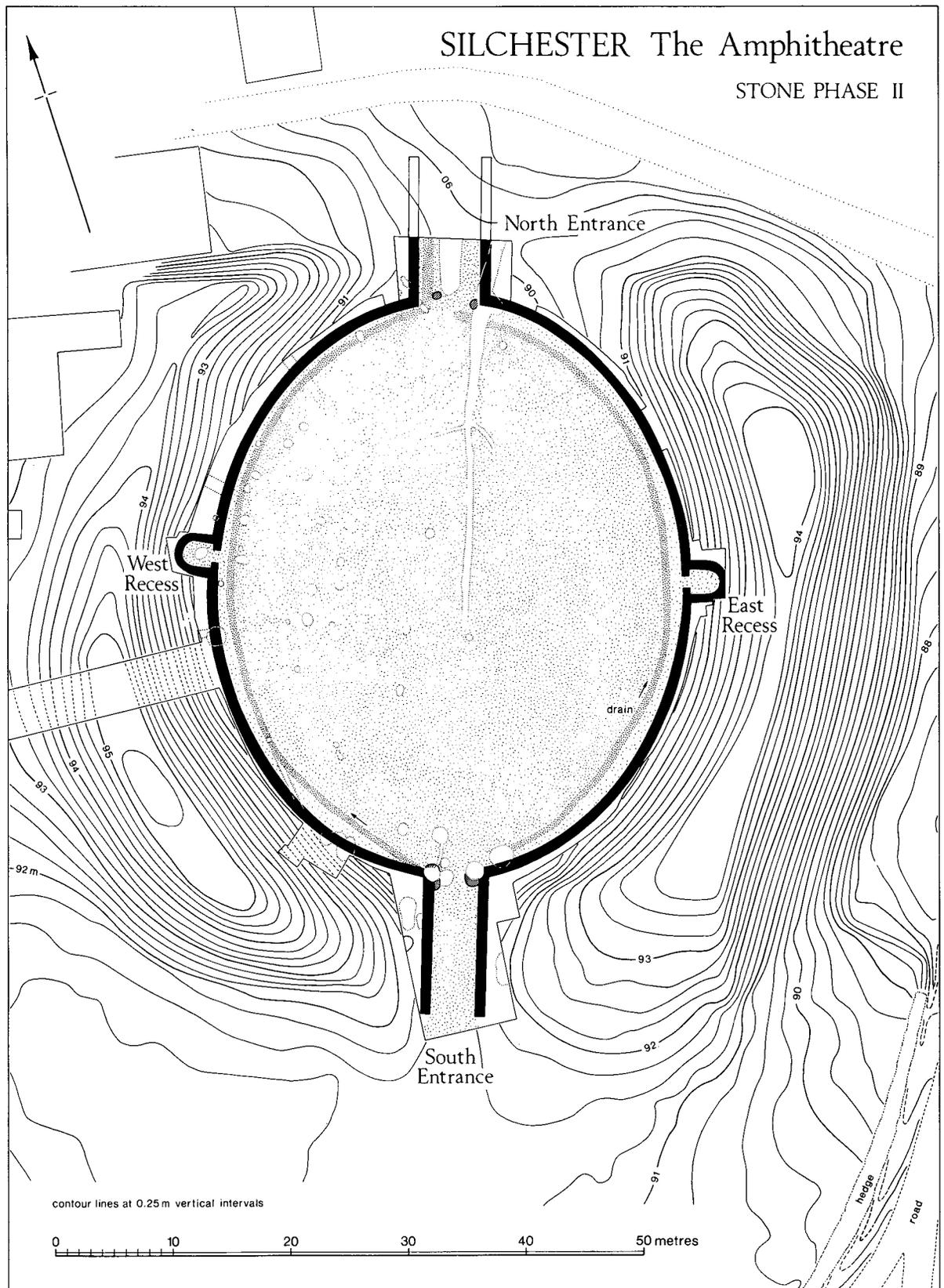
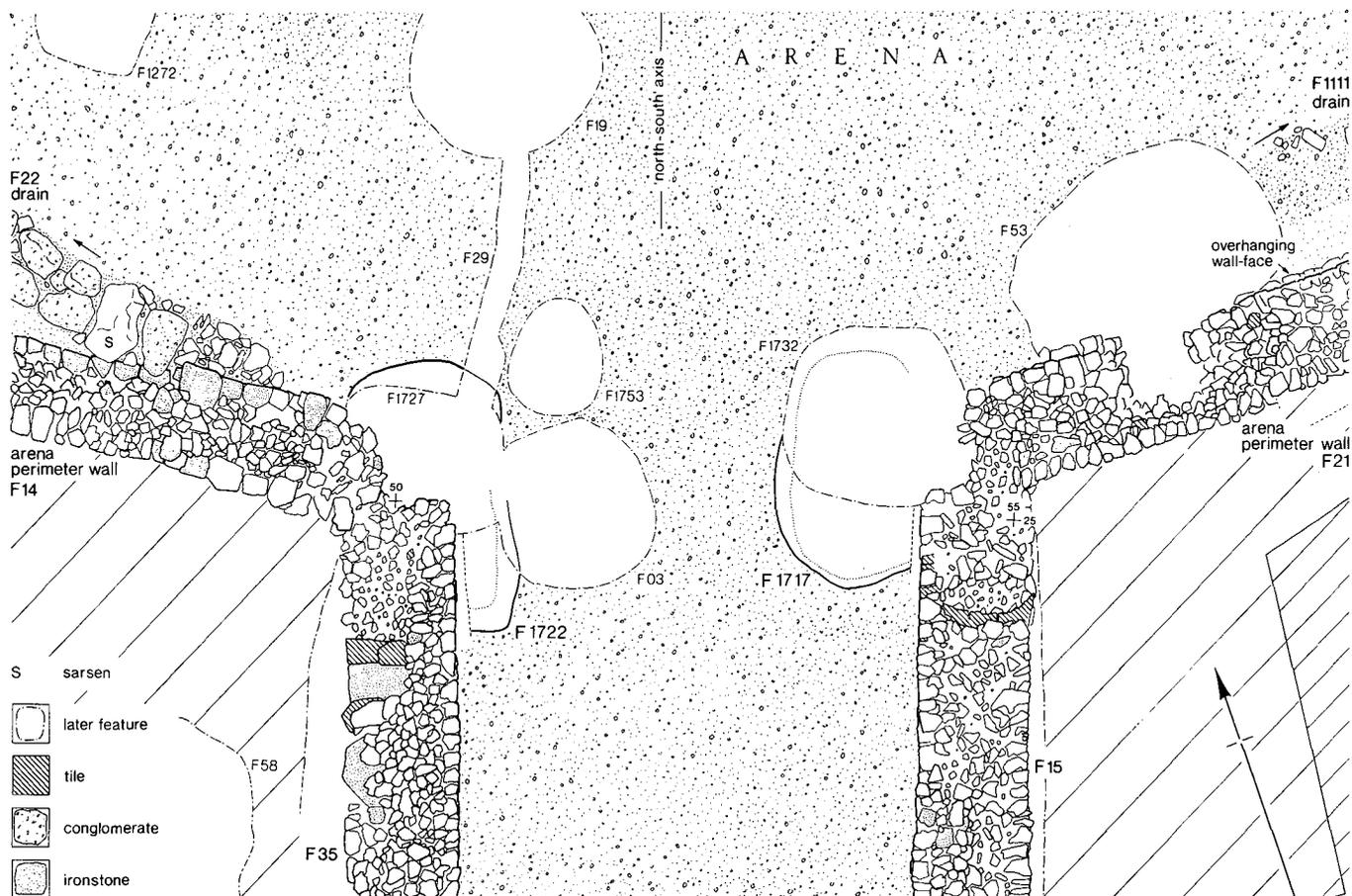


FIG. 28. Stone Phase 2: plan of amphitheatre (Scale, 1:500).



SOUTH ENTRANCE · Stone Phase II

0 1 2 3 4 5 metres

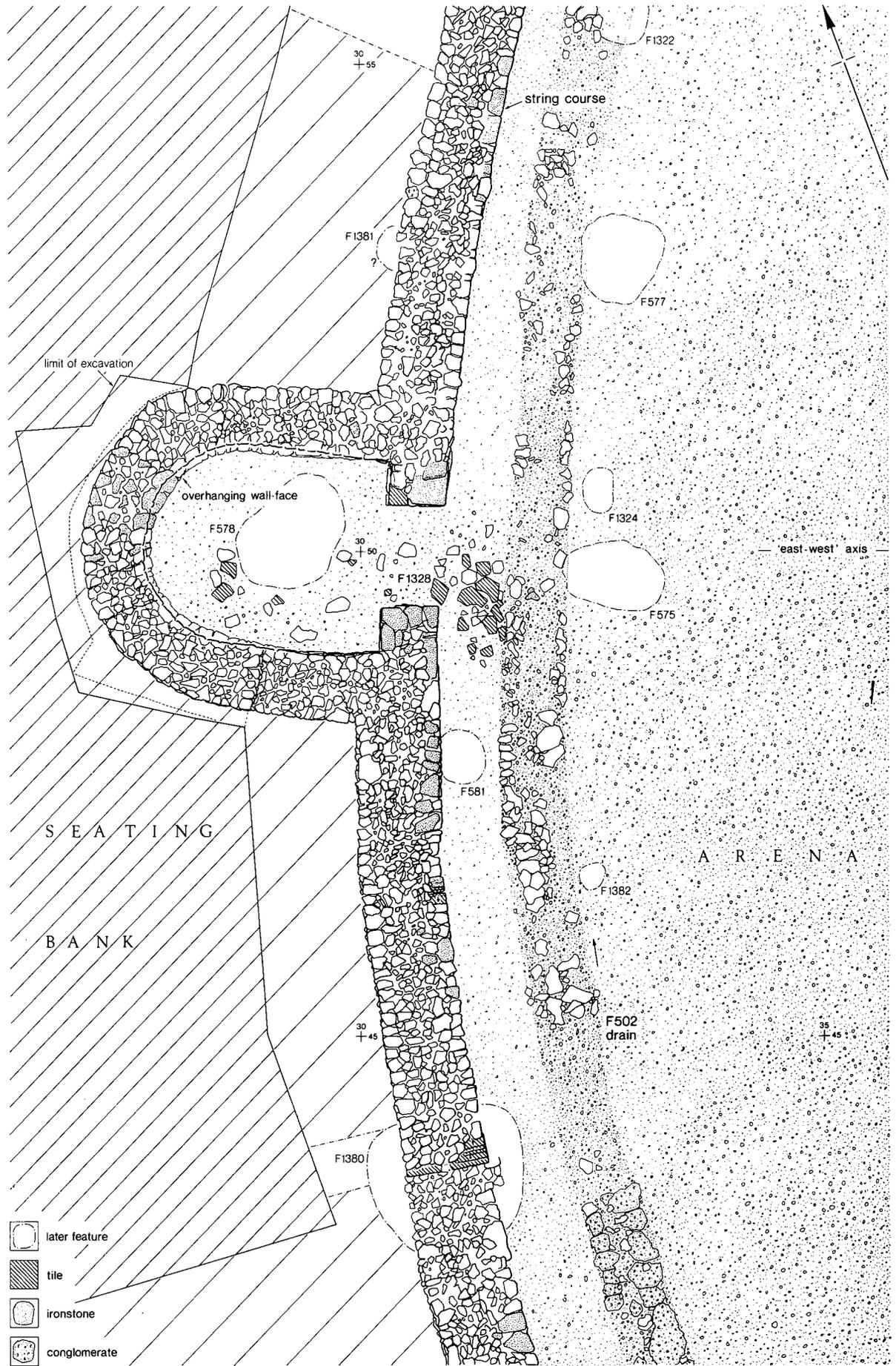
FIG. 29. Stone Phase 2: South Entrance (Scale, 1:60).

North-West Quadrant (FIGS. 25, 84; PL. XXXV A)

In this quadrant the drain ran within 0.2 m of the arena wall. The capping here was of flint, carefully laid and slightly angled towards the arena wall at a slope of 25–30 degrees. The proximity of this feature to the arena wall tends to rule out the interpretation that it may have partly served as a support for struts to shore up the arena wall, which itself leans inwards by some 15 degrees at this point (Fulford 1985, 72–3). Beneath the surviving capping, the drain was 0.7 m wide and up to 0.5 m deep, straight-sided and flat-bottomed. As outside the West Recess, the sides of the drain had been carefully lined with large flints before the gravel infilling.

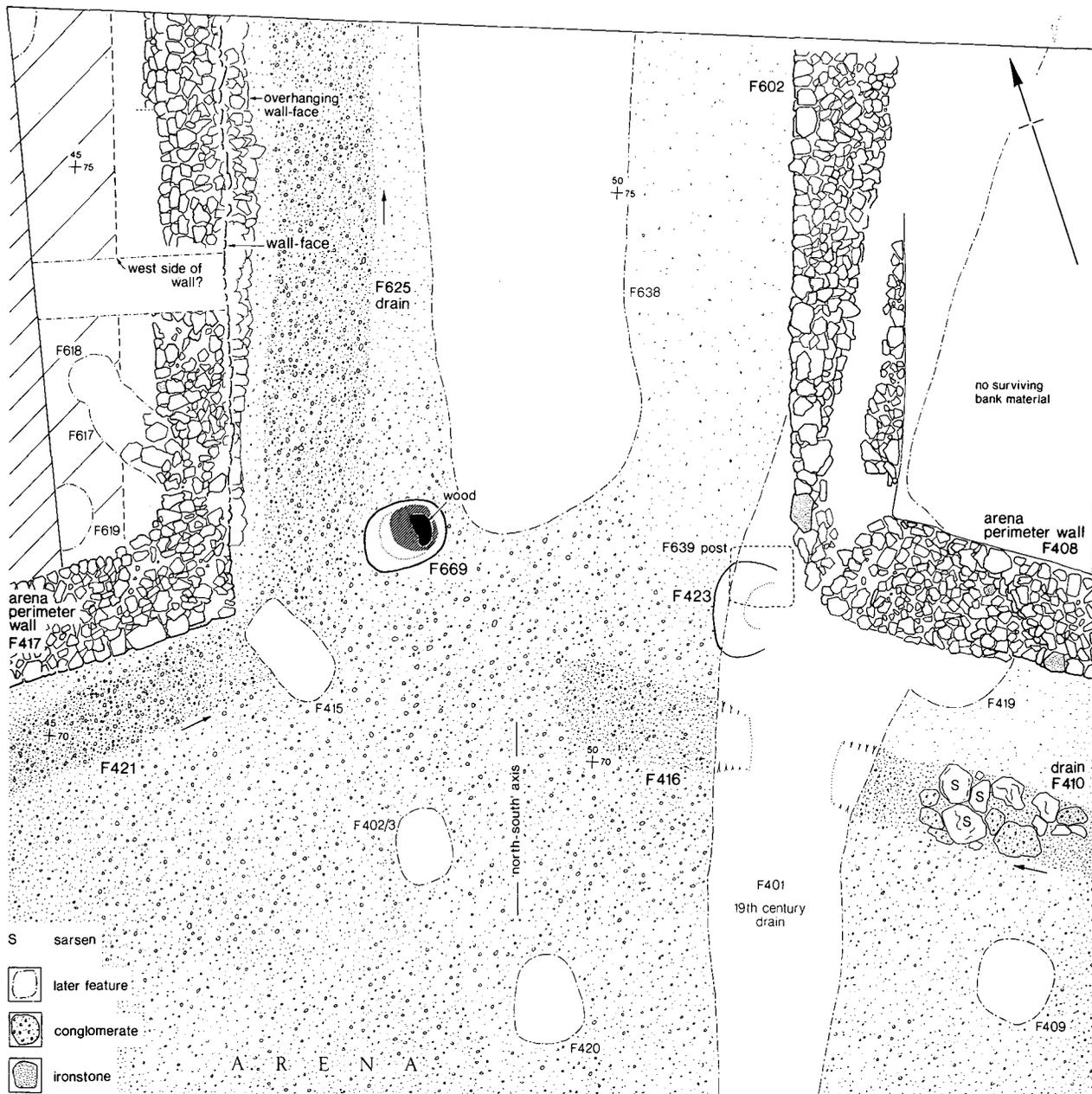
North Entrance (FIG. 31)

Since the North Entrance provided the natural exit for water draining from the arena, the surface was raised less. At the entrance into the arena the accumulation amounted to some 0.3 m, and this then shelved away so that in the north section there is no evidence of a raised surface before the collapse of the western wall (see below, p. 57). Owing to the extent of post-Roman disturbance the arrangement of the drains within the entrance is not entirely clear. On the west side F625 was *c.* 0.8 m wide and 0.6 m deep (FIG. 41), thus cutting into the underlying natural. It was filled with gravel and some larger flints. On the eastern side the north section shows a possible cut 0.3 wide and 0.2 m deep with a gravel fill, but this was not observed in plan and it may relate to post-Roman activity. The evidence for the late drain around the arena is also slight on the



WEST RECESS · Stone Phase II 0 1 2 3 4 5 metres

FIG. 30. Stone Phase 2: West Recess (Scale, 1:60).

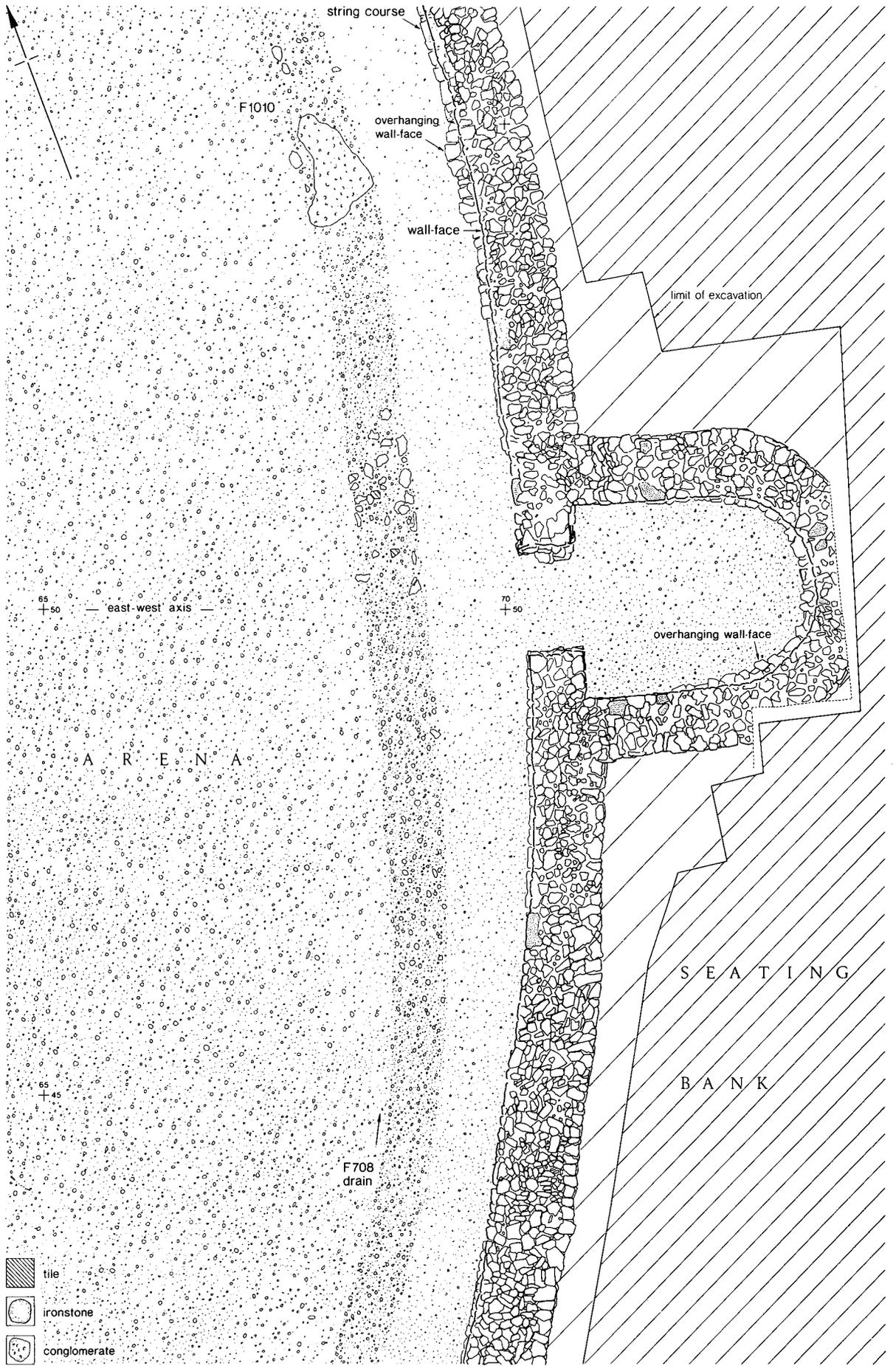


NORTH ENTRANCE · Stone Phase II 0 1 2 3 4 5 metres

FIG. 31. Stone Phase 2: North Entrance (Scale, 1:60).

western side of the entrance, but in section shows as a cut (F421), 0.6 m wide and 0.3–0.4 deep and filled with gravel (FIG. 41). On the eastern side the drain is clear in plan (F410), 0.6 m wide and 0.3 m deep, capped with large sarsen and conglomerate–gravel blocks. As elsewhere around the arena the drain was concealed by a gravel spread. Within the entrance-way, from the surface of this latest Roman surface, came a coin of 324–30, one of two fourth-century coins from the amphitheatre (p. 79, No. 23).

As has been observed above, the gate-post F669 may relate to these secondary modifications. On the eastern side traces of a secondary post-pit (F423) were recorded. It measured about 0.8 m in diameter and 0.5 m deep. Neither feature is securely dated.



EAST RECESS · Stone Phase II



FIG. 32. Stone Phase 2: East Recess (Scale, 1:60).

North-East Quadrant (FIG. 84)

Here the drain (F1010) was 0.5–0.7 m wide and 0.3–0.4 m deep, running about 1.0 m inside the arena wall. Some of the largest capping stones were recovered from this quadrant, including one gravel-conglomerate boulder measuring 1.1 by 0.8 m.

East Recess (FIG. 32)

The extent of post-Roman disturbance obscured any later Roman developments inside the recess, but the late drain (F1010, F708) continued across the entrance to the recess.

South-East Quadrant (FIG. 84; PL. XXXV B)

The drain (F708, 1103, 1111) continued at a distance of 0.8–1.0 m from the arena wall and was cut through deposits against the wall up to 0.6 m in depth. The drain itself was 0.6 m wide and 0.4–0.5 m deep. Fewer and smaller capping stones, mostly of flint, were recovered from this sector. The end of the drain at the South Entrance appears to have been cut by the medieval pit, F53.

THE ORIGIN AND DATE OF CONTEXT GROUP 3.4

The largest collection of Roman coins was obtained from the deposits against the arena wall up to and including the latest Roman surface (Context groups 3.4; 3.6; p. 77). The former group (3.4) includes a number of very worn second-century bronzes and ends with a slightly worn to worn As of Philip I (A.D. 244–9) (No. 13). The latest surface (3.6) sealing these deposits includes a fragment of a radiate (A.D. 260–73) (No. 20), the Constantinian issue of 324–30 (No. 23) and a possible Magnentius (350–3) (No. 24), as well as other very worn second-century bronzes.

The pottery too is a large collection, including Antonine sigillata and third-century BB1 wares (p. 106). In the western arena deposits a conspicuous element of the pottery is provided by sherds of Dressel 20 amphorae.

One fibula was recovered from the entrance-passage deposits (p. 127, FIG. 58). This is a 'P' shaped brooch, with a divided bow and dated to between the late second and mid third century.

All this material seems to have been introduced deliberately into the arena, rather than having resulted from slippage or erosion off the seating-banks. Two pieces of evidence suggest that it originated from quite close to the amphitheatre. Among the pottery there is a conspicuous element of pre-amphitheatre kiln wares of the type excavated from F216 (Context group 0). Secondly, as has been observed, there is a high proportion of Dressel 20 amphorae. The olive oil which these vessels carried would have been entirely appropriate in the context of participants preparing themselves for the games. Finally, given the evidence for a somewhat unkempt exterior to the amphitheatre (below, p. 151), we have no reason to suppose that this material would have been brought from further away than necessary. These considerations are important when evidence for the use of the amphitheatre is reviewed (p. 187).

This material is also helpful in resolving the date of the stone phase and its modifications. Given the inadequacy of the drainage provided for the arena when the wall was first built, and the speed with which flooding could cause damage to the facing of the wall, it is likely that the alterations took place soon after the arena wall was built. The character of the material from the deposits against the arena wall is consistent with a date towards the middle of the third century. On typological grounds it has been argued above that the character and composition of the arena wall itself point to an earlier date than that suggested for the town wall of *Calleva*, that is to a date after about 200, but before *c.* 260–80. Indeed it is likely that the modifications to the stone amphitheatre were complete by the 250s. The question, therefore, is how long before about 250

was the stone amphitheatre first constructed. This is difficult to gauge, but an historically-attested episode does suggest a context for the start of work. The emperor Severus and his family were in Britain between 208 and 211 to conduct campaigns on the northern frontier. During this period it is likely that the imperial entourage visited other parts of Britain apart from the north – an inspection of *legio II Augusta* at Caerleon is a strong possibility. If, as has been suggested, the Antonine Itinerary records the planned route of Caracalla to the east in 214–15 (van Berchem 1937, 172–5) and, if the British section records various journeys of the Severi (Black 1984), then Silchester, given the number of citations in the Itinerary, would have witnessed more comings and goings than many other of the southern towns of Britain. Irrespective of the Itinerary, Silchester is anyway well placed for such visits to have taken place and they may have provided the catalyst to promote renewed interest in the amphitheatre. The unusual cake-mould from Silchester, decorated with a scene which Boon has plausibly interpreted as representing members of the Severan family (1974, 150, fig. 40, 5), could well have been made to mark such an event. In fact, as far as the dating evidence is concerned, it is not completely implausible to suggest that it was an imperial visit which prompted the major refurbishment of the amphitheatre signalled by the stone phase rebuilding. If this work was completed by the end of the second decade of the third century it would leave no more than about thirty years before the final modifications of Stone Phase 2. This is not an unreasonable interval, allowing time for the kind of rubbish gathered up for dumping around the arena (Context group 3.4) to accumulate outside the amphitheatre. As a further speculation to support association of the initial stone phase with the Severi, it is worth noting that the secondary modifications took place very close to the time of the celebration of Rome's millenium in 248. Is this merely a coincidence?

The two coins of Constantine II and Magnentius may be regarded as evidence of intermittent use of the amphitheatre up to the mid fourth century.

7. COLLAPSE OF THE NORTH ENTRANCE, ROBBING OF ARENA WALL AND DESERTION OF AMPHITHEATRE (Phase 4)

North Entrance (FIG. 41; PL. XXXVI A)

It has already been observed that the surviving remains of the arena wall in the north-west quadrant lean inwards up to some 15 degrees from the vertical. In other places, where sufficient of the wall survives to measure it, the angle is between five and ten degrees; in certain sections the wall remains vertical. The west wall of the North Entrance reveals an angle of 30 degrees and considerable quantities of flint rubble were recorded over the western side of the entrance-passage. The reduction of the east passage-wall and post-Roman disturbance of the centre of the passage to facilitate drainage of the arena have obscured the full extent of this rubble. When did the wall begin to lean inwards and when did the collapse of the north passage-wall take place? The latter is likely to have occurred before the general robbing of the arena wall when the rubble at the North Entrance would have been covered over. Otherwise it would be reasonable to have expected fallen flints visible on the surface to have been collected at the same time as the stone from the arena wall. Given the lack of build-up between the surface of the drain F625 and the fallen rubble (FIG. 41) it is possible that the north wall collapsed in the Roman period, perhaps after 324–30. The coin of this date is not sealed by the rubble, but is unlikely to have been incorporated into the latest Roman surface if the entrance-passage was already blocked.

The Robbing of the Arena Wall

The arena-wall was generally robbed down to near the level of the latest Roman surface. The arena itself was largely clear of wall material below the post-medieval metalling (below, p. 67) which suggests that the walls still stood, or that whatever had fallen from them was visible enough to be removed when the robbing finally took place. The inward lean of the arena wall may have developed over a long period without leading to any major collapse before that general phase of robbing. Pressure from the bank or the weight of the *podium*, combined with weathering of the ironstone string-courses, and the earlier erosion at the foot of the wall may all be regarded as contributory factors. The weathering of the ironstone is very conspicuous in some sectors of the wall, such as in the south-east quadrant where it has been reduced to thin, rounded slabs. Yet in other places no such reduction is evident – the slabs appearing reasonably fresh – and so the variable quality of the rock used may have been responsible for the differential angle of repose of the arena wall. On balance therefore, except for the west wall of the North Entrance, there is no evidence to assume a general collapse of the arena wall in the Roman period.

The arena walls were generally robbed down to within one or two courses of the latest Roman surface. Occasionally, as in the south-west quadrant, the robbing was deeper and this seems to be in connection with the construction of buildings in the twelfth century. Indeed it is structures of this date which seem to provide a *terminus ante quem* for the general robbing. The recesses together fared better than the arena wall, probably because to have dismantled them completely would have brought down the bank above. The West Recess was more extensively robbed from above and this may, like the associated deeper robbing of the arena wall to the south, be related to the construction of the medieval hall-building in the arena. If we are right to assign to the twelfth century the palisade (F24, F230) which cuts into the bank face of the eastern wall of the South Entrance, this too would provide support for an earlier date for the robbing. The construction of the parish church of St. Mary from 1125 to 1150 (or a predecessor) may just provide a context for it. Nevertheless the robbing could have been much earlier, and other possibilities need to be examined. The construction of the town wall might be regarded as an obvious context for the robbing of the arena wall. However this work did follow very shortly after the secondary (Stone Phase 2) modifications of the arena and, although a direct link between the two has yet to be proved, the postern gate just to the north of the easternmost angle of the wall seems designed to

lead traffic to the amphitheatre. An insecure *terminus post quem* of the mid fourth century is provided by the two fourth-century coins which are unlikely to have been incorporated into the arena surface after it had ceased to be used as an amphitheatre. In effect there is a period of seven or eight centuries in which the robbing could have taken place. The balance of evidence is marginally in favour of a later rather than an earlier date within this period.

Post-Roman Silting

Thin lenses of post-Roman silts were identified around the western edge of the arena and on each side of the North Entrance (FIGS. 39–41). Except where they could be shown to have been cut by twelfth-century post-holes in the arena, the cut-off date for these silts is the establishment of the metallised surface in the arena in the post-medieval period, probably from the seventeenth century onwards.

There is only a handful of Roman material later than the modification of Stone Phase 2. In addition there are two sherds of Saxon pottery which are not closely datable and which could have been introduced in the context of the eleventh to twelfth-century occupation.

8. MEDIEVAL OCCUPATION (Phase 5)

(FIGS. 33–5; PLS. XXXVI B–XXXIX B)

On the basis of pottery finds, two concentrations of activity, probably related, can be assigned to the period between the eleventh and thirteenth centuries. On the western side of the arena there is evidence for at least one post-built structure while, in the passage-way of the South Entrance and in the arena close by, several pits were recorded. In addition it will be argued that a palisade which ran along the crest of the western bank, then inside the bank face of the Roman retaining-walls on each side of the Southern Entrance, terminating in post-pits at the junction of the arena- and passage-walls, is also of a similar date. Traces of a second structure in the south-west quadrant of the arena, perhaps related to a pair of large post-pits which cut into the lower courses of the Roman arena wall, are also interpreted as belonging to this period of medieval occupation.

There was also a little pottery of late medieval date (thirteenth to fifteenth century).

Arena: Medieval Hall (FIG. 34; PL. XXXVI B)

Excavation of the arena between 1981 and 1983 revealed evidence of a post-built, single-aisled Hall, about 11–12 m in length and about 8.5 m in width on the western side of the arena. It was located to take advantage of the rising floor close to the arena wall and West Recess. The main posts (F527, 512, 506, 505, 561) supporting the eastern wall were clearly recognised in plan as patches of darker silt with stone packing showing on the surface, cutting the post-Roman silt. On excavation the packing (where present) proved to be the most useful guide in locating the sides and bottoms of the post-holes, as the silty clay which otherwise filled the features was difficult to distinguish from the arena silts through which they were cut. The packing-stone, predominantly of flint and ironstone, was presumably derived from the arena wall.

The hall was of three or four irregular bays, with a nave measuring *c.* 6.4 m in width between post-centres and an aisle of 2.2 m between centres. A doorway may have lain between F506 and F512. The post-pits of the nave on the eastern side measured *c.* 0.8–1.0 m in diameter with a depth of up to 0.55 m. The spacing between post-centres varied between 2.4 and 3.6 m. There were no traces of the posts themselves. Running between the posts was a shallow slot (F544) with a more gravelly fill than that of the post-pits. The posts of the western side of the nave were not as easily recognised because they had been dug from higher up in the post-Roman silts and only the lower parts of the post-pits showed at the same level as the posts of the eastern wall. The main posts (F573, 577, 575) ranged between 0.7 and 1.1 m in diameter with recorded depths ranging up to 0.2 m. The fugitive traces of the southernmost major post-pit of the western wall are to be located in a generally disturbed area which produced some medieval pottery to the south-east of the West Recess. The spacing of the major posts on the western side is slightly greater than on the east: 3.2, 3.6 m, with subsidiary posts (F1322, 1324, 1382) occupying the gaps. It is possible that these and F1320 belong to a second structural phase. All the major post-pits except F512 and F577 produced pottery of mid to late twelfth-century date.

The aisle-posts on the eastern side were identified during the excavation of the test-pits in the arena in 1983. These post-pits measured *c.* 0.5–0.75 in diameter and 0.4–0.8 m deep and were distinguished by a dark staining of the sandy clay fill and the occasional presence of packing-stone. Some of these post-pits also produced mid to late twelfth-century pottery.

There were no internal features identified as certainly contemporary with the building. A rectangular setting of flints and Roman tile (F563) might have served as a hearth. A patch of burnt clay was found in the south part of the hall (F562).

Other discrete small posts or post-holes were excavated around the hall, and some of these contained medieval pottery. Others without dating evidence could be of medieval or post-medieval date. Particular attention is drawn to F578 which cut into the West Recess and F1380 which cut deeply into the footings of the arena wall south of the recess.

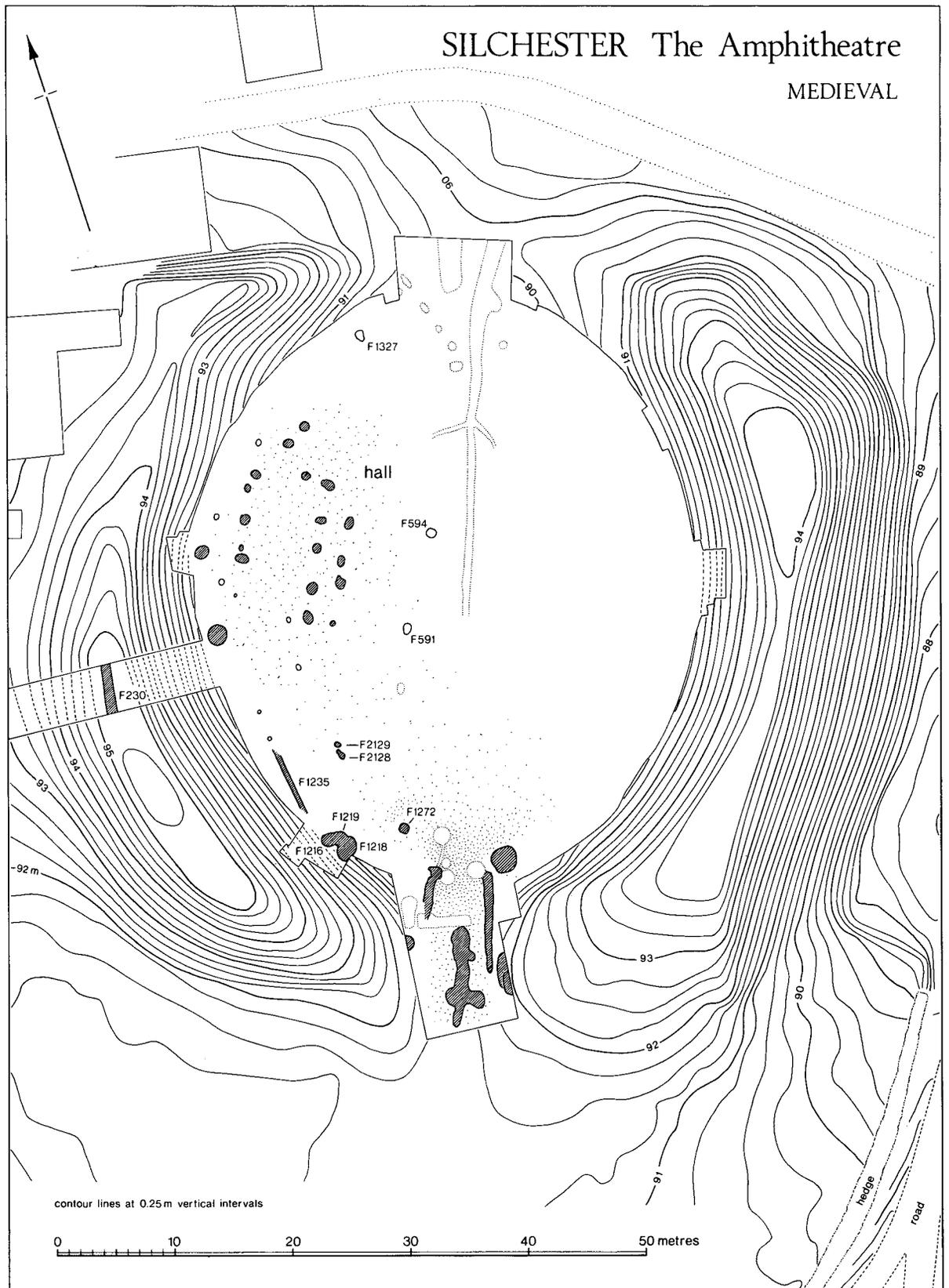


FIG. 33. General plan of medieval occupation (Scale, 1:500).

Arena: South-West Quadrant and South Entrance (other features) (FIG. 33; PLS. XXXVII A, XXXVIII A)

Two substantial post-pits were dug at the edge of the arena, cutting deeply into the lowest courses of the arena wall, below the level of the latest Roman surface (F1216/1219; F1218). Although each post-pit measured about 1.0 m in diameter and about 1.2 m deep, the evidence at the base suggested that the posts themselves measured *c.* 0.25 m in diameter. Running northwards from the posts and thus tangentially to the arena wall was a row of unmortared flints, 3.4 m long and 0.4 m wide (F1235). Whether the post-pits and the flint alignment are related is unclear. It is possible that the former were part of a separate structure erected on the seating-bank (cf F53, below). Excavation of the arena surface to the east of F1235 revealed traces of two shallow post-holes (F2128, 2129), respectively 0.4 by 0.8 and 0.2 m deep and 0.2 by 0.3 m and 0.1 m deep. Taken together these features may have formed part of a small rectangular building, which, like the hall described above, took advantage of the slightly higher ground of the western part of the arena. All the features are tentatively interpreted as medieval and contemporary with the hall, although no dating evidence was recovered from them. Stratigraphically they are later than the late Roman surface of the arena.

Two other pits remain to be described. The first cut the late Roman arena surface to the west of the South Entrance (F1272) and was about 0.9–1.0 m in diameter and *c.* 1.0 m deep. Its fill was of gravel and sandy clay with some larger flints, and fragments of Roman tile and residual Roman pottery. To the east of the South Entrance was a large pit which cut to the bottom of the foundation of the arena wall (F53) and measured up to 2.0 m in diameter and was about 1.5 m deep (phase 5.3). It contained sherds of mid to late twelfth-century pottery. Like the post-pits cutting the arena wall in the south-west quadrant, and possibly F1272, this could relate to a structure established on the horn of the eastern seating-bank.

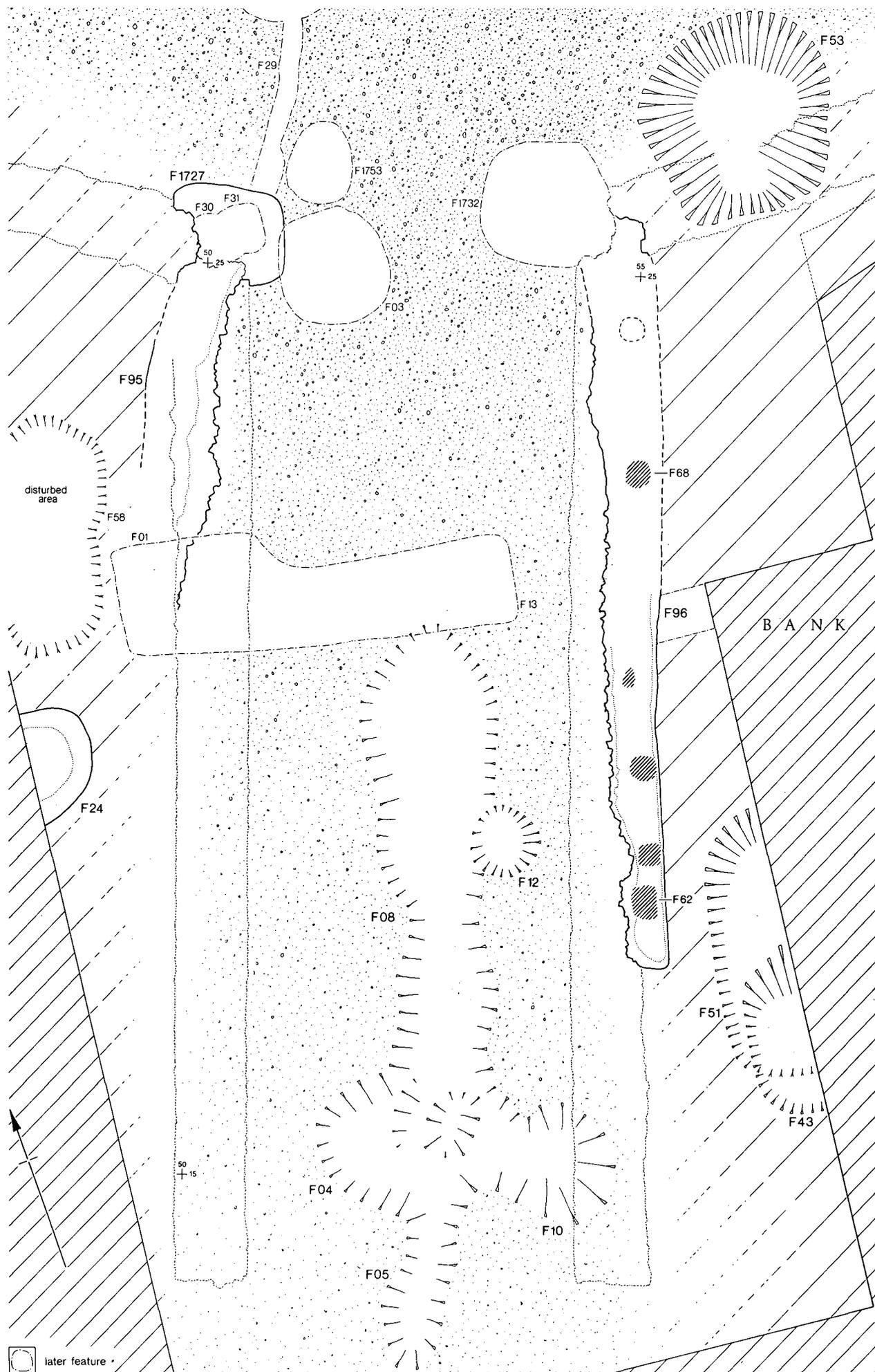
South Entrance (FIGS. 35, 38; PLS. XXXVII B, XXXVIII B–XXXIX B)

(a) Entrance-Passage

A series of intercutting shallow pits and a gully (F4, 5, 8, 10, 12) containing medieval pottery, the latest of which is of mid to late twelfth-century date, were found to cut the latest Roman surface in the southern half of the entrance-passage. Overall these features measured 8.2 m in length and up to 3.4 m in width, with depths of 0.15–0.2 m. Together they were filled with dark soil, much charcoal, burnt daub and patches of yellow clay and a considerable quantity of medieval pottery. There were also pieces of greensand and limestone weighing up to 1.55 kg each and smaller fragments of ironstone and greensand weighing up to 0.05 kg each. These features are provisionally interpreted as forming a hearth or possible oven.

(b) Western Seating Bank

Attention has already been drawn (p. 17) to the cut (F24) in the middle of the terminal of the western seating-bank. It measured *c.* 1.1 m wide and *c.* 0.5 m deep and was traced about 0.5 m into the trench. It contained no datable finds but was cut from just below the present surviving surface of the bank. Its location is close to a generally disturbed area on the bank which produced both medieval and post-medieval pottery (F58). It is also almost opposite the beginning of a poorly-defined cut (F95) into the west face of the western Roman passage-wall, which itself terminated at the junction with the arena wall in a post-pit cut through the wall (F1727 (F30/31)). There is no evidence for the date when these cuts were made, and the possibility that F24 is Roman has already been discussed. The post-medieval disturbance of the bank may be related to a clearly-defined cut into the western passage-wall (F01), which in turn may be related to a cut across the entrance-passage (F13), which also produced post-medieval pottery. These features are seventeenth-century or later (p. 67), so pointing to an earlier date for the cut along the inner face of the passage-wall, which itself was sealed by layers containing post-medieval pottery. A comparable and clearer treatment of the eastern passage-wall will soon be described below.



SOUTH ENTRANCE · Medieval

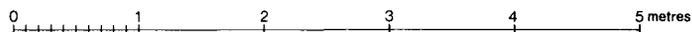


FIG. 35. Medieval occupation in South Entrance (Scale, 1:60).

(c) Eastern Seating Bank (FIG. 35; PLS. XXXVIII B, XXXIX A)

Excavation in 1980 behind the eastern (Roman) passage-wall revealed a north-south trench (F96), c. 0.5 m wide, which had robbed out the eastern face of the Roman wall from a point c. 4 m from its southern end (phase 5.6). Within the fill there was evidence for individual posts (F62, 68) cutting into the fabric of the wall (FIG. 35; PLS. XXXVIII B, XXXIX A). The course of this trench ran obliquely across the line of the passage-wall so as to occupy almost its full width at the junction with the arena wall. There too, as has been mentioned earlier (p. 62), there is evidence for a post-pit (or pits) cutting the wall foundations. The fill of this pit (F1732) produced a sherd of Surrey green-glazed ware (sixteenth to eighteenth centuries). This can be regarded as the date of its latest re-cut. Although the cut (F96) into the east face of the passage wall only contained residual early Roman pottery (p. 107), it was sealed by layers which contained late medieval and post-medieval pottery.

The small area of the bank that was excavated here showed general evidence of post-Roman disturbance, caused by a substantial cut which shows in the east section (FIG. 38, F51, F43). This proved difficult to excavate in plan except at the southern end, where it showed as a sub-rectangular pit measuring about 1.2 m north-south and extending about 0.7 m into the trench; this appeared to be cut into the upper fill of the more extensive cut. The bottom of F51 also cut into the gravel subsoil. In the fill of this complicated pit was an eleventh- to twelfth-century sherd. This feature, possibly a post-pit, may be related to F53 and the general disturbance of the eastern seating-bank, which is reflected in the flatter contours of its southern terminal.

North Entrance

No features of certain medieval date were identified at the North Entrance. However, neither F669 nor F423, discussed above (p. 39), are securely dated and they could parallel the post-Roman refurbishments at the South Entrance. The disturbed area, F638 (FIG. 41), may also belong to this period.

DISCUSSION

Each side of the southern entrance-passage has produced evidence of a timber revetment terminating in post-holes cutting the Roman wall-foundation where they turn into the arena. On the west there is a possible link with the cut F24 which, in turn, may be related to the cut (F230) identified on the crest of and in the middle of the seating bank, as described above (p. 17). There is no dating evidence for F230 except that it is later than the secondary heightening of the seating bank. Although within the features at the South Entrance the only dating evidence (one sherd) gives a post-medieval date for the latest fill of the eastern post-pit (F1732), the interpretation offered here is that the revetments and gate-posts in the angle of arena and passage-walls were originally constructed by the mid twelfth century, but that some kind of gate also existed in the early post-medieval period. Stratigraphically the revetment on the eastern side was sealed by layers containing late medieval and post-medieval pottery, while that on the western side appears to have been cut by a post-medieval trench while also being sealed by layers containing post-medieval pottery. The totality of the evidence of the post-pits on the site of the southern Roman gateway into the arena, combined with that for revetments either side of the entrance-passage, points to a comprehensive refurbishment of the entrance-passage. The date of this will be discussed below.

In addition, attention should be drawn to the large post-pits which cut the arena wall on the western side (F1216/1219; F1218, etc.) and F51 and F53 on the eastern side (FIGS. 33, 35). Although these could all have been dug as rubbish-pits, the lack of material from them and the position in which they were placed combines to argue for them as post-pits. As has been suggested for the south terminal of the eastern bank (p. 62), the post-pits on the western side might have served to support a platform resting on the upper surface of the bank behind F230.

Although the revetments and palisade-trench (F24, 230, 95, 96) cannot be closely dated, they are regarded as contemporary with the Hall and the other undated structure in the arena. The best reason for building in the amphitheatre in the first place may have been to take advantage of its potential as an easily defensible earthwork. In order to make the earthwork more secure, improvements of the kind described above would have been necessary. Further work on the eastern bank and at the North Entrance is necessary to substantiate this argument fully.

Almost ninety per cent of all the medieval pottery dates between the eleventh and early thirteenth century. The stratified material from the Hall and from the pits at the South Entrance belongs to the second half of the twelfth century. This would suggest that occupation had begun by the mid twelfth century. With the exception of two sherds of Saxon pottery of (?) tenth-century date, the date-ranges of the pottery fabrics and types recovered would be consistent with occupation beginning towards the middle of the twelfth century.

A possible context for a defended ringwork of this date is discussed below (p. 193).

Later Medieval Activity (FIG. 36)

The western passage-wall of the South Entrance is cut obliquely by a drainage-ditch (F9) which contained pottery including thirteenth- to fourteenth-century sherds (Context group 5.4), in its lower fill. The upper fill contained post-medieval pottery of seventeenth-century date. The gully begins outside the excavated area to the south and terminates short of the post-medieval cut (F13) across the entrance passage. It is on the same alignment as a more modern field-drain (F588/401/601) which was laid from the centre of the arena to the north entrance (PL. XXIII A).

A small number of twelfth- to fifteenth-century sherds were recovered from general layers on the terminals of the banks and over the passage at the South Entrance, but mostly in association with small quantities of post-medieval pottery, clay pipes and glass of sixteenth- to eighteenth-century date (Context group 5.7).

At the North Entrance there is evidence of a channel (F604) in the north section (FIG. 41) which cuts layers which contained pottery ranging in date to the fifteenth century. This drain, which was not traced in plan within the excavated area, was probably maintained until the nineteenth century when a new field-drain (F601, etc.) was inserted into a cut through the eastern wall of the North Entrance and carried to the centre of the arena.

Thus, apart from the ditch (F9) at the South Entrance, no other features could be attributed with certainty to the period between the thirteenth and sixteenth centuries. The small quantity of pottery datable to this period is likely to have been introduced from elsewhere.

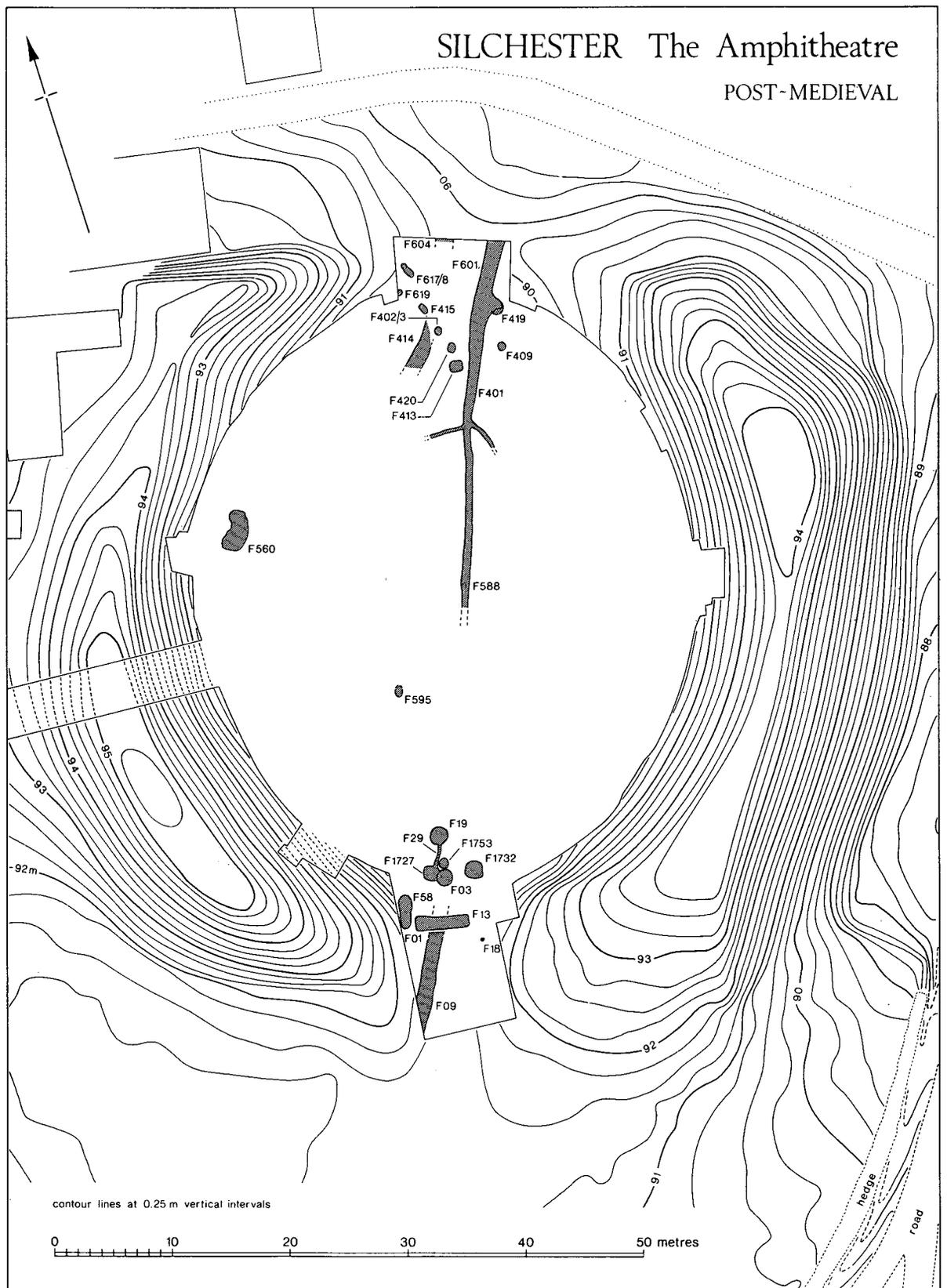


FIG. 36. General plan of post-medieval occupation (Scale, 1:500).

9. POST-MEDIEVAL ACTIVITY (Phase 6)

South Entrance (FIG. 36; PL. XXXIX B)

A post-medieval date can be assigned to a number of discrete features at the South Entrance.

First there is the evidence of the sixteenth to early eighteenth-century sherd from the bottom of the post-pit F1732 at the angle of the eastern passage-wall and the arena. It has been argued (p. 64) that the original placement of posts at this point and the equivalent point on the western side took place in the eleventh-twelfth century, but that at least one gate-post setting was re-used later. The latest date for the abandonment of the gate is given by the material from F3 which lies directly in its way.

The latter is a circular stone-lined pit (PL. XXXIX B) measuring 1.26 m externally and 0.72 m internally and filled with black soil and a group of late seventeenth- to early eighteenth-century pottery, glass and clay pipes dated 1690–1720 (Context group 6.2). The material used to line the pit was mainly flint and some ironstone, presumably derived from the Roman arena wall, as well as some Roman tile and post-medieval brick. In plan it is adjacent to F1753 which was not recognised and excavated until 1985 and which does not appear to relate to any phase of the Roman amphitheatre (above, p. 21). It is likely that these two features are indeed related and of post-medieval date. The stone-lined pit is interpreted as a cess-pit which was filled around 1700–1720.

A sub-rectangular pit (F13) was dug across the entrance-passage (Context group 6.3). This extended 3.0–3.2 m eastwards from the remains of the western wall and was 0.9–1.0 m wide and about 0.5 m deep. It contained a fill of humic soil, redeposited yellow clay, residual medieval pottery and some fragments of clay-pipe stems. Adjacent to it was a cut (F1) which penetrated the upper surviving courses of the western wall, where it measured *c.* 1.3 m wide. While the base of the feature was clearly defined where it cut the edge of the seating-bank, on the eastern side no clear edge was defined in the general fill of the entrance-passage; but it seemed to have been cut by F13. Like the latter its fill consisted of black soil, residual medieval pottery and some fragments of clay-pipe stems. At a higher level this pit may account for a wider disturbance of the western seating-bank (F58) (see above, p. 62).

At the northern end of the trench and actually within the arena was an irregularly-shaped pit (F19) linked with a shallow slot (F29). Both were filled with dark soil and F19 also contained large flints. The pit measured *c.* 1.8 m in diameter, was dug to a depth of about 0.6 m, and yielded sherds of late seventeenth-century pottery.

Except for the postulated re-use of one or both post-pits at the junction of the arena- and passage-walls before the late seventeenth century, all the post-medieval features may be interpreted as cess- or rubbish-pits dating to the late seventeenth or early eighteenth century. This is consistent with the bulk of the post-medieval pottery in the upper layers at the South Entrance, which is of seventeenth- and eighteenth-century date, with only a small amount of nineteenth- and twentieth-century material.

The drainage gully (F9), which is probably of late medieval date in origin, continued to be used into the post-medieval period.

The cluster of pits at the South Entrance with their distinctive fills of black soil may be connected with a cottage occupying the plot between the amphitheatre and Wall Lane. Apart from a little nineteenth- and twentieth-century pottery, nothing else need be later than the early eighteenth century. It is noticeable that Stukeley's map of 1722 shows no sign of a building here (1776, pl. LXI).

Arena (FIG. 36)

The surface of the arena was provided with a gravelled surface which lapped over the post-Roman bank silts at the edge. This sealed silts and post-holes which contained twelfth- to fourteenth- and, possibly, fifteenth-century pottery. It was probably established in the sixteenth or seventeenth century. It was cut by two late nineteenth- or twentieth-century rubbish-pits (F560, 595), as well as by the field-drain to the North Entrance (F588).

North Entrance (FIG. 36)

Apart from a number of post-holes around the Northern Entrance, the most important feature was the drain (F401, F601) which cut obliquely across the eastern Roman passage-wall, largely destroying what previously remained of its foundations (PL. XXX A). At the bottom of the cut was a field-drain of later nineteenth- or twentieth-century date. The fill produced considerable quantities of nineteenth- and twentieth-century English pottery and glass. This drain extended into the middle of the arena (F588). Pottery, coins and glass from redeposited bank-material filling the hollow of the Roman entrance-passage was largely of eighteenth- and nineteenth-century date. However the reduction of the North Entrance is earlier than 1724 when Stukeley saw the amphitheatre and remarked 'and they have levell'd some part of the terras for their garden' (1776, 178).

Much of the evidence for the post-medieval period suggests that the amphitheatre served as a farm-yard related to 'The Mount'. Engravings and photographs of the amphitheatre from 1724 (PL. I A) onwards show the amphitheatre much as it is today – seating-banks overgrown with trees and an arena devoid of any structures.

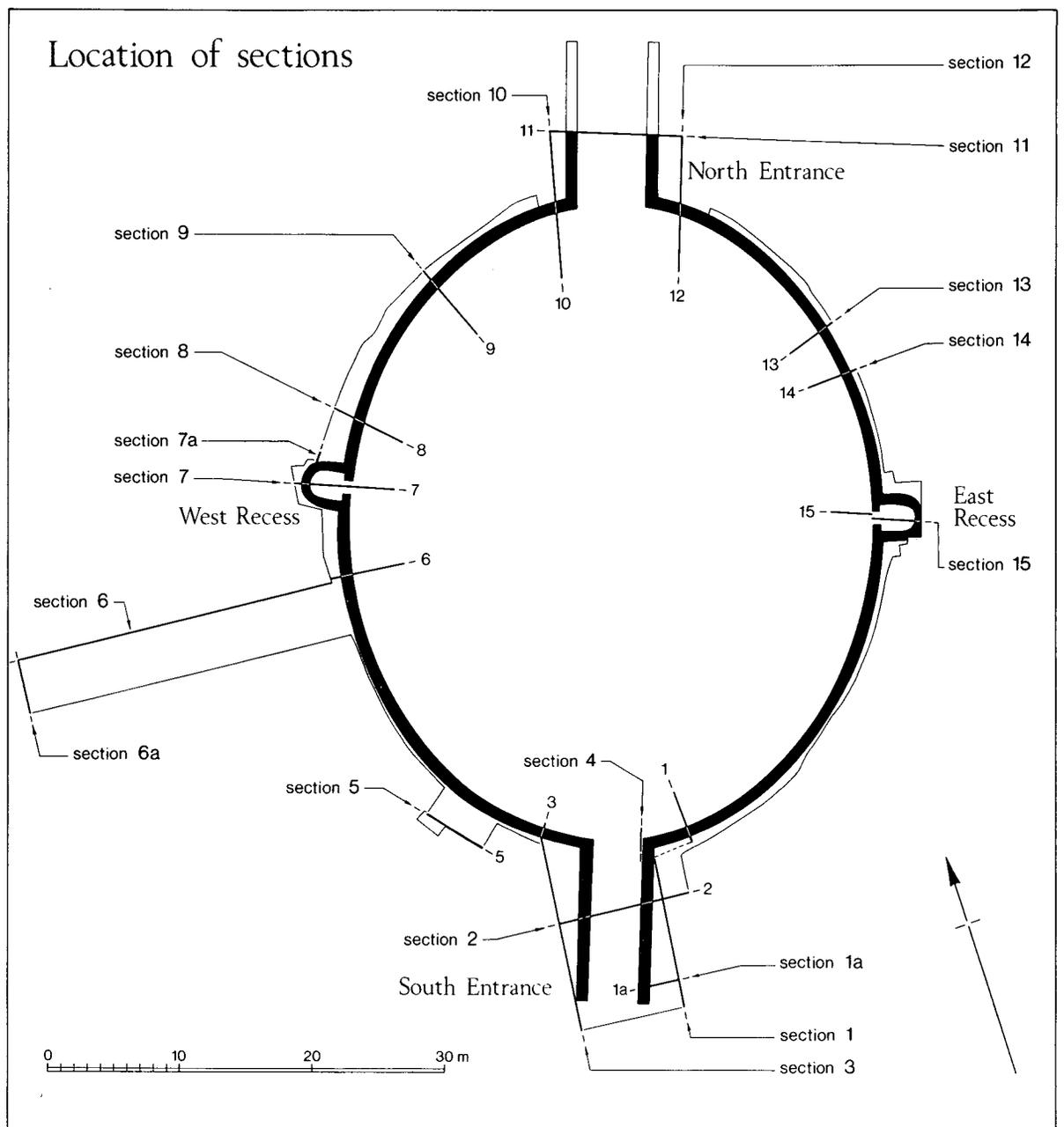


FIG. 37. Location of Sections.

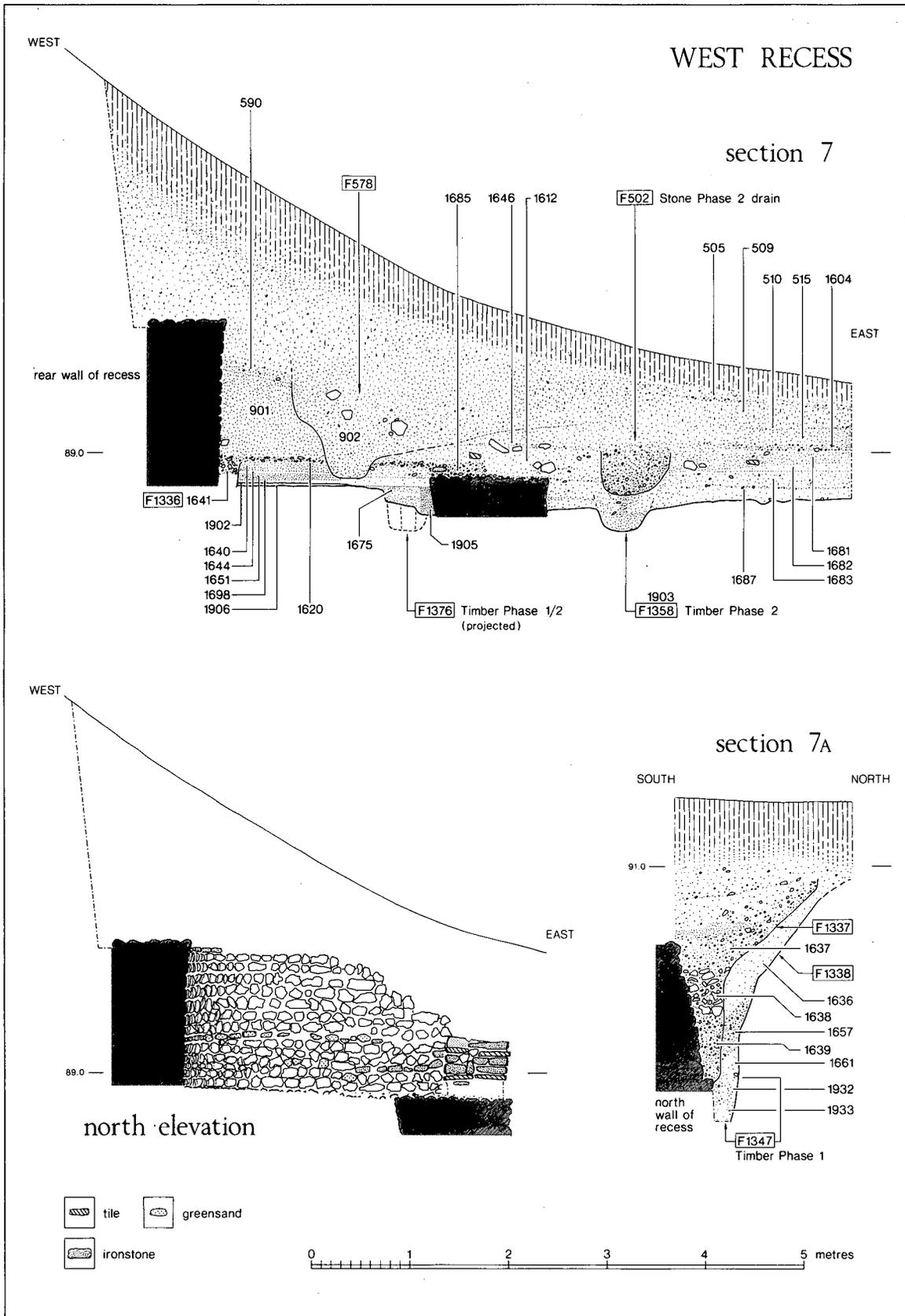


FIG. 39. Sections – West Recess (Scale, 1:60).

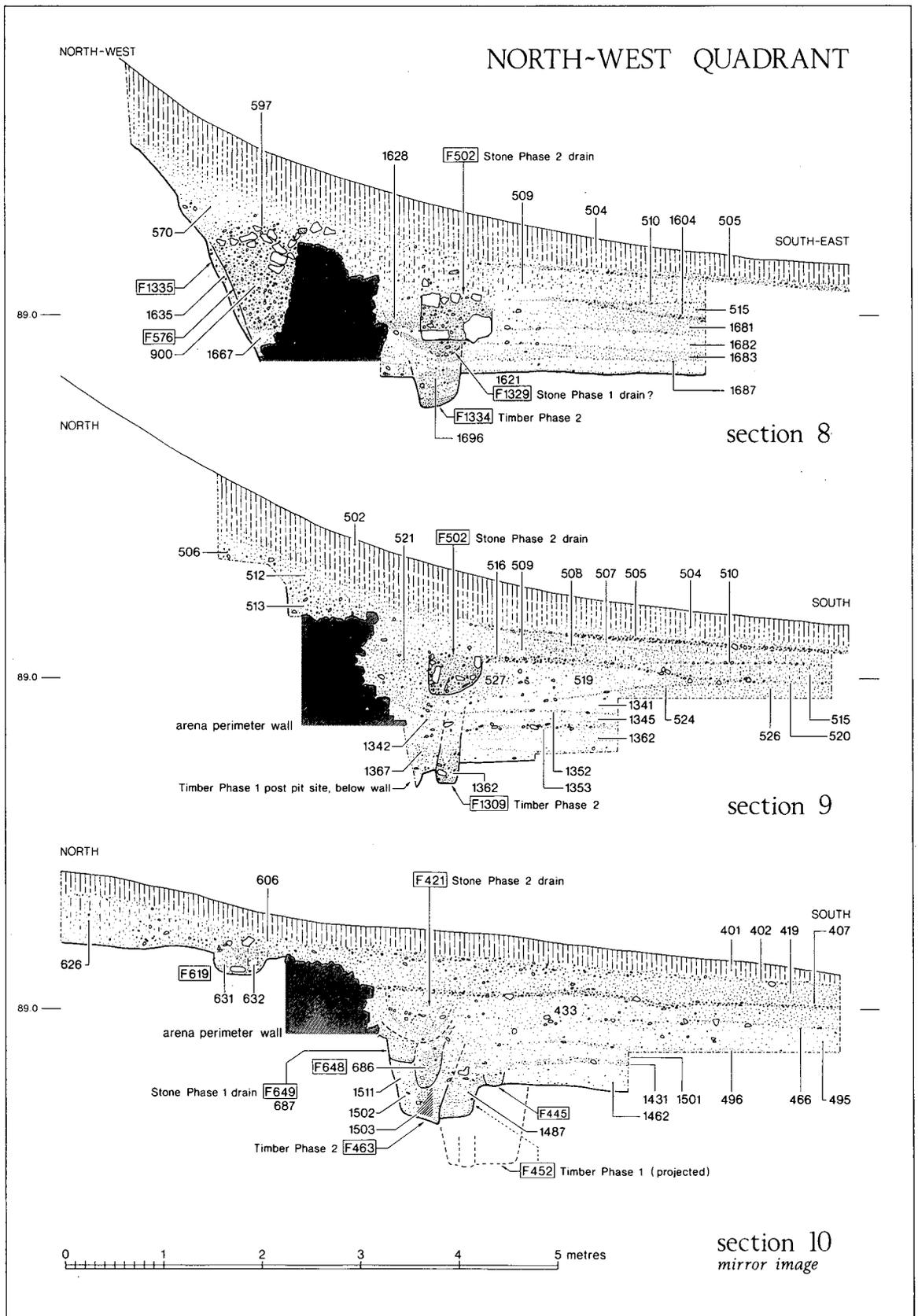


FIG. 40. Sections – north-west quadrant (Scale, 1:60).

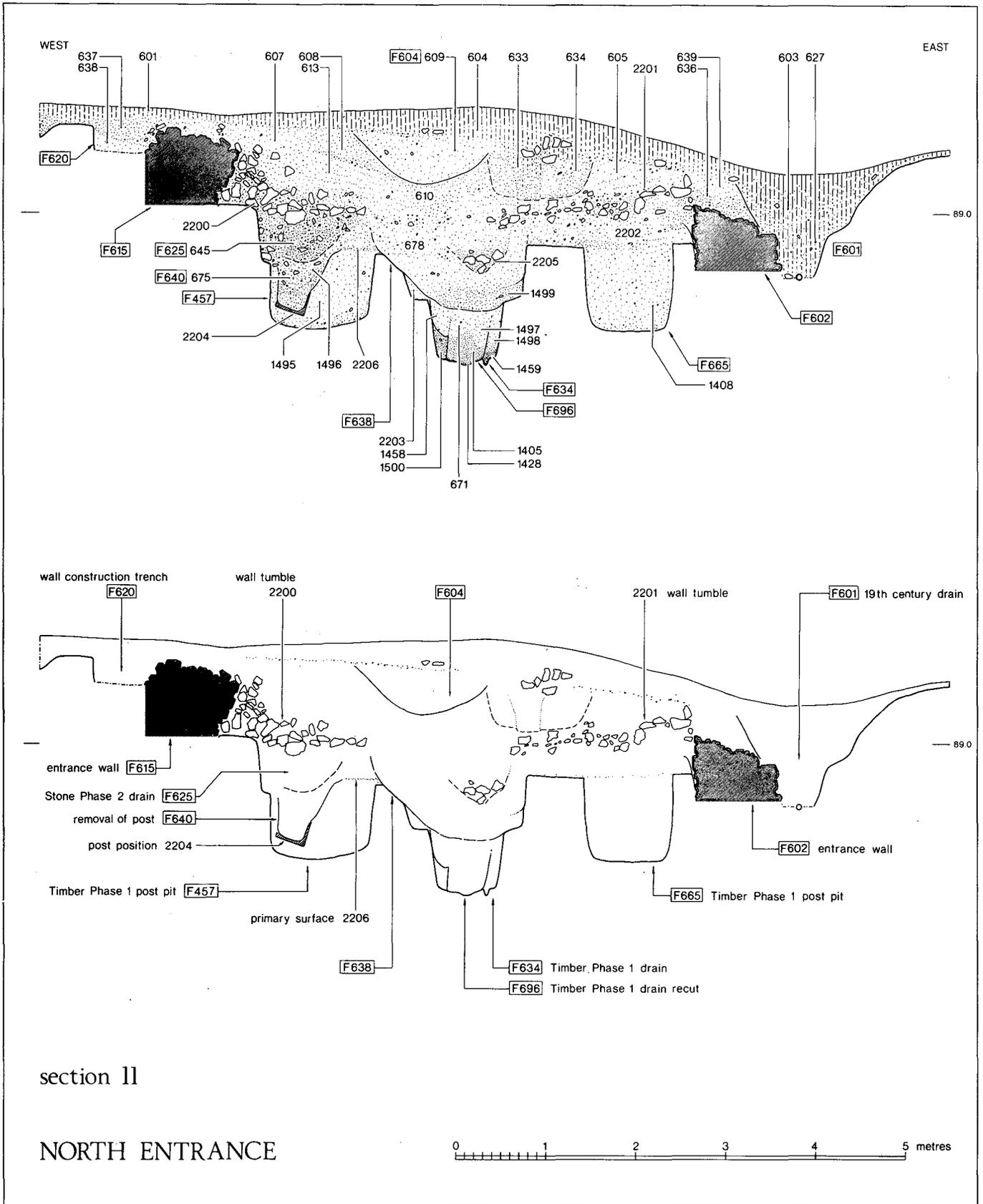


FIG. 41. Sections – North Entrance (Scale, 1:60).

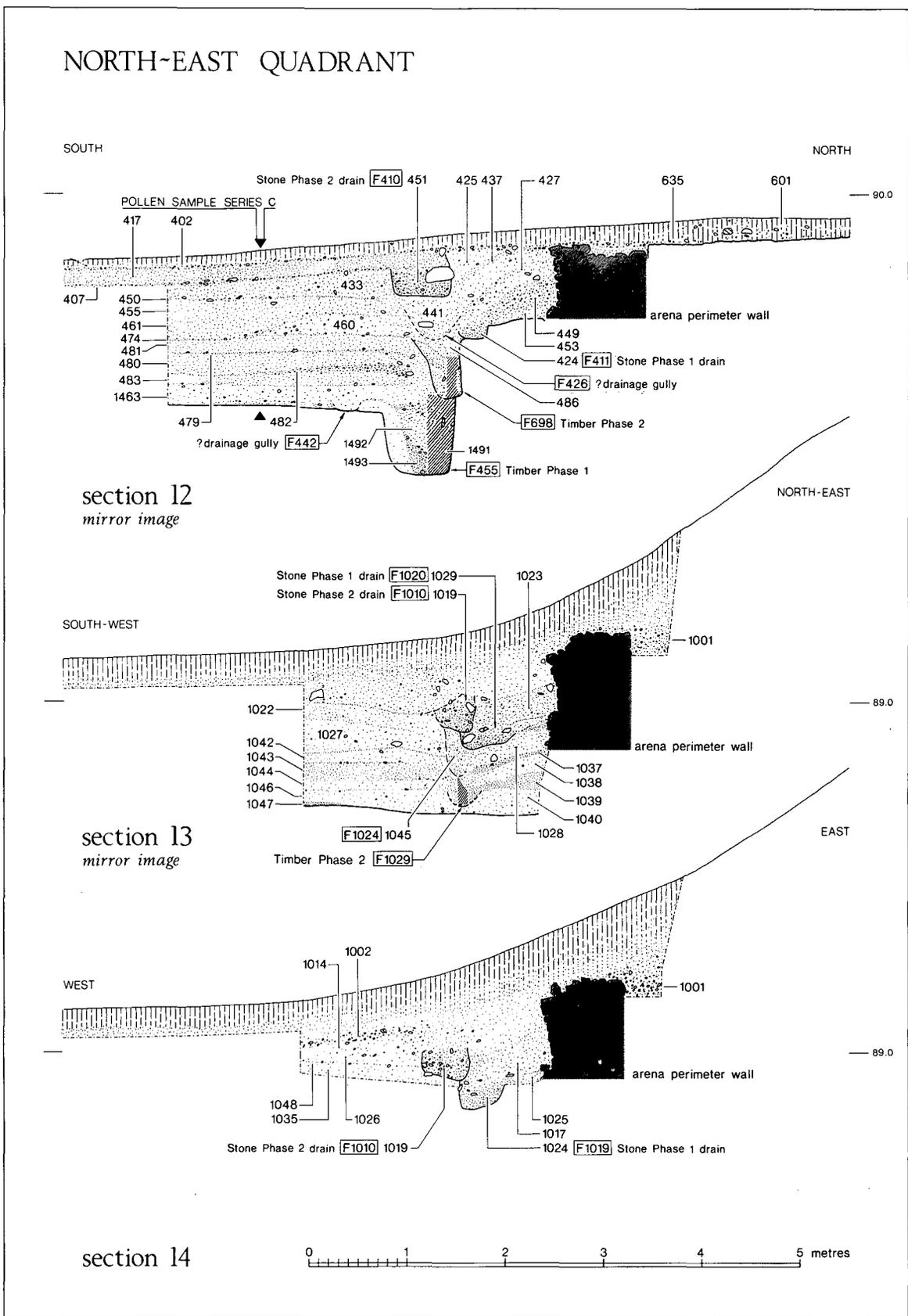


FIG. 42. Sections – north-east quadrant (Scale, 1:60).

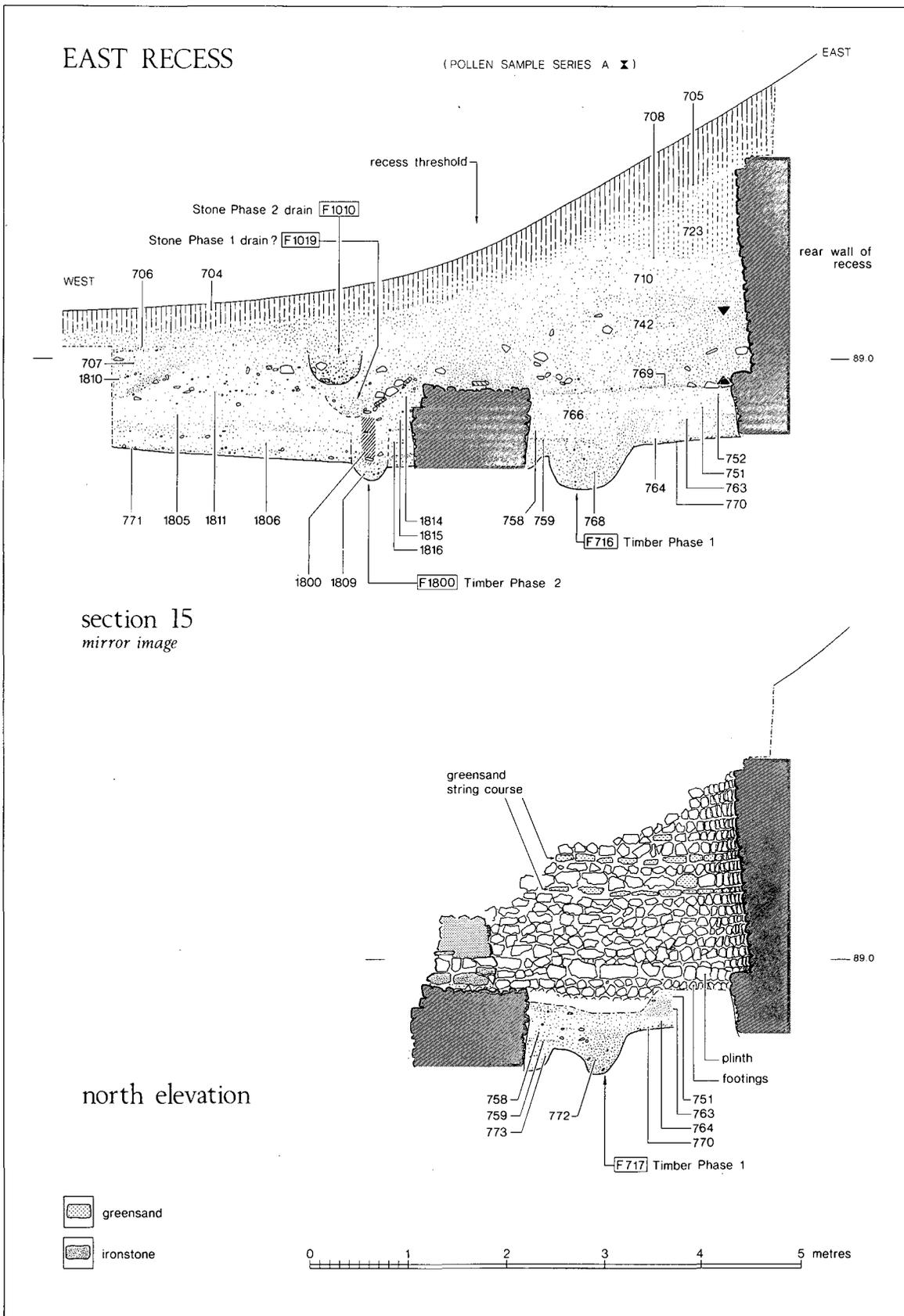


FIG. 43. Sections – East Recess (Scale, 1:60).

10. SUMMARY OF CONTEXT GROUPS

The following list summarises the phased groups of contexts which produced finds.

- CONTEXT GROUP 0: CONTEXTS PRE-DATING CONSTRUCTION OF AMPHITHEATRE.
- CONTEXT GROUP 1: TIMBER PHASE 1 AMPHITHEATRE.
- Context Group 1.1: The seating-bank (primary)
- Context Group 1.2: The seating-bank (secondary heightening)
- Context Group 1.3: Arena Revetment and Entrance-Passage: post-pit fills
- Context Group 1.4: Arena: silts and surfaces associated with Timber Phase 1 amphitheatre
- Context Group 1.5: North Entrance: threshold F646
- Context Group 1.6: North Entrance: drain F634, F696
- CONTEXT GROUP 2: TIMBER PHASE 2 AMPHITHEATRE
- Context Group 2.1: Arena Revetment: post-hole fills
- Context Group 2.2: Arena Revetment: general fill of trench
- Context Group 2.3: Arena: silts and surfaces associated with Timber Phase 2 amphitheatre
- CONTEXT GROUP 3: STONE PHASE AMPHITHEATRE
- Context Group 3.1: Arena wall fabric and construction
- Context Group 3.2: Entrance gate-posts
- Context Group 3.3: Arena: ring-drain contemporary with wall construction
- Context Group 3.4: Arena: dumps and silts against arena wall
- Context Group 3.5: Arena: the late ring-drain
- Context Group 3.6: Arena: latest Roman surfaces
- CONTEXT GROUP 4: ARENA: POST-ROMAN SILTING
- CONTEXT GROUP 5: MEDIEVAL OCCUPATION
- Context Group 5.1: South Entrance: features within the entrance-passages F4, 5, 8, 10, 11, 12
- Context Group 5.2: South Entrance: west seating-bank, medieval (?post-medieval) disturbance
- Context Group 5.3: South Entrance: pit F53
- Context Group 5.4: South Entrance: drainage-gully F9
- Context Group 5.5: South Entrance: general layers
- Context Group 5.6: South Entrance: revetment of entrance-passage
- Context Group 5.7: South Entrance: late medieval general layers
- Context Group 5.8: South-west quadrant: post-pits F1216, 1218 and F1272
- Context Group 5.9: South-west quadrant: arena surface
- Context Group 5.10: Surface of Western seating-bank and general layers outside
- Context Group 5.11: Arena (west): general layers
- Context Group 5.12: Aisled hall: post-pits
- Context Group 5.13: North-west quadrant: late medieval seating-bank slip
- Context Group 5.14: North Entrance: late medieval dumps in entrance-passage
- Context Group 5.15: North Entrance: late medieval drain F604
- Context Group 5.16: North Entrance: post-hole F415
- Context Group 5.17: South-east quadrant: post-Roman post-hole F1109
- CONTEXT GROUP 6: POST-MEDIEVAL ACTIVITY
- Context Group 6.1: South Entrance: general layers
- Context Group 6.2: South Entrance: pit F3
- Context Group 6.3: South Entrance: pit F13
- Context Group 6.4: South Entrance: pit F19
- Context Group 6.5: South Entrance: post-hole F18

- Context Group 6.6: South Entrance: gate-post F1727 (F37)
- Context Group 6.7: South Entrance: gate-post F1732
- Context Group 6.8: South Entrance: seating-bank: F58
- Context Group 6.9: Arena: layers above metalled surface 6.10
- Context Group 6.10: Arena: metalled surface
- Context Group 6.11: Arena: pit F560
- Context Group 6.12: Arena: silts sealed by surface 6.10
- Context Group 6.13: North Entrance and Arena: drain F601, 401, 588
- Context Group 6.14: North Entrance: redeposited bank in entrance-passage
- Context Group 6.15: North Entrance: miscellaneous post-holes



PART II: THE FINDS

1. THE COINS by George C. Boon

The twenty-four Roman coins are very heavily corroded and some are fragmentary, so that the schedule is bereft of detail. The waterlogged arena provenance is no doubt responsible for their bad condition. Most of the stratified coins are associated with accumulations – silts or make-up – later than the erection of the flint wall of the arena, and comprise worn second-century *aes*. This was issued in very large amounts and bore the brunt of circulation down to the 260's; little Severan *aes* found its way into Gaul or Britain by comparison, and when third-century *aes* occurs it is likely to be of the period of Alexander, Gordian, or Philip. Thus the *as* of Philip I (No. 13) offers a good clue to the general date of the deposition of the worn second-century material; though it is a cast counterfeit, it is from an original by no means worn. The casting of *aes* is attested as late as the 270's at Whitchurch (Somerset) (Boon 1965, 27), though the present coin may not be quite as late – say 250's on grounds of the wear of the original.

The legionary *denarius* of Antony (No. 1) is also much worn, and is of a type well-attested in circulation, because of its inferior alloy, into Severan times as is well-instanced by the 1894 hoard of 258 *denarii* from Silchester itself (Boon 1960, 241–5). This coin, therefore, has nothing to tell of the first (timber) period of the amphitheatre, which is devoid of any certain numismatic representative; No. 18 may as well come from the second (timber) period, and in any case it is not formally identifiable, though quite possibly of Vespasian. From this second period comes the early *as* of Trajan (No. 3), its surface lost through corrosion, but not, seemingly, a very worn piece.

The later third- and fourth-century representation (Nos. 19–22, 23–24) is extremely meagre, but the condition of such coins as survive suggests that others may have disappeared completely. Even so, frequentation of the place must surely have been both intermittent and slight, on the face of it ending *c.* 350 (No. 24). Nevertheless, when every allowance has been made for hostile soil-conditions, the balancing paucity of material from the long pre-stone period of the monument is at least curious; for frequentation then, presumably, would not have been slight. Indeed the coins listed seem in general to be a meagre total from excavations extensive enough to have traced the entire circuit of the arena and to have opened both South and North Entrances in detail. But neither arena nor processional entrances would have seen much public traffic, the route of which – with its scatter of coins – would have presumably have lain around the outside, and on to the banks – areas only lightly explored.

SCHEDULE

1. Antony, legionary *denarius*, LEG.XIX, 32–31 B.C.; *RRC*, No. 544/35. Much worn. Residual (S.F. 23, layer 8).
2. Trajan, *sestertius*, SPQR OPTIMO PRINCIPI, *Spes* standing left, A.D. 103–11. *RIC*, No. 519. Worn; small fragment broken off

- owing to the decayed state of the piece. Context group 3.4 (S.F. 697, layer 737).
3. Trajan, *as*. *Rev.*: Winged Victory advancing left holding shield, A.D. 100. *RIC*, No. 417; cf. *BMC* iii, pl. 26,6. Surface now rough, scaled, but coin not much worn. Context group 2.3 (S.F. 760, layer 844).
 4. Trajan or Hadrian, *sestertius*. Similar surface, but coin much worn. Context group 3.4 (S.F. 826, layer 1014).
 5. Hadrian, *sestertius*. The outline of the 'large head' portrait is visible on this very much-worn piece. Context group 3.4/3.6 (S.F. 767, layer 436).
 6. Hadrian (?), *as*, with his(?) head left. Rough, much worn. Perhaps a struck counterfeit; a deep ancient dent on the obverse shows on the reverse. Context group 3.4 (S.F. 810, layer 433).
 7. Hadrian (?), *as*. What remains visible on this rough, worn surface is consistent with the 'small head' portrait to right. Context group 3.6 (S.F. 834, layer 948).
 8. Faustina I, *sestertius*, *Vesta* standing left, as in *BMC* iv, Antoninus Pius, No. 1522 type. Much worn, with many small cuts and scratches such as might have been the result of contact with rough gravel. Context group 3.6 (S.F. 24, F1010).
 9. Aurelius, *dupondius* with the young head used in the time of Antoninus Pius; *rev.* standing figure. Much worn. Residual (S.F. 46, layer 18).
 10. Aurelius, *sestertius* of TR P XXVI, A.D. 171–2. *Rev.*, seated *Roma*. *RIC*, No. 1033, cf. *BMC*, iv, pl. 82,7. Much worn. Residual (S.F. 750, layer 502).
 11. Aurelius (?), *dupondius*, with his (?) head right. Very doubtful, but perhaps an Antonine emperor rather than another. Very much worn. Residual (S.F. 5, layer 202).
 12. Crispina, *sestertius*, c. A.D. 180–3. *Rev.*, seated *Venus* with *Victoriola*, as *BMC* iv, pl. 102,7. Probably a cast counterfeit. Worn, from less worn original. Context group 3.6 (S.F. 835, layer 1246).
 13. Philip I, *as*, PAX AETERNA, A.D. 244–9. *RIC* No. 184b, but this is a cast counterfeit. Neither original nor cast very worn. Context group 3.4 (S.F. 828, layer 1109).
 - 14–15. First to Second Century, *dupondius*, mere cores, quite illegible. Context group 3.6 (S.F. 785, layer 407) and residual (S.F. 832, layer 1130).
 - 16–17. First to Second Century, *asses*, worn, one apparently battered on *obv.*, the other a mere core. Context group 3.6 (S.F. 763, layer 457) and residual (S.F. 7, layer 202).
 18. First to second century *as*, similar to above, but head in strong relief: might well have been of Vespasian. Context group 1.4/2.3 (S.F. 764, layer 846).
 19. Gallienus, sole reign A.D. 260–8, *antoninianus*, a fragment showing the top of the head and crown of characteristic appearance. Residual (S.F. 119, layer 209).
 20. Radiate, period 260–73, a fragment only. Phase 3.6 (S.F. 280, layer 228).
 21. Radiate, fragment, probably this type. Residual (S.F. 6, layer 202).

22. Radiate, fragment, illegible, consistent with this identification. Phase 3.6 (S.F. 825, layer 1231).
23. Constantine II Caesar, *nummus*, PROVIDENTIAE CAESS type, not worn, but fragmentary, and mint-mark gone; c. A.D. 324–30. Context group 3.6 (S.F. 812, layer 407).
24. Mid-fourth century, *majorina* (22 mm), a fragment showing part of a diademed bust to right. Perhaps Magnentius, A.D. 350–3, but other possibilities exist. Another small fragment of the same coin is preserved. Context group 3.4 (S.F. 238, layer 246).
- 25–27. Modern English coins: William III, 6d., 1696, worn, Context group 6.1 (S.F. 6, layer 8); counterfeit ½d., George III, 1775, worn, Context group 6.14 (S.F. 551, layer 604); and penny, Victoria, 1862, much worn, Context group 6.1 (layer 2). The fairly advanced state of decay of the last, which cannot have been lost before the early 1900s and possibly the 1920s is worth remark in view of the state of the Roman material.

2. THE POTTERY by Jane Timby with contributions by Joanna Bird and Paul Cannon

The pottery recovered from excavations at the amphitheatre totalled *c.* 9060 sherds, *c.* 110kg in weight. This broadly fell into three chronological groups: Roman (first to fourth century), Medieval (eleventh to fifteenth century) and Post-Medieval (sixteenth to twentieth century).

The pottery of each chronological group was sorted by fabric type, and the sherds quantified by weight, number and vessel-equivalent for each stratigraphic context. The following report presents a description of the fabrics for each main chronological group, together with comments on dating and sources where possible. The quantified data are summarised by Context groups (as defined by the excavator) on TABLES I–IV. Fabric descriptions are followed by a discussion of the pottery in relation to the chronology of the site.

2.1 THE ROMAN POTTERY

Roman pottery constitutes the greater part of the total assemblage, forming 61% by sherd count and 57% by weight. A very wide range of fabrics is present, the greatest variety belonging to the earlier Roman period. Despite this diversity, the quantities of each are generally low, a drawback which is exacerbated by the fact that approximately half the Roman assemblage consists of sherds of amphorae, mainly of Dressel 20 type. The pottery is generally in poor condition, a large number of sherds are small and abraded and some are partially covered in concretions. This occasionally makes identification difficult, and militates against the reconstruction of vessel-forms. The total number of vessel-equivalents for the Roman assemblage is only 27% compared with 44% for the Post-Medieval types, which form only 27% by weight of the total ceramic assemblage (18% by sherd count).

The Roman assemblage can be divided into seven groups on the basis of identified stratigraphic phases: Context group 0 – material from beneath the seating-bank of the amphitheatre; Context group 1 – material associated with the first timber phase; Context group 2 – material associated with the second timber phase; Context group 3 – material from the stone phase; Context group 4 – post-Roman/pre-medieval silting; and Context groups 5 and 6 – material from the post-Roman deposits.

Description of Fabrics

The notation used here to describe Roman pottery fabrics follows a system already established for material from excavations at the basilica site (in preparation). Coarse wares are grouped together according to the dominant tempering agent(s) present, and these groupings are signified by a letter forming the first element of the fabric code: **F** for flint, **G** for grog/clay pellets, **O** for organic tempering, **C** for chalk and **S** for sandy wares. Combination of letters can occur where there is mixed tempering. Fine wares are classified separately under the prefix **E**, amphorae as **A** and mortaria as **M**. Descriptions (for which see pp. 84–88, 90–94) are based on macroscopic examination aided by the use of a binocular microscope (x 20).

IMPORTED FINE WARES

The Samian by Joanna Bird

All stratified material is listed here: residual material is recorded in the archive. Layer-numbers are in brackets.

Pre-amphitheatre occupation (Context group 0)

South Entrance:

F46: SG, Dr 29, pre- or early Flavian (74)

West seating bank:

- F216: SG, Dr 15/17 or 18, second half of first century (214)
 SG, Dr 24/25, pre-Flavian (219)
 SG, sherds (two), first century (219)
- F217: SG, Dr 18, Neronian to early Flavian (297)

Old ground-surface:

- SG, Dr 18R or 15/17R, Neronian to early Flavian (310)
 SG, rim of Dr 18 or 27, second half of first century (310)

West Seating Bank (Context groups 1.1, 1.2)

Primary bank (Context group 1.1):

- SG, Dr 18 or 15/17, probably Neronian (306)
 SG, Bowl, probably (as Ritterling 12 or Curle 11), Neronian to mid Flavian (282)

Secondary heightening and associated features (Context group 1.2):

- SG, Dr 15/17, pre to early Flavian, (very abraded) (210)
 SG, Dr 18, pre to early Flavian (very abraded) (210)
 SG, Dr 29, probably: decorated with a band of rosettes above a row of large beads, pre- or early Flavian (204)
 CG (Les Martres-de-Veyre), sherd, Trajanic-Hadrianic (210)
 CG (Lezoux), sherd, Hadrianic-Antonine (211)
 CG (Lezoux), Dr 36, mid to later Antonine (very abraded) (213)

Timber Phase 1:

Arena silts and surfaces (Context group 1.4):

South Entrance:

- CG (probably Les Martres-de-Veyre), Dr 27, Trajanic-Hadrianic, joining sherds in 1746, 1784
 CG (Lezoux), very small sherd, Hadrianic-Antonine (1705)

Arena:

- SG, Dr 18 or 15/17, Flavian (957)
 SG, Dr 18R, Flavian (1312)
 SG, sherd, probably Flavian (very abraded) (957)
 CG (Lezoux), Dr 33, probably Hadrianic (972)

Timber Phase 2:

Arena revetment (Context group 2.2):

- SG, Dr 18, probably later first century (very abraded) (1702)
 SG, Dr 27, probably Flavian (686)

Arena silts (Context group 2.3):

- SG, probably Dr 15/17R or 18R, pre-Flavian (961)
 SG, Dr 27, Flavian (961)
 SG, cup sherd, second half of first century (844)
 SG, sherd, Flavian (846)
 CG ('Micaceous Lezoux'), probably Dr 36, Flavian (slip badly worn, as characteristic of this fabric) (1501)
 CG (Lezoux), probably Dr 33, Hadrianic-Antonine (956)
 CG (Lezoux), sherd, Hadrianic-Antonine (844)

Stone Phase:

Construction (Context group 3.1):

- SG, Dr 27, probably pre-Flavian (439)
- SG, Dr 18, pre- or early Flavian (1147)

Drainage gully (Context group 3.3):

- CG (Lezoux), cup, probably Dr 35 as apparently unstamped, Hadrianic to early Antonine (452)

Raising of arena surface (Context group 3.4):

- SG, Dr 15/17 or 18, Pre-Flavian (102, 488)
- SG, Dr 15/17 or 18, second half of first century (466)
- SG, Dr 18, Neronian to early Flavian (801)
- SG, Dr 18, Flavian-Trajanic (742)
- SG, Dr 27, Neronian-Flavian (920)
- SG, Knorr 78, probably Flavian (464)
- SG, fragment, first century (492)
- CG (Les Martres-de-Veyre), Dr 18/31, Trajanic to early Hadrianic (832, 465)
- CG (Lezoux), Dr 18/31R, mid second century (1249)
- CG (Lezoux), Dr 27, Hadrianic to early Antonine (before *c.* A.D. 160) (812, 832(2))
- CG (Lezoux), Dr 31, Antonine (246)
- CG (Lezoux), Dr 31 or 31R, mid to later second century (246)
- CG (Lezoux), Dr 31R, Antonine (229)
- CG (Lezoux), Dr 31R, mid to late Antonine (very abraded) (249, 922, 1014)
- CG (Lezoux), Dr 33, Hadrianic-Antonine (burnt) (464, 815, 1105, 1229)
- CG (Lezoux), Dr 33, Antonine; stamped BURDOM (see below), A.D. 140–65 (249, 253)
- CG (Lezoux), possible flange fragment, (as Dr 36 or 38), Hadrianic-Antonine (493)
- CG (Lezoux), Dr 37, Hadrianic-Antonine (466)
- CG (Lezoux), Dr 37, Antonine (burnt) (466)
- CG (Lezoux), mortarium, probably Dr 45, later second century (925)
- CG (Lezoux), closed form, probably Antonine (815)
- CG (Lezoux), cup or dish, Hadrianic-Antonine (102)
- CG (Lezoux), large dish or bowl form, Antonine (very abraded) (911)
- CG (Lezoux), two fragments: Hadrianic-Antonine, (burnt) (466); undated (492)

Late drain (Context group 3.5):

- SG, Dr 37, probably; part of panel border (?) with pointed leaf on a tendril, Flavian (very abraded) (910)
- CG (Lezoux), Dr 31R, mid to late Antonine (slightly burnt) (910)
- CG (Lezoux), Dr 31 or 18/31, Antonine (910)
- CG (Lezoux), Dr 30 or 37, Antonine (910)
- CG (Lezoux), mortarium, probably Dr 45, later second century (591)

Latest Roman arena surfaces (Context group 3.6):

- SG, Dr 27, probably; Flavian (very abraded) (1002)
- SG, fragment, pre- or early Flavian (abraded) (520)
- SG, fragment, second half of first century (516)

Samian Stamps by Brenda M. Dickinson

BURDOM on Dr 33. Die 8a, Burdo of Lezoux, a die found at the kiln site. This stamp occurs in early Antonine groups at Alcester and Castleford. It was also used on Dr 27 and Walters 80. *c.* A.D. 140–165. Context group 3.4 (253)

PRI[$\overline{\text{MVL}}$ I] or PRI[$\overline{\text{MVL}}$] on Dr 15/17 or 18. Die 4h or 4h¹, Primulus i of La Graufesenque. Other dies of the potter – but not this one – have been found at the kiln site. His output is mostly Flavian, but he occasionally made forms Dr 24 and Ritterling 8. There is no close dating for this particular stamp.

c. A.D. 60–90. Residual, Context group 5/6 (705).

Other Fine Wares

E6 *Terra Nigra*

Five sherds of TN from three platters were recorded. Three sherds of a Cam. 16 platter were recovered from Context group 1.1, a base-sherd with a footring from Context group 0 and a further worn base-sherd from Context group 1.4.

E7/8 *Terra Rubra* (TR 1A/B) (Rigby 1973)

A single burnt sherd from a cup, Cam. type 56, in Context group 3.4. Residual.

E7/9 *Terra Rubra* (TR 1 A/C)

Five sherds from a burnt Cam. 5 platter and a platter base-sherd with a footring from Context group 1.1.

E9 *Terra Rubra* (TR 1 C)

One sherd from a pedestal beaker in Context group 1.2. Residual.

E10 *Terra Rubra* (TR 2)

Eleven sherds of this fabric were recorded, the only recognisable form being four sherds from a Cam. 8 platter in Context group 1.1. Other platter sherds were present in Context groups 0, 1.2 and 5.

E11 *Terra Rubra* (TR 3)

One rim-sherd from a girth beaker (FIG. 46, 43) in Context group 1.2.

E13 *?imported white-ware flagon*

Five burnt sherds in Context group 3.4.

E21 *Pompeian red ware*

Two sherds of a curved-wall platter in Peacock (1977) fabric 3 from Context group 1.1.

E24 *Micaceous beakers*

A thin-walled pale grey to white very micaceous ware with a red painted interior surface. Generally occurs as beakers with rouletted decoration in pre-conquest levels. Three sherds are present here in Context group 1.2, presumably residual.

E28 *Miscellaneous black fine wares*

One sherd from Context group 3.4.

E30 *Rhenish colour-coated ware*

One sherd from a beaker in Context group 4.

E43 *North Gaulish colour-coated ware*

One body-sherd with roughcast decoration in Context group 3.4. A.D. 70–150.

Amphorae (TABLE 1)

Amphora sherds formed a significant part of the total Roman assemblage, contributing 51% by weight (13% by number). There were however no rim-sherds and only a very few featured sherds (i.e. handles, etc.). The commonest fabric by far is the Dressel 20 from Southern Spain which makes up 86% by weight (82% by sherd count) of the amphora assemblage. Amongst these sherds was the greater part of a whole amphora in fragmented condition from the shoulder down. The neck of the vessel had been broken in antiquity and the shoulder-edge ground smooth (FIG. 47, No. 71).

Amongst the remaining amphorae were several sherds from a Cam. 186 type in Context group 0 with additional sherds in Context groups 2.3 and 5. Other sherds recognised included Gallic types (A3) (Gauloise IV) and Dressel 2-4 (A4).

TABLE I: QUANTIFICATION OF THE AMPHORAE

<i>Fabric code</i>	<i>Name</i>	<i>Number</i>	<i>%</i>	<i>Weight (g)</i>	<i>%</i>
A1	Dressel 20	566	82	27785	86
A2	Cam. 186 sp	78	11	3444	11
A3	Gallic	8	1	228	> 1
A4	?Dressel 2-4	6	1	60	> 1
A5	unclassified	37	5	546	2
<i>Total</i>		695	100	32063	100

COARSE WARES**Grog-tempered wares: Fabrics and Forms**

G1 Fabric: A moderately hard, (but sometimes soft) dark brown to black ware. The surfaces are generally very smooth with a soapy or waxy feel. The core is grey or brown, occasionally with reddish-brown margins. The matrix shows a temper of medium to fine rounded to sub-angular grog and iron inclusions occurring in variable quantities accompanied by sparse angular flint and rounded quartz grains.

Forms: Vessels are both hand-made and wheel-turned. The surfaces are frequently highly burnished, often showing horizontal tooling marks. Examples of vessels in this assemblage include bead-rim jars and beakers.

Discussion: This fabric is mainly associated with the pre-conquest levels at Silchester and evidence from the Basilica assemblage shows it to be almost totally eclipsed by flint-tempered 'Silchester ware' (F1) by the Claudian period. Small quantities are present throughout the amphitheatre assemblage but any pieces after Context groups 0 and 1.1 must be considered residual.

G2 Fabric: A grey to brown moderately hard ware with smooth matt surfaces. The fabric is tempered with sparse to moderate fragments of sub-angular light grey grog/clay pellets.

Forms: Vessels are hand-made and are slightly cruder than G1 without the burnished finish. A single sherd with horizontal combed decoration was recovered from Context group 3.6. Residual.

G3 Fabric: A hard, dark grey ware with smooth but lumpy surfaces. The matrix is tempered with sub-angular hard grey and white grog fragments up to 3mm across, accompanied by sparse angular flint fragments.

Forms: Vessels are hand-made and include bead-rim jars and a jar with an internal lid-seating. Not a common fabric.

G4 Fabric: A moderately hard, reddish-brown fabric generally with a grey core. The clay is finely micaceous and tempered with fine reddish-brown and dark grey rounded to sub-angular grog/clay pellets; sparse quartz grains, flint and organic material present as occasional blackened voids.

Forms: Vessels are wheel-made with thin walls. Forms include necked, cordoned jars and beakers. The beakers are generally decorated with fine rouletting imitating that found on some of the imported wares, in particular TR 3 (E11) beakers. The fabric is mainly a pre-conquest one and does not occur in any great quantity here.

G5 Fabric: A moderately hard, oxidised orange ware with a light grey core. The surfaces are smooth with a slightly soapy feel. The matrix contains sparse fine grey and reddish-brown rounded to sub-angular grog/clay pellets, very fine mica and occasional quartz.

Forms: Vessels are wheel-made. There are no featured sherds here but evidence from elsewhere suggests that this is the only grog-tempered fabric to occur after the first century at Silchester.

G6 Fabric: A hard (but sometimes soft) grey-brown or red-brown ware tempered with a common density of angular to sub-angular pale orange to buff grog fragments averaging 1–2mm in size. In addition sparse angular flint, mostly sub-angular quartz and dark brown iron grains are present.

Forms: Vessels are hand-made. The surfaces are roughly smoothed, sometimes showing drag lines where inclusions have been brought out. No featured sherds.

G7 Fabric: A moderately soft brownish-orange to grey ware tempered with a moderate frequency of rounded to sub-angular orange or dark grey grog/clay pellets up to 1mm in size. Occasional grains of quartz and iron are also present.

Forms: Vessels include both hand-made and wheel-made examples. No featured sherds.

G8 Fabric: A moderately soft brownish-orange ware tempered with a common density of sub-angular to rounded dark grey and orange grog/clay pellets. Occasional grains of quartz sand, quartzite and iron also occur.

Forms: Thick-walled hand-made vessels. No featured examples.

Flint-tempered wares: Fabrics and Forms

F1 'Silchester ware'. Fabric: A moderately hard, smooth, 'clean' clay matrix fired to a dark grey or to variable shades of brown. The paste is tempered with a moderate to common density of white calcined angular flint fragments ranging up to 4mm in size. Sparse quartz and red iron grains are also present.

Forms: Vessels are hand-made and mainly restricted to bead-rim jars, everted-rim storage-jars and lids. Decoration is never employed but the vessel surfaces are often burnished in a horizontal or vertical direction.

Discussion: This is the second-commonest single fabric to be represented in this assemblage (excluding amphorae), forming 18% by weight. It appears to be largely a first-century type which although present in pre-conquest levels does not appear to reach the zenith of its production until the Claudio-Neronian period. Its presence throughout the amphitheatre assemblage emphasises the residual nature of most of these deposits.

F2 Fabric: Distinguished from F1 by a finer, denser quantity of angular calcined flint (1mm in size and less) in a brown, grey or black fabric. The matrix also contains a higher frequency of fine quartz compared to F1.

Forms: Hand-made. No featured sherds.

F3 Fabric: A grey or brown moderately soft ware. The matrix contains a common density of angular calcined flint and grains of quartzite (up to 1mm) with occasional iron.

Forms: Vessels are hand-made. No featured sherds.

F4 Fabric: A hard, generally light brownish-orange ware with a dark grey core. The matrix contains a sparse temper of angular non-calcined flint (averaging 1 mm in size) and a sparse to moderate density of ill-sorted quartz and sparse red iron and clay pellets in a finely micaceous clay.

Forms: Vessels appear to include both hand-made, wheel-turned examples and wheel-thrown types. Forms include bead-rim jars, platters, beakers and collared flagons. First century.

F5 Fabric: A very hard, pale brown to grey-brown fabric. The matrix contains a moderate density of angular white or grey calcined flint (up to 1 mm in size), sparse red iron/grog, fine white mica and sparse rounded quartz grains (up to 0.5 mm) against a background of finer quartz.

Forms: Vessels are hand-made and include bead-rim jars, a beaded-rim lid and a lid-seated narrow-mouthed jar. First century.

Organic-tempered wares: Fabric and Forms

O1 Fabric: A moderately soft, dark grey-brown ware in a fine micaceous clay. The core has a sandwich effect of red-brown and dark grey. The matrix contains a sparse to moderate density of fine organic temper.

Forms: Vessels are hand-made and include necked, cordoned globular bowls with burnished exterior surfaces.

Chalk-tempered wares: Fabric and Forms

C1 Fabric: A moderately hard, dark grey ware with a reddish brown surface. The sherds have a very vesicular appearance with irregularly-shaped voids where inclusions have leached out. In fresh fracture abundant rounded pellets of greyish-white chalk (up to 2mm in size), with sparse grog/clay pellets, flint and fine mica are visible.

Forms: Thick-walled hand-made vessels. No featured sherds.

Mixed Tempered Fabrics: Fabrics and Forms

GF1 Fabric: similar to G1 but with a sparse frequency of white calcined flint of variable size.

Forms: Hand-made necked cordoned bowls, beakers and curved-wall platters with flat bases. Mainly a pre-conquest fabric type.

GF2 Fabric: A very hard, orange-brown ware with a light grey core and orange-brown margins. The matrix has a temper of fine rounded/sub-angular, grey and orange grog/clay pellets with sparse white angular flint and rounded to sub-angular quartz grains.

Forms: Vessels are wheel-made with moderately thin walls. Types include everted-rim jars and globular jars with small upright rims.

GF5 Fabric: A moderately hard, brown, very fine sandy ware in a micaceous clay tempered with sparse rounded to sub-angular light-coloured grog/clay pellets and white angular flint (0.5 mm). The inner core is dark grey. In addition sparse red-brown iron and occasional larger grains of quartz up to 0.5 mm are visible.

Forms: Wheel-made thin-walled vessels including bead-rim jars.

GF7 Fabric: Smooth dark grey clay analogous to F1 but with an added temper of orange-brown sub-angular grog, sparse white flint (0.5 mm) and rounded quartz.

Forms: Hand-made with vertically-smoothed exterior surfaces. No featured sherds.

SF1 Fabric: A very hard, oxidised dark orange ware in a finely micaceous clay. Tempering material consists of angular white flint (up to 2 mm), fine quartz sand, sparse iron and clay pellets/grog.

Forms: Wheel-made bead-rim jars.

SF2 Fabric: A hard dense sandy black ware with a dark reddish brown core. The quartz is predominantly rounded in shape, fine but macroscopically visible as individual grains. In addition sparse angular white flint fragments (up to 4 mm) and iron are scattered in the matrix.

Forms: Hand-made bead-rim jar with burnishing on the exterior surface.

SF3 Fabric: Dark grey to brown ware with a black interior surface. A hard, very fine sandy clay matrix with sparse angular calcined flint fragments up to 2 mm. The quartz content is finer and denser than in SF2.

Forms: Hand-made. No featured vessels.

SF4 Fabric: Orange-brown to red-brown fine moderately hard ware. The clay is finely micaceous with an added temper of white angular flint, quartz and light-coloured grog/clay pellets, all averaging 1 mm in size, and dark brown iron. Similar to K1 but less sandy.

Forms: Wheel-made jars with square-topped rims.

GO1 Fabric: A moderately hard, dark grey-brown ware with smooth slightly soapy surfaces. The matrix has an added temper of rounded sub-angular grog/clay pellets and a sparse scatter of organic material visible as angular elongated voids on the surfaces. Sparse inclusions of flint and iron are also present.

SGF2 Fabric: A moderately hard ware with a light grey interior surface, orange-brown exterior and dark grey inner core. The matrix contains a dense frequency of fine rounded polished grains, macroscopically visible, a moderate scatter of grey and pinkish-orange sub-angular to angular grog (up to 1 mm) and sparse white angular flint and iron.

Forms: Hand-made vessels including bead-rim jars.

SGF3 Fabric: A hard, generally orange oxidised ware with a dark grey core. The matrix contains a common density of multi-coloured angular flint grit with lesser quantities of rounded quartz, clay pellets and iron.

Forms: Wheel-made. Several forms are present including bead-rim and simple thickened-rim jars, hemispherical bowls with flat rims, collared-rim flagons and beakers including butt-beaker types with rounded or bevelled rims and globular beakers with short everted rims. First century.

SGF4 Fabric: A moderately hard, brownish-orange ware with a grey inner core. The paste contains a dense fine quartz sand with angular flint (up to 1 mm), red iron/clay pellets, mica and occasional larger grains of quartz.

Forms: Wheel-made types including beakers with combed decoration.

SGF5 Fabric: A moderately hard grey to reddish brown ware in a finely micaceous clay. The matrix shows a sparse scatter of light orange, sub-angular clay pellets/grog, calcined angular flint and sparse larger grains of quartz (up to 2 mm).

Forms: (?) Hand-made. No featured sherds.

GS1 Fabric: A moderately hard, grey to pale grey-brown ware tempered with frequent fine well-sorted quartz, mostly sub-angular in shape and sparse sub-angular grey grog.

Forms: Probably wheel-made, the only featured sherd being from an everted-rim jar.

GS2 Fabric: A hard ware with dark grey surfaces and a light grey core. The matrix shows a dense scatter of fine well-sorted rounded polished grains of quartz and sparse fine fragments of sub-angular grog up to 1 mm in size but generally finer.

Forms: Probably hand-made vessels including storage-type jars with simple thickened rims.

GS3 Fabric: A hard ware with black exterior surfaces, a red-brown interior and a dark grey inner core. The matrix contains a dense frequency of fine ill-sorted rounded to sub-angular quartz, sparse clay pellets/grog and occasional larger grains of quartz up to 1.5 mm in size.

Forms: Thin-walled wheel-made simple-rim and flared-rim jars.

GS4 Fabric: This fabric is similar to SGF4 but contains no flint.

Forms: This fabric is one associated with the kilns excavated in 1906 (Hope and Stephenson 1910, 327–9) and FIG. 49 (see pp. 89, 116). In the amphitheatre assemblage examples of a necked jar and a platter were recorded. Body-sherds from beakers with rouletted decoration also feature.

The Kiln wares (K1)

The ditch (F216) found at the western end of the trench which was cut through the west seating-bank produced a dump of pottery wasters. In total *c.* 319 sherds, 5667 g, were recovered from this deposit, which make up 43% by weight of the pre-amphitheatre assemblage (Context group 0). The total assemblage produced *c.* 790 sherds, 7556 g, 24% by weight of the overall Roman assemblage (excluding amphorae).

Fabric: The fabric is one which had already been recognised from the Basilica assemblage but not as waster material and not in any great quantity. It is characterised by pale to mid-orange surfaces and a grey core. The matrix contains a moderate density of very fine quartz, sparse dark brown iron, larger quartz grains (1 mm in size), occasional fine sub-angular flint (0.5–1 mm) and occasional rounded flint pebbles (1–2 cm in size). Some vessels have a thin white exterior slip.

Forms: The vessels are wheel-thrown on a fast wheel by what must be regarded as an inexperienced potter. The vessels are finger-smudged and not cleaned or trimmed of surplus clay before being fired. As a result large lumps have been left on the interior of the bases. The failure to remove larger extraneous material from the clay during preparation has created weaknesses in the vessel-walls which have subsequently cracked or blistered during firing.

The repertoire of forms (FIG. 48) is also unusual. The two commonest forms are bowls (62% by vessel-equivalent) and flagons (30%). The remaining 8% is made up by a beaker (6%) and a jar (2%).

(i) Bowls (FIG. 48 (p. 116), Nos. 75–85)

Bowls form the most unusual part of the assemblage. The commonest type represented shows a carinated body with a flaring rim and high pedestal foot. The latter was luted to the body, often very clumsily. Many examples have a white slip. This form is well represented in burials dated from the Claudian to Flavian period at Alton, about ten miles south-east of Silchester (Millett 1986). Although it is assumed that the vessels are early products of the Alice Holt/Farnham industry (*ibid.*, 78–80), they have not yet been recorded from the production site. More distant parallels for this form are provided by two vessels, one containing a cremation, from the Belgic cemetery at Boxford, Suffolk (Owles and Smedley 1967, fig. 17, Nos. 10 and 11). A related vessel but with a lower foot occurs at Ardleigh, Essex (Birchall 1965, fig. 15, No. 130). Other vessels sharing a similar general form are usually characterised by cordons around the body, for example the bowls from the Welwyn graves (*ibid.*, fig. 12, Nos. 103, 105).

The only other form of bowl is represented by four vessels with everted reeded rims and straight-sided or hemispherical bodies (FIG. 48, Nos. 95–98). Comparable forms occur in the Claudio-Neronian military assemblage at Kingsholm, Gloucester (Hurst 1985, fig. 30, Nos. 181–186).

(ii) Flagons

At least three varieties of flagon are represented; ring-necked (FIG. 48, No. 86), collared (FIG. 48, No. 87) and everted-rim (FIG. 48, No. 88). Vessels are single-handled and have a raised footring. Most examples have a white slip.

(iii) Beakers

A beaker of cylindrical form was present (FIG. 48, No. 93). The form is again uncommon and may just represent a test piece by the potter.

(iv) Jar

A single bead-rim jar (FIG. 48, No. 94) was also among the assemblage.

(v) Unclassified

The only remaining featured sherd not accounted for above is represented by a broad, short, strap-handle attached to a slightly irregular body which may be a jug or flagon.

(vi) Kiln furniture

Five pieces of kiln furniture with some form or shaped surface were recognised amongst the fired clay and these are illustrated on FIG. 48, Nos. 99–103. Three of these pieces were found with the dump of pottery and the remaining two are from Context groups 1.2 and 1.3. Amongst these are discs of clay, (?)spacers, a possible kiln bar and a pedestalled piece, perhaps a support.

Discussion of Kiln Wares

This unusual collection of pottery, undoubtedly the waste material from a nearby kiln, must date stratigraphically to the period before the amphitheatre was constructed. It seems to present a strange combination of 'belgic' and romanised forms. The rarity of the fabric amongst the considerable first-century A.D. assemblage from the basilica, which incidentally has produced none of the bowls, indicates that production was not long-lived. It is suggested that the material is of Claudian or Claudio-Neronian date.

This is only the second example of pottery-production to be directly associated with Silchester. Two small kilns were discovered and excavated in 1906 but their location, to the north-east of the town walls, was never accurately recorded (Hope and Stephenson 1910, 327–9). They are reported by Boon to have been found a short distance beyond the North Gate (1974, 280) and thus not very near to the amphitheatre dump. The main vessel-types associated with these kilns and partly published by Thomas May (1916, 192–195, pls. LXXIX–LXXX) are reproduced here for comparison (FIG. 49). The fabric of these vessels falls within the fabric category GS4 (see p. 88 for description) and is thus slightly different to the amphitheatre material. Firing-colour ranges from orange to light brown to light grey. The main forms produced include lids, shallow dishes, reeded-rim straight-sided and hemispherical bowls, ring-necked flagons, carinated jars and wide-mouthed necked jars. Burnishing was widely employed. Chronologically, May's kiln assemblage is later than the amphitheatre group and can be assigned a date in the later Flavian to early Trajanic period.

Sandy wares: Fabric and Forms

S2 Fabric: A dark grey to black, very hard ware characterised by a dense frequency of well-sorted, rounded to sub-angular quartz. The surfaces have a pimpled appearance. Sparse grains of red iron are also present.

Forms: Both hand-made and wheel-made vessels occur in this fabric including jars, beakers and hemispherical bowls with flat rims. The surfaces are generally plainly burnished or have zones of burnished line decoration. Possibly an Alice Holt product.

S4 Fabric: A moderately hard, fine-textured micaceous ware ranging in colour from black to red-brown. The matrix contains a common density of fine quartz sand only visible under x 20 magnification, with sparse angular flint and iron inclusions.

Forms: Wheel-made. No featured examples.

S5 Fabric: A mid-grey, dense sandy ware with distinctive pimpled surfaces. The very clean clay matrix has a temper composed of abundant fine well-sorted rounded to sub-angular quartz. Occasional grains have erupted from the surface. Sparse dark grey, hard rounded inclusions (?iron) up to 1 mm in size, are also present. The fabric is well fired.

Forms: Wheel-made simple everted-rim jars and beakers.

S6 Fabric: A finer version of S5. Some sherds show grey horizontal streaking on the exterior surfaces.

Forms: Wheel-made vessels including bead-rim jars.

S7 Fabric: A hard, mid-grey ware with a lighter core. The matrix contains a dense frequency of dark-coloured ill-sorted quartz grains, very fine mica and sparse iron.

Forms: Wheel-made. No featured sherds.

S8 Fabric: A mainly grey-black reduced ware with some brown and light grey examples. The hard sandy fabric has a reddish brown or brown-grey sandwich-effect core. The main characteristic of this fabric is the sparkling quality of the surfaces produced by the light catching flecks of white mica and polished quartz grains. The quartz is slightly variable in size between sherds but is generally fine and present in abundant quantities. Sparse iron, flint and quartzite inclusions are also present.

Forms: A wide variety of wheel-made vessels including jars, bowls, platters/shallow dishes, butt-beakers, lids and flagons. The jars include bead-rim, necked, cordoned, flared-rim, flat-rim and everted, thickened-rim examples. The bowls are predominantly of Lyne and Jefferies type 5 (1979, fig. 17) (also referred to as 'Surrey' bowls), and the platters include imitations of moulded fine wares, notably the Gallo-Belgic platter Cam. type 14 (Lyne and Jefferies 1979; type 6.2).

Source: This fabric is probably an Alice Holt product. It is the commonest sandy ware present in the assemblage, contributing 7% by weight (10% by number) to the overall Roman assemblage (excluding amphorae). It is present from the earliest levels of the excavation (Context group 0) where a bowl, Lyne and Jefferies type 5, generally dated to c. A.D. 60 (but on no explicit evidence) is present (context 214), through to the post-Roman phases.

S9 Fabric: A very fine, hard sandy ware, either grey, black or orange-brown in colour. The surfaces are matt with occasional iron streaking. Apart from grains of iron no other inclusion is macroscopically visible although some quartz can be seen under x 20 magnification. Mica appears to be absent.

Forms: Wheel-made vessels including everted, thickened-rim jars and a lid.

S10 Fabric: A very hard, sandy orange ware with a cream surface slip. The internal surface has a slightly pimpled appearance from the dense fine quartz sand present. Sparse red iron grains and fine white mica are also visible (cf. also S29).

Forms: Wheel-made ring-necked flagons. First century.

S11 Fabric: A light grey sandy ware with a dense frequency of ill-sorted fine, sub-angular to rounded quartz. Sparse iron grains are also present.

Forms: Wheel-made and hand-made jars. The former include flared-rim domestic-type jars, the latter large storage jars, for example the cable-rim jar (Lyne and Jefferies 1979, class 10) (FIG. 47, No. 74) from Context group 3.5. Also present is a flanged bowl (FIG. 47, No. 73). The surfaces of the vessels are slipped and burnished.

Source: This fabric is one associated with the Alice Holt industry, in particular in the later Roman period, i.e. from the later third century. Sherds first feature in Context group 3.4.

S12 Fabric: This is a miscellaneous category for fine sandy wares not allocated elsewhere. Both reduced and oxidised examples are included. The matrices contain sparse iron, some fine mica and frequent grains of quartz visible microscopically.

Forms: Vessels are wheel-made and generally thin-walled. A variety of forms occurs, ranging from jars, bowls, platters – curved-wall and imitation moulded-wall types, beakers – rounded-rim, bevelled-rim, flared and lid-seated types, lids and collared flagons.

S13 Fabric: A mid blue-grey, hard, finely micaceous ware. The core is a lighter grey. The fine fabric contains sparse dark grey iron and frequent fine white mica.

Forms: Poppyhead beakers. Only one small sherd was recovered, from Context group 2.

S14 Fabric: A hard, sandy ware ranging from grey to red-brown in colour. The fabric is characterised by a scatter of large rounded quartz grains (2–3 mm in size) in a background of abundant finer ill-sorted grains and sparse fine white mica.

Forms: Vessels are hand-made and include bead-rim and storage jars.

Source: The fabric is probably another Alice Holt ware belonging to an earlier phase of the industry. Only a few sherds are present here but these occur from Context group 0 on.

S16 Fabric: A very hard, dark brownish- or greyish-orange ware used to make thin-walled vessels. The vessel walls have a brittle appearance, and the interior surfaces are characteristically pimply, resulting from the presence of abundant well-sorted rounded to sub-angular quartz. Sparse red iron is present, occasionally showing as streaks on the exterior surface which have been smoothed or burnished.

Forms: This fabric seems to have been used exclusively for beakers with zones of decoration. This decoration consists of either rouletting or incised/combed latticing. Sherds are present from Context group 0. First century.

S18 Fabric: Dorset Black-Burnished ware (BB1).

Forms: Several sherds of this ware were present, first appearing from Context group 1.4. These include a flanged bowl, Gillam (1976) type 96, of mid to late third century date from context 954, which must be regarded as intrusive. Further sherds do not occur until Context group 3. These include another example of a flanged bowl, Gillam type 48–49, from context 724 (Context group 3.1) which may again be an intrusive find. Other second- to third-century pieces, including a jar (Gillam type 10), a flanged bowl and a plain-rimmed dish occur in Context group 3.4.

S21 Fabric: A hard, sandy pale brown or light grey ware. The fabric is characterised by an abundant density of fine ill-sorted, rounded quartz, generally grey, pink or dark brown in colour. The quartz grain size ranges from very fine up to c. 2 mm. In addition fine white mica, sparse iron, clay pellets and very occasionally chalk grains are present.

Forms: Mainly wheel-made jars.

Source: A product of the Alice Holt industry associated with the earlier phases.

S22 Fabric: A moderately hard, fine sandy micaceous ware, similar to S4 but with a sandier texture. Grey or brown in colour with matt surfaces.

Forms: Wheel-made bead-rim, everted and flared-rim jars and flanged bowls. Represented from Context group 0 onwards.

S24 Fabric: A mid to light grey hard ware with a lighter grey core occasionally with brown margins. The matrix has a temper of abundant fine, well-sorted, rounded quartz sand, fine white mica and sparse iron.

Forms: Vessels are wheel-made and include bead-rim and everted-rim jars (the latter often cordoned at the base of the neck), beakers, a flanged bowl with a low bead and lids.

Source: An Alice Holt ware present from Context group 0 onwards.

S28 Fabric: A miscellaneous category for grey sandy wares of medium coarseness not allocated to other groups.

Forms: Everted-rim jars, bowls and platters.

S29 Fabric: A very hard, mid orange ware with a blue-grey core and a cream slightly streaky surface-slip. The very dense fine fabric has no macroscopically-visible inclusions although under x 20 magnification very fine quartz, orange/red rounded clay pellets and dark grey/brown iron grains are present. Finer version of S10.

Forms: Wheel-made. No featured sherds.

S32 Fabric: A hard, pale brown ware with a light grey inner core. The matrix contains abundant very fine well-sorted quartz sand and sparse red iron.

Forms: A fabric used exclusively for butt-beakers of Cam. 113 type (Hawkes and Hull 1947, pl. LVII), with rouletted decoration. First century.

S33 Fabric: A very hard, dense sandy ware with pale pinkish-brown surfaces and a pale brown core. The matrix contains abundant fine, mostly sub-angular well-sorted quartz and sparse orange-red iron.

Forms: Wheel-made vessels, probably from flagons although there are no featured sherds.

Source: The fabric probably originates from the Brockley Hill/Verulamium region. Late first century.

S34 Fabric: Miscellaneous grey sandy wares finer than S28. Mid to light grey sandy wares, well-fired. Some examples show a dark grey-black slip.

Forms: Vessels are wheel-made and include storage jars, flanged bowls and curved-wall platters.

Source: Most of the vessels are probably Alice Holt products.

S35 Fabric: Hard, fine grey sandy wares with slipped/burnished exterior surfaces. There are no visible inclusions apart from sparse fine iron.

Forms: Wheel-made. Flanged bowls.

S36 Fabric: A moderately soft, fine sandy ware. The exterior surfaces have a mid-brown coloured slip which is slightly glossy. The outer half of the core is grey-brown, the inner half and interior surface dark orange. The fabric has a very sandy texture with sparse red iron and fine mica.

Forms: Wheel-made. One example of a single-handled flagon.

S37 Fabric: Soft, very fine orange micaceous ware with abraded surfaces. Sparse red iron is present.

Forms: Wheel-made jars and bowls including flanged examples. Note that some examples of Oxford colour-coated wares may be included in this group where all trace of colour-coat and form type have been lost.

S38 Fabric: Miscellaneous oxidised wares. Generally soft, fine to medium sandy non-micaceous wares with sparse red iron grains.

Forms: Vessels are wheel-made and include bowls, flagons, beakers and jars. Sherds are generally worn and fragmentary.

S39 Fabric: A very hard white ware with a pink interior surface. The clean white matrix shows a high frequency of very fine, well-sorted quartz sand and sparse iron.

Forms: Wheel-made flagons including collared-rim types. First century.

S40 Fabric: A very hard, light pink sandy ware. The matrix contains dense, very fine, ill-sorted quartz, frequent soft white (?) clay pellets (up to 1 mm in size) and round red iron.

Forms: Wheel-made. No featured sherds.

S41 Fabric: A moderately hard, pale brown ware with a slipped surface. The matrix contains a moderate density of fine quartz grains and sparse red iron.

Forms: Wheel-made. No featured examples.

Source: This fabric probably originates from the New Forest industry (information from M. Fulford).

S42 Fabric: A moderately soft, very light grey-brown fine fabric with a slightly darker core. The matrix contains sparse rounded quartz grains (up to 1 mm in size), dark grey iron and fine white mica.

Forms: Wheel-made beakers of second-century type.

S43 Fabric: A very hard, sandy white ware. The matrix contains abundant fine well-sorted rounded to sub-angular quartz, mostly of a darker, coloured variety and sparse red iron.

Forms: Wheel-made. Flagons dating from the second century onwards.

Source: Oxfordshire industry (information from S. Green).

S44 Fabric: A very hard, slightly off-white sandy ware with a reddish-orange colour-coat and a pink core. The paste is characterised by abundant well-sorted quartz and a moderate frequency of red iron.

Forms: Wheel-made. No featured sherds.

S45 Fabric: Oxford colour-coated ware (Young 1977, 123 ff.). A small number of Oxford colour-coated wares was recognised in the later phases of the site (Context group 4 onwards). Additional pieces have possibly been placed under S37 where no trace of form or surface finish was discernible.

S46 Fabric: New Forest colour-coated ware (Fulford 1975).

Forms: Three pieces of New Forest colour-coat from a closed vessel of fourth-century date were recovered from the North Entrance in Context group 4 with a further sherd from Context group 6.

Mortaria

M1: Oxford red colour-coated mortaria (Young 1977, 173 ff.).

M2: Oxford white-ware mortaria (Young 1977, 56 ff.).

M3: Oxford white colour-coated mortaria (Young 1977, 121). An example of Young type WC7, dated 240–400+, was recovered from Context group 4.

M4: Nene Valley mortaria.

M5: Source unknown, (?) imported. *Fabric:* A pale pink fine sandy ware tempered with a sparse number of flint fragments ranging up to 2 mm in size, fine red rounded grains of iron and sparse white mica. The trituration-grits are composed of angular pieces of flint similar to those in the paste.

Forms: A single sherd in this fabric was recovered from Context group 6. Residual.

TABLE II: SUMMARY OF ROMAN FABRICS

Fabrics	Phase 0			Phase 1			Phase 2			Phase 3			Phase 4			Phase 5			Phase 6			
	No	Wt	VE ¹	No	Wt	VE	No	Wt	VE	No	Wt	VE	No	Wt	VE	No	Wt	VE	No	Wt	VE	
FINE WARES																						
Samian SG	14	47	7	9	33	13	6	16	5	19	53	21	2	5	-	6	22	11	5	39	5	
Samian CG	-	-	-	12	52	6	3	85	-	53	585	30	-	-	-	1	6	6	10	72	7	
T.N. (E6)	1	9	-	4	32	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T.R.1 (E7-9)	-	-	-	7	18	5	-	-	-	1	4	2	-	-	-	-	-	-	-	-	-	
T.R.2 (E10)	2	14	-	9	38	4	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	
T.R.3 (E11)	-	-	-	1	13	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
White wares (E13/16)	-	-	-	1	10	-	-	-	-	7	92	12	-	-	-	-	-	-	-	-	-	
Pompeian Red (E21)	-	-	-	2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
E24	-	-	-	3	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
E28	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-	-	-	
Rhenish CC (E30)	-	-	-	-	-	-	-	-	-	-	-	-	1	1	11	-	-	-	-	-	-	
Unclassified	-	-	-	3	11	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AMPHORA	73	3334	-	177	5556	-	46	3390	-	45	17898	-	5	234	-	31	1106	-	19	620	-	
MORTARIA	-	-	-	-	-	-	-	-	-	-	-	-	1	42	13	2	36	-	1	18	-	
COARSE WARES																						
Grog	23	173	13	61	331	12	7	29	-	59	325	19	2	2	-	23	147	23	8	54	-	
Flint	86	826	20	379	3131	145	42	393	12	57	540	18	5	35	8	57	604	17	22	509	21	
Organic	-	-	-	1	3	-	1	4	-	1	9	-	1	5	-	1	3	-	-	-	-	
Chalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-	
Mixed grit	42	253	54	168	987	117	25	132	7	86	738	59	2	17	-	54	357	13	17	128	16	
Kiln wares	319	5667	693	159	839	59	8	57	-	105	704	92	2	47	-	23	192	14	-	-	-	
Sandy	720	2874	442	659	2508	205	76	411	24	738	4506	484	55	585	12	297	1527	109	147	827	75	
Med/Post-Med.	-	-	-	-	-	-	3	17	2	17	222	-	4	24	-	1020	10276	534	2416	34963	3359	
TOTALS	1280	13197	1229	1655	13588	588	217	4534	50	1189	25678	737	80	997	44	1517	14280	727	2646	37233	3483	

1. These headings stand for Number, Weight and Vessel-equivalent.

2.2 THE SAXON POTTERY

Two sherds of Saxon ware were identified in the assemblage (Fabrics 44a and 44b). These were recovered from 006W and 013W (Context group 5.7). **Fabric 44a** is a fine, black soft fabric with a laminar fracture and a soapy feel. It contains frequent burnt organic material. **Fabric 44b** is a harder ware with an orange-brown exterior and a grey-black interior. The fabric is finely micaceous with a sandy texture and a sparse to moderate density of organic material. Both sherds are from hand-made vessels.

2.3 THE MEDIEVAL POTTERY

General

The medieval pottery formed 16% by weight of the total pottery recovered (21% by number, 16% by vessel-equivalent).

Chronologically the bulk of the wares appear to fall into the earlier part of the period, from the late eleventh to the thirteenth century, with only a scatter of sherds attributable to the later medieval period (fourteenth to early sixteenth century).

Description of Medieval Fabrics

Fabric 2: Sand- and flint-tempered ware

A very hard, sandy ware with a moderate scatter of angular, multi-coloured flint tempering mainly 1–2 mm in size, mixed with rounded grains of quartz.

Forms: Vessels are hand-made and include cooking-pots (FIG. 50, Nos. 1–22), dishes (FIG. 50, Nos. 24–27) and spouted pitchers (FIG. 50, No. 23). The rims are generally thumbled.

Date: The forms associated with this fabric generally date from the eleventh to the mid twelfth century. The fabric is not among contemporary material found at Newbury and is likely to be from a source more local to Silchester (information from A. Vince). This suggestion is reinforced by the fact that this is the commonest of the medieval fabrics in the assemblage, 68% by weight, (64% by number) and first appears in quantity in Context group 5, although small numbers are intrusive in Context groups 3 and 4.

Fabric 6: Dense sandy ware

A hard, dense sandy ware with a light grey to pale brown core and buff surfaces. The matrix contains abundant fine, well-sorted, rounded polished quartz grains and sparse iron.

Forms: Vessels seem to include both hand-made/wheel-finished and wheel-made examples. Forms include cooking-pots (FIG. 51, No. 38) and tripod pitchers (FIG. 51, Nos. 34, 37, 39–40). The latter are partially covered in a thin green glaze on the exterior surfaces.

Date: This fabric has been identified at Newbury (fabric C) (Vince 1983, 161 ff.) in mid to late twelfth century contexts. In the amphitheatre assemblage it occurs alongside Fabric 2, but only contributes 5% by weight of the medieval assemblage.

Fabric 7: Surrey-Hampshire border ware

A very hard, creamish-white ware. The fabric contains a common density of well-sorted, fine rounded, polished grains up to 0.5 mm in size and sparse brown iron. Some sherds show a light green glaze on the exterior surfaces.

Forms: A thumbled base-herd from a pitcher and a cooking-pot (FIG. 51, No. 45).

Date: This was not a very well-represented fabric in the group, forming only 2% by weight. The industry developed in the mid to late thirteenth century and continued until the early sixteenth century. Later products from the same region (cf. Post-medieval Fabric 1, p. 98) are far more numerous.

Fabric 10: Flint-tempered ware

A very hard, brown ware. The clean clay matrix (similar to that used for the first-century 'Silchester' ware, Fabric F1) is tempered with a moderate density of angular flint (averaging 1 mm in size), quartzite and sparse rounded quartz grains.

Forms: Hand-made, everted-rim cooking-pots (Fig. 51, Nos. 28–32) similar to those in Fabric 2.

Date: Late eleventh to early twelfth century. Like Fabric 2 this ware is probably locally made. It is the second-commonest fabric in the assemblage although only forming 11% by weight of the total.

Fabric 11: Sand- and flint-tempered ware

A very hard brown to grey ware tempered with abundant rounded to sub-angular quartz sand, a moderate scatter of angular to rounded flint grit, 1–2 mm in size, and sparse fine white mica. The surfaces are occasionally pocked where grains have fallen out.

Forms: Hand-made cooking-pots (FIG. 51, Nos. 33–35) and dishes (FIG. 51, No. 36).

Date: Although only represented by 11 sherds in this assemblage this fabric is recognised as fairly widespread in the Berkshire/North Hampshire/East Wiltshire area. It equates with Newbury Group B (Vince 1983, 150 ff.) and is probably of slightly later date than Fabrics 2 and 10, occurring between the mid twelfth and fourteenth centuries. It first occurs at Netherton, Hampshire *c.* 1160 to become thereafter the commonest ware on the site. A similar development occurs at Newbury, where it dominates the thirteenth- to fourteenth-century assemblages (*ibid.*, 150).

Fabric 13: Fossil shell-tempered ware

A moderately hard, red-brown to black ware with slightly soapy surfaces. The paste contains a moderate to common density of fossil shell accompanied by sparse angular flint, rounded quartz and iron. The surfaces are marked by shallow irregularly-shaped voids where shell fragments have dissolved out.

Forms: Hand-made cooking-pots.

Date: Similar wares have been noted in the Thames basin and London area in late eleventh- to twelfth-century contexts (Vince 1985, 37).

Fabric 15: (?)Medieval sandy ware

A light brown, moderately soft fabric with a moderate density of ill-sorted rounded quartz grains with occasional flint and red iron. The sparse scatter of larger quartz grains, up to 2 mm in size, shows a distinctive polished appearance characteristic of the Greensand deposits.

Forms: No featured sherds.

Fabric 18: Late Medieval sandy ware

A hard reddish-brown, very sandy ware. The quartz sand grains, although fine, are macroscopically visible and rounded in shape. Sparse iron and white mica are also present.

Forms: Wheel-thrown cooking-pots (FIG. 52, Nos. 46–47).

Date: A similar fabric was associated with the reconstruction of Netherton, Hampshire, in the fifteenth century (information from A. Vince).

Fabric 19: Sandy ware

A pinkish-orange, moderately soft ware. The matrix shows a common density of fine well-sorted quartz, sparse sub-angular flint and fine red iron. The exterior surfaces of the sherds show splatters of glaze.

Forms: Jugs and cooking-pots (FIG. 51, No. 44).

Date: Late thirteenth century.

Fabric 21: Sandy ware

A hard, reddish-brown sandy ware. The paste contains a sparse scatter of rounded red iron/clay pellets up to 1 mm, and abundant, fine well-sorted quartz.

Forms: Tripod pitchers with slip decoration. Some examples show vertical combing (FIG. 51, No. 41).

Date: Similar fabrics were noted at Newbury in thirteenth- and fourteenth-century contexts (information from A. Vince). The fabric is slightly later than, although possibly overlapping with, Fabric 6 and probably derives from the same source.

Fabric 22: Grey sandy glazed ware

A mid grey sandy ware with a granular texture. The fabric contains abundant fine rounded to sub-angular quartz grains with polished surfaces and sparse flint. The external surfaces are covered in a dark green, slightly pocked glaze.

Forms: Only three unfeatured sherds are present, probably from a jug or pitcher.

Date: (?)Thirteenth to fourteenth century.

Fabric 34: 'Tudor ware'

A pale orange fabric with a darker orange core. The matrix contains sparse, rounded to sub-angular quartz and red iron. Unglazed.

Forms: Represented here by a jug rim and a bung-hole with other unfeatured sherds.

Date: Mid to late fifteenth century.

Fabric 37: White-slipped, green-glazed ware

A dark pinkish orange ware with a temper of dense fine, rounded, polished quartz grains and sparse red-brown iron. The surfaces are covered in a white slip and normally have a green glaze although this was not in evidence on the sherds here.

Forms: Represented by a strap handle from a spouted pitcher decorated with ring and dot impressions at the base of the springing (FIG. 51, No. 42).

Date: Mid to late thirteenth century. The fabric equates with Newbury group C whose source is considered to lie in the Thames Valley (Vince 1983, 161 ff).

Fabric 42: South-east Wiltshire sandy ware

A moderately soft, pale brown to greyish white sandy ware with a dark grey speckled surface. Individual grains can be easily removed from the matrix. The fabric contains an abundance of moderately well-sorted rounded to sub-angular quartz, sparse clay pellets, iron and blackened voids from burnt organic material. The exterior surfaces are covered in a patchy brown glaze.

Forms: Hand-made tripod pitchers decorated with vertical and horizontal applied strips.

Date: Twelfth century. The fabric probably originates from south-east Wiltshire (information from A. Vince).

Fabric 45: White-slipped, glazed ware

A mid orange, hard sandy ware with a grey interior surface. The fabric contains a common to abundant density of fine well-sorted, rounded quartz and sparse red iron. The exterior surfaces have a white slip covered by a mottled green glaze.

Forms: Pitchers. One sherd shows impressed ring-and-dot decoration.

Date: Late thirteenth to early fourteenth century. This fabric, like Fabric 37, is a Newbury Group C type.

TABLE III: SUMMARY OF THE MEDIEVAL FABRICS

Fabric	No	%	Wt	%	VE ¹	%
2	1191	63	11886	68	716	65
6	96	5	895	5	101	9
10	196	10	2028	12	141	13
11	11	*	103	*	10	1
13	54	3	333	2	9	*
19	75	4	388	2	9	*
21	47	3	528	3	13	1
22	3	*	13	*	—	—
37	6	*	71	*	—	—
42	20	1	134	*	—	—
45	2	*	24	*	—	—
7	63	3	418	2	16	1
15	10	*	132	*	19	2
18	59	3	366	2	47	4
34	11	*	123	*	8	*
Unclassified	28	1	162	*	12	1
TOTAL	1872	100	17604	100	1101	100

1. For explanation of headings see note on p. 94.

* = less than 1

2.4 THE POST-MEDIEVAL POTTERY

General

The Post-medieval pottery forms 27% of the assemblage by weight, 18% by number and 44% by vessel-equivalent. A large number of fabrics was present, ranging in date from the seventeenth through to the twentieth century. Often only single sherds are present of a particular type. Description has been kept to a minimum and mainly used where no common name is available.

Description of Post-Medieval Fabrics

A. Surrey-Hampshire border wares

Fabrics 1, 3, 20; sub-types 33, 35, 36, 43 (cf. Holling 1971)

Fabric 1: A hard, pale brown to white ware occasionally with a pale grey inner core. The fabric contains a moderate to common density of fine sand, sparse fine mica and fine black iron. Vessels are generally glazed internally, ranging in colour from a bright apple-green through to olive-green and pale yellow.

Forms: Plates, platters, dishes (FIG. 52, Nos. 61–63), bowls (FIG. 52, Nos. 53, 64–68), pipkins (FIG. 52, Nos. 69–72), costrels (FIG. 52, No. 52), chamber-pots (FIG. 52, Nos. 54–57), butter-pots (FIG. 52, Nos. 58–60), a perfume-pot (FIG. 52, No. 75), a single example of a multi-lobate dish (FIG. 52, No. 74) and a handle probably from a bed-pan (FIG. 52, No. 73).

Date: Late sixteenth to early eighteenth century.

Fabric 3: A very hard, pale pinkish-brown, fine sandy ware with sparse fine red iron. The interior and exterior surfaces are covered in a thick glossy mid-green glaze with occasional black specks.

Form: Bowl.

Fabric 20: A moderately hard, pale brown, fine sandy ware with sparse fine mica and red iron. The vessel surfaces are covered in a distinctive thin opaque glaze with occasional green specks.
Forms: A small jar (FIG. 52, No. 76) and shallow dish (FIG. 52, No. 77).

Fabric 33: A pale orange, fine sandy ware with a dark brown glaze.
Form: A handle from a tankard or mug.

Fabric 35: A hard, fine pale orange-brown fabric, coarser in texture than Fabric 33. The exterior surfaces are unglazed, the interior have an orange-brown glaze.
Form: Bowl (FIG. 52, No. 78).

Fabric 36: Fine sandy, light grey ware with frequent fine white mica. The internal and external surfaces are covered in an olive-green glaze with dark brown specks.
Form: Bowl (FIG. 52, No. 79).

Fabric 43: A hard, white, dense sandy ware with an even mid-brown or pale blue glaze on the exterior and interior surfaces. There is evidence of combing under the glaze in some examples.
Forms: Mug and a chamber-pot (FIG. 54, No. 102).
Date: Seventeenth to early eighteenth century.

B. Red Earthenwares: Fabrics 5, 8/17, 26, 27, 39

Fabric 5: A red earthenware with a white slip under a brownish-orange glaze. A finely micaceous, sandy fabric with sparse red iron.
Forms: Bowls (FIG. 52, No. 48) and chamber-pots (FIG. 52, No. 49).
Date: This ware is characteristic of the Berkshire region in the mid to late seventeenth century (information from A. Vince).

Fabric 8/17: Other red earthenwares. No attempt has been made to differentiate the wares within this group which may derive from more than one source. Many undoubtedly belong to the Surrey-Hampshire border industry. In general terms the fine sandy fabrics are reddish to pinkish-orange in colour with a greenish-brown or orange-brown glaze usually confined to the internal surfaces. Some examples are slipped before glazing. Decoration is restricted to slip-trailed designs on some of the platters or shallow dishes.
Forms: A selection of forms found in this group, including, for example, bowls, shallow dishes, mugs, jugs and pipkins can be found on FIG. 53.
Date: The forms indicate a largely post-medieval assemblage dating to the seventeenth and eighteenth centuries. At least one vessel from context 004 however is more typical of the fifteenth century and it is possible that there is a small number of other wares of slightly earlier date incorporated into the group.

Fabric 26: Dark red, fine sandy ware with sparse red iron. Very light-textured.
Form: A thick-walled unglazed base-sherd.

Fabric 27: A fine red sandy earthenware with sparse red iron. Lighter in texture than the 8/17 group. The surfaces have a brownish-green glaze, generally confined to internal surfaces but occasionally on both.
Forms: Dishes/platters.
Date: Seventeenth century.

Fabric 39: A very hard ware, with a coarser grade of sand temper than the preceding types. The matrix contains a medium density of mostly sub-angular fine quartz, macroscopically visible, and sparse red iron.
Forms: Bowls.

C. Stonewares: Fabrics 23, 28, 29, 32, 40, 46

Fabric 23: English stoneware.

Forms: Marmalade jars (James Keiller), inkwell (FIG. 54, No. 103), beakers and mineral water/soft drink bottles (e.g. FIG. 54, No. 104).

Date: Nineteenth to early twentieth century.

Fabric 28: Frechen stoneware.

Form: A mask from a bellarmine flask (FIG. 52, No. 50).

Date: Late seventeenth century.

Fabric 29: Westerwald stoneware.

Form: A single sherd from a mug/tankard with a blue, white and purple glaze.

Date: The use of purple colouration indicates a date later than c. 1680.

Fabric 32: Raeren stoneware.

Form: (?)beaker.

Date: Late fifteenth to early sixteenth century.

Fabric 40: London stoneware.

a) Ordinary salt glaze with a dark brown wash.

Form: Tankard.

Date: Late seventeenth to eighteenth century.

b) Bristol glazed ware (felspatic glaze).

Form: The base of a bottle with BOULTON-LAMBETH stamped on the side.

Date: Mid to late nineteenth century.

Fabric 46: Staffordshire stoneware.

Form: One sherd from a small tankard decorated with a relief 'pineapple' pattern.

Date: Late seventeenth to early eighteenth century.

D. Tin glazed ware

Fabric 38:

Forms: A chamber-pot and fragment from a charger (FIG. 52, No. 51).

Date: Seventeenth to eighteenth century.

E. Miscellaneous china

Fabric 4:

All white-ware china/porcelain has been amalgamated into this category including plain and decorated pieces. A large proportion of the group consists of blue-on-white-patterned ware, many in the willow-pattern style.

Forms: Plates, saucers, teacups, lids and a circular board with the figure of Britannia and a lion depicted in black on white. One example of a registration mark survived on a platter bearing a Chinese-style design (FIG. 54, No. 105).

Date: Eighteenth to twentieth century.

F. Other wares: Fabrics 24, 25, 30, 31

Fabric 24: Sunderland coarse-ware.

Form: A single sherd with a clear yellow-white internal glaze and a brown-glazed exterior.

Date: Nineteenth century.

Fabric 25: A fine sandy orange ware with a pale greenish-grey speckled external glaze. Source and type unknown.

Fabric 30: Pharmacy jar.

A brownish sandy fabric with a pale blue-white glaze. One sherd only.

Date: Eighteenth century.

Fabric 31: Red flower-pot ware.

Date: Modern.

TABLE IV: SUMMARY OF THE POST-MEDIEVAL FABRICS

Groups	Fabric	No	%	Wt	%	VE ¹	%
A:	Surrey-Hants ware						
	1	337	20	5704	19	648	22
	3	38	2	206	*	4	*
	20	12	*	225	*	80	3
	33	24	1	363	1	4	*
	35	7	*	156	*	25	*
	36	24	1	499	2	45	2
	43	27	2	665	2	26	*
B:	Red Earthenwares						
	5	21	1	442	1	79	3
	8/17	710	43	15542	52	885	31
	26	2	*	370	1	—	—
	27	32	2	245	*	1	*
	39	4	*	69	*	8	*
C:	Stonewares						
	23	11	*	622	2	50	2
	28	15	1	369	1	100	3
	29	2	*	13	*	—	—
	32	1	*	23	*	—	—
	40	19	1	399	1	100	3
	46	1	*	2	*	—	—
D:	Tin glaze						
	38	46	3	1034	3	102	3
E:	China						
	4	298	18	2421	8	695	24
F:	Other wares						
	24	6	*	76	*	6	*
	25	6	*	66	*	26	*
	30	1	*	3	*	—	—
	31	4	*	97	*	6	—
TOTAL	1648	100	29611	100	2890	100	

1. For explanation of headings see note on p. 94

* = less than 1

2.5 CLAY TOBACCO PIPES by Paul Cannon

The post-medieval levels have produced a number of complete or near-complete pipe bowls and two identifiable makers' marks, together with a larger quantity of stem fragments. Four of the illustrated examples were from the pit in the South Entrance (F3, p. 67).

The Pipes (FIG. 44, Nos. 1–5)

1. Stem with circular heel and incuse mark TH with small fleur-de-lis above and below, all within a circle of dots, *c.* 1660–1690 (Atkinson 1965, 88–9). Context group 6.1 (004).
2. Bowls with short spurs (two examples), the small variety of the Wiltshire-type spur-pipe, *c.* 1690–1720 (Atkinson 1969, 91). Context group 6.2 (F3).
3. Bowl with short spur, one of the larger variety of Wiltshire type spur-pipes, *c.* 1700–1720 (Atkinson and Oswald 1969, 179–80). Context group 6.2 (F3).
4. Bowls with 'stumpy' bases (two examples), London types showing the long, distinctively forward-projecting bowls, *c.* 1680–1710, (Atkinson and Oswald 1969, 179–80, Type 20 or 22). Context group 6.2 (F3).
5. Bowl with tailed heel, *c.* 1690–1720. Context group 6.2 (F3).
6. (*Not illustrated*) Stem with small spur attached, poorly impressed with the incuse mark RICH/ARD.[S/]A[YER], *c.* 1690–1720 (Atkinson 1971, 76). Context group 6.2 (F3).

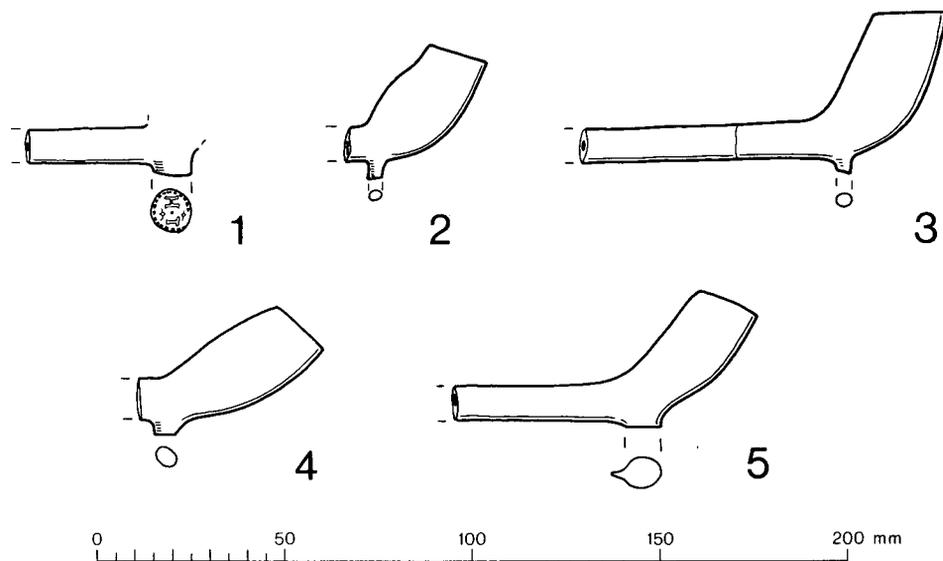


FIG. 44. The Clay Pipes (Scale, 1:2).

The group includes two marked examples. The TH mark (No. 1) was the work of Thomas Hunt of Marlborough in Wiltshire. An identical mark is featured by Oak-Rhind (1980, 353). Thomas Hunt was but one of an extremely prolific pipemaking family whose members worked in various places in Somerset and the West and in Wiltshire (Lewcun 1985, 14–21). There were no less than four different Thomas Hunts who were all pipemakers. This particular one took apprentices in 1667, 1671 and 1689 (Atkinson 1965, 93) and died in 1692 (Lewcun 1985, 16). The vast majority of pipes bearing this mark have been found within the immediate area of Marlborough, but occasional examples, to which this piece can be added, have been found further afield (information from D.R. Atkinson).

The only other mark found was that of Richard Sayer. In 1696 he was married at Winchester (Oswald 1975, 173) but it is generally accepted that he was in fact working at East Woodhay in the north of Hampshire.

As a group these pipes fit into the period *c.* 1680–1720.

2.6 POTTERY COUNTERS by Jane Timby (FIG. 45)

1. Diameter 77 mm, thickness 8 mm. Counter in a fine, very soft pale pink-orange fabric (Fabric S38); Context group 3.5 (SF 836, layer 1019).
2. Diameter 23 mm, thickness 4 mm, fashioned from a sherd in fabric S8; Context group 3.4 (SF 768, layer 433).
3. Diameter 43 mm, thickness 10 mm. Worn counter, probably made from an amphora sherd. Unstratified.
4. Diameter 75 mm, thickness 17 mm. Roughly-fashioned disc made from a Roman tile in Fabric 'C'. Residual, Context group 5.4 (layer 17).

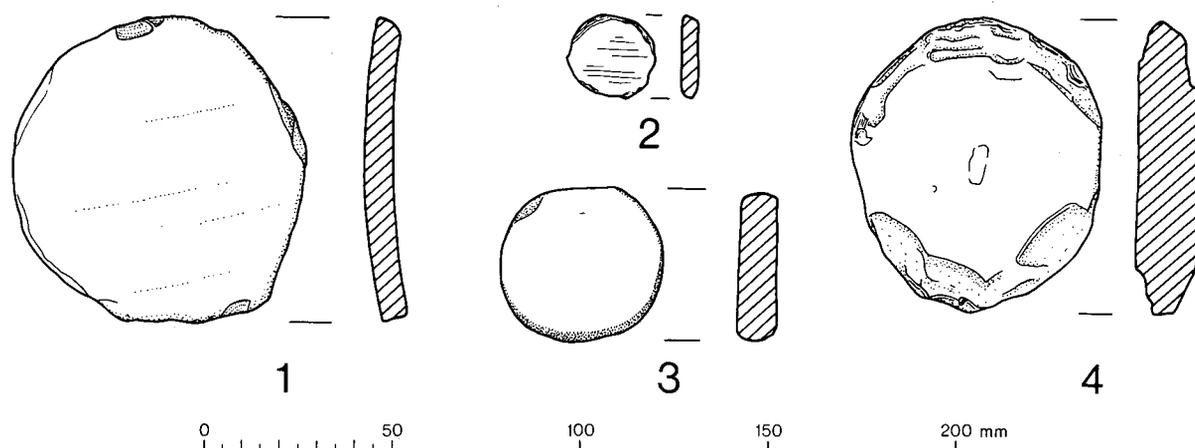


FIG. 45. Pottery Discs (Scale, 1:2).

2.7 DISCUSSION OF POTTERY BY CONTEXT GROUPS

The following section briefly summaries the pottery evidence for each sub-phase. Tabulations of the forms and fabrics from each Context group are available in the unpublished archive.

Context group 0: Contexts pre-dating the construction of the amphitheatre (FIG. 46, Nos. 1–19)

Approximately 13.2 kg of Roman pottery was recovered from Context group 0. The old ground-surface (Contexts 222, 223, 256, 304 and 310) produced 225 sherds (853 g). The only fine wares present in this group include samian of Neronian to early Flavian date and two sherds from a Terra Rubra (TR 2, fabric E10) platter base. A variety of coarse wares are represented, including flint- and grog-tempered wares. Sandy wheel-made wares make up 43% (by sherd count) of the group with a further 34% (weight and sherd count) belonging to kiln wares (Fabric K1). This high proportion of sandy wares to other 'native' coarse-tempered wares points to a post-conquest (Claudio-Neronian) date of deposition.

Material from the South Entrance includes a samian sherd of pre- or early-Flavian date, and the base-sherd of a Terra Nigra platter (TN fabric E6) dating to the pre-Flavian period. Featured coarse wares include bead-rim jars (Fabric SGF3) and a beaker (Fabric F4).

Comparable material was recovered from the fill of F216. The main dump of kiln waste came from this ditch; 5.3 kg in weight (23% by sherd count, 44% by weight of the F216 group) (cf. FIG. 48). Other material from F216 includes samian of pre-Flavian and first-century date and a large number of amphora sherds. The latter were mainly from a Cam. type 186 (Fabric A2) accompanied by some Dressel 20 sherds (Fabric A1). Altogether amphorae make up 27% by weight (6% by sherd count) of this group. The coarse wares are again predominantly sandy

wares (21% by sherd count, 58% by weight). Vessel forms include ring-necked flagons, butt-beakers, rounded-rim beakers, everted-rim and bead-rim jars and bifid-rim 'Surrey bowls' (Lyne and Jefferies 1979, type 5 dated A.D. 60+) (FIG. 46, No. 8).

Pottery from the pre-bank features (232, 297) consists of very fragmentary sherds amongst which is a single sherd of Neronian to early Flavian samian. The remainder are mostly unfeatured coarse wares.

Timber Phase 1

Context group 1.1: Primary Seating-Bank (039, 045, 047, 048, 051, 056–059, 089, 095, 128, 811)

The South Entrance produced 23 sherds, five of which derive from a burnt TR 1 platter of Cam. type 5. The only other featured sherd in this group is a bead-rim jar in Fabric F4. Six sherds were recovered from the SW quadrant (1212), four from the NW quadrant (571), and three from the East Recess (716), all of which can be considered typical of the pre-Flavian period.

The section across the seating-bank produced a wide range of sherds (535 in sherd count, 2868 g). Samian of Neronian to mid Flavian date is accompanied by sherds from a TR 2 platter, three sherds from a TN platter of Cam. type 16 (FIG. 46, No. 37), and two sherds from a Pompeian Red ware platter (Fabric E21). The coarse wares are very similar to those found in Context group 0, both in terms of fabric-type and form. A variety of jars, lids, platters, beakers, flagons and bowls is present, including further examples of Alice Holt bowls (Lyne and Jefferies 1979, type 5) (FIG. 46, No. 32). A number of platters in the same fabric (S8) is also present, including imitations of imported moulded Gallo-Belgic forms like Cam. types 8 and 12/14, as well as a bead-rim jar (FIG. 46, Nos. 30, 31, 35). Sandy wares account for 32% by sherd count (21% by weight) of this group.

Context group 1.2: Secondary addition to the seating-bank

The pottery from the section across the seating-bank shows little perceptible difference from that in the earlier groups. The samian dates to the pre- or early Flavian period. A small amount of later material is present in the uppermost layers (204, 205, 206, 210, 213, 231, 247) consisting of samian of the Trajanic to mid or late Antonine period (210, 211, 213), and a number of Medieval and Post-medieval sherds. Contemporary fine wares also include part of a pedestal beaker in TR 1 C (Fabric E9). Kiln wares continue to be well represented (18% by weight) and some fragments of kiln furniture were recovered from this deposit. Silchester ware (Fabric F1) is fairly prominent, contributing 16% by weight, and includes bead-rim and everted-rim jars. A further 36% by weight is made up of sandy wares, most of which probably originate from the Alice Holt industry (FIG. 46, Nos. 40–42).

Additional material was recovered from contexts 212, 218 and 260 (possibly associated with the primary bank) and from the fill of F212 (237, 245, 267), none of which could be chronologically distinguished from the preceding group. The same is also true of material from uncontaminated layers firmly associated with the secondary heightening of the seating-bank (225, 273, 274, 275, 276, 296) which again contain a high proportion of wares typical of the pre-Flavian period, including a girth-beaker in TR 3 (FIG. 46, No. 43).

Context group 1.3: Post-pits of Revetment of Arena and Entrance-Passage

Moderately small groups of pottery were recovered from the South Entrance, SW quadrant, Arena west and West Recess, the NW quadrant and the North Entrance. The pottery was largely derived from post-pits, mostly single sherds. One small scrap of first-century samian was recovered from the South Entrance. The coarse wares show little difference, with a large proportion of 'native' wares of mid first-century date.

Context group 1.4: Silts and Surfaces associated with the first timber phase

From this Context group the pottery groups begin to include some later types (FIG. 47, Nos.

44–48). Groups were recovered from the South Entrance where six sherds of Trajanic–Hadrianic samian are recorded; from the SW quadrant, the Arena west, from sondages in the arena, and from the North Entrance and the SW quadrant.

The coarse wares from the arena sondages include a few early to late third-century BB1 wares (Fabric S18), presumably intrusive. Samian from these dates to the Flavian and Hadrianic periods. The same sondages produced a high proportion of Dressel 20 amphora sherds which account for 94% (by weight) of this particular group.

Context group 1.5: North Entrance passage-threshold

Only four body-sherds of first-century grog-tempered ware (Fabric G1) were recorded from the fill of F646 (684). Residual.

Context group 1.6: North Entrance drain

The drain produced 44 sherds (323 g) of pottery, predominantly first-century types. Only one featured sherd was present, a jar in fabric S6 (671). No fine wares.

Timber Phase 2

Context group 2.1: Second arena revetment: post-hole fills

The post-holes of this phase produced a low incidence of pottery, mainly small sherds predominantly of first-century types. The only featured sherds were from a beaker decorated with barbotine dots (Fabric S13), probably an early second-century poppy-head type, from 1402 and an Alice Holt bowl (Fabric S8) from 1363.

Context group 2.2: Second arena revetment; upper fills

These layers also produced few sherds (34 sherds, 1446 g). Eighty-three per cent by weight results from amphora sherds, mainly Dressel 20. Other featured sherds include a flat-rim bowl in Fabric S35 and an everted-rim large jar in Silchester ware (Fabric F1). A small sherd of samian of Flavian date was found in the North Entrance. The group was largely first-century in date.

Context group 2.3: Arena surfaces and silts

Contexts associated with this phase produced a total of 140 sherds (987 g) of mainly unfeatured pottery. Samian of Flavian to Hadrianic–Antonine date is present. The only coarse wares of note are a second-century beaker in a fine sandy fabric (S42) from 956 (FIG. 47, No. 52), and jars in fabric F5 (FIG. 47, No. 49), GF2 (FIG. 47, No. 50) and S8 (FIG. 47, No. 51).

Stone Phase

Context group 3.1: The construction-trench of the Arena wall

Remarkably little pottery was associated with this phase (46 sherds, 773 g). Seven are BB1 sherds (199 g) of late third-century date which were intrusive in 724 (FIG. 47, No. 55). The SE quadrant and North Entrance contained residual sherds of pre- and early Flavian samian. The SE quadrant also produced a ring-necked flagon in Fabric GS4 (Flavian–Hadrianic) and a flagon in Fabric S8 equating with Lyne and Jefferies (1979) class 8, dated 60–150. Two examples of bead-rim jars in Fabric SF1 were present in contexts 1001 and 827 (FIG. 47, Nos. 53–54).

Context group 3.2: Gate Posts

A single sherd of Dressel 20 amphora was present at the South Entrance and three sherds of unfeatured coarse ware in Fabrics G1, F5 and S17 were found at the North Entrance.

Context group 3.3: Drain contemporary with the construction of the wall

The drain produced a comparatively large quantity of sherds (226 by sherd count, 1602 g) but

again very few featured pieces. Central Gaulish samian of Hadrianic to early Antonine date was present at the North Entrance along with a quantity of kiln wares (81 sherds, 558 g) identical with those from beneath the rampart in Context group 0. Further examples of bowls together with a flagon and a jar were recorded. Other fabrics residual from the first century include G1, F1, GF1 and GS3. One small scrap of BB1 (Fabric 218) was noted in the East Recess together with several sherds from a jar in Fabric S5 (FIG. 47, No. 56).

Context group 3.4: The Arena silts, make-ups and surfaces after the construction of the arena wall.

This episode produced one of the largest collections of Roman pottery from the site (962 sherds, 19,488 g). Seventy-seven per cent by weight is taken up by Dressel 20 amphora sherds which are particularly common in the SW quadrant and western arena. Several of these sherds derive from a re-used Dressel 20 which had been broken and smoothed off at the shoulder in antiquity (FIG. 47, No. 71). The samian from this phase ranges in date from the pre-Flavian through to the Antonine period. Other fine wares present include a white-ware flagon-rim (Fabric E13) (FIG. 47, No. 57), fine black ware (Fabric E28), a burnt TR cup of Cam. form 56, and a sherd from a colour-coated beaker of North Gaulish type dated 70–150. The latest coarse wares present include BB1 wares, for example a flanged bowl and a jar of Gillam (1976) type 10 (FIG. 47, No. 62) dated to the third century onwards, and late Alice Holt wares. These last-mentioned include flanged bowls with low beads and straight-sided dishes (Fabric S24) (FIG. 47, Nos. 64, 69). Also of note is an Oxford white-ware single-handled flagon (Fabric S43) (FIG. 47, No. 70). Sand-tempered wares make up 57% by weight of the coarse ware assemblage (excluding amphora). The remaining 43% largely comprises grog- and flint-tempered wares and kiln wares residual from the first century.

Context group 3.5: The late drain

The late drain produced 130 sherds (2174 g) of pottery. As with the earlier phases a large proportion of this is amphora (70% by weight). Late Alice Holt ware (Fabric S11) is present in the form of a cable-rim jar and a flanged bowl (FIG. 47, Nos. 73–74), dated by Lyne and Jefferies (1979) to A.D. 180+ and 270–350 respectively. A straight-sided BB1 dish was found in the SE quadrant (FIG. 47, No. 72).

Context group 3.6: Latest arena surface

The pottery assemblage from the latest arena surface contained a number of Medieval sherds derived from later disturbances. Few if any of the Roman sherds present could be regarded as indicative of the fourth-century date suggested for this phase. Featured sherds were limited to a bead-rim jar in Fabric SGF2 (first century).

Phase 4: Post-Roman silting

The post-Roman silting contained several late Roman fabrics not present in previous levels. These include New Forest and Oxfordshire colour-coated wares, a Rhenish colour-coated beaker and an Oxford white-slipped mortarium of Young (1977) type WC7.

These occurred alongside other Roman coarse wares dating from the first century onwards. A single early Medieval cooking-pot rim (Fabric 2) was also recorded.

Phase 5: Medieval Occupation

Context group 5.1: Discrete features in South Entrance

The pits and hearths cutting the Roman metalling (030) contain predominantly Medieval sherds in Fabrics 2, 6 and 10. Fabric 2 accounts for 88% of the material by sherd count (84% by weight) and almost exclusively occurs as cooking-pots with thumb-pressed rims (FIG. 50, Nos.

1, 3, 7–11, 17–18, 21). Two sherds from dishes (FIG. 50, Nos. 25, 27) were the only exceptions. Further examples of cooking-pots occurred in Fabric 10 (FIG. 51, Nos. 29, 30, 32). Fabric 6 was present in the form of a tripod-base from a pitcher (023) (FIG. 51, No. 37), a cooking-pot (FIG. 51, No. 38) and a handled jug with a knicked rim (FIG. 51, No. 39). Sherds from the latter vessel occurred in contexts 023, 024, and 028. Other links between 022 and 024 were also observed. Four sherds of residual Roman pottery were found in 020 and 024. Fabric 2 is generally thought to have been current in the eleventh and down to the mid twelfth century. The small amount of Fabric 6, dating to the mid to late twelfth century, suggests that a date towards the latter half of the twelfth century is appropriate for the fill of these features.

Context group 5.2: South Entrance; features in the horn of the west seating-bank

The Medieval and possibly Medieval feature in the horn of the west seating-bank produced a small number of Medieval sherds ranging in date from the twelfth to the thirteenth–fourteenth centuries. In addition there were three sherds derived from Post-medieval disturbances and five residual Roman pieces.

Context group 5.3: South Entrance; Pit F53

The fill of Pit F53 contained sherds identical to the range already described in Context group 5.1, namely Fabrics 2, 6, and 10. A date in the second half of the twelfth century is likely.

Context group 5.4: South Entrance; Drain F9

The lower fill of the drain produced a mixture of sherds ranging in date from the mid to late twelfth through to the thirteenth–fourteenth centuries. Fabrics present include 2, 6, 10, 11, 17, 21 and 22.

Context group 5.5: South Entrance; general layers

A single sherd of residual Roman pottery (Fabric GS4).

Context group 5.6: South Entrance; revetment behind the passage wall

Despite their possible Medieval date, the contexts allocated to this phase produced only seven sherds of early Roman pottery. These were probably derived from the seating-bank.

Context group 5.7: South Entrance; general late Medieval layers

A great variety of fabrics was recorded from these layers including 19 sherds of Roman wares, two Saxon sherds, 394 sherds of Medieval (twelfth–fifteenth century), and 21 sherds of Post-medieval (sixteenth–eighteenth century). The majority of the featured sherds come from cooking-pots in Fabric 2 (79% by vessel-equivalents) (FIG. 50, No. 15).

Context group 5.8: South-west quadrant; post-holes

The post-holes belonging to this phase cut into the Roman arena wall and produced no contemporary material. The only pottery consisted of five Roman sherds.

Context groups 5.9–10: South-west quadrant; general layers (seating-bank)

The general layers provided a large collection of pottery, 87% of which by weight (90% by sherd count) is Roman and dates from the first to fourth centuries. The remainder consists of 12% by weight (9% by sherd count) Medieval wares, and 1% by weight (1% by sherd count) Post-medieval wares from later intrusions. The Roman wares contain a high proportion of rim-sherds when compared to earlier phased groups. Amphorae account for 20% by weight of the Roman assemblage.

Context group 5.11: West Recess and western arena; general layers

A similar picture to that in Context groups 5.9–10 is presented by the pottery recovered from the general layers in the western arena, where 74% of the wares by weight are Roman (46% by sherd count). The remaining 26% by weight (54% by sherd count) are twelfth- to fourteenth-century in date.

Context group 5.12: Western arena; Medieval earthfast building

The majority of the pottery from the post-holes associated with this structure (82% by weight) dates to the early Medieval period (mid to late twelfth century). The principal vessel-type is the everted-rim cooking-pot, but there is at least one bowl. This group is thus contemporary with Context groups 5.1 and 5.3. The remaining sherds are residual Roman wares.

Context group 5.13: North-west quadrant; seating-bank slip

The late Medieval seating-bank slip contained unfeathered sherds of twelfth- to fifteenth-century date.

Context groups 5.14–5.16: North Entrance passage

The post-Roman fill of the entrance-passage contained mainly Roman sherds. The latest pieces present were six sherds ranging from the twelfth to the fifteenth century. The drain F604, which cuts this fill, contained a residual sherd of eleventh- to twelfth-century date.

Phase 6: Post-Medieval

Context group 6.1: South Entrance; general layers

These layers contained 13.6 kg of pottery. Only a small fraction of this was Roman (2% by sherd count, 1% by weight), the rest being Medieval (46% by weight, 53% by sherd count) (twelfth to fifteenth century) and Post-medieval (53% by weight, 45% by sherd count) (sixteenth to nineteenth/twentieth century). The Medieval wares included a number of hand-made cooking-pot rims (FIG. 50, Nos. 5, 6, 12–14, 19, FIG. 51, Nos. 28, 32–36) in Fabrics 2, 10, and 11. In addition there are examples of wheel-made slightly later cooking-pots in Fabrics 16, 19, 7 and 18 (FIG. 51, Nos. 43–45). The Post-medieval pottery includes a large number of domestic wares from the Surrey-Hampshire industry with examples of a multi-lobate dish (FIG. 52, No. 74), a costrel (FIG. 52, No. 52), pipkins (FIG. 52, No. 69), chamber-pots (FIG. 52, Nos. 54–57), bowls, dishes (FIG. 52, Nos. 53, 61–65, 67–68) and butter-pots (FIG. 52, Nos. 59–60). Also present was a fragment from a tin-glazed seventeenth- to eighteenth-century charger or display vessel (FIG. 52, No. 51).

Context group 6.2: South Entrance; Pit F3

This pit produced a good Post-medieval assemblage dating to the late seventeenth or early eighteenth century. Many of the sherds were large, enabling several vessels to be reconstructed. Surrey-Hampshire white wares form 32% by weight of the group and red earthenwares 44%. The former includes examples of pipkins with tripod bases and internal yellow-green glaze (FIG. 52, Nos. 70–72), a fragment of a perfume-jar (FIG. 52, No. 75) and shallow bowls (FIG. 52, Nos. 77–78). The red earthenwares also include examples of pipkins (FIG. 53, No. 101), a jug (FIG. 53, No. 98) and bowls (e.g. FIG. 53, No. 100). Other vessels of note include the top of a bellarmine jug from Frechen (Fabric 28) dating to the late seventeenth century (FIG. 52, No. 50), a pale blue-glazed chamber-pot (Fabric 43) (FIG. 54, No. 102) and a mug in an orange fabric covered with a brown glaze (FIG. 53, No. 99). The clay pipes and glass are reported above and below respectively (pp. 102 and 125).

Context group 6.3: South Entrance; Pit F13

A small group of undistinguished wares ranging from the Roman through to the Post-medieval period was recovered from the fill of this feature.

Context group 6.4: South Entrance; Pit F19

Two sherds probably of late seventeenth-century date (Fabrics 5 and 20).

Context groups 6.5–6.8: South Entrance; F18, F37/1722, F58, F1732

Except for Context group 6.7 (gate-post F1732) which produced one small fragment of Surrey

green-glazed ware (sixteenth to early eighteenth century), these features contained only a few sherds of Roman pottery.

Context groups 6.9–6.15: Arena and North Entrance; drain (F401) and topsoil layers

The topsoil produced *c.* 17 kg of pottery which ranged in date from the mid first century A.D. through to the twentieth century. Roman wares account for 12% by weight but 20% by sherd count (6% by vessel-equivalent) of the total, these figures reflecting the residual nature of the sherds. Medieval wares account for a further 9% by weight (10% by sherd count, 4% by vessel-equivalent). The remaining 79% are Post-medieval in date. This group features the latest material to be found on the site, with significant quantities of nineteenth- and twentieth-century English stonewares (e.g. FIG. 54, Nos. 103–4) and china including cups, saucers, plates (e.g. FIG. 54, No. 105) and teapots.

CATALOGUE OF ILLUSTRATED SHERDS
(layer-number in brackets)

Context group 0, Fig. 46, Nos. 1–19

1. Bead-rim jar in fabric SGF3, (91)
2. Bead-rim handmade jar in fabric F1, (219)
3. Platter in fabric GF1, (219)
4. Small beaker in fabric S2, (219)
5. Beaker in fabric S5, (219)
6. Bead-rim jar in fabric S8, (214)
7. Everted-rim cordoned jar in fabric S8 (214)
8. Bowl, Lyne and Jefferies (1979), type 5 in fabric S8, (214)
9. Bowl in fabric S12, (214)
10. Butt-beaker in fabric S12, (219)
11. Butt-beaker in fabric S12, (214)
12. Beaker body-sherd with rouletted decoration in fabric S12, (219)
13. Collared flagon in fabric S12, (214)
14. Beaker in fabric S24, (214)
15. Everted-rim jar in fabric S24, (214)
16. Everted-rim jar in fabric S24, (227)
17. Lid in fabric S24, (222)
18. Collared flagon in fabric S39, (214)
19. Bead-rim jar in fabric F4, (256)

Context group 1.1, Fig. 46, Nos. 20–37

20. Hand-made bead-rim jar in fabric F1, (307)
21. As 20.
22. Hand-made bead-rim jar in fabric F1, (313)
23. As 22.
24. Hand-made everted-rim storage jar in fabric F1, (303)
25. As 24, (307)
26. Hand-made lid with a burnished surface in fabric F1, (308)
27. Bead-rim jar in fabric GF2, (306)
28. Jar/beaker in fabric (?)GS2, (309)
29. Platter imitating Cam. type 12 in fabric GS4, (309)
30. As 29 in fabric S8, (313)
31. Bead-rim jar in fabric S8, (309)
32. Bowl, Lyne and Jefferies (1979) type 5 in fabric S8, (307)
33. Butt-beaker in fabric S12, (305)
34. Platter in fabric S12, (309)
35. Platter in fabric S24, (313)
36. Platter Cam. type 8 TR 2 (fabric E10), (308)
37. Platter Cam. type 16 in TN (fabric E6), (294)

Context group 1.2, Fig. 46, Nos. 38–43

38. Beaker with a burnished-line pattern in fabric SGF4, (212)
39. Flagon in fabric F4, (210)
40. Platter in fabric S8, (210)
41. Bead-rim jar in fabric S24, (193)

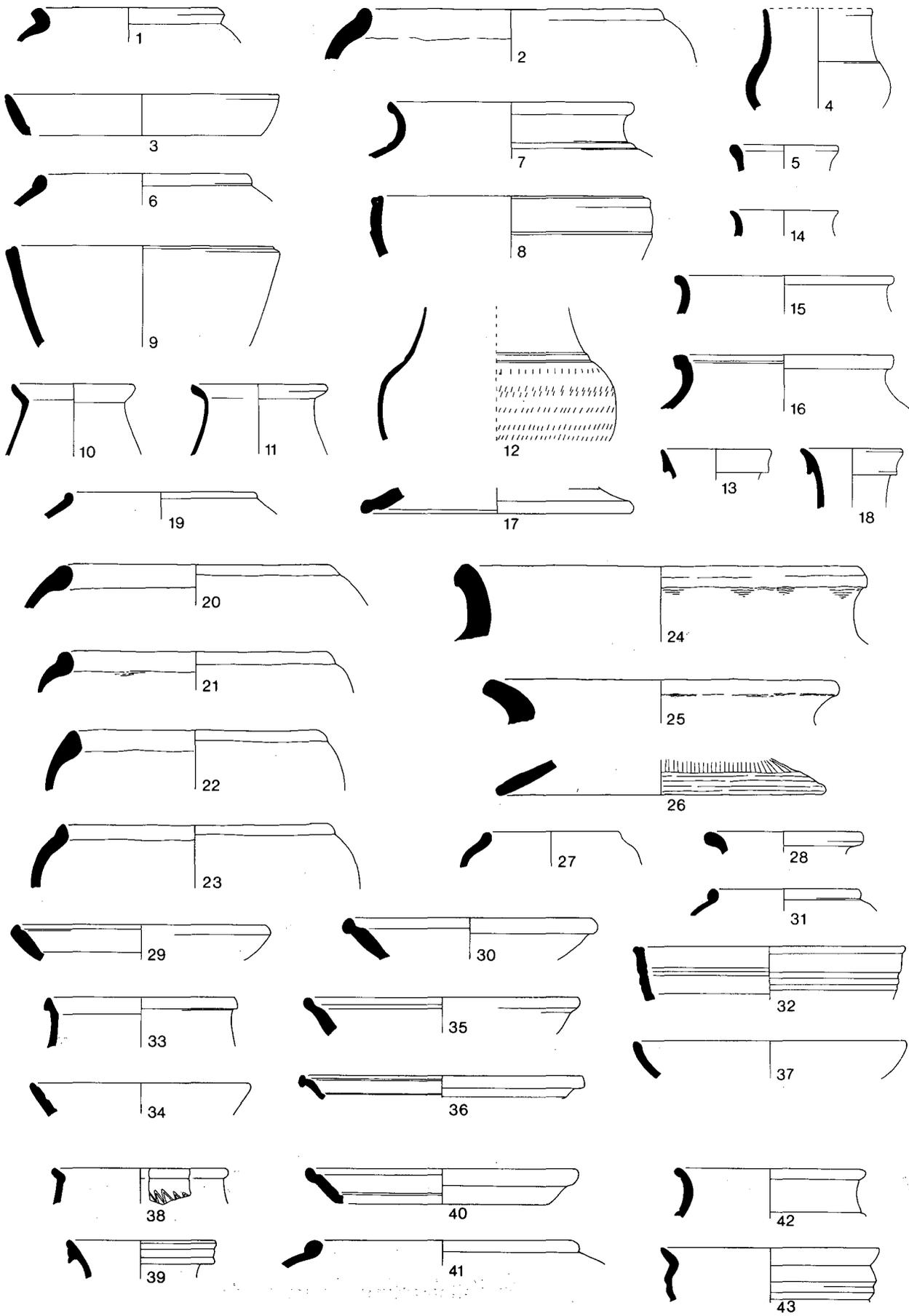


FIG. 46. Roman Pottery (Scale, 1:4).

- 42. Everted-rim jar in fabric S24, (212)
- 43. Girth beaker in TR 3 (fabric E11), (276)

Context group 1.4, Fig. 47, Nos. 44–48

- 44. Lid in fabric F5, (958)
- 45. Lid in fabric S8, (958)
- 46. Jar in fabric S8/22, (958)
- 47. Jar in fabric SGF3, (1651)
- 48. Flagon with a white slip in fabric S38, (1283)

Context group 2.3, Fig. 47, Nos. 49–52

- 49. Bead-rim jar in fabric F5, (968)
- 50. Everted-rim jar in fabric GF2, (1502)
- 51. Jar in fabric S8, (1640)
- 52. Beaker in fabric S42, (9956)

Context group 3.1, Fig. 47, Nos. 53–55

- 53. Bead-rim jar in fabric SF1, (1001)
- 54. As 53, (827)
- 55. Flanged bowl Gillam (1976) type 48/49 in BB1 (fabric S18), (724)

Context group 3.3, Fig. 47, No. 56

- 56. Jar in fabric S5, (747)

Context group 3.4, Fig. 47, Nos. 57–71

- 57. White-ware flagon in fabric E13, (1109)
- 58. Bead-rim jar in fabric S6, (464/466)
- 59. White-ware jar with a sooted exterior in fabric (?)S9, (1014)
- 60. Ring-necked flagon in fabric S10, (461)
- 61. Everted-rim jar in fabric S11, (1249)
- 62. Jar in BB1 (fabric S18), (920)
- 63. A burnt bead-rim dish in BB1 (fabric S18), (455/433/461)
- 64. Flat-rim bowl in fabric S24, (920)
- 65. Everted beaded rim jar in fabric S28, (810)
- 66. Bowl in fabric S28, (832)
- 67. Bowl decorated with a burnished-line lattice in fabric S34, (1249)
- 68. Bowl in fabric S34, (1014)
- 69. Flanged bowl in fabric S24, (1023)
- 70. Flagon, Young (1977) W5 variant in Oxfordshire white ware (fabric S43), (805)
- 71. A re-used Dressel 20 amphora fabric A1, (908)

Context group 3.5, Fig. 47, Nos 72–74

- 72. A plain shallow bowl in BB1 (fabric S18), (1107)
- 73. Flanged bowl in fabric S11 (Alice Holt), (910)
- 74. Storage jar with a cable rim in fabric S11, (910)

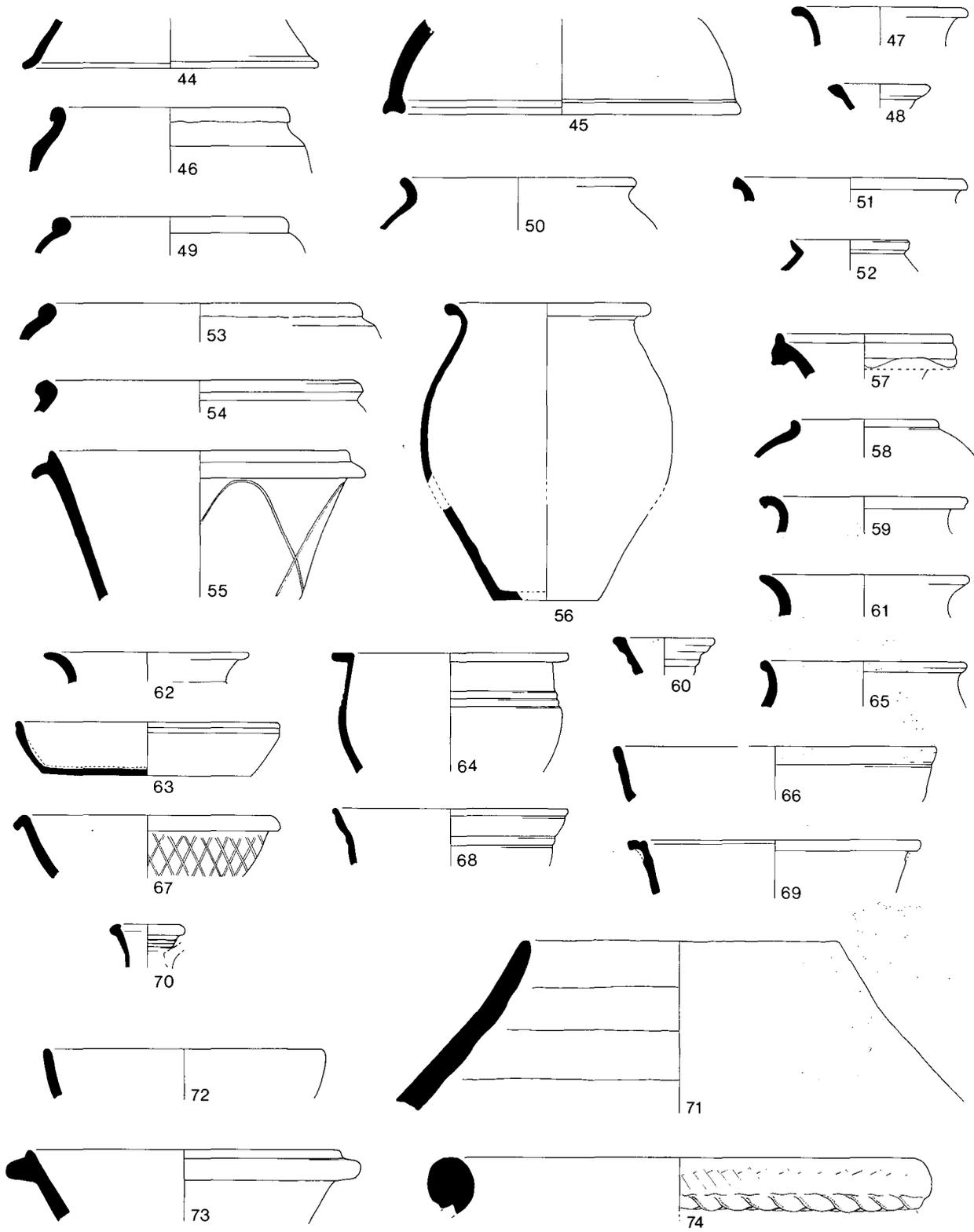


FIG. 47. Roman Pottery (Scale, 1:4).

Figure 48: Nos. 75–103. Kiln wares

- 75–85. Bowls with flaring rims and pedestal-bases in white slipped fabric K1, (219 and 227)
 86. Single-handled ring-necked flagon in fabric K1, (645)
 87. Flagon in fabric K1, (227)
 88. Flagon in fabric K1, (219)
 89–91. Flagon base-sherds in fabric K1, (227)
 92. (?)Flagon in fabric K1, (1648)
 93. Cylindrical (?)beaker in fabric K1, (227)
 94. Bead-rim jar in fabric K1, (227)
 95–98. Flat-rim bowls in fabric K1, (227)
 99–103. (?)Items of kiln furniture (contexts 227, 210, 1650, 227 and 227 respectively). See p. 89.

Figure 49: Wares from kilns excavated in 1906 (May 1916) (see p. 89)

- A–B. Ring-necked flagons
 C. Very large flagon
 D. Jar decorated with a knicked cordon
 E. Jar with a carinated shoulder
 F–H. Necked jars (wasters)
 I. Carinated beaker with burnished-line decoration
 J. Shallow platter
 K. Dish
 L–M. Lids
 N–U. Reeded-rim bowls

Figure 50: Medieval Pottery

- 1–22. Handmade cooking-pots in fabric 2 from context groups; 5.1 (022) (No. 1); 5.3 (061) (No. 2); 5.1 (025) (No. 3); 5.8 (1238) (No. 4); 6.1 (010) (No. 5); 6.1 (002) (No. 6); 5.1 (023) (No. 7); 5.1 (023) (No. 8); 5.1 (020 F004) (No. 9); 5.1 (020 F004) (No. 10); 5.1 (024) (No. 11); 6.1 (060) (No. 12); 6.1 (010) (No. 13); 6.1 (010) (No. 14); 5.7 (013) (No. 15); 5.4 (017) (No. 16); 5.1 (02 F005) (No. 17); 5.1 (025) (No. 18); 6.1 (010) (No. 19); 5.3 (061) (No. 20); 5.1 (024) (No. 21); 5.3 (061) (No. 22).
 23. Decorated body-sherd from a spouted pitcher in fabric 2, 5.12 (563).
 24–27. Dishes in fabric 2 from context groups 6.9 (504) (No. 24); 5.1 (025) (No. 25); 5.12 (547) (No. 26); 5.1 (025) (No. 27).

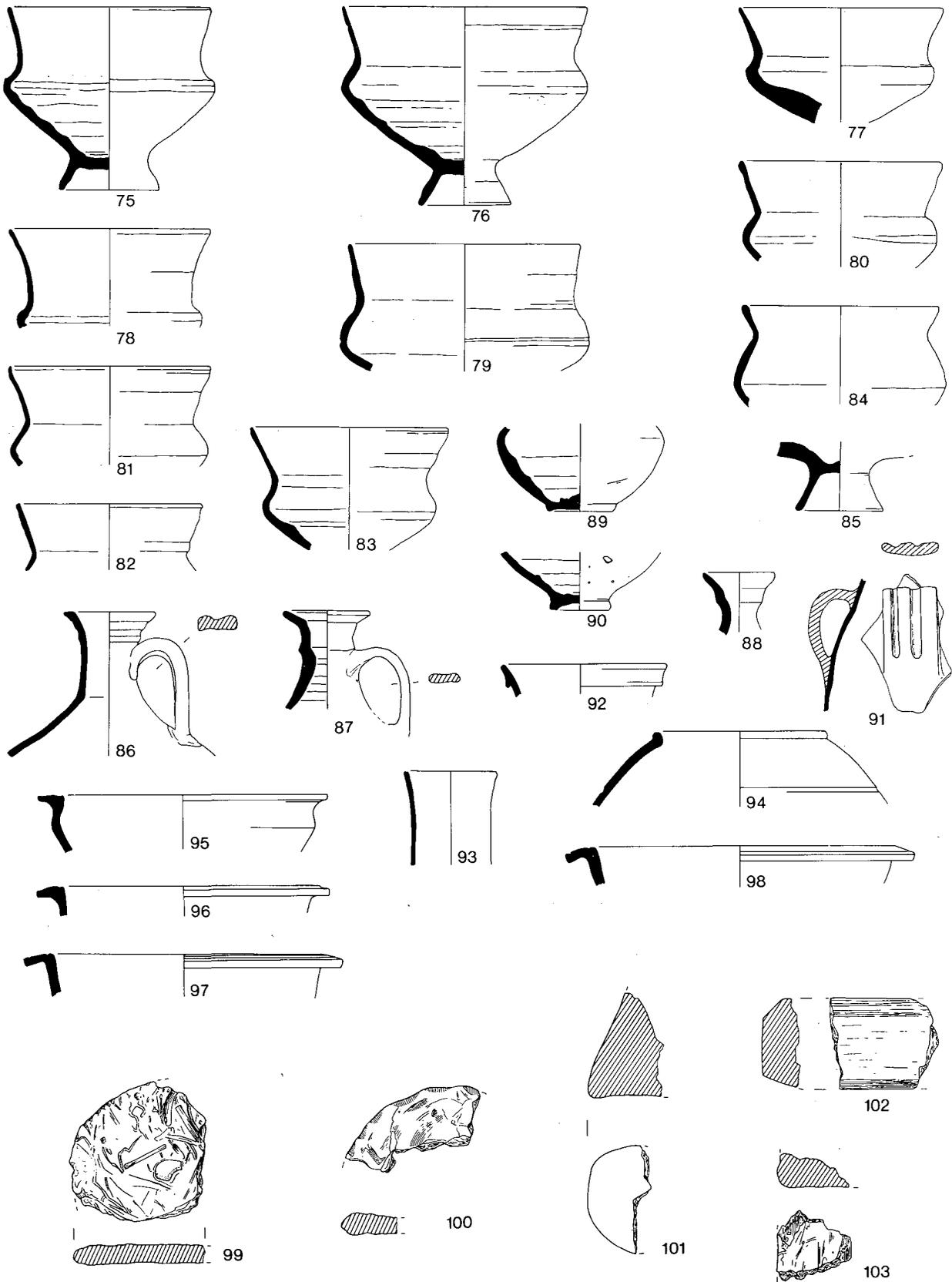


FIG. 48. Kiln Wares (Scale, 1:4).

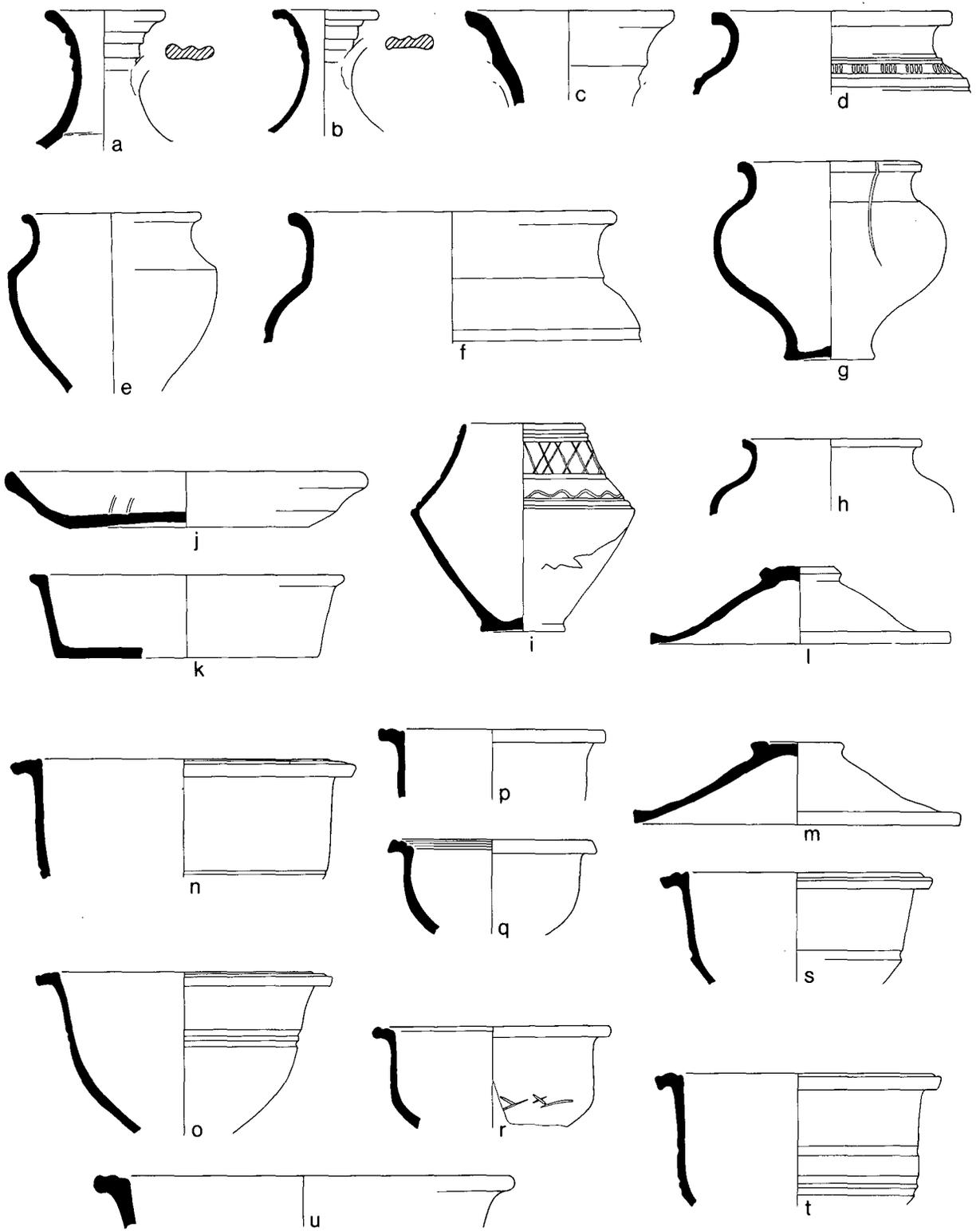


FIG. 49. Wares from Kilns excavated in 1906 (Scale, 1:4).

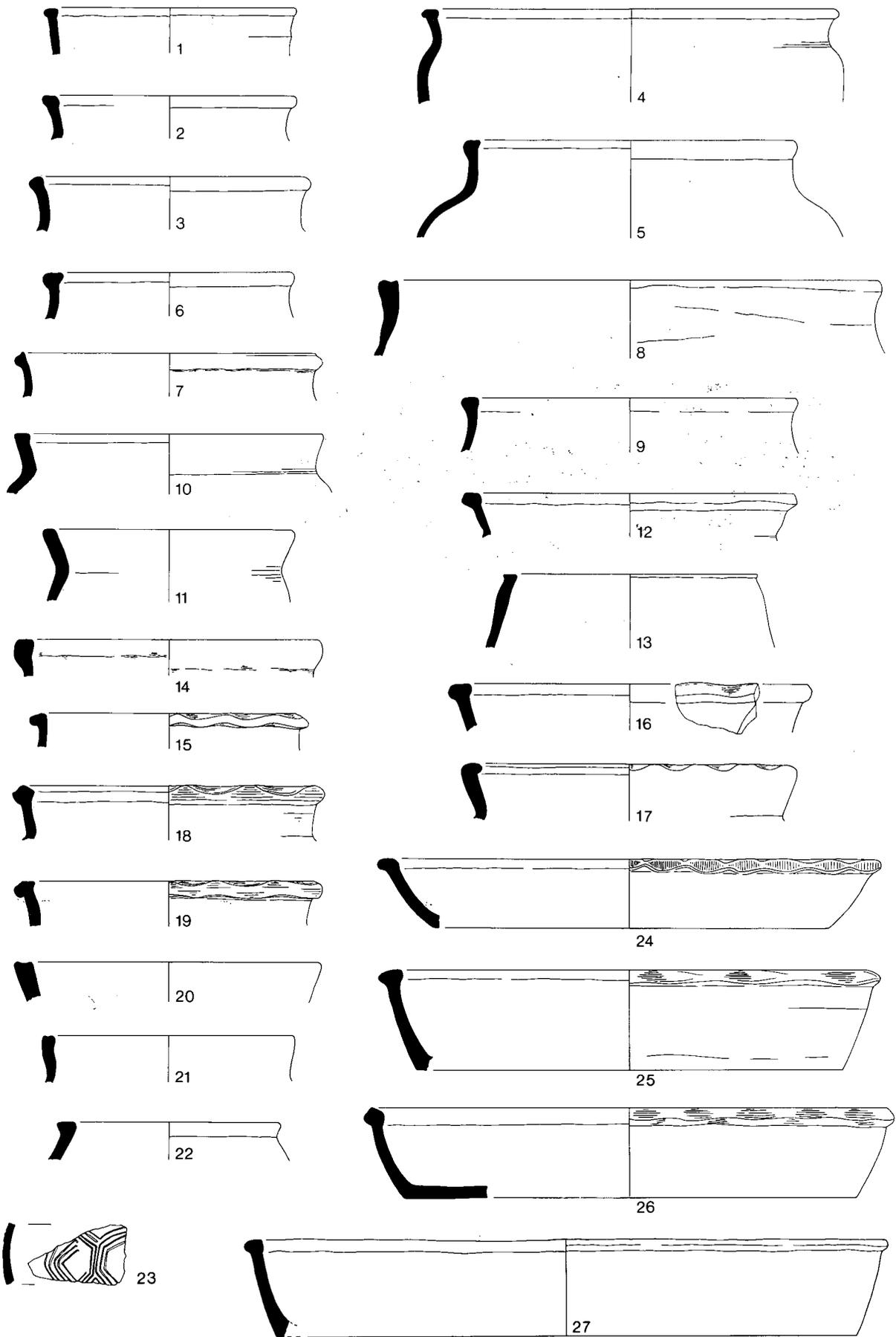


FIG. 50. Medieval Pottery (Scale, 1:4).

Figure 51; Medieval Pottery

- 28–32. Hand-made cooking-pots in fabric 10 from Context groups; 6.1 (008) (No. 28); 5.1 (020) (No. 29); 5.1 (024) (No. 30); 3.6 (disturbance) (030) (No. 31); 6.1 (060) (No. 32).
- 33–36. Hand-made cooking-pots in fabric 11 from Context groups; 6.1 (010) (No. 33); 6.1 (003) (No. 34) 6.1 (010) (No. 35); 6.1 (003) (No. 36).
37. Base-shoulder from a tripod pitcher in fabric 6, Context group 5.1 (020)
38. Hand-made/wheel-finished cooking-pot in fabric 6, Context group 6.1 (003)
39. Wheel-made handled (?)pitcher with a knicked rim in fabric 6, Context group 5.1 (024, 028)
40. Wheel-made handled pitcher partially covered on the exterior surface by a thin green glaze, fabric 6, Context group 5.1 (020)
41. Hand-made body-shoulder with combed decoration from a (?)spouted pitcher in fabric 21, Context group 6.9 (504)
42. A strap-handle with slash decoration and impressed ring-and-dot at the base of the springing. Partially covered with a white slip, fabric 37, Context group 5.7 (014)
43. Wheel-made cooking-pot in fabric 16, Context group 6.1 (010)
44. Cooking-pot in fabric 19, Context group 6.1 (004)
45. Cooking-pot in fabric 7, Context group 6.1 (004)

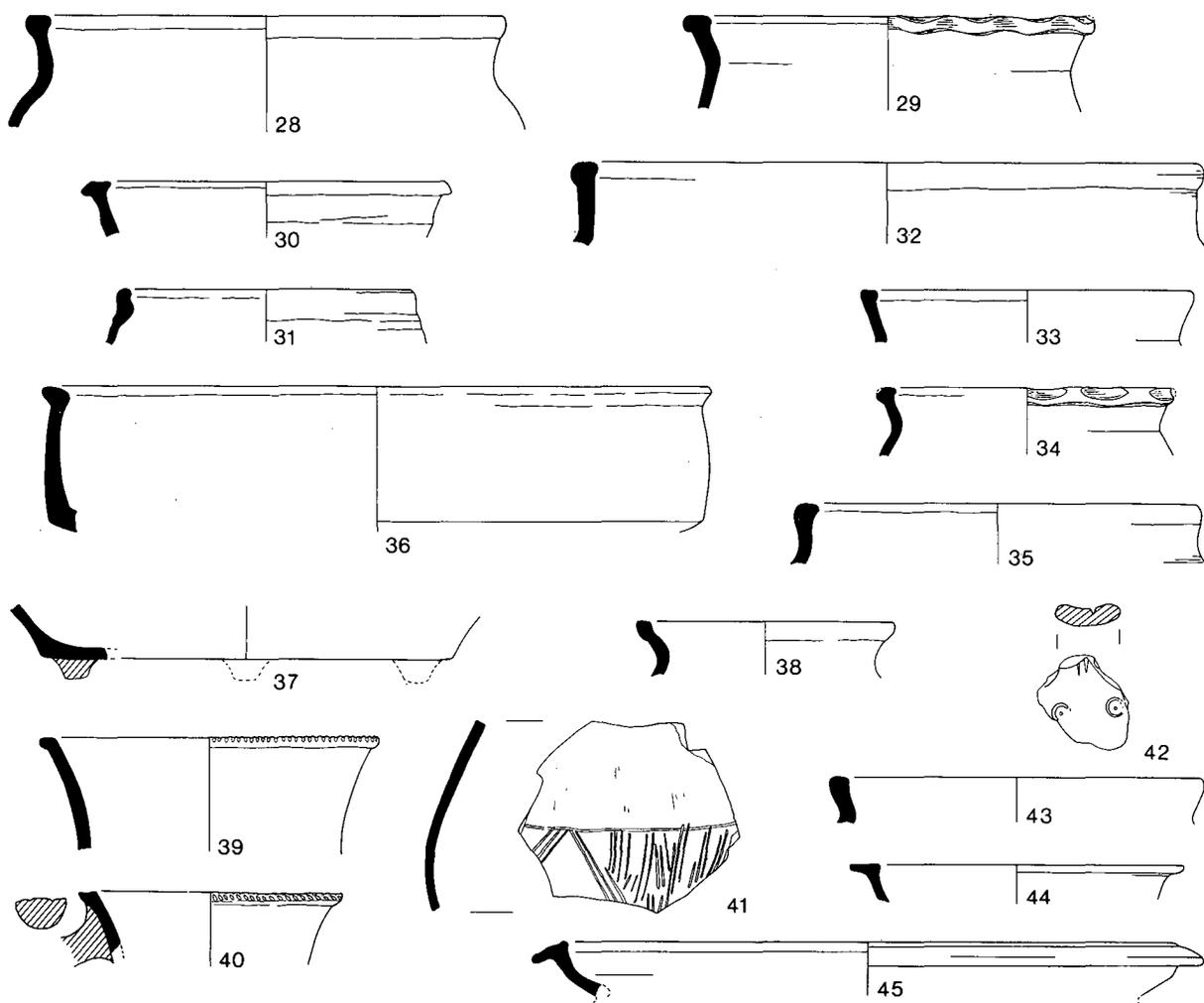


FIG. 51. Medieval Pottery (Scale, 1:4).

Figure 52: Late Medieval and Post-medieval Pottery

- 46–47. Cooking-pots in fabric 18, Context group 6.1 (004)
48. Bowl in fabric 5, Context group 6.1 (005)
49. (?)Chamber pot in fabric 5, Context group 6.9 (209)
50. Top of a bellarmine jug in fabric 28, Context group 6.2 (F003)
51. Fragment of a charger in fabric 38, decorated with a mainly blue-on-white painted design with some lines in a brownish-yellow, Context group 6.1 (004)
52. A green-glazed costrel in fabric 1, Context group 6.1 (002)
53. A hemispherical bowl with an internal green glaze in fabric 1, Context group 6.1 (002)
- 54–55. Chamber-pots with internal yellow glazes, fabric 1, Context group 6.1 (002)
56. A chamber-pot with an internal green glaze, fabric 1, Context group 6.1 (002)
57. A chamber-pot with an internal yellowish-green glaze, fabric 1, Context group 6.1 (002)
58. The base of a butter-pot with a sooted exterior and a yellow-glazed interior, fabric 1, Context group 6.2 (F003)
59. A butter-pot with a yellowish-green crazed glaze on the top of the exterior surface of the vessel and on the interior, fabric 1, Context group 6.1 (002)
60. A butter-pot with a yellow green internal glaze, fabric 1, Context group 6.1 (005)
- 61–63. Shallow dishes with internal green glaze, fabric 1, Context group 6.1 (004)
64. A bowl with an internal bright green glaze, fabric 1, Context group 6.1 (002)
65. A bowl with an internal green glaze, fabric 1, Context group 6.1 (008)
66. A bowl with an internal yellow-green glaze, fabric 1, Context group 6.9 (601)
67. A bowl with an internal yellow-green glaze, fabric 1, Context group 6.1 (008)
68. A bowl with a bright green glaze on the exterior and interior surfaces, fabric 1, Context group 6.1 (002)
69. A pipkin with an internal yellow-green glaze, fabric 1, Context group 6.1 (004)
70. A pipkin with an internal yellow glaze, fabric 1, Context group 6.2 (F003)
- 71–72. Pipkins with internal yellow-green glaze, fabric 1, Context group 6.2 (F003)
73. A partially yellow-glazed twisted handle probably from a bedpan, fabric 1, Context group 5.7 (018)
74. Part of a multi-lobate dish with a yellow surface-glaze, fabric 1, Context group 6.1 (002)
75. A rim-sherd from a perfume-jar with irregularly-cut shapes in the body. The exterior surface is covered in a yellowish-green glaze, fabric 1, Context group 6.2 (F003)
76. A jar in fabric 20, Context group 6.1 (005)
77. A shallow dish in fabric 20, Context group 6.2 (F003)
78. A bowl in fabric 35 with a thin internal glaze, Context group 6.2 (F003)
79. A bowl in fabric 36 with an orange glaze marked by greenish patches on the interior and exterior surfaces, Context group 6.9 (502)

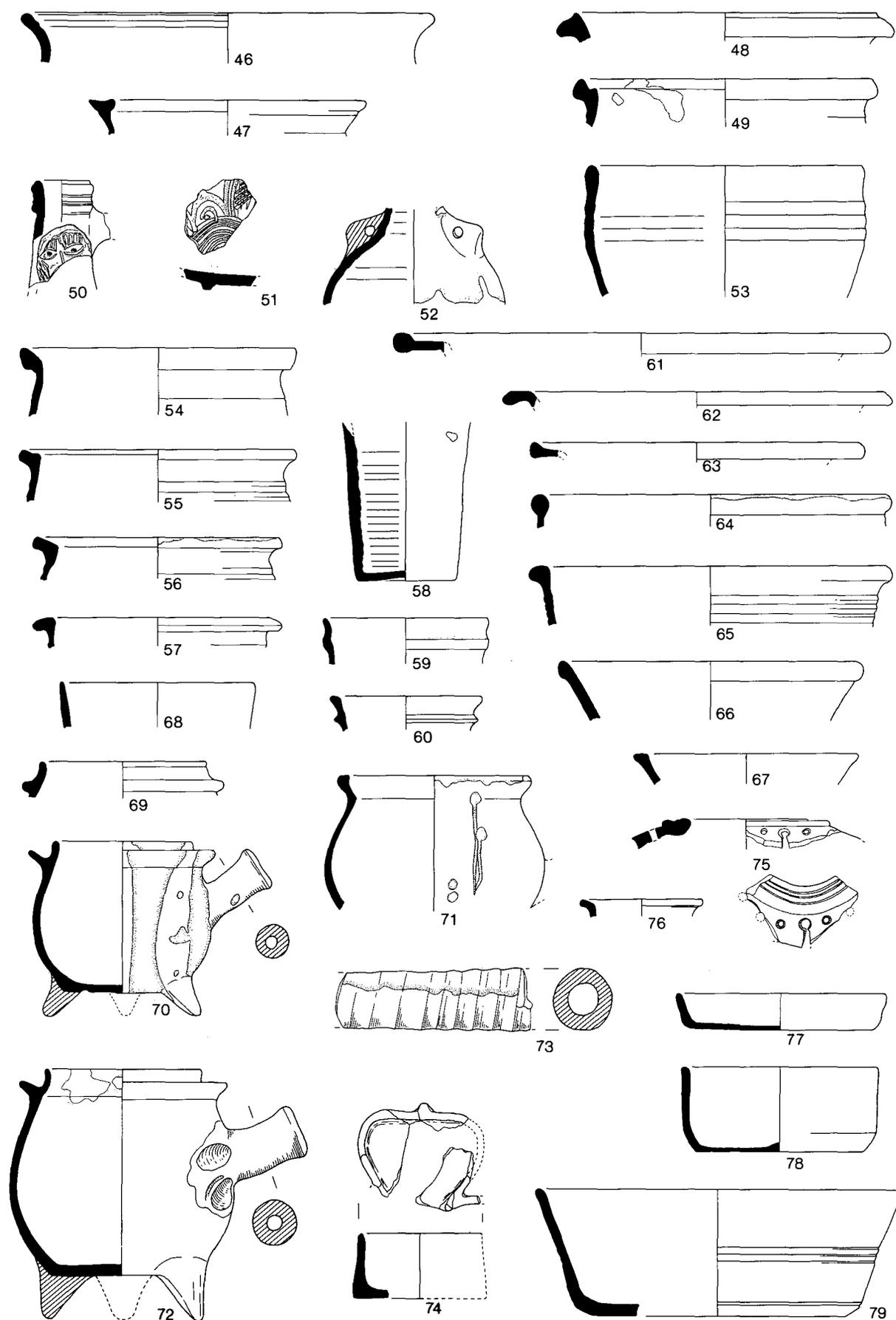


FIG. 52. Late medieval and Post-medieval Pottery (Scale 1:4).

Figure 53: Post-medieval Red Earthenwares

80. A large dish, internally glazed, fabric 8/17, Context group 6.13 (403)
81. A bowl with an internal orange-brown glaze extending over the rim, fabric 8/17, Context group 6.1 (002). Seventeenth to eighteenth century.
82. A bowl with a green-brown internal glaze, fabric 8/17, Context group 6.1 (005)
83. An internally-glazed (?)bowl with a beaded rim, fabric 8/17, Context group 6.9 (502)
84. A flat-rim dish, glazed internally, fabric 8/17, Context group 6.1 (003)
85. A bowl with an orange-brown internal glaze, fabric 8/17, Context group 6.1 (005)
86. A bowl with a red-brown internal glaze, fabric 8/17, Context group 6.1, (002)
87. A bowl with an internal brown glaze, fabric 8/17, Context group 6.1 (002)
88. An internally-glazed bowl, fabric 8/17, Context group 6.9 (401)
89. An internally-glazed bowl, fabric 8/17, Context group 6.9 (401)
90. A small dish with slip decoration, fabric 8/17, Context group 6.13 (403)
91. A shallow dish with slip decoration and an orange-brown internal glaze, fabric 8/17, Context group 6.9 (504)
92. A shallow dish with a green-brown internal glaze, fabric 8/17, Context group 6.1 (004)
93. A shallow dish with an internal orange glaze, fabric 8/17, Context group 6.9 (502)
94. A shallow dish with an internal orange glaze, fabric 8/17, Context group 6.9 (401)
95. A slip-decorated dish with an internal brown glaze, fabric 8/17, Context group 6.1 (002)
96. An internally-glazed hemispherical bowl, fabric 8/17, Context group 6.14 (626)
97. An internally-glazed vessel with a lid-seating, fabric 8/17, Context group 6.15 (631)
98. A jug, glazed internally, fabric 8/17, Context group 6.2 (F003)
99. A mug, glazed on both the interior and exterior surfaces, fabric 8/17, Context group 6.2 (F003)
100. A chafing dish or handled bowl with an orange-brown internal glaze, fabric 8/17, Context group 6.2 (F003)
101. A seventeenth-century pipkin, glazed internally with splashes on the exterior, fabric 8/17, Context group 6.2 (F003)

Figure 54: Post-medieval Wares

102. A chamber-pot with a pale blue glaze, fabric 43, seventeenth to early eighteenth century, Context group 6.2 (3)
103. A nineteenth-century stoneware inkpot, fabric 23, Context group 6.13 (401, 403)
104. A stoneware mineral-water bottle stamped TUNBRIDGE & CO. Fabric 23. Tunbridge & Co. came into existence in 1886, previously being known as F. Tunbridge who was a chemist as well as a mineral-water manufacturer. The business was based at 39, Castle Street, Reading. It continued until 1918 when the company amalgamated with another firm to become Tunbridge Jones and Co. (Reading Town Directories; information from S. Read). Context group 6.9 (504)
105. A chinaware plate, fabric 4 with a chinese-style design in blue-black on a white background with occasional smudges of added yellow and red colour. The back of the plate carries a broken registration-mark indicating the date when the plate was registered although not necessarily manufactured. This particular type of registration-mark was current between 1842 and 1883 and the W at the top of this example suggests a registration in 1865. Context group 6.9 (501, 502, 504)

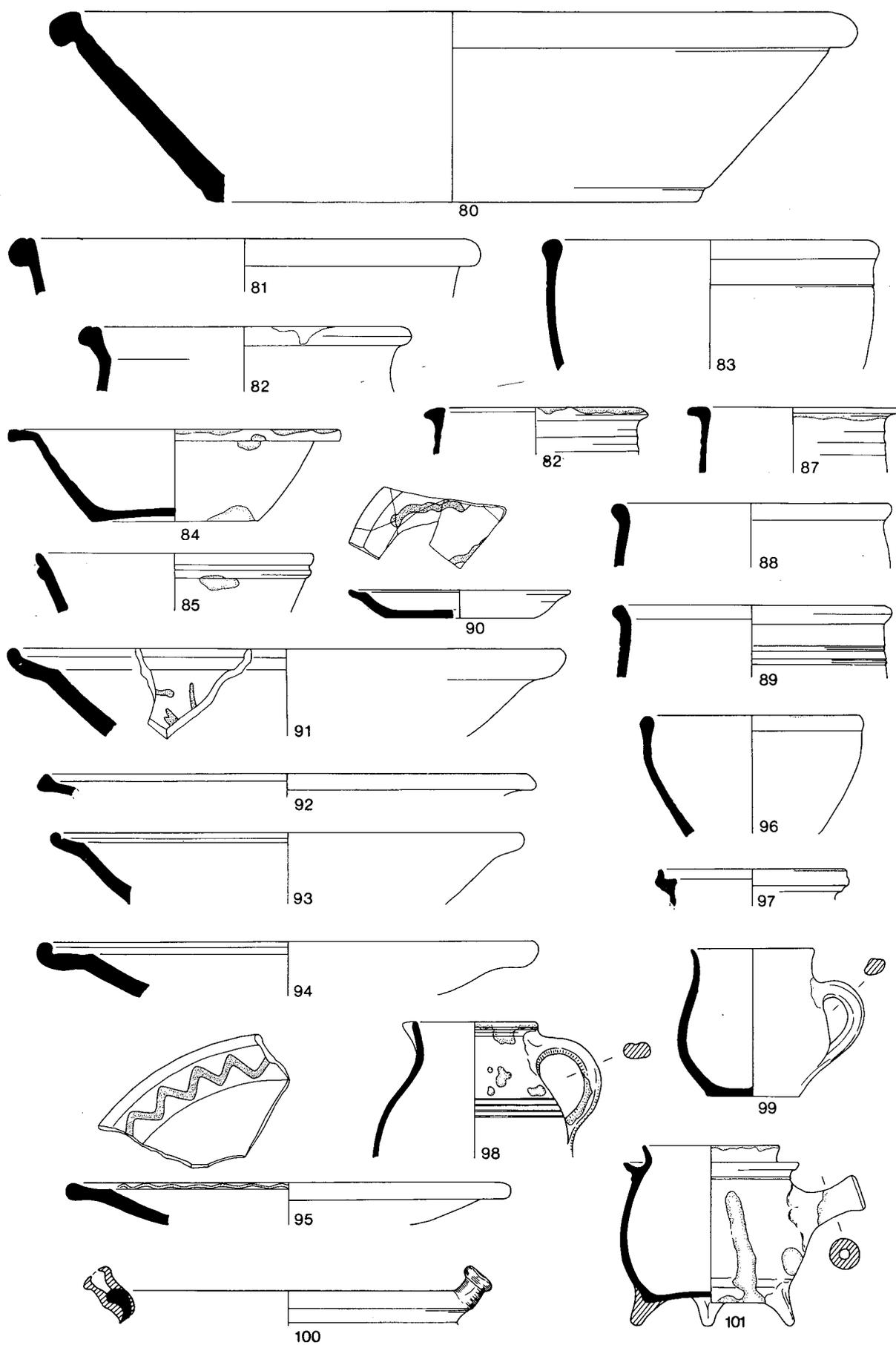


FIG. 53. Post-medieval red Earthenwares (Scale, 1:4).

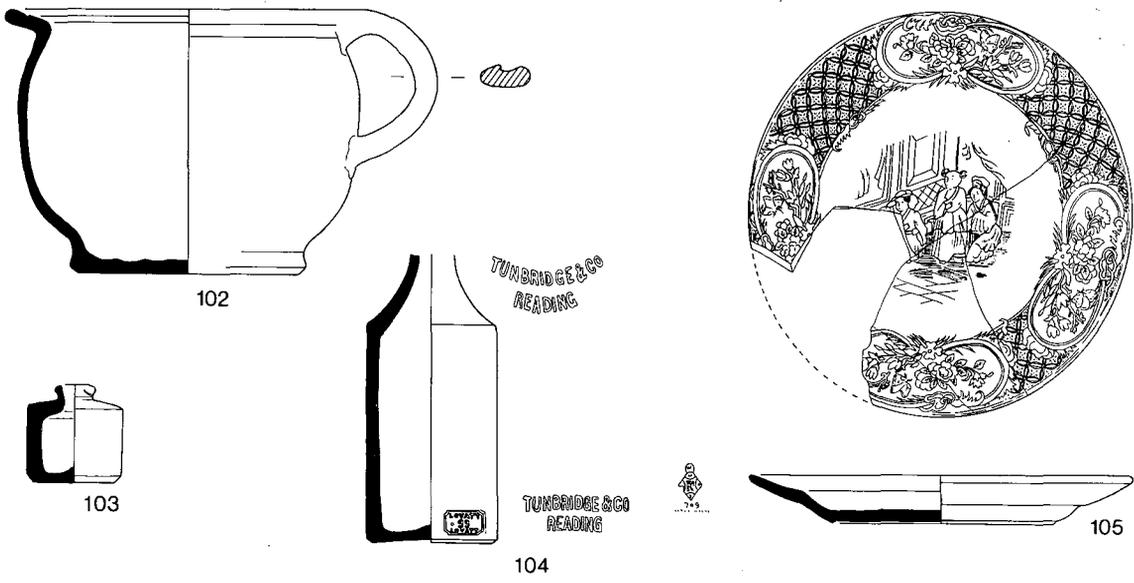


FIG. 54. Post-medieval Wares (Scale, 1:4).

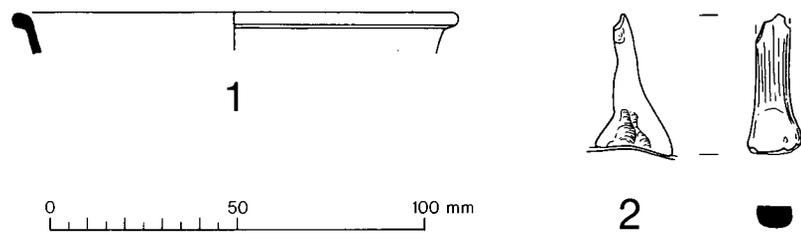


FIG. 55. Roman Glass (Scale, 1:2).

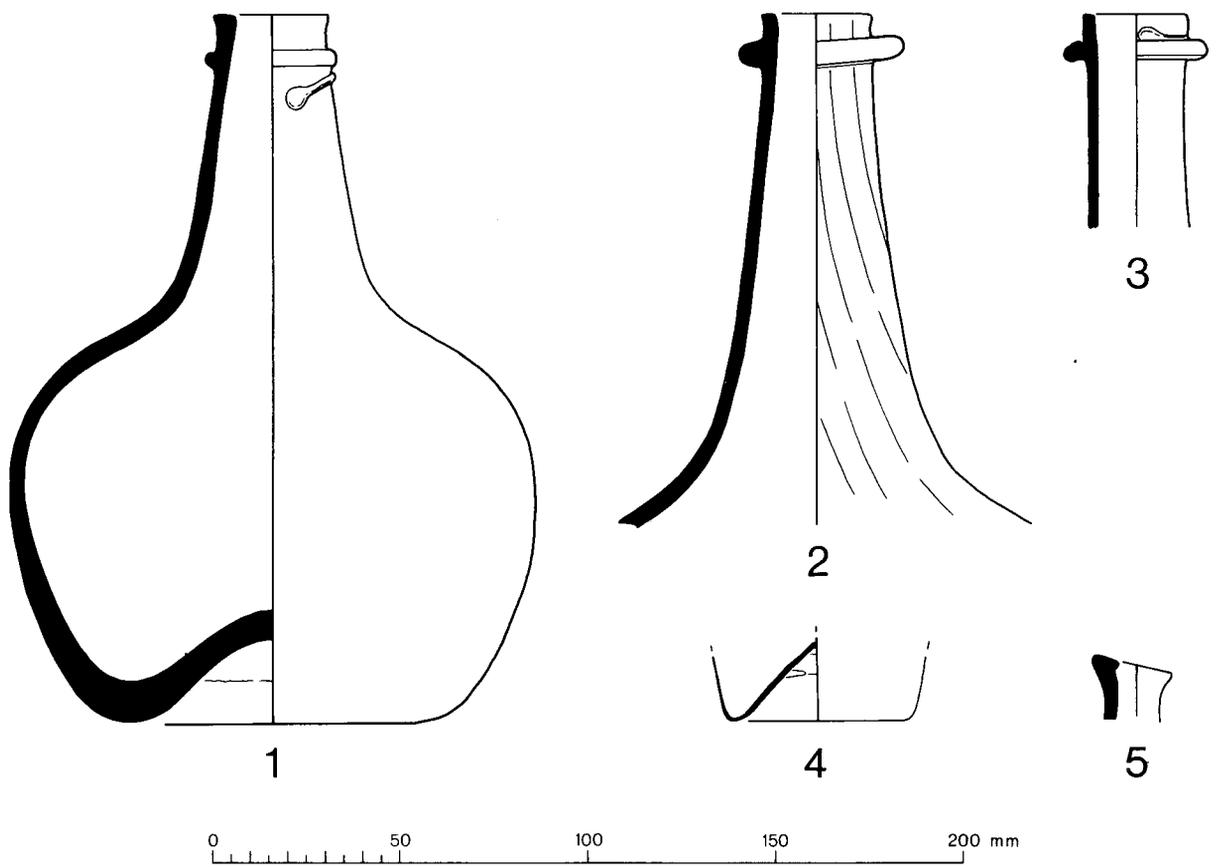


FIG. 56. Post-medieval Glass (Scale, 1:2).

3. THE GLASS

3.1 Roman Glass by Denise Allen (FIG. 55)

1. Rim-shoulder from a small cup or bowl; cast emerald-green glass, pre- or early Flavian. Diameter 120 mm. Context group 3.5 (layer 649).
2. Possibly a chain handle in blue-green glass. Unstratified (S.F. 827)

Not illustrated

3. Other fragments of bottles in blue-green glass, first to second century:
Cylindrical bottle: Context group 3.4 (S.F. 831, layer 1012)
Base with pontil mark: Context group 6.1 (S.F. 10, layer 2)
Ribbed handle: Context group 5.7 (S.F. 43, layer 13)
Prismatic bottle: Context group 5.4 (S.F. 55, layer 17)
Base of prismatic bottle: Context group 6.9 (S.F. 61, layer 209)
Square bottle base with 'cross in a circle' (Charlesworth 1966, 34, fig. 12): Context group 6.10 (S.F. 80, layer 220)
Base: Context group 3.4 (S.F. 838, layer 1255)
Fragment of jug or flask: Context group 3.6 (layer 407).
4. Fragments of window glass:
(a) pale green double glossy cylinder-blown: Context group 6.1 (S.F. 29, layer 27)
(b) Matt/glossy cast, first to third century: Context group 5.10 (S.F. 246, layer 221).
5. Vessel fragments:
(a) thin, pale green: Context group 5.10 (S.F. 81, layer 220)
(b) Pale olive-green, third to fourth century: Context group 3.4 (S.F. 255, layer 229).
6. Fragments of royal-blue vessel-glass, first to second century: Context group 3.3 (S.F. 824, layer 1318).
7. Indeterminate fragments of probable Roman glass:
(a) thin, pale green fragments: Context group 0 or 1.1 (S.F. 115, layer 126)
(b) Blue-green glass: Context group 5.3 (layers 061, 081); Context group 6.1 (S.F. 12, 15, layers 2, 4)
(c) Burnt blue-green fragment: Context group 5.10 (S.F. 56, layer 207).

3.2 Post-medieval Glass by Denise Allen and Jane Timby (FIG. 56)

- 1-2. Wine-bottles in thick dark green glass; the basal kick shows a rough pontil mark in the centre. They may be compared with examples of early eighteenth-century date (Hume 1961, fig. 3, No. 6): Context group 6.2 (F3) The clay pipes (above, p. 102) would suggest an early eighteenth-century date for this pit-group. See also Nos. 3-4, below. Other fragments of dark green bottle glass from Context groups 6.1 (F2; layers 2(13), 4(14), 5(15), 8(13), 10, 78); 6.3 (layer 31); 6.9 (layers 201(4), 203(3), 206(18), 207, 401(5)); 6.10 (layer 402(2)); 6.13 (layer 416).
3. Rim and neck from a wine-bottle in blue-green glass: Context group 6.2 (F3).
4. Base of a small bottle in thin blue-green glass: Context group 6.2 (F3).
5. Rim from a small bottle or flask: Context group 6.1 (layer 2).

Not illustrated

6. Fragments of pale green bottle glass were recovered from the following phases: 6.9 (layers 201(7), 202(3)); 6.10 (layer 402).
7. Fragments of clear bottle glass were recovered from the following Context groups: 5.1 (layer 22, base-shoulder); 6.1 (layer 2); 6.9 (layers 206 (2), including a body-shoulder embossed with the incomplete name EMERSON, 401, 1323).

8. Fragments of blue-green thinner-walled bottle glass were recovered from Context groups 6.1 (layers 4, 24); and 6.13 (layer 416).
9. Fragments of dark brown bottle glass were recovered from Context groups 4 (disturbed) (layer 583) and 6.9 (layer 203(4)).
10. Small hollow cylindrical fragment; 30 mm long in pale blue-green glass: Context group 6.1 (layer 5).
11. A fluted base and broken stem from a clear wine-glass: Context group 6.9 (layer 203).
12. Fragments of a cup or bowl of clear glass with 'pinched nipple' decoration: Context group 6.1 (S.F. 9, layer 2).
13. A fragment of flat pale blue (?) window-glass: Context group 6.10 (layer 402).
14. Three fragments of thin (2 mm) clear window-glass from Context groups 6.9 (layer 401) and 6.13 (layer 403).
15. One fragment of thicker (6 mm) clear window-glass: Context group 6.9 (layer 401).
16. Fragment of olive-green window-glass, just possibly later Roman: Context groups 5.3 (layer 61); 6.1 (S.F. 8, layer 2(2)); 6.9 (layer 401).

3.3 The Beads by Michael Fulford (FIG. 57)

1. Annular bead; greenish translucent glass (max. external diameter: 20 mm) (Guido 1978, Group 6 ii (a) (medium-sized), her pl. II, No. 11), unstratified. [S.F. 837].
2. Melon bead fragment (height: 16 mm; diameter: *c.* 18 mm); turquoise frit, Phase 1.4 (see No. 3). [S.F. 823, layer 1316].

Not illustrated

3. Melon bead fragment; turquoise frit. Mainly Flavian to Antonine in date, here residual (6.1) (Guido 1978, 100, fig. 37, No. 22). [S.F. 41, layer 27].

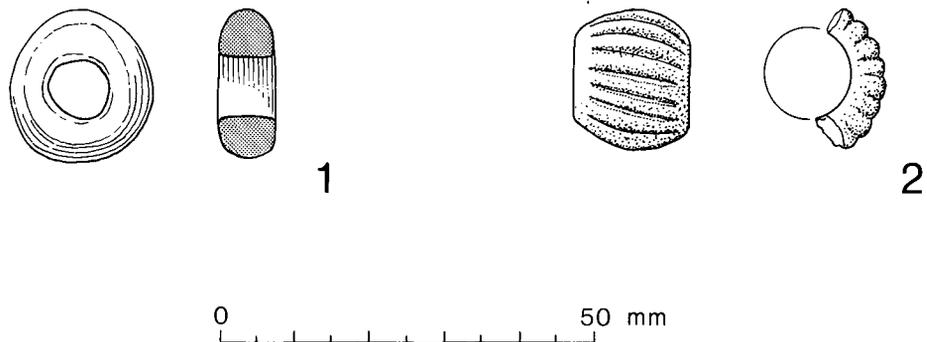


FIG. 57. Glass Beads (Scale, 1:1).

4. OBJECTS OF COPPER ALLOY

4.1 The Brooches by Mark Corney (FIG. 58)

1. Colchester or Colchester-derivative. A very corroded example whose general form is clearly of the Colchester or Colchester-derivative type. Because of the advanced state of corrosion no further detailed comment is possible. The broad date-range for the type runs from the early first century A.D. into the Flavian period. Base of seating-bank; Context group 0/1.1 (S.F. 433, layer 256).

2. 'P' shaped brooch with a bow of three separate ribs. The ribs, one of which is missing, join top and bottom plates. The top plate has rounded ends and is surmounted by a moulded knob, below which is a single 'ring and dot' ornament. The rear of the top plate retains the housing for the axial bar of the spring and pin, now missing.

The bottom plate consists of three triangular peaks above which each rib of the bow sits. Below this plate the lower bow is triangular in section and has a cross-moulding at the point where the deeply-set and robust catch-plate begins. The lower bar is decorated by six 'ring and dot' motifs.

The brooch is 64 mm long and retains extensive traces of silvering or tinning. This form is rare in Britain. Parallels for it are mainly from military sites and they are so similar in their typological details as to suggest a common origin. Four are known from Richborough (Bushe-Fox 1928, pl. XVII, No. 13; Cunliffe 1968, pl. XXXII, No. 72); others are recorded from Corbridge (Haverfield 1911, 84, fig. 22), Carpow (Birley and Dodds 1965, 206, fig. 11.4) and Chichester (Down 1978, 286, fig. 10.28, No. 53). Outside Britain very close parallels are recorded from Saalburg and Zugmantel where occupation ceases by about 260 (Böhme 1972, Nos. 679-690). General parallels for the type are also recorded at Dura-Europos where Roman occupation dates between about 165 and 256 (Toll 1949, pl. XIV, Nos. 98-111, particularly Nos. 110-111). If we are correct in identifying products of one particular workshop, then the Rhineland seems the most likely source. The context of the Silchester example is consistent with a date-range of the late second to mid third century. Context group 3.4 (S.F. 84, layer 112).

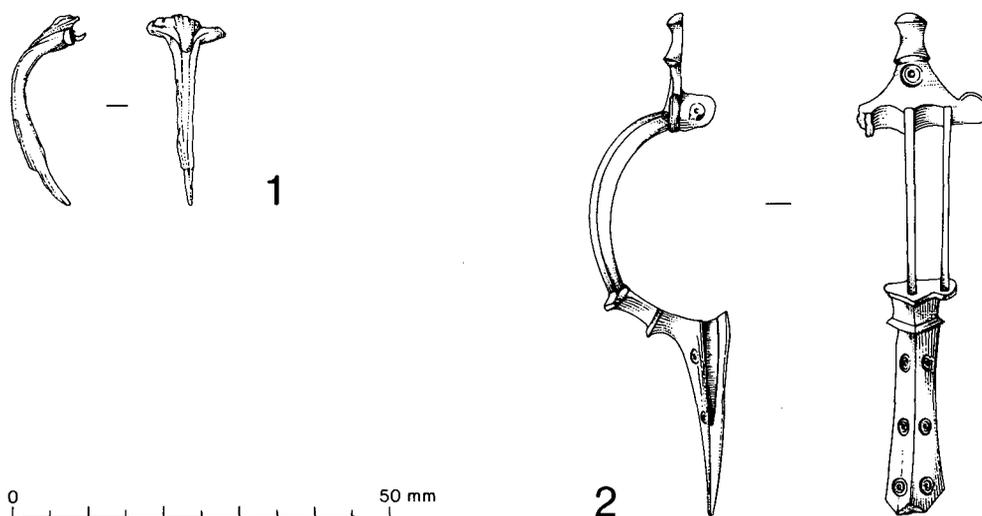


FIG. 58. The Brooches (Scale, 1:1).

4.2 Other Objects of Bronze by Michael Fulford (FIG. 59)

1. Ring. Maximum external diameter: 13 mm. Context group 6.9 (layer 504).
2. Toggle-like object; one end has been flattened and bent over, the other has a corroded lump of iron attached. Maximum length 65 mm. Context group 6.1 (S.F. 14, layer 4).
3. Bell with beaten 'loop' pattern decoration on the upper half; clapper of iron. Maximum height (including suspension loop): 43 mm; diameter of bell: 34 mm. Generally similar examples (except for the decoration) of sixteenth- and seventeenth-century date from Basing House (Moorhouse 1971, 59, fig. 25, No. 164) and the Civil War phase of Maumbury Rings (Bradley 1976, 86, fig. 26, No. 2). Context group 6.1 (S.F. 21, layer 8).

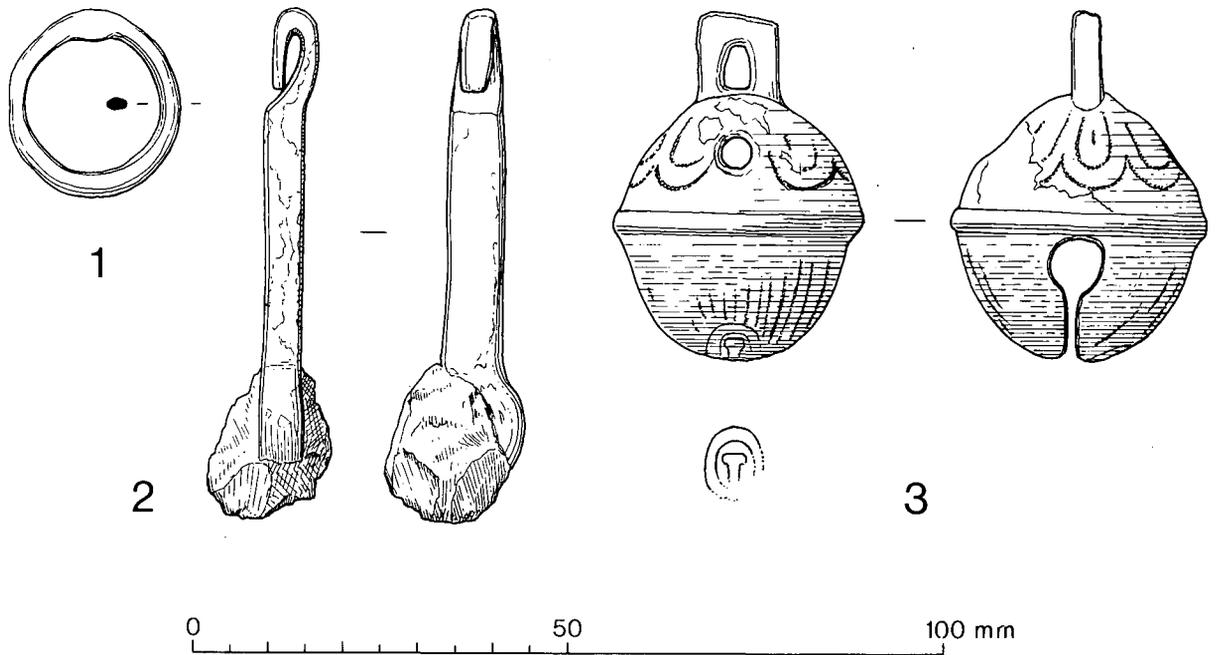


FIG. 59. Other objects of Copper Alloy (Scale, 1:1).

5. OBJECTS OF IRON by David Richards (FIG. 60)

The wet conditions in the arena and the effect of the acidic gravel and clay subsoil were not conducive to the preservation of metal objects. Thus, of the 116 iron finds recorded, all are more or less severely corroded. The majority were from post-medieval contexts.

Roman

Apart from the ring (FIG. 60, No. 1), all securely stratified finds of Roman date are nails. These were mostly too fragmented to obtain accurate measurements of their original dimensions.

They were recovered from: the secondary heightening of the seating-bank (four fragments) (1.2); from the post-pits of the revetment of the first timber phase (1.3) and included two whose stems measured, respectively, 58 and 120 mm; from the associated silts and surfaces in the arena (1.4), including stems measuring 46, 58 and 109 mm; one fragment from the second timber-phase revetment (2.1) and from the associated arena surface (2.3); one fragment from the drain associated with the construction of the stone arena wall (3.3) and eight pieces from the material imported to raise the arena floor (3.4) and from the latest Roman surface of the arena (3.6). The nails associated with the revetment of the first timber phase would have been suitable for securing horizontal planking between the main uprights.

Medieval

The only securely stratified find is a plough-share from the arena (FIG. 60, No. 7), associated with thirteenth- and fourteenth-century sherds. Less securely stratified, and possibly of post-medieval date are a barrel-hoop (FIG. 60, No. 3) and a small square-sectioned bar (35 by 38 by 39 mm) (not illustrated).

Post-Medieval

These included a sickle (FIG. 60, No. 8), scythe (FIG. 60, No. 9), pruning-hook (not illustrated), curb-bit (FIG. 60, No. 6) and pen-knife (not illustrated). All these are consistent with the agricultural use of the amphitheatre in this period.

Catalogue (FIG. 60)

1. Ring: c. 18 mm in diameter. X-ray photography shows that this is formed from a wire spiral. Context group 3.6 (S.F. 55, layer 34).
2. Stud: 45 mm in length with a rectilinear head, 45 by 43 mm. Context group 6.1 (layer 2).
3. Barrel-hoop: approximate diameter 300 mm. A heavily-corroded curved strip, now in eight fragments. Context group 5.10 (or 6.9) (S.F. 8, layer 208).
4. Nail: 67 mm in length; a ribbed-stem wire nail with a chisel point. Context group 6.13 (layer 603).
5. Buckle: 75 by 45 mm; heavily corroded. A square buckle probably from a wagon harness. Context group 6.1 (layer 7).
6. Curb-bit: 122 mm in length; very heavily encrusted. X-ray photography reveals a typical curved bit with knobbed and perforated terminals. Context group 6.1 (S.F. 19, layer 8).
7. Plough-share: 290 mm in length. A simple 'shoe' form with slightly raised wings and a square nose; badly corroded. This is not unlike Romano-British, or even earlier, socketed shares (cf Rees 1979, 49–56, fig. 49), except for its square-sectioned point. At the same time it is quite unlike published examples of sixteenth- or early seventeenth-century plough-shares (Passmore 1930, 8, pl. 19). It is associated with thirteenth to fourteenth-century pottery and there is no reason to doubt a medieval date for it. Although there is ample documentary evidence for iron ploughshares in the medieval period (e.g. Field 1965), there is a surprising lack of excavated examples in Britain. There are two from Cambridgeshire (Fox 1923, 300, pl. XXXV; Addyman 1973, 94,



FIG. 60. Objects of Iron (Scale, 1:2).

fig. 19, No. 30) and a recent specimen from Essex (Morris 1983, 32, fig. 2, 2i). While all three are generally similar to the Silchester share, their probable dates lie in the late Saxon period. In Europe ploughshares have been published from the excavations at Novgorod (Thompson 1967, 87, fig. 88) and Dorestad (Van Es and Verwers 1979, 178, fig. 131, 1 and 2). The latter are also of early medieval date but the Novgorod examples cover the tenth to fourteenth centuries. Context group 5.11 (S.F. 771, layer 507).

8. Sickle: 260 mm in length overall. A narrow curved blade, tanged and of modern appearance. Context group 6.1 (layer 2).
9. Scythe: 620 mm in length overall. A large tanged blade, curved and with a square reinforcement on the back; badly affected by corrosion and probably no earlier than the nineteenth century. Context group 6.1 (layer 2).

Not illustrated

10. Nail: 102 mm in length; relatively uncorroded. A 'rose-headed' cut nail, probably late nineteenth century. Context group 6.13 (layer 403).
11. Penknife: 90 mm in length. A two-bladed, folding knife with bone or horn side-plates. Probably late nineteenth or early twentieth century. Context group 6.1 (S.F. 3, layer 3).
12. Pruning-hook 102 mm in length. Context group 6.2 (layer 402).

6. SLAGS by David Richards

A total of twenty-six pieces of slag was recovered, weighing just over 4 kilogrammes.

Apart from three small fragments of fuel-ash or smithing slags (weighing approximately 65 g) from Roman contexts (1.3, 3.4), the assemblage is of post-Roman date.

About eighty per cent (in six major pieces) is characteristic of hearth-bottom smithing-slag. Four of these larger pieces are associated with medieval or late medieval contexts: two bun-shaped hearth-bottoms from Context group 5.4 (F9, layer 17, weighing 615 and 745 g); one in several fragments from the robbing of the West Recess (5.11, layers 565, 577, weighing 815 g) and the fourth from a disturbed Context group, 5.7, at the South Entrance (layer 6, weighing 480 g). The two remaining hearth-bottoms occurred in post-medieval contexts (Context groups 6.1, layer 60, weighing 205 g and 6.13, layer 601, weighing 510 g) and could well be residual from medieval contexts. Other small fragments of medieval smithing/fuel-ash slags occurred in Context group 5.7 (80 g).

The remaining fragments of smithing-slag and fuel-ash slag occurred in post-medieval contexts, principally at the South Entrance (6.1).

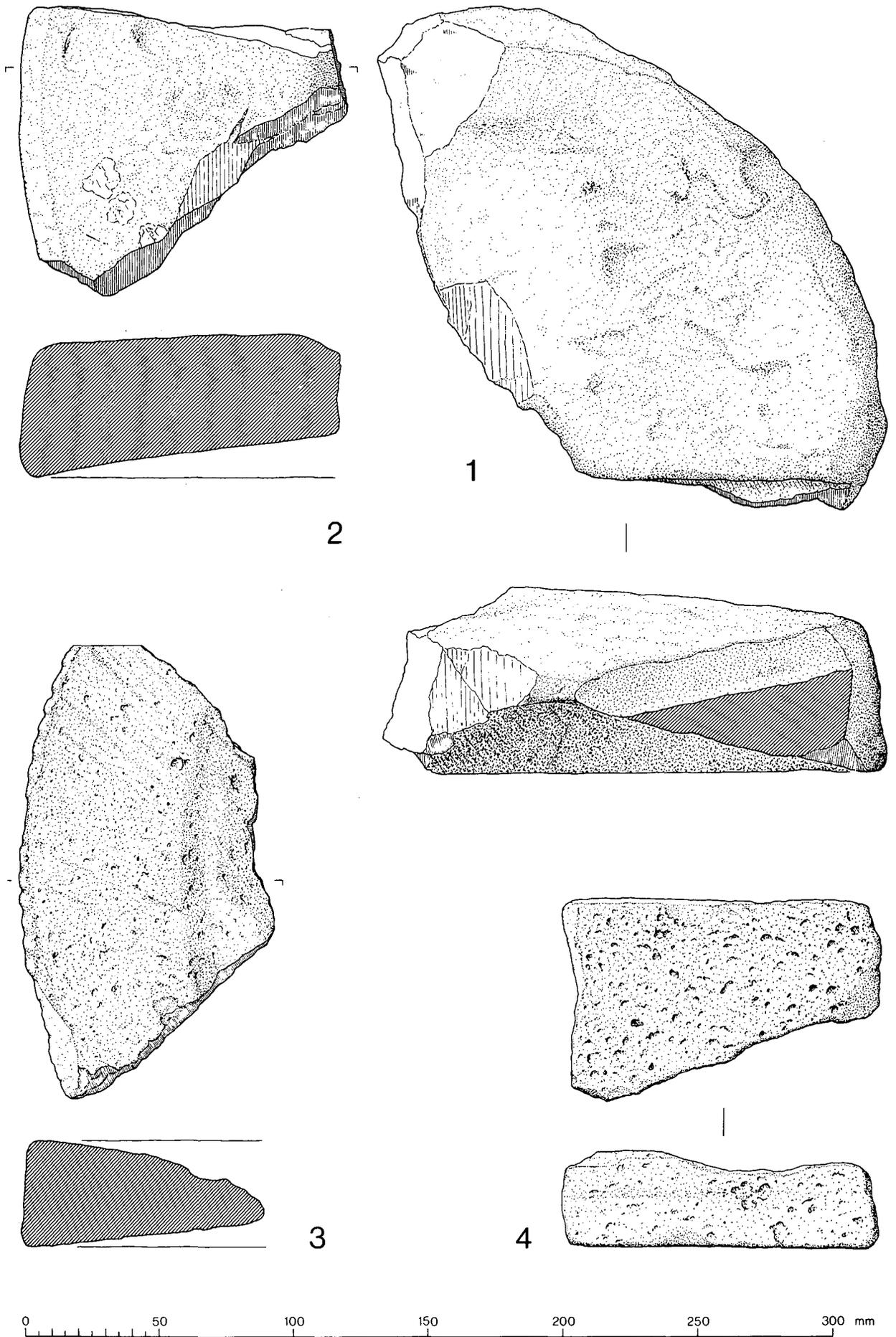


FIG. 61. Querns and Hones (Scale, 1:2).

7. OBJECTS OF STONE

7.1 Querns, whetstones and sharpening-stones

by Michael Fulford,

with petrological identifications by D.K. Bailey, D.P.S. Peacock

and B.W. Sellwood (FIGS. 61–2)

The objects of worked stone consist of querns and whetstones or sharpening-stones. All pieces are of Roman date except for two querns of sarsen which are probably medieval (Nos. 7–8), a sharpening-stone of medieval or late medieval date (No. 10) and two post-medieval or modern whetstones (Nos. 11–12). A piece of Niedermendig lava which may have originated from a Roman quern was probably re-used as a sharpening-stone in the post-Roman period (No. 6).

1. (**Fig. 61, No. 1**). Quern fragment; upper stone. Lower Greensand (Lodsworth) (D.P.S.P.); maximum thickness 65 mm; weight 1825 g. Probably Roman, but from Context group 4 (S.F. 780, layer 419).
2. (*not illustrated*). Quern fragment; lower stone. Lower Greensand (Lodsworth) (D.P.S.P.); maximum thickness 35 mm; weight 220 g. Pre-amphitheatre, Context group 0 (F216, layer 227).
3. (*not illustrated*). Probable quern fragment of Lower Greensand (Lodsworth) (D.P.S.P.); maximum thickness 65 mm; weight 375 g; Context group 1.2 (layer 210).
4. (**Fig. 61, No. 2**). Quern fragment; upper stone. Quartzose conglomerate, Old Red Sandstone (B.W.S.); maximum thickness 45 mm; weight 700 g. Roman, but residual here in 5.10 (layer 207).
5. (**Fig. 61, No. 3**). Quern fragment; ? upper stone. Niedermendig lava; maximum thickness 40 mm; weight 500 g. Context group 3.4 or 3.6 (S.F. 840, layer 1255).

Thin-section description by D.K.B.:

Rock type and probable provenance: the rock is a Basanite (Nepheline Basalt). It is very distinctive and almost certainly comes from Niedermendig, E. Eifel (near Laachen See).

Description (PL. XL, No. 10): it is a vesicular nepheline-bearing basalt. Its most distinctive characteristics are that the phenocrysts (large crystals) stand out from the feldspar-rich glassy matrix. Because of this, when in use, it would have been a self-sharpening grindstone (millstone).

6. (**Fig. 61, No. 4**). Quern fragment, re-used as sharpening-stone; two cut edges at right-angles to each other; upper surface worn to a shallow U-shaped profile. Niedermendig lava; maximum thickness 33 mm; weight 275 g. Unstratified (layer 2).
7. (**Fig. 62, No. 5**). Quern fragment; ? upper stone, lower surface with deep, oblique grooves. Sarsen; maximum thickness 55 mm; weight 750 g. Medieval, phase 4 (S.F. 795, layer 583).

Thin-section description by B.W.S.:

Rock type and probably provenance: Lithic quartz arenite with well-developed interlocking silica cement (Sarsen Stone). Age: Early Tertiary, locally-derived from the Kennet Valley area, or adjacent Chalklands.

Description: medium-grained lithic quartz arenite, tightly cemented by silica (quartz syntaxial silica cements).

Roundness: subangular but appear more angular because of cement-to-cement planar contacts. Sorting good.

Grain composition: Quartz is totally dominant, as mostly monocrystalline grains and rare polycrystalline grains. Chert clasts also occur. Rare grains of tourmaline are present.

Cement: is entirely quartz as syntaxial (optically continuous with host grain) overgrowths.

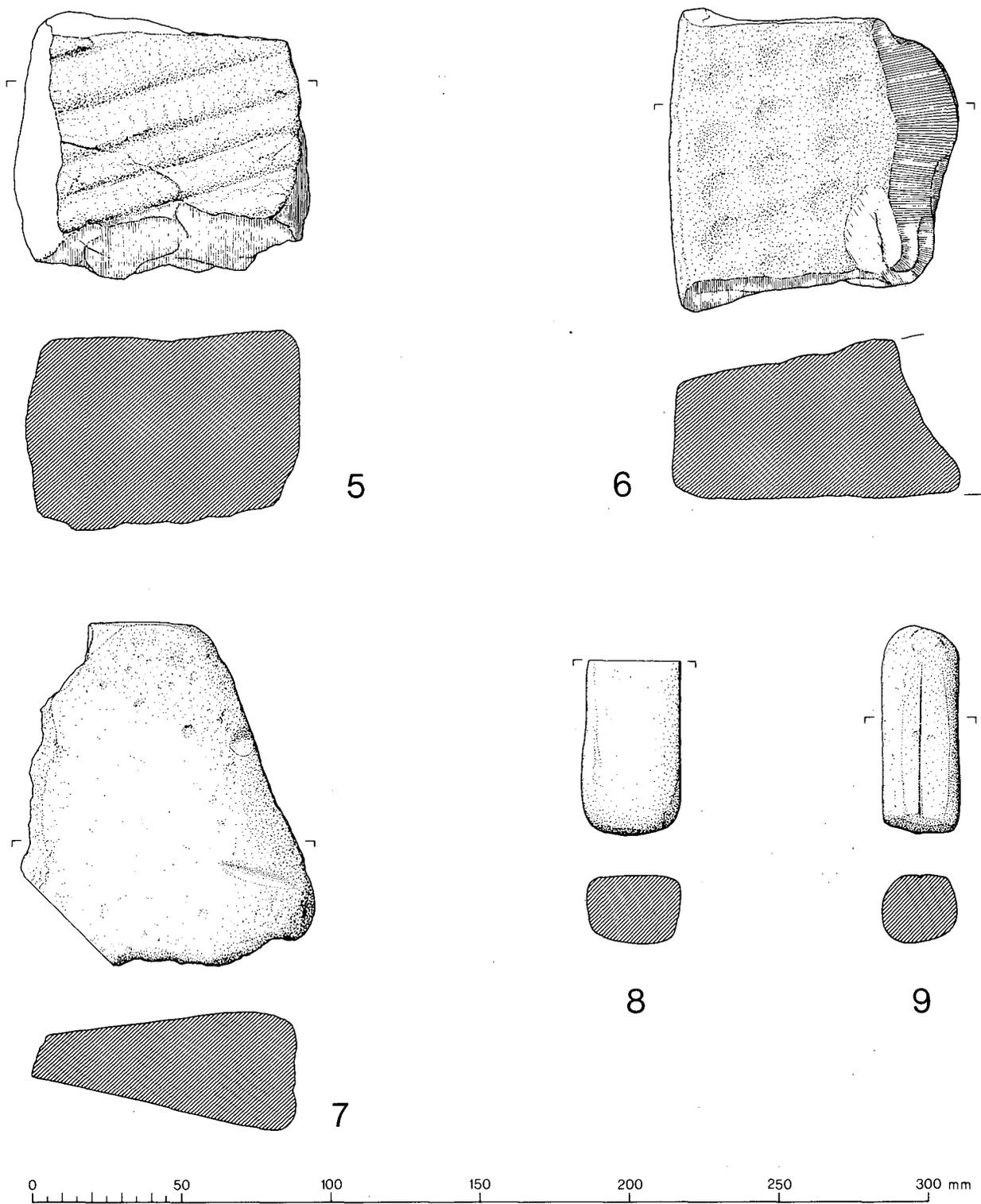


FIG. 62. Querns and Hones (Scale, 1:2).

Depositional environment: originally shoreface marine sands subjected to later silcrete cementation during the Tertiary.

8. (**Fig. 62, No. 6**). Quern fragment; lower stone with pecked upper surface and milled outer edge. Sarsen; maximum thickness 45 mm; weight 570 g. Medieval (?), but in context group 6.1 (layer 12).
9. (*not illustrated*). Sharpening-stone; irregular fragment with traces of one partly rubbed surface, as if by sharpening. Cretaceous Greensand (margins of the Weald (?)); maximum thickness 70 mm; weight 1450 g. Probably Roman but residual in 5.10 (layer 207). Other small lumps of similar stone from Context groups 1.2 (layer 210), weight 100 g and 5.10 (layer 207) weight 450 g.
10. (**Fig. 62, No. 7**). Whetstone; irregular piece with wedge-shaped profile; traces of wear or polish on the upper, lower and part of the edge surfaces. Old Red Sandstone (?); maximum thickness 38 mm; weight 525 g. Medieval or late medieval, Context group 5.7 (layer 18).

Thin-section description by B.W.S.:

Rock type and probable provenance: Medium- to coarse-grained micaceous sandstone (arenite) with abundant micaceous lithic fragments. (?) Old Red Sandstone.

Description (PL. XL, No. 11): Medium- to coarse-grade lithic micaceous arenite with abundant iron-oxide rims to grains.

Sorting: moderate.

Roundness: grains of quartz angular to sub-angular, but shapes difficult to assess because of intense grain-to-grain interpenetration caused by pressure dissolution. This reflects the deep burial suffered by the rock during its history. Micaceous fragments have been bent and buckled in response to overburden stresses.

Grain composition: Quartz and feldspar grains, micaceous lithic fragments (?schist) and monocrystalline quartz (?chert or devitrified volcanic glass) are present in equal proportions. Quartz occurs as both poly- and mono-crystalline forms. Monocrystalline quartz is largely unstrained. Feldspar occurs in subordinate quantities to quartz, and mostly as plagioclase. Mica fragments consist both of chlorite and chlorite-muscovite. Biotite-rich clasts may have originally been well represented but have now degraded leaving iron-oxide stains within micaceous clasts. Chert or volcanic glass fragments are present as monocrystalline siliceous grains.

Cement: All grains tightly interlock and there is no true cement present. Iron-oxide occurs as interstitial stain to micaceous grains and as a rim-coating to all grains.

Depositional environment and age: unknown, but possibly high-energy alluvial system.

Age: (?) Devonian Old Red Sandstone.

11. (**Fig. 62, No. 8**). Whetstone; traces of wear on all surfaces except at the broken end; Old Red Sandstone (?); weight 150 g. Post-medieval/modern, Context group 6.1 (S.F. 7, layer 10).

Thin-section description by B.W.S.:

Rock type and probable provenance: Fine to medium-grained sandstone: probably Old Red Sandstone.

Description (PL. XL, No. 12): Fine to medium-grade micaceous and feldspathic arenite.

Sorting: moderate.

Roundness: quartz grains sub-angular to sub-rounded, micas represented as flakes. Contacts between grains modified by pressure dissolution. Quartz grains interpenetrate others. Micas have planar pressure-dissolved boundaries and splayed ends. Compaction has led to mica flakes being broken.

Grain composition: Quartz is predominantly monocrystalline and often strained to extinction. Feldspars (mostly plagioclase) are present, orthoclase feldspars are rare and often partially degraded. Micas comprise mostly muscovite as flat plates. Biotite appears to have been rare, residual biotites are now represented as pleochroic alteration products.

Matrix: the intergranular areas contain a red-brown (non-oxide stained) clay matrix (probably recrystallized illite or illite-chlorite).

Cement: grains exhibit few signs of cement overgrowth and lithification appears to have occurred by pressure-welding and recrystallization of clay matrix.

Depositional environment and age: probably alluvial. No age-significant fossils are seen, but the rock compares with certain facies of the Old Red Sandstone.

12. (**Fig. 62, No. 9**). Whetstone; traces of wear on all surfaces except at the broken end. Old Red Sandstone (?); weight 70 g. Post-medieval/modern, Context group 6.1 (S.F. 4, layer 4).

7.2 Other carved and worked stone

by Michael Fulford

1. (*not illustrated*). Two fragments of carved Lower or Upper Greensand, both weathered. One measures *c.* 15 mm by *c.* 150 mm by 120 mm deep with one surface carved in high relief. It is difficult to establish what is represented, perhaps a fold of drapery. The second fragment measures *c.* 190 mm by *c.* 110 mm by *c.* 140 mm deep. One surface has been carved in low relief, but too little survives to determine what is represented. Both the quality of the carving and the stone are reminiscent of the unfinished lion and altar found in Insula V in 1905 (Hope 1906, 163, figs. 2–3) and regarded as evidence of a mason's workshop at Silchester (Boon 1974, 186, 277). Context group 3.1 (West Recess, layer 1668).
2. (*not illustrated*). Fragment of a block of oolitic (Jurassic) limestone, measuring *c.* 270 mm by *c.* 170 mm by *c.* 200 mm. Parts of three roughly-dressed surfaces survive. One face shows rough pick-marks; a second shows axe-blade marks in a rough V-pattern. This face has evidence of a mortice-hole measuring *c.* 80 mm by at least 50 mm by 50 mm in depth. Context group 3.1 (West Recess, layer 1668).

7.3 The Flint

by Richard Bradley

Nine struck flakes were recovered. These include one bladelet (Context group 3.5) and two core-trimming flakes off narrow flake/blade cores, one of which exhibits use-damage (Context group 1.1). These pieces are probably of Mesolithic date and are comparable to material recovered during field-walking to the south of the Roman town within the parishes of Silchester and Mortimer West End. The remaining flakes are undiagnostic and are of local pebble material.

Eleven pieces of burnt flint were recovered from F220 beneath the tail of the western seating-bank. A deposit of 12 pieces of burnt flint (745 g) was found in the upper fill of the mid twelfth-century pit F53 (Context group 5.3).

8. THE ANIMAL BONES by Annie Grant

During the excavation of the amphitheatre a small number of animal remains was recovered. They were found in deposits dated to the timber and stone phases of the Roman period, in the post-Roman silt layers and in the deposits associated with the medieval and post-medieval use of the site.

The soil-conditions were clearly not conducive to good bone-preservation. This was shown by the condition of most of the bone fragments and by the fact that the sample as a whole contained a high proportion of teeth. In some soils, teeth have a higher resistance to decay than bone, and the ratio of loose teeth to identified bone fragments has been used as an index of bone survival (see Grant 1987a; forthcoming). Here the ratio was very high, approximately 1 : 0.4, suggesting very poor bone-preservation.

Both the small size of the sample, 60 identified fragments, and their condition severely limited the nature of any conclusions that could be drawn from its study but, nonetheless, some interesting points did emerge. The Roman deposits included a very small number of cattle and sheep bones, but the majority of the remains were those of horses. While the particularly large and robust teeth of these animals may give them a survival advantage in some soil-conditions, we may still be justified in assuming that the deposits did originally contain a high proportion of horse bones. The remains of these animals are generally rather rare at domestic sites of the Roman period and they formed less than one per cent of the bones found in Roman deposits excavated elsewhere at Silchester (Maltby 1984; Grant 1985). The scarcity of their remains in contexts where the bones are primarily food refuse is not surprising, since both documentary and archaeological evidence indicate that the Romans did not usually eat horse-meat (Toynbee 1973, 185). However, the contexts encountered during the excavation of an amphitheatre are rather different from those of a settlement and may be expected to reflect a different range of activities. It is quite possible that the bones of Roman date may be those of animals used in spectacles mounted in the amphitheatre rather than those of animals used for food, although the possibility that some of the bones, particularly those of cattle and sheep, may have been from food refuse cannot be discounted.

The majority of the animal remains were found in the silts and dumps that raised the surface of the arena in the stone phase (Context group 3.4). It is suggested (p. 55) that this soil may have been taken from outside the amphitheatre and dumped over the arena. Some of the finds incorporated within these layers, including the horse remains, may originally have been deposited outside, but close to, the amphitheatre. Thus, they may still reflect activities carried out within the structure.

Little is known of the spectacles that were mounted in the amphitheatres of the distant provinces of the Roman world, but in Italy and North Africa they often involved conflicts between men and wild animals (p. 189). The indigenous wild fauna of Roman Britain included very few creatures that would be suitable for such displays. Brown bears do appear to have survived in Britain until the tenth century (Corbet and Southern 1964, 321). However, there is very little evidence for their presence in lowland England even in the later prehistoric period. By the Roman period they are likely to have been found only in the remotest areas of the north and the west, where suitable habitats remained. Luff (1985, 148), commenting on the very unusual find of a bear mandible from Sheepen in Essex, has suggested that it may have been from an animal captured in the north. She quotes Martial's statement that bears were imported from Scotland to Rome in the first century A.D. (*de Spectaculis*, vii, 3) and so it is certainly possible that bears were brought down from the north for use in the amphitheatres of southern Britain. They could even have been imported from abroad like those that were used for baiting and as performing animals in medieval and post-medieval Britain. However, animals obtained in this way may have been limited in supply and also, if any long-distance transport was involved, very expensive.

Wild boars did not become extinct in Britain until the seventeenth century (Corbet and Southern 1964, 409) but there are only very occasional finds of the bones from these animals in southern British contexts (for example, Grant 1971, 385). As the cultivated area of Britain

expanded, these animals too are likely to have been pushed into the more marginal and remote areas of the country. In terms of its use for human entertainment, the boar is not especially suitable for shows staged in an amphitheatre, but is primarily an animal of the chase.

The wild cattle that were used in bullfights in Rome (Toynbee 1973, 149) were extinct in Britain long before the Roman period, but domestic bulls could certainly have been used in their place. These are the only creatures of the list of those to be found in Roman spectacles that could easily have been obtained in southern Britain. While the few cattle bones found in amphitheatre deposits may have been the remains of animals used for entertainment, we are not likely to have in the animal-bone remains an accurate reflection of any importance that they did have here. Unlike horses, cattle, while used for a range of other purposes when alive, were certainly eaten when dead, and even bulls used for fighting may have been sold off as food after the display.

Horses were sometimes used in the displays mounted in Rome, particularly for pulling light chariots for gladiatorial combat and occasionally as performing animals (Toynbee 1973, 183–4). These displays do not seem to have been as popular as the wild-animal events, but local custom no doubt had to adapt to local conditions, and the lack of suitable and easily available wild animals in Britain may have made performances involving horses a necessary alternative. What we may have here at Silchester are the bones of animals that had served their time giving entertainment, and which, having reached the end of their useful life, had been disposed of in the vicinity of the amphitheatre.

A very small number of animal remains were found in primary deposits. These were almost all horse teeth and bones. From a post-pit of Context group 1.3 came nine upper teeth from a single individual. They were almost certainly all that remained of a horse skull, the bone itself having decayed. In the West Recess, in Context group 2.3, were five lower teeth, again almost certainly from a single individual (see above, p. 22). Deposits of horse-skulls and jaws are a fairly common feature of Iron Age ritual (Grant 1984a, 221) and even in the Roman period horse-skulls are not infrequently found in pits and especially in wells, for example, at Newstead (Ewart 1911), Tripontium (Noddle 1973), Northfleet (Ross 1968) and Portchester (Grant 1975, 176), and may represent a continuation of the Iron Age ritual into the Roman period. Those found at Silchester, and indeed in other Roman contexts, are not necessarily sacrificial animals. They may have been natural mortalities, or, at Silchester, animals killed or injured during performances, whose remains were offered in dedication or as symbols of the importance of the live animals.

The very small number of bones recovered from post-Roman contexts stands in sharp contrast to the Roman bones. A wider range of species was represented, including cattle, sheep, horses, red deer and, in post-medieval deposits, chickens. Horse bones are in the minority. These bones are much more typical of food refuse, and thus reflect the later use of the site. A fragment of sheep pelvis from a twelfth-century context had been sawn through. While the location of the cut, which was made through the ilium, is consistent with it having been made during butchery of the animal's carcass, the use of a saw for this purpose at this period is unusual. Saw cuts are almost exclusively found on bones that have been used as raw material for tool or object manufacture (Grant 1987b, 55), but a sheep pelvis is not a bone that one would normally associate with such a use. In contrast, tibiae are frequently utilized for tools (for example, Grant 1984b, 532) and the distal end of a cattle tibia, which had been sawn through at each end, does seem to be an unfinished bone object. Although the context from which this piece of bone was recovered was dated to Context group 3.4, its condition was remarkably good and it seems possible, if not likely, that it is of much more recent date.

9. THE BUILDING-MATERIALS

9.1 The Wood

by Jacqui Watson

The following identifications of preserved wood were made.

South Entrance

F1719 *Quercus* sp. (oak), gate-post (Context group 2.1, layer 1786)

F1732 *Quercus* sp. (oak), gate-post (Context group 6.7, layer 1744)

F1753 fruitwood, probably *Prunus* sp. (cherry), post-Roman but otherwise undated (layer 1785).

North Entrance

F637, 639 *Quercus* sp. (oak), gate-post (Context group 3; that from F637 (layer 416) is probably a Roman replacement).

F634 or 696 *Quercus* sp. (oak), in the fill of the timber-phase drain (1.6) and probably from one of the supports (layer 671).

9.2 The Rock-Types Represented in the Arena Wall

by Bruce W. Sellwood

The majority of the material comprising the third-century arena wall consists of flint from the Upper Cretaceous Chalk. The fresh and unworked character of the nodules suggests that they were dug directly from the Chalk itself. Mapledurwell (Hants.), 7.5 miles (12 km) to the south, is about the nearest place to Silchester where this flinty unit of the Chalk crops out.

A distinctive feature of the arena wall is the string-course of brown, iron-oxide cemented sandstone (No. 3, below) which is present in much of the surviving circuit of the wall. This seems to have been intended only as a decorative element, rather than a true bonding-course, for it is not clear whether it was laid to the full width of the wall. It is probably a Tertiary sandstone of very local origin. Patches of similar material are ploughed up from time to time within eight hundred metres of the town wall. This string-course is interrupted at both entrances, where (excluding quoins) flint is the sole surviving building-material, and also at the recesses. In the latter are found irregularly-spaced courses of glauconitic sandstone (Nos. 1–2, below) of either Lower or Upper Greensand which might have originated from no further than Kingsclere, 7.5 miles (12 km) to the west of Silchester. In addition some Tertiary sarsen (not thin-sectioned) was identified in both the recesses and the main circuit of the arena wall. Similar material can also be picked off the fields to the south of Silchester and larger boulders can be seen to decorate the farmyard of Brocas Land Farm, 0.75 mile (1 km) to the south-east.

The relative abundance of the various types of stone other than flint is probably indicated by their frequency in the heightening of the seating-bank (Context group 1.2). Ironstone predominates over greensand with a ratio of 3 :1; sarsen is insignificant (< 1%).

The thin-sections described below include samples taken from the surviving remains of the wall itself (Nos. 1–4) as well as from stones from later Roman and medieval contexts in close proximity to the arena wall. The latter stones can very reasonably be regarded as detritus from either the construction or robbing of the wall. They include three pieces of late Jurassic (Corallian) age, the only rock-type not identified in the surviving fabric of the wall.

With the exception of the latter, which might have originated in the Faringdon (Oxon) area, the materials used to build the arena wall, entrances and recesses were of a local origin. The composition of the string-courses can be contrasted with that of the bonding-stones used in the slightly later town wall. These reveal a greater diversity of lithologies and include some rock types which originated from as far afield as Bath (Avon) (Sellwood 1984).

1. **Context: East Recess**

Rock type and probable provenance: Either Lower or Upper Greensand. (PL. XL, No. 1):

Grain-size: medium-grained glauconitic and calcareous quartz-arenite (quartz, glauconite and skeletal carbonate grains set in a calcite cement).

Sorting: grains are mostly well-sorted, but rare coarse quartz grains, and shell fragments of coarse to very coarse grade occur.

Roundness: quartz grains are well rounded.

Grain composition: Quartz is the dominant grain-type, mostly monocrystalline and unstrained and probably derived ultimately from an igneous parent rock (not necessarily a first-cycle grain-set). Polycrystalline quartz grains are present but in relatively small quantities.

Glauconite: minor quantities occur as pellets and as fillings to shell material. Rarely the mineral replaces (?)volcanogenic fragments or cherts.

White mica flakes are present, but rare. One grain of tourmaline seen.

Skeletal grains: Bryozoan, oyster, crinoid, sponge and bone fragments are present.

Cement: initial grain-rimming was accomplished by iron-oxide; subsequently rhombic siderite grew as patchy coatings to some grains. All original porosity was occluded by the emplacement of poikilotopic (i.e. large-scale crystals) of calcite. Calcite etches into quartz grains. There may be minor fabric expansion due to the emplacement of calcite cement (i.e. exploded jig-saw fabrics). The sand was not deeply buried prior to the emplacement of the calcite cement as no pressure dissolution features are seen.

Depositional environment and age: Early Cretaceous shallow-marine sandstone.

2. **Context: West Recess**

Rock type and probable provenance: Fine to medium-grade glauconitic calcareous quartz arenite: Either Lower or Upper Greensand. (PL. XL, No. 2):

Grain-size: fine to medium grade calcareous and glauconitic quartz arenite (quartz, glauconite, skeletal fragments, coated grains and pellets set in a calcite cement).

Sorting: good.

Roundness: grains well to moderately well rounded.

Grain composition: Quartz is dominant, as monocrystalline grains, rare polycrystalline grains occur.

Glauconite occurs mostly as pellets, some brown and degraded.

Skeletal grains: mostly mollusc (bivalve), crinoid and rarer bone and ostracod fragments. Micritized grains occur and some pellets have precipitate carbonate coats (superficial ooids).

Cement: grains are embedded in a coarsely crystalline poikilotopic calcite cement (coarse mosaic in which single calcite crystals enclose several grains). Calcite etches into quartz grains and modifies grain surfaces.

Depositional environment and age: shallow marine sand of Early Cretaceous age (absence of *Rhaxella* sponge spicules suggests that it is not of Portland Sand – Late Jurassic age), but no age-significant fossils have been seen.

3. **Context: Arena wall**

Rock type and probable provenance: Iron-oxide cemented sandstone from the Tertiary deposits adjacent to Silchester. (PL. XL, No. 3):

Grain-size: medium to coarse-grade ferruginous quartz-arenite with well-developed iron-oxide cement.

Sorting: good.

Roundness: grains well rounded to sub-rounded.

Grain composition: Quartz is dominant component as both composite (polycrystalline) and monocrystalline grains. Monocrystalline grains are most abundant but a significant proportion show strained extinction suggesting derivation from a possible metamorphic source area, as do the polycrystalline grains.

Chert clasts are common (probably flint fragments from the Chalk).

Cement: cement consists entirely of red-brown iron oxide which turns a coating to grains and occludes all original porosity. Iron oxide comprises about 15% of the bulk volume of the whole rock.

Depositional environment and age: this sediment is mature to hyper-mature and probably represents a high-energy marine shelf or beach deposit. No age-significant fossils (or any fossil material not within flint clasts) is present so age is unknown (post-Chalk). It is probably local Tertiary iron-cemented sandstone from the Reading, Bagshot or Barton Beds.

4. **Context: West Recess, fallen slab**

Rock type and probable provenance: Coarse glauconitic calcareous sandstone: either Lower or Upper Greensand. (PL. XL, No. 4):

Grain-size: Coarse to very coarse calcareous and glauconitic quartz arenite.

Sorting: moderate with coarse, medium and rarer fine grains.

Roundness: most coarse grains are well rounded, finer grains are sub-rounded.

Grain composition: Quartz is dominant, mostly monocrystalline, but with some polycrystalline grains. Monocrystalline grains sometimes show strained extinction. Some chert grains are present.

Glauconite: present both as pellets and as glauconitized grains within intraclasts.

Intraclasts: consist of previously cemented, and buried, aggregates of pellet material, fine quartz grains and glauconite. (Intraclast lithologies are in some ways similar to No. 2).

Skeletal grains: Bryozoans, sponge and molluscan (bivalve) grains are dominant, accompanied by crinoid debris. All shell material is abraded and derived from robust organisms.

Cement: many grains were coated in (?) phosphatic iron oxide prior to emplacement of poikilotopic calcite cement.

Depositional environment and age: high-energy shallow marine, probably of Early Cretaceous age.

5. **Context group: 5.14 (layer 610), probably derived from arena wall**

Rock type and probable provenance: Fine to medium peloidal and skeletal quartz-arenite with calcite cement: either Lower or Upper Greensand.

Description (PL. XL, No. 5): Fine to medium-grade calcareous and ferruginous quartz arenite.

Sorting: good.

Roundness: quartz grains subrounded, sometimes overgrown with ferruginous (ferruginous and phosphatic) coatings.

Grain composition: Quartz grains are dominant, with mostly monocrystalline grains predominant. Polycrystalline grains present.

Feldspars are rare, consisting mostly of microcline, with occasional plagioclase.

Skeletal grains include coarse ossicles from crinoids, scattered bivalve fragments (some micrite envelopes).

Pellet or peloid grains, some ferruginous and brown are abundant (second most abundant component after quartz). Some of the browner grains may represent original glauconite that has degraded during weathering in the amphitheatre. Many peloids have brownish coatings of iron oxide (and ? phosphate).

Cement: all original porosity had been occluded by the emplacement of poikilotopic calcite cement. This etches into some quartz grains. Some syntaxial cement is seen over and around crinoidal grains.

Depositional environment and age: Shallow marine shelf sandstone.

6. **Context group: 5.1 (layer 24); probably derived from arena wall**

Rock type and probable provenance: Either Lower or Upper Greensand.

Description (PL. XL, No. 6): Fine to medium-grade quartzose intraclastic glauconitic peloidal and skeletal grainstone.

Sorting: moderate to good.

Roundness: quartz grains are sub-angular to sub-rounded, skeletal material ranges from irregular fragments to spheroidal coated grains.

Grain composition: Skeletal grains are dominant consisting of mollusc (mostly fragments of bivalves), bryozoans, crinoidal and other indeterminate debris. All grains are heavily micritized (i.e. have been altered by microbial infestation at the time of sediment deposition – probably under photic conditions).

Quartz grains are mostly fine-grade, monocrystalline and with altered margins embayed by calcite cement.

Glauconite pellets are as both fresh and brown-weathered forms.

Peloids are abundant, some may be micritized coated grains and voids.

Intraclasts of wackestone occur, heavily impregnated with iron oxide (and ? phosphate).

Cement: all original porosity has been occluded by poikilotopic calcite cement and mosaic calcite cement.

Depositional environment and age: well-lit (sunny) shallow marine.

7. **Context group: 3.4 (layer 112), Roman dumping in South entrance**

Rock type and probable provenance: probably Corallian (Late Jurassic) or Forest Marble (Mid-Jurassic)

Description (PL. XL, No. 7): Skeletal packstone (Coral framestone).

Sorting: Poor with massive coral and infiltrated lime mud.

Roundness: not applicable, mostly skeletal debris.

Grain composition: Skeletal grains are the only ones present. The thin-section is mostly taken up by coral (*Thecosmilia* (?)), but other skeletal material includes benthonic foraminiferans, gastropods, crinoid and echinoid debris. Rare bivalve fragments occur. Small spheroidal grains (mostly dissolved and now spar-filled) may be relics of former *Rhaxella* sponge spicules (suggesting Later Jurassic age).

Cement: all originally aragonitic fossil material has been dissolved and the ensuing voids subsequently spar-filled with mosaic calcite. The (?) *Rhaxella* were originally opaline silica and they too have been dissolved and spar-filled.

Depositional environment and age: coral thicket, tropical shallow-marine. Age is most likely to be Late Jurassic (Corallian), probably from the Oxford area. However, it could also be (Forest Marble) Mid-Jurassic if the (?) *Rhaxella* are not spicules. Preservation is not good enough to allow definitive identification.

8. **Context group: 1.2 (layer 204), secondary heightening of seating-bank (disturbed)**

Rock type and probable provenance: Coarse limestone (grainstone), probably Late Jurassic (Corallian).

Description (PL. XL, No. 8): Coarse-grade peloidal skeletal grainstone.

Sorting: poor with coarse skeletal grains and fine peloids.

Grain composition: Skeletal grains predominate, all have been micritized and many are present as micrite envelopes. Shells represented are: coral, mollusc (bivalve), echinoderm, serpulid worms, benthonic forams.

Intraclasts are coarse-grained micritic lumps.

Peloids are fine-grained, some are superficially coated.

Glauconite is present but very rare.

Cement: micrite envelopes and all intergranular porosity are filled with mosaic calcite spar. Some early fresh-water phreatic rim cements are present. Rare brown patches of iron-oxide (and ?phosphate) fill original pores locally.

Depositional environment and age: well-lit shallow marine; probably related to No. 7 in facies terms.

9. **Context group: 5.12 (layer 241), probably derived from arena wall.**

Rock type and probable provenance: quartzose limestone (packstone) of probable Late Jurassic (Corallian) age.

Description: Quartzose peloidal and skeletal packstone.

Sorting: poor, coarse skeletal debris and fine quartz sand with a muddy (micritic) matrix and micrite-filled burrows.

Grain composition: Skeletal debris is dominant, molluscan material is most abundant, often as micrite envelopes (bivalves and rarer gastropods). Echinoderm debris is common (crinoid ossicles and echinoid spines). Rare benthic forams are present and (?)algal debris.

Peloids are abundant and coated grains occur.

Matrix: irregular patches of microspar are present representing infiltrated lime-mud.

Cement: all original porosity has been occluded by mosaic calcite spar. This also fills secondary pores within micrite-envelopes.

Depositional environment and age: Shallow marine shelf, some minor ferruginous clastic influx. No age-diagnostic fossils seen, so age interpretation is problematic. Rock is probably of Late Jurassic age (? Corallian), from Oxford area.

10. **Context group: 5.12 (layer 241), probably derived from arena wall**

Rock type and probable provenance: calcareous quartz arenite (calcareous sandstone); possibly Lower or Upper Greensand.

Description (PL. XL, No. 9): medium-grade quartz and feldspar grains accompanied by skeletal debris and set in a coarsely crystalline calcite spar cement (poikilotopic).

Sorting: moderate to good.

Roundness: most grains subrounded to rounded, but surfaces etched in contact with carbonate cement. Many grains have ferruginous rims

Grain composition: Quartz dominates grains, mostly as unstrained monocrystalline quartz. Occasional polycrystalline varieties seen. Feldspars are relatively rare and dominated by fresh plagioclase and microcline. Very rare quartz grains exhibit carbonate overgrowths (superficial ooids).

Skeletal material is not abundant but consists of crinoid particles, molluscan debris. Benthonic forams are rare and none of the fossils provides a definitive indication of age. However, presence of crinoidal debris suggests Mesozoic rather than Tertiary and ferruginous nature suggests Lower or Upper Greensand.

Cement: is poikilotopic calcite giving a coarsely crystalline spar.

Depositional environment and age: shallow marine shelf sand.

9.3 Tile and Brick

by Michael Fulford and Jane Timby

Out of just over 329 kilograms of tile and brick from the amphitheatre, 287.8 kg were stratified in Roman contexts. In contrast, post-medieval brick and tile only accounted for 11 kg of the total. The majority of the building-material was recorded and then discarded on site. Practical limitations allowed for only a small sample to be retained for fabric analysis. The aim of the field record was to note the number and weight of the fragments from each context as well as to record the type (TABLE V, p. 143) and dimensions of identifiable pieces. Of the Roman brick and tile between 73 and 84% (209 or 241 kg) came from contexts associated with the life of the stone phase of the monument. Of the identifiable Roman fragments from stratified contexts 91% could be attributed to flat tiles.

Since very little brick appears to have been used in the arena wall the material of this kind associated with the stone phase cannot be interpreted as waste from the building of the wall. The largest quantity of brick and tile was imported along with other material to raise the height of the arena surface around the edge (Context group 3.4–3.6). Of the remaining brick, some may have been laid down deliberately to provide a hard surface during the building of the wall. This may explain some of brick and tile in Phase 2 contexts (see above, pp. 27, 47). The choice of tile for the

drains through the arena-wall may have been fortuitous. The idea could have been suggested by the brick and tile lying on the arena surface at the time of building. A small proportion of this building-material, totalling 62 kg in weight, was retained to be sorted and weighed by fabric and phase (TABLE VI). Unfortunately, for Context group 1.4 and Phase 2 contexts the tile only amounted to, respectively, less than one and less than three per cent of the total recovered; in Phase 3, although the sample was large compared with others, at best it only accounted for 10% of all the brick and tile recorded from it. The saved pieces include items of intrinsic interest such as marked or decorated fragments, usually flue-tile.

The differences in fabric are frequently more apparent in the hand-specimen than in their descriptions. The abundance of tile by phase and fabric is summarised in TABLE VI (p. 146). Apart from variations derived from the small sample of tile examined, there appear to be few differences in the range of tiles present by phase or sub-phase during the lifetime of the Roman amphitheatre. However, albeit the sample is small, that from Context group 0 lacks Fabric A–C. The latter account for more than 45% of the sample Roman tiles from arena contexts in Periods 1.2–3. Likewise Fabric D (which accounts for 19% in Phase 0) is not represented in arena contexts between Context group 1.2 and Context group 3 where it is probably residual. Fabric K, on the other hand, is represented throughout. Although the analysed samples are small, there is a distinct difference in the fabric-composition of the tile from Context groups 0 and 1.1 in comparison with 1.4–1.6 and Period 2 onwards. This is probably accounted for by chronological reasons (see above, p. 142).

TABLE V: INCIDENCE OF TILE AND BRICK TYPES

Phase	Flat Tile	Tegula	Imbrex	Tegula Mammata	Tessera
0	–	1	–	–	–
1	13	5	2	–	–
2	27	–	1	–	–
1 or 2	16	1	–	–	–
3	249	13	5	3	1
2 or 3	35	–	–	–	–
TOTAL	340	20	8	3	1

Roman Fabrics

A: A soft, slightly powdery, very sandy fabric, pale to mid orange in colour. The matrix contains moderate to frequent inclusions ranging from fine to coarse in size. These mostly include red or buff rounded clay pellets and iron ranging up to 5 mm across.

Identifiable fragments include box-flue, flat tiles and tegulae. Examples of this fabric first appear in small quantities in Phase 1, with greater quantities apparent from Phase 3 onwards.

B: A moderately soft, very fine sandy fabric with a smooth texture, mid orange in colour. The matrix contains a few visible inclusions, mainly red clay pellets/iron and rounded quartz grains with some fine mica.

This fabric is quite a common one in the assemblage and appears from Context group 1.4 onwards. Recognisable types include tegulae and imbrices.

C: A hard orange to brick-red fabric, very similar to Fabric A but harder fired. The matrix contains a sparse to moderate incidence of buff or red clay pellets (up to 5 mm across), iron and occasional flints. The latter sometimes occurs as small pebbles, 10 mm and above in size.

This is one of the commoner Roman tile fabrics in the assemblage and occurs as tegulae, flat tiles, imbrices and combed flue-tile. The tegula thicknesses range from 20 to 22 mm whilst the flat tiles fall in the 38 to 60 mm range. Two examples of flat tile from Phase 5 (context 020) and

Phase 3 (context 455) respectively show animal paw-print impressions. The latter example has been identified by Mr L. Cram as probably that of a dog. Another piece from Phase 5 (context 017) has been shaped into a rough disc (FIG. 45). The fabric first appears in Context group 1.3

D: A moderately hard, sandy brick-red to orange fabric with few visible inclusions. The clay contains fine flecks of mica.

A fairly uncommon fabric but represented in the earliest levels of the site (Context group 0) as a possible tegula fragment. The context for this (214), however, is contaminated by later material so this fragment may not be contemporary with Phase 0. A further piece is present in Context group 1 and an imbrex is recorded in Phase 3.

E: A very hard, well-fired fabric, dark red in colour with a blue-grey inner core. There are few inclusions visible apart from occasional fragments of calcined flint up to 6 mm in size. This fabric may be an overfired version of one of the others but recurs in sufficient quantity to merit separate classification.

Featured pieces include flat tiles, imbrices and a piece of *tegula mammata* (Context group 3.2, context 1475). Although quantitatively well represented, all the examples with the exception of one sherd in Phase 3, occur in Phases 5 and 6 (Post-Roman levels).

H: A hard, light orange-brown sandy fabric with cream streaks. The texture is porous with a number of voids. The clay contains red and buff clay pellets, iron and sparse angular flint fragments.

A distinctive fabric but only represented by two abraded pieces from Phase 3.

K: A fairly coarse-textured, moderately soft, sandy ware. The pale orange to pinkish-orange fabric contains a moderate density of rounded cream or light orange clay pellets, rounded quartz grains and red iron.

This is the most common Roman tile fabric in this assemblage. It is represented from the earliest levels on the site (Phase 0) and recognisable types include tegulae, flat tiles, box-flue and imbrices.

L: A moderately hard, pale pinkish-buff fabric with a very sandy texture. The matrix shows a sparse scatter of red or orange rounded clay pellets up to 3 mm across.

A small group present from Phase 0. The only recognisable type is an imbrex.

M: A very hard fabric with orange surfaces and a light grey core. The matrix contains a sparse to moderate density of fine clay pellets and dark red-brown iron.

A small group present from Phase 3 onwards with examples of tegulae and imbrices.

R: A very hard, light to dark orange fabric with a streaky appearance. The matrix shows a sparse scatter of dark red-brown iron and clay pellets.

A rare fabric with examples present from Context group 1.2 on. Featured sherds include a piece of box-flue with concentric combing in Phase 6.

U: A very hard, bright orange fabric with a mid blue-grey inner core. The matrix contains a moderate frequency of quartz sand, the individual grains of which are just macroscopically visible. Fine grains of red iron are also present.

Another rare fabric which is only recorded from the post-Roman levels. Types include box-flue and tegulae.

V: A moderately soft, fine sandy ware distinguished by a finely micaceous clay. In addition sparse dark orange and buff clay pellets and iron inclusions are present.

A rare fabric which like Fabric U only occurs from the post-Roman levels. Tegulae and flat tiles are represented.

Post-Roman fabrics

N: A hard, dark brownish-red sandy fabric. The matrix contains fine round quartz sand, iron and fine flint. Identified as flat roof-tile fragments in Phase 6.

O: A dark red sandy fabric with cream streaks. The only visible inclusions are sparse grains of iron. Examples of this fabric are confined to Phase 6 and include one piece with a greyish-green glazed surface.

P: A hard, orange-red dense sandy fabric. A Post-medieval roof-tile fabric mainly present in Phases 5 and 6 but also present as intrusive material in earlier phases. The roof-tile averaging 13 mm in thickness includes several examples with peg-holes. A pantile was also present.

Q: A hard, reddish-brown ware with a smoother texture than the above types. The matrix contains a moderate frequency of fine quartz sand, sparse angular flint, fine mica and clay pellets.

The fabric is identifiable with roof-tiles some with peg-holes present in Phases 5 and 6.

S: A hard, brownish orange sandy fabric with frequent clay pellets, sub-angular to angular flint and occasional large grains of quartz (up to 2 mm in size). Some pieces show a thin patchy yellow-green glaze.

The fabric is only recorded from Phase 6 and includes roof-tiles with an average thickness of 13 mm.

T: A dark brownish-red, hard dense sandy ware, with occasional grains of iron visible. This fabric appears to have been exclusively used for making bricks. These are handmade and occasionally show traces of a greyish-white or clear glaze on some of the surfaces. A complete example from Phase 6 (F3) measured 3.5 ins. (89 mm) (width) by 2.2 ins. (56 mm) (depth) by 9 ins. (228.5 mm) (length) and weighed 2305 g.

W: A dense sandy brick-red ware similar to Fabric P, used in making tubular field-drains. The examples from the amphitheatre have been produced by extrusion, using moulds – a technique introduced in the late 19th or early 20th century. The drain pieces have a diameter of 55 mm and a length of 315 mm (just over 1 ft.).

TABLE VI: INCIDENCE OF TILE AND BRICK FABRICS (expressed as weight in grammes)

Phase	0	1.1	1.2	1.3	1.4	1.6	2	3	4	5	6	Total
Fabric												
Roman A	—	—	104	—	—	—	—	2241	529	521	113	3508
B	—	—	276	—	50	501	—	1486	11	1354	399	4077
C	—	—	1409	782	—	20	486	5789	—	3419	3234	15139
D	100	31	—	—	—	—	—	229	—	6	376	742
E	—	—	—	—	—	453	—	2606	—	1533	4067	8659
H	—	—	—	—	—	—	—	36	—	—	—	36
K	387	—	585	866	21	9	152	8174	110	2016	2783	15103
L	14	—	—	—	—	—	—	29	—	127	35	205
M	—	—	—	—	—	—	—	169	—	192	47	408
R	—	—	8	—	—	—	—	113	—	—	180	301
U	—	—	—	—	—	—	—	—	—	900	20	920
V	—	—	—	—	—	—	—	—	—	—	1205	1205
Misc.	—	7	205	—	6	—	—	17	42	65	702	1044
Post-Roman												
N	—	—	—	—	—	—	—	—	—	—	93	93
O	—	—	—	—	—	—	—	—	—	—	165	165
P	18	—	333	—	—	—	—	—	26	915	3579	4871
Q	—	—	—	—	—	—	—	—	—	90	109	199
S	—	—	—	—	—	—	—	—	—	—	134	134
T	—	—	—	—	—	—	—	—	—	445	5098	5543
TOTAL	519	38	2920	1648	77	983	638	20889	718	11583	22339	62352
Total including discarded material	519	38	2920	1648	8505 or 18990 ¹	983	22174 or 64014 ²	209200 or 240555 ³	2408	12378	26439	329052

Notes

¹ The upper figure represents material certainly stratified in Phase 1. The lower figure includes material that could belong to Phases 1.4 or 2.3.

² The upper figure represents material certainly stratified in Phase 2. The lower figure includes material that could belong to Phases 1.4 or 3.4.

³ The upper figure represents material certainly stratified in Phase 3. The lower figure includes material that could belong to Phases 2, 3 or 3, 4.

PART III

THE EVIDENCE OF POLLEN FOR THE ENVIRONMENT OF THE AMPHITHEATRE:

by Antonie van Scheepen

The excavation of the amphitheatre provided an opportunity to extend our knowledge of the vegetational history of Silchester between the later Iron Age and the present day. The pollen-analyses described below thus complement Keith-Lucas's study based on samples dated to about A.D. 200 from the site of the South East Gate of the Roman town (1984). This had suggested the existence of a largely open landscape, comprising heathland, pasture and arable land. Samples from a number of contexts from the amphitheatre were analysed, including a sequence from the arena extending from the time of its original excavation in the mid to late first century to the ground-surface which existed at the start of the archaeological excavation. The comparison with surface samples suggested that it was possible to reconstruct only the immediate surroundings of the amphitheatre. More general trends in the vegetational history of southern England cannot be deduced from these data.

The Contexts of the Pollen-Samples and the Description of the Sediments

Sample sites (FIGS. 1, 63)

Samples were taken from the stratigraphic sequence at the North Entrance which spanned the period from the construction of the amphitheatre to the ground-surface at the time of excavation (Series C). Evidence for the pre-amphitheatre environment was provided by a series of samples from the podzollized soil beneath the seating-bank (Series B). One sample was selected of a deposit in the East Recess which could not be closely dated (Series A). In addition, as a check on the distribution of pollen in relation to the present environment, samples were taken from modern surfaces in the amphitheatre and in the vicinity (Sample series E, F, G). A detailed description of the sediments could not be included here, but can be found in the original report of this study. This can be consulted in the Department of Botany, University of Reading, or obtained from the author. The sediments were described from field observation, using the terminology used by Jarvis (1968) and Troels-Smith (1955). The acidity of the sediments (non-calcareous gley (Jarvis 1968)) made a reasonable preservation of pollen grains and spores possible. Except in the surface samples (C1, C2, E1, E2, F and G), the samples contained little or no organic material.

Sampling strategy

Sampling was carried out as follows. All samples had a vertical thickness of 1 cm. For Sample series A, cores were taken from which a sub-sample was selected and analysed at 10 cm intervals.

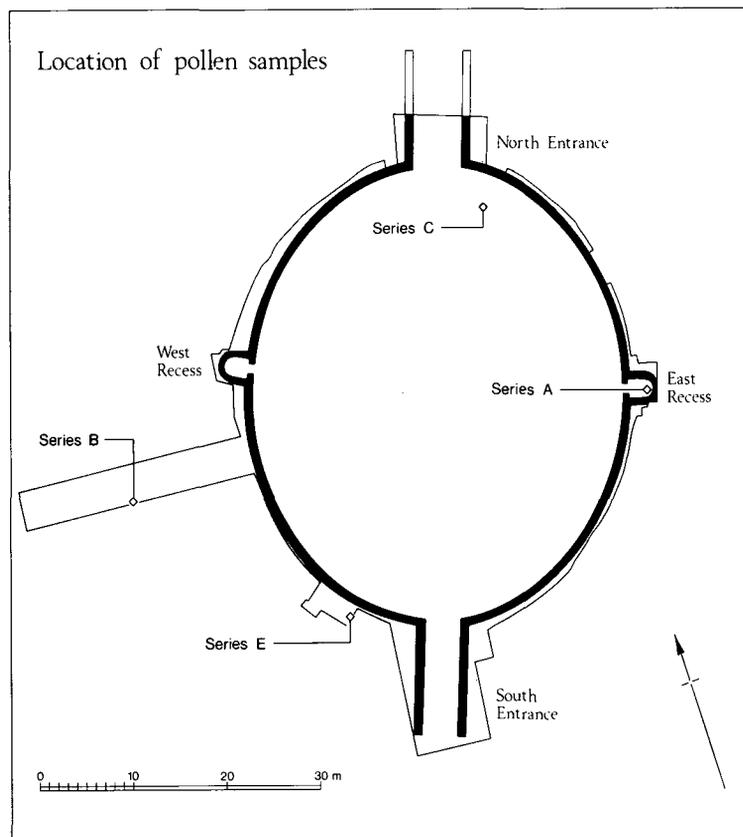


FIG. 63. Location of Pollen Samples.

For B the whole core was divided into sub-samples and analysed (continuous 1 cm samples). The other sample series were taken as small quantities of soil from exposed and cleaned sections (C, E). For Samples F and G, small quantities of soil were taken from recent surfaces.

Samples from Archaeological Deposits

Sample series A (FIGS. 43, 63)

Sample series A (at O.D. 88.81–89.42 m) was taken from the infill of the East Recess of the stone-phase amphitheatre from within layer 742 (Section 15). The base of the sample series corresponds with the bottom of the foundation offset. The infill was formed by homogeneous sandy material eroded from the seating-bank. It is not known over what period layer 742 developed, except that it cannot be earlier than about the mid third century, when the stone recess was first constructed. With the layers above, it could be seen as a part of a continuous process of silting until the recess was completely filled. It is important to note that at this sampling point no floor-surface survived in this recess. The disturbance of the floor-surface could have occurred within the late Roman period, between about 250 and about 450. Alternatively it and the subsequent rapid silting-up of the recess occurred when the arena walls were robbed. This took place before, but not necessarily long before, the period of medieval occupation, perhaps in the late eleventh or early twelfth century. Within Sample series A, samples were analysed every 10 cm. The percentages of the different pollen types in this series show little variation from level to level, so that closer sampling would probably not have changed the course of the curves substantially.

Sample Series B (FIGS. 63–4)

Sample series B (at O.D. 91.42–91.47 m) was taken from the original ground-surface buried under the seating-bank (western *cavea*, south section, 1982). The position of the sediments in this

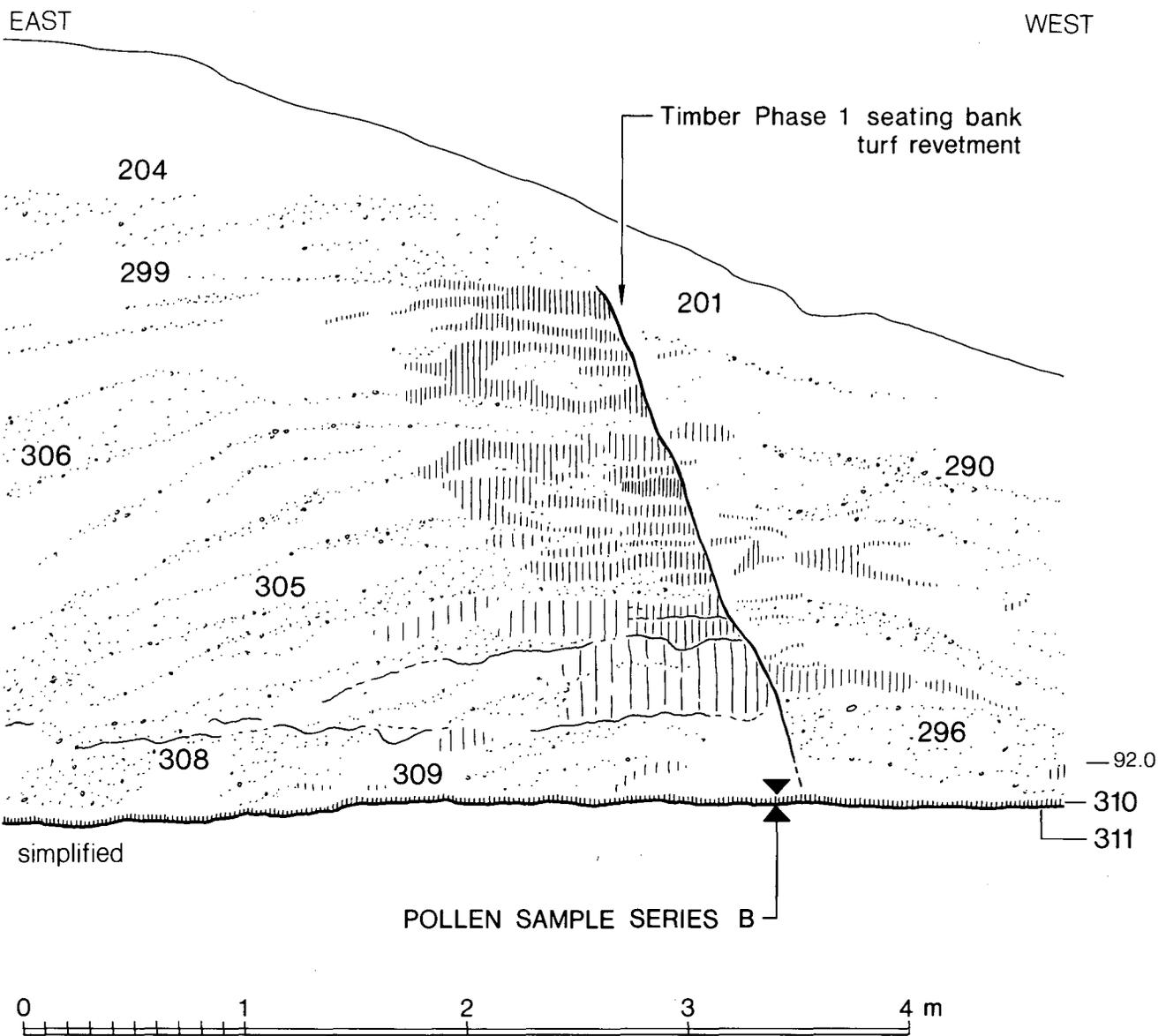


FIG. 64. Location of Pollen Sample B (Scale, 1:30).

podzol are found in FIG. 64. Within Sample series B, the relatively small sample did allow for analysis of the whole podzol sequence (B1, turf layer; B2, B3, B4, leached sand; B5, iron pan). Although this series cannot be later than *c.* A.D. 55/75, it is not possible to attach a lower limit to the possible date-ranges of the preserved pollen.

Sample series C (FIGS. 42, 63)

Sample series C (at O.D. 88.8–89.46 m) was taken from the arena near the North Entrance (Section 12). As excavation had not been completed, the three basal samples came from a small section, facing north, in the same trench. The position of the sediments is indicated on FIG. 42. Within Sample series C, C1 and C2 represent the modern surface with a recently formed humus layer; C5 represents the post-Roman erosional material; C3, C6, C10, C17, C22 and C25 represent successive floor-surfaces of the arena; C29 and C31 represent the lowest silts, while C32 represents the undisturbed natural sub-soil. In this series closer sampling seemed desirable in view of the archaeological data but was later abandoned because of lack of time. This section provides a complete sequence of the stratigraphy from the date of the original construction of the arena to the present day. It is not possible to attach close dates to individual layers although major structural events can be related to the sequence.

Surface Samples

Sample E (FIGS. 7, 63)

Sample E (O.D. 91.02–91.09 m) was taken from the small trench at the south-east side of Section 5 (FIG. 7) in the arena-face of the seating-bank in the south-west quadrant. It comes from an organic layer, consisting of horizontal layers of compressed leaf-mould, 2–5 mm thick. It was formed on the seating-bank after the erosion stopped and is most likely to be entirely recent (of the last few decades) and was definitely later than layer 402 (Section 12, Sample C3), (FIG. 42).

Sample F (FIG. 1)

Sample F consisted of mud taken from the surface of the ditch between the town wall of Calleva and the hedge (5–10 m high) along Wall Lane (SU 643628).

Sample G (FIG. 1)

Sample G was decomposed leaf-mould taken from the dry ditch between the driveway across the Roman town and the low hedge to the south of it (SU 642625).

Redeposition

As Sample series C and A consist of material eroded from the seating-bank, redeposition of pollen might have taken place.

The seating-bank was constructed with a turf revetment along the outside. It is likely that the turf, with part of the adhering podzolized soil (undisturbed C-horizon) covering the site at the time, was used for this. The soil below the iron pan of the podzol was used for the seating-bank. As this soil contained no sub-fossil pollen, (C32, see p. 152) most of the pollen in Sample series C and A will have been deposited at the same time as the formation of the sediments.

Method of Pollen Analysis

The preparation of the samples consisted of treatment with 10% NaOH for 5 to 10 minutes, concentrated HCl for 1 minute, concentrated HF for 30 to 60 minutes and acetolysis mixture (concentrated H₂SO₄: glacial acetic anhydride in the ratio 1:9) for 5 to 20 minutes. The material was coloured with saffranin and mounted in glycerine jelly.

For the identification of the pollen and spores the following literature was used: Erdtman *et al* (1961), Erdtman *et al* (1963) and Moore and Webb (1978). The grouping of pollen and spores of more than one species into types largely follows Moore and Webb (1978), except for the pollen types of the Caryophyllaceae in which the grouping follows Faegri and Iversen (1975) with support of the descriptions by Chanda (1962). For the Rosaceae the grouping follows Reitsma (1966). For the cereal Gramineae the grouping follows Gröhne (1957) with support of the descriptions and photographs of Firbas (1973), Köhler and Lange (1979), Andersen and Bertelsen (1972), Watson and Bell (1975) and Beug (1961).

Results of Pollen Analysis

A composite pollen diagram comprising all the samples placed in supposed chronological order is presented in FIG. 65. The percentages with their standard deviations are represented by horizontal bars with brackets in the pollen diagram.

The percentage base (pollen sum) for the composite pollen diagrams (FIG. 65) is the total of all identified pollen and spores. When percentages are mentioned in the text these relate to this pollen sum of total identified pollen and spores, unless otherwise stated. This pollen sum was chosen because it was not possible to separate pollen and spore types of regional or local origin.

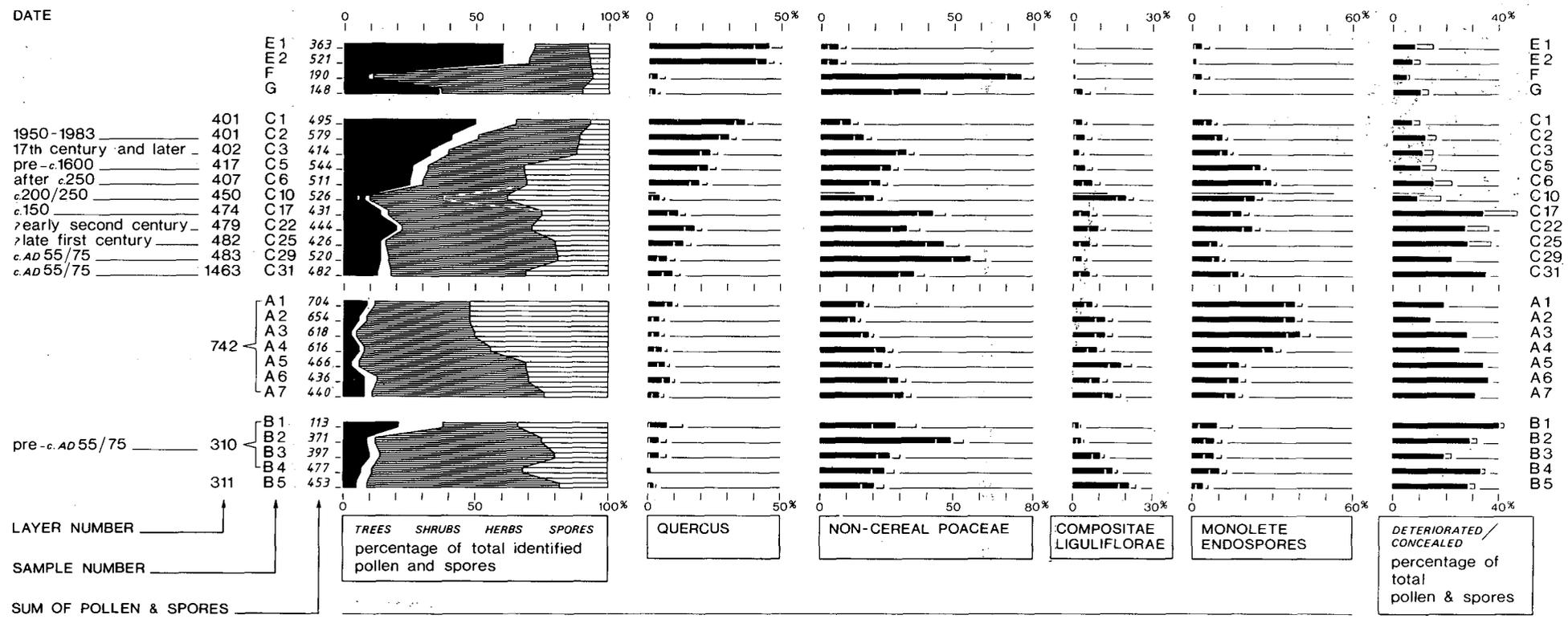


FIG. 65. Pollen Diagram. Sample C10: the line above the bar represents the original calculated percentage, while the bar itself represents the modified percentage as described in the text (p. 152).

The condition of the pollen and spores turned out to be poor in most cases, but was reasonable in samples with a high organic content, as, for instance, the surface samples. Sample C32 contained no sub-fossil grains, and only fossil grains of the Eocene Period were found. This indicates that at this depth the natural deposits (Bagshot Beds) are undisturbed. The turf layer of the podzol, where Sample B1 was taken, contained abundant charcoal; this indicates that the surface was burned.

The results of Sample series B and C form the main framework of this study; they assume no truncation of the sediments so that the samples form a more or less continuous sequence with the time. Sample series A, for which there is no close dating, can then be placed relative to series B and C. Because *Quercus* (oak) pollen, non-Cereal Gramineae (wild grass) pollen and monolete fern endospores are dominant in the pollen record, their changes with time are discussed. *Quercus* pollen is present in pre-Roman and Roman samples at levels of up to 10% (sometimes up to 20%), but rises to between 30 and 40% in post-Roman time. The changes of the wild grass pollen and monolete endospores in time are less straightforward. Wild grass pollen is present in low percentages at the base of Series B (pre-amphitheatre and, probably, pre-Roman). It occurs in very high percentages in B shortly before the Roman amphitheatre was constructed but decreases in C with some minor fluctuations from then until the present day. The monolete endospores are found in low percentages except in the middle and at the end of the Roman period (A.D. 220/250 and A.D. 400).

In Sample C10 all the pollen and spores have relatively low percentages because the monolete endospores are so abundant. An explanation is not easily found, although this might be the effect of selective corrosion (Havinga, 1971). A correction for the unexplained high percentage of monolete endospores in sample C10 is made by extrapolation of the pollen curves above and below Sample C10. From C22 to C17 a decrease of 4% was found for the monolete endospores. If the same decrease had taken place from C17 to C10 the latter would have had 14% of these spores. From C6 to C5 a decrease of 4% was found. If the same decrease had taken place from C10 to C6, the former would have had 38% of these spores. The average of these estimates is assumed to be the expected percentage: 23%. This is comparable to the percentage in Sample A1, which is suggested to be contemporary with sample C10 (FIG. 65). The percentages of the other species were then re-calculated, assuming the percentage of monolete endospores to be correct. Both the original and the re-calculated percentages are shown in FIG. 65.

Quercus pollen

In the pollen diagram of Series B and C (FIG. 65) the percentage of *Quercus* pollen shows a slight rise (from 0–5% to 25%) from pre-Roman time in Series B until some time between the first and the second timber phase of the amphitheatre (C31 up to C22). Thereafter (C17), it declines and remains low through the stone phase. The decline of *Quercus* at this level is related to a maximum of Compositae Liguliflorae at the same point (corrected percentage of *Quercus* pollen: 5%, see above). Above the later Roman surface (C6 and upwards) a steady rise in *Quercus* pollen frequencies is found. Series A consisted of material eroded from the seating-bank and accumulated in the recess of the arena wall, thus sitting directly above the foundation of the recess, which has been dated to about the mid third century. The percentages of *Quercus* pollen in Series A are lower than those of C5 and C6. If we assume a continuous rise (with the exception of an interruption in the twelfth to thirteenth century) in *Quercus* pollen since C10 (stone phase) then the A series should be dated before C5 and C6: i.e. before A.D. 400, the latest Roman surface. However it has also been argued that the disturbance of the recess and rapid infill of sediments could have occurred at the time of the robbing of the arena wall, dated between the late eleventh and mid twelfth centuries. Low percentages of *Quercus* could equally well fit with the clearance of the seating-banks which coincided with its use in the mid twelfth century.

High percentages of *Quercus* pollen are found in the recent samples of the C series. This does not seem to match with the present regional distribution-pattern of *Quercus* pollen, but probably reflects a strong local influence of *Quercus* trees in the immediate surroundings of the amphitheatre. As mentioned above, Surface-samples E, F and G were analysed to determine the influence of local plants on the percentages of pollen grains and spores found in the samples. In

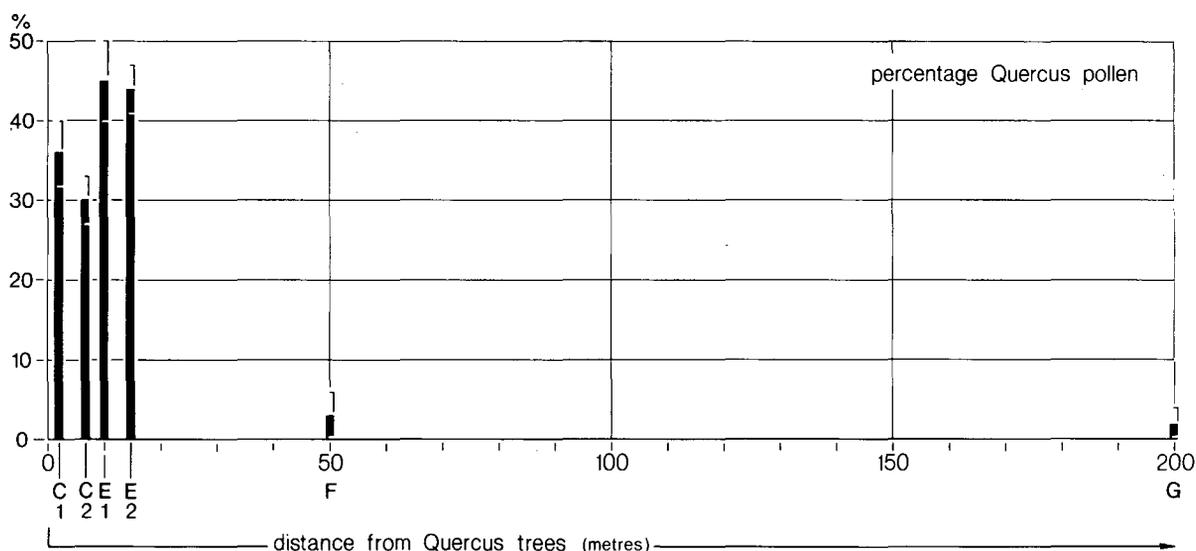


FIG. 66. Percentages of *Quercus* pollen with distance from the trees.

FIG. 66 the percentages of *Quercus* pollen and the distance of the surface samples C1, C2, E1, E2, F, G from the nearest *Quercus* trees are shown. Samples close to *Quercus* trees (C1, C2, E1, E2) have 30 ± 5 to $45 \pm 5\%$ *Quercus* pollen, much more than samples 50 m or more away from *Quercus* trees (F, G): which have 3 ± 3 to $4 \pm 3\%$. This shows how strong the influence of locally-growing *Quercus* can be.

The surface samples from near the town walls (F and G) as well as the samples from the South-East Gate of *Calleva* (Keith-Lucas, 1984), have low percentages of *Quercus* pollen, while in the amphitheatre such percentages are only found at level C10. Both the South-East Gate series and C10 are dated between the end of the second and the mid third century. This suggests that the distribution of *Quercus* trees in the mid-Roman period was similar to that found today both in and immediately outside the walls of *Calleva*.

On the basis of historical sources, Stamper (1983) described the surroundings of Silchester during the Middle Ages when it was part of Pamber Forest. At the end of the thirteenth century this forest became a closed wood. The increase of *Quercus* trees in the surrounding area of Silchester in post-Roman times is neither proved nor contradicted by our results. Although the samples of the amphitheatre show a rise in *Quercus* pollen between the latest Roman and the post-medieval gravelled surfaces, this could reflect changes on the banks of the amphitheatre or close by. Whether this rise also occurred elsewhere in Silchester and its neighbourhood is not evident and can only be proved by analysing sediments of appropriate date from other locations. In order to get a regional picture of these changes, dated samples throughout the area as well as a sample series from a peat bog which developed continuously over that period, need to be analysed. The rise of *Quercus* in the arena sediments (up to C22) may also relate to very local developments around the amphitheatre, and perhaps even on the seating-banks themselves.

Non-cereal Gramineae pollen

In pre-Roman times (Sample series B) a rise of non-cereal Gramineae (wild grass) pollen occurs: from 20 ± 4 to $26 \pm 4\%$ in B5, B4 and B3 to $49 \pm 5\%$ in B2. The percentage of wild grass pollen in both sample C31 and B1 is low, especially when compared to younger and older adjacent samples like C29 and B2; but other pollen and spore types are more abundant, e.g. *Corylus*, *Alnus* and *Polypodium* (see p. 156). The high percentage of wild grass pollen in C29 is likely to be the result of colonization of the bare surfaces by grass vegetation after the construction of the amphitheatre. From that time the percentage of wild grass pollen decreases until the end of the Roman period (C6). The corrected percentage of wild grass pollen in sample C10 (p. 152) fits nicely in the decreasing curve of wild grasses in Roman times. At the end of the Roman period and until the seventeenth century the percentage of wild grass pollen increases (C6, C5, C3) but becomes very low again in modern times (C1, C2).

<i>Stellaria holostea</i>	<i>Lychnis</i> type	<i>Sagina</i>	<i>Spergula</i>	Chenopodiaceae sp.	Compositae Liguliflorae	<i>Artemisia</i>	<i>Bidens</i> type	<i>Aster</i> type	<i>Centaurea</i> (non-cyanus)	<i>Cirsium</i> type (<i>serratula</i>)	<i>Sansurea</i> type	<i>Matricaria</i> type	Cruciferae sp.	<i>Sinapis</i> type	<i>Hornungia</i> type	Labiatae sp.	<i>Stachys</i> type	<i>Teucrium</i> type	Leguminosae sp.	<i>Astragalus</i> type	<i>Vicia/Lathyrus</i> type	<i>Trifolium</i> type	<i>Lotus</i> type	Samples		
					0.3		0.3					0.3		0.3								3	0.3	E1		
					0.2	0.2	0.2					0.6		0.4						0.2		3	2	0.2	E2	
					0.5							0.5		0.5									1	1	F	
					3									2									0.7	0.7	G	
0.2					0.4		4		0.2		1	1	0.2						0.2		0.2	0.2			C1	
0.2					0.7		1		0.2		1	2							0.2		0.5	0.2			C2	
0.1					2		1		0.1			0.6	0.1								0.1				C3	
					4		0.5					0.5	0.4												C5	
					7		0.8		0.1			0.7													C6	
			0.2		13		0.4	0.2		0.1		0.1													C10	
					6		0.2	0.5				0.5	0.2												C17	
					9		0.5	0.5				0.2	0.2												C22	
					6		0.2	0.5																	C25	
					3						1														C29	
		0.4			0.4		0.2				0.8								0.2				0.2		C31	
					7		0.2			0.1				0.1	0.1		0.6								A1	
0.1	0.1				12		1			0.1							0.1								A2	
0.1					12	0.2	1			0.2		0.1	1												A3	
0.5	0.2				9		0.5		0.3			0.8	0.6	0.2											A4	
					18		3	0.4	0.6			0.6		0.9												A5
0.2					10		0.7			0.2		0.7									0.1		0.6		A6	
					15		2													0.4	0.4		0.4		A7	
					2																				B1	
0.3					3		0.5					0.8													B2	
					10							1													B3	
					15		0.2					0.6		0.2											B4	
					0.4		1				1														B5	

<i>Lysimachia</i>	<i>Chrysoplegium</i>	<i>Rhinanthus</i> type	<i>Reseda</i>	<i>Potamogeton</i>	<i>Nuphar</i>	<i>Sporogonium</i>	<i>Typha</i>	<i>Hydrocharis</i>	<i>Polypodium</i>	<i>Athyrium</i>	<i>Dryopteris</i>	Monolete endospores	<i>Osmunda</i>	<i>Pteridium</i>	<i>Lycopodium</i>	<i>Ophioglossum</i>	spores sp.	<i>Sphagnum</i>	<i>Polytrichum</i>	Samples
				0.6																E1
	0.8	1	0.2	0.4					0.2			3		6						E2
									0.5			1		6						F
												3		2						G
												1		9						
				0.2					0.2		0.2	7		5						C1
				0.4					0.2			11		7	0.2					C2
									1			13		4	0.2					C3
									0.3			25		6			0.1			C5
									2	1		29		2						C6
									3	0.2		53		6			0.1			C10
									3	1		18		5						C17
					0.2				3	0.5		22		4						C22
						0.2			0.8			9		6				0.2		C25
									3	2		10		5				0.2	0.7	C29
												17		8					0.4	C31
				0.1			0.1		2											A1
				0.2					5			38								A2
0.4				0.2				0.2	4			38	0.1		0.1					A3
				0.5	0.2				5			40				0.2				A4
				0.9		0.2			5			30			0.2					A5
				0.5				0.2	6			17			0.2		0.3	0.3		A6
									2			17				0.2	0.6	0.2		A7
												16	0.1							
				16																B1
				0.8					6	2		9		15						B2
									3			8		11						B3
												8		8				0.8		B4
							0.4		3			10		12						B5
												4		19						
																		0.4		
																		2		

The pollen of wild grasses probably derives mainly from pasture and hay meadow in the surrounding area, and the continuing decline in the Roman sequence would result from a local increase in the proportion of tree pollen relative to grass pollen rather than any decline in the acreage of grassland.

Monolete endospores

The percentages of monolete endospores (ferns) are low in pre- and early Roman times (B series, C31, C29, C25). Incorporating the corrected value of C10 (see p. 152), we see a continuous rise during the Roman occupation and a decrease afterwards.

Pinus, Ulmus, Crataegus, Sambucus and Ilex pollen

Pollen of *Pinus*, *Ulmus*, *Crataegus*, *Sambucus* and *Ilex* are more abundant in recent samples than in the older samples (see TABLE VII). *Pinus*, *Crataegus*, and *Sambucus* seem slightly more abundant in pre-Roman than in Roman time. Before the end of the Roman period pollen of these trees and shrubs is either absent or very rare: $4 \pm 2\%$. Above the latest Roman surface their percentages start to rise (C6, C5, C3: 4 ± 3 to $10 \pm 2\%$ and reached 11 ± 4 to $22 \pm 4\%$ in E1, E2, C1 and C2. Regarding the pollen sum, the low percentage values for the samples older than C3 are not very reliable, but the higher percentage values of samples younger than C3 are reliable (Hafsten, 1956). This recent increase in *Pinus*, *Ulmus*, *Crataegus*, *Sambucus* and *Ilex* is contemporary with that of *Quercus*.

The rise in *Ulmus*, *Crataegus*, *Sambucus* and *Ilex* reflects both the colonization of the seating-banks by these trees and shrubs in the post-Roman period after the amphitheatre was abandoned, and also the more recent planting of hedges in the local landscape, in which these species are prominent. The increase in *Pinus* represents colonization of local heathland by pine as former intensive burning and grazing have been relaxed, as well as the local forestry plantations, which now occupy much of the former area of heathland.

Alnus, *Corylus*, *Compositae Liguliflorae*, *Bidens/Matricaria*, *Polygonum* pollen and *Polypodium* spores
The following suggestions are based on low percentages and are therefore unreliable (Hafsten, 1956). In pre-Roman times the earliest samples contain more *Alnus*, *Corylus*, *Polygonum*, and *Compositae Liguliflorae* pollen along with *Polypodium* spores, and possibly also more *Bidens/Matricaria* type pollen than later samples. This is most evident in the curve of *Compositae Liguliflorae*, but can also be seen in the curves of *Alnus*, *Corylus* and *Polygonum* pollen (FIG. 65, TABLE VII).

In sample B1, predating the construction of the amphitheatre, *Alnus* and *Corylus* pollen and *Polypodium* spores have relatively high percentages, reflecting the presence of damp woodland locally. But in sample C31 *Alnus*, *Corylus* and *Polypodium* are scarcely represented, leading to the conclusion that *Alnus*, *Corylus* and *Polypodium* were no longer growing in the immediate surroundings of the amphitheatre at the time when it was built.

In Roman times *Alnus*, *Corylus* and *Polygonum* pollen and *Polypodium* spores remain at low percentages, around 5%, while *Compositae Liguliflorae* remain at around 15–20%. At the end of the Roman period the *Compositae Liguliflorae* decrease quickly and the other types follow the same pattern. A slight recovery of all these types possibly occurs in modern times.

The *Polygonum aviculare* type and *Compositae Liguliflorae* pollen, along with *Bidens/Matricaria*, are almost certainly derived from herbaceous weeds growing directly on the sandy floor of the arena. Their presence in pre-Roman times suggests that there was disturbance of soils locally before the amphitheatre was constructed, and their demise in the post-Roman period will reflect both the shading out of the herbaceous weed flora as the seating-banks became colonized by trees and shrubs, and possibly also loss as a result of more recent flooding of the arena.

Cereal Gramineae pollen

In all samples pollen of Gramineae larger than $37 \mu\text{m}$ was, in the first instance, recorded as one pollen type, cereal Gramineae. After completing the counting of Sample series A the author learned how to separate cereal pollen of different types using a phase contrast microscope. So

cereal pollen in the other samples was subdivided into the different cereal types which could be identified (TABLE VIII). A distinction could be made between the cereals of *Triticum aestivum* type, *Triticum non-aestivum* type (including *Triticum spelta*, *T. monococcum*, *T. dicoccum*), *Avena* type, and *Secale* type. Non-cereal grasses which were identifiable included *Glyceria* type and *Hordeum* type, the latter possibly also containing cereal *Hordeum*; but this type could not be identified satisfactorily.

The *Triticum non-aestivum* type (Emmer, Spelt, Einkorn) is found in most pre-Roman and Roman samples (up to C5, TABLE VIII). *Triticum aestivum* type (modern bread wheat) is found in post-medieval and modern samples (C3 to C1). This agrees with the records of macrofossils in southern England compiled by Godwin (1956). According to him, Einkorn was present in deposits of the Iron Age and earlier; Emmer and Spelt in deposits of the Roman period and older.

In the present study *Avena* type (Oat) was found in samples from late Roman to modern times. Godwin cites records from the early Iron Age to the late Middle Ages.

Secale type (Rye) was not found in the Silchester deposits studied.

The extent of cereal cultivation or the proximity of areas of cultivation cannot satisfactorily be deduced from these data. For example, Surface sample G was taken next to a *Triticum aestivum* field, but pollen of this species was only present to the extent of 0.4% in the sample. However, in Samples C1 and C2, with no such field near the sampling site, this pollen type was more abundant, to the extent of 2.8 and 3.5% respectively. Again, in order to draw any conclusions from such low values, they must be based on a large pollen sum. The value of these identifications is proof of the presence, but not of the absence, of any type.

Surface samples

As mentioned before, the surface samples from the amphitheatre contained more *Quercus* pollen than those from the area of the town walls (F, G). The same applies for *Ulmus* and *Ilex*, but wild grasses were more abundant in F and G.

These differences reflect the differences in the local vegetation. The banks of the amphitheatre are covered with trees and shrubs, mainly *Quercus* and *Ilex*. *Ulmus* was also present up to 1962, until the Dutch Elm disease killed it (information from Keith-Lucas). The area within and surrounding the town walls contains mainly farmland: arable and pastoral land with hedges and solitary trees.

Pinus is unexpectedly high in Sample G. *Pinus* plantations are plentiful around Silchester but are ± 5 km away from the sampling points, so the sources for this pollen will probably be the same for all the surface samples. Regional pollen might be expected to be present in larger percentages in Sample G because of the open situation of the sampling spot (FIG. 1). As Jonaassen (1950), cited in Dimbleby (1961), says: 'We have seen that a low vegetation may collect pollen from a distance, whereas in a wood this effect is negligible'.

Regional Comparisons

If we compare the evidence from Silchester with other pollen diagrams of southern England from comparable situations, we find great similarity. The diagrams referred to are based on a pollen sum of pollen and spores.

Pollen diagrams from Pingewood (Keith-Lucas, 1985) of Roman age contain 90–95% herb pollen, of which 30–40% is wild grass pollen and $30 \pm 10\%$ is Compositae Liguliflorae. Pollen diagrams from Farmoor (Dimbleby, 1979) of Roman age contain even more herb pollen: 90–97%, of which 40–50% is wild grass pollen and 2–20% Compositae Liguliflorae. Dimbleby (1978) also published a diagram of Roman age from St Albans (*Verulamium*). There tree and shrub pollen is less than 10%, grass pollen is 60–65% and Compositae Liguliflorae is less than 10%.

Greig (1982) compared British pollen spectra of a number of urban and natural deposits from 200 B.C. to A.D. 1500. He found that in samples from urban sites (ponds, wells, organic occupation-deposits, etc.) tree pollen was scarce (normally in the range of 1–15% with extreme

TABLE VIII: RECORDS OF GRAMINEAE POLLEN LARGER THAN 37 μ m

Samples	C1	C2	E1	E2	F	G	C3	C5	C6	A1	A2	A3	A4	A5	A6	A7	C10	C17	C22	C25	C29	C31	B1	B2	B3	B4	B5			
Cereal types (in numbers)										5	2	-	3	3	-	1	3	8	3	1	1	4	-	1	3	1	-			
Cereal Gramineae	15	19	1	6	3	6	9	7	9																					
<i>Triticum</i> (non- <i>aestivum</i>)	-	-	-	-	-	-	-	6	1								3	8	3	1	1	4	-	1	3	1	-			
<i>Triticum aestivum</i>	14	19	1	2	2	2	4	-	-																					
<i>Avena</i>	-	-	1	3	-	1	2	-	1								-	-	-	-	-	-	-	-	-	-	-	-		
Cereal unidentified	1	-	-	1	1	3	2	1	7																					
Wild grass types																														
<i>Glyceria</i>	2	-	-	2	2	1	-	-	-								-	-	-	-	-	-	-	-	-	-	-	-	1	
<i>Hordeum</i>	2	1	-	-	-	-	1	1	1																					
wild grass unidentified	5	2	-	-	-	-	1	6	7																					
?	6	5	-	1	-	-	-	5	3																					
																	1	-	-	-	-	-	-	-	-	1	1	1		
																	2	7	11	1	13	9	-	-	-	-	-	-		
																	1	5	1	-	-	6	-	-	-	-	-	-		

values up to 50%) and wild grass pollen abundant (normally in the range of 25–50% with extreme values of 15 and 75%).

In samples from more natural deposits (peat bogs, urban and rural ditches, etc.) more tree and shrub pollen were present: the former normally in the range of 15–50%, with extreme values up to 60%, and the latter normally in the range of 35–60% with extreme values of 20 and 75%. So, according to Greig, a low percentage of tree and shrub pollen in a pollen diagram in England reflects human occupation, while a large percentage of this pollen reflects unoccupied sites.

The data from Silchester samples, as well as from the samples mentioned above, agree with Greig's findings.

High percentages of cereal pollen, as discussed by Greig, have not yet been recorded from Silchester.

Conclusions

In pre-Roman and Roman times the site of *Calleva Atrebatum* had an open landscape with few trees. This landscape comprised pasture, hay meadow, arable land and heathland, though pasture probably predominated. At various times the seating-bank probably became colonized by trees, with ferns beneath; at other times it was cleared and supported only a weed flora.

From pre-Roman to mid-Roman times the weed flora of the site of the amphitheatre became progressively poorer, as the area immediately around and perhaps within the arena itself was colonised by ferns. A rise in *Quercus* during the first timber phase of the monument may also reflect local colonisation. *Quercus* trees growing locally as opposed to regionally have been shown to be responsible for most of the *Quercus* pollen grains in recent samples. When the amphitheatre was abandoned, at the end of the Roman period, it was again colonised by trees and shrubs. Unless Sample Series A is of medieval date, there is no change in the pollen sequence from the arena (Sample Series C) to correspond with the medieval re-use of the monument.

In the late and post-medieval period, the pollen data indicate the presence of oak trees on the amphitheatre, but cannot add any information to the historical data on Pamber Forest collected by Stamper (1983).

A vegetational reconstruction for the immediate surroundings of the amphitheatre has been deduced from the pollen diagrams, and at all times pasture has predominated. However, the data did not provide enough evidence for a reconstruction of the vegetation over a larger area.

Cereal Gramineae pollen is recorded from Silchester throughout the period covered by the present study. However, the scale of cereal cultivation cannot be deduced from the data available. The records from pre-Roman and Roman times are all of *Triticum non-aestivum* type (Einkorn, Emmer and Spelt), while records of post Roman times are all of *Triticum aestivum* type (modern bread wheat).

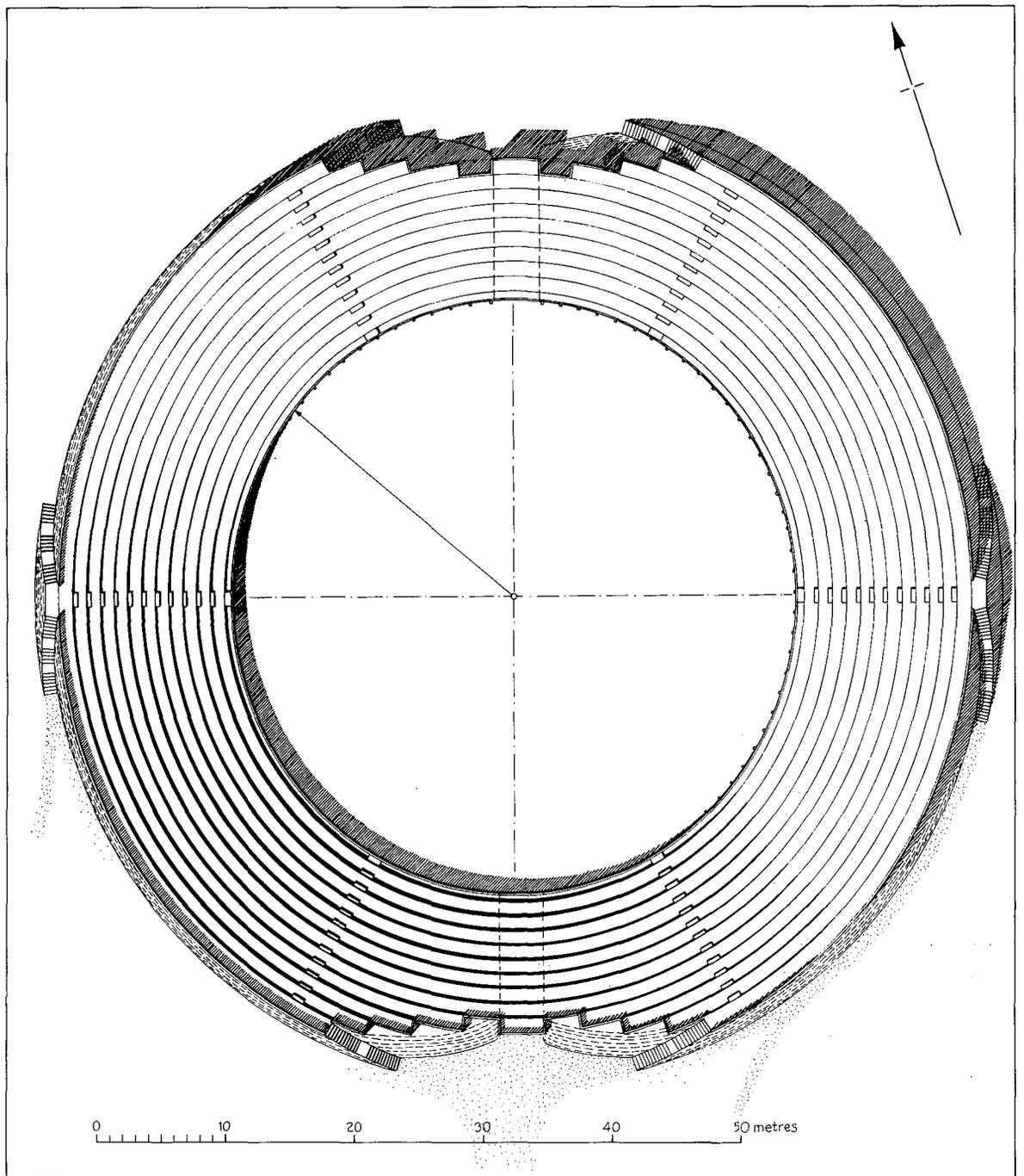


FIG. 67. Reconstruction of amphitheatre of Timber Phase 1: Plan.

PART IV

OBSERVATIONS ON THE RECONSTRUCTION OF THE AMPHITHEATRE by Nigel Sunter

Phase 1 Timber Amphitheatre

Within a limited tolerance of about 0.5 m the arena revetment palisade conforms on plan to a circle, with the axes of the two entrances set out reasonably accurately in relation to the centre of the arena (see Discussion, p. 181). The circular plan is difficult to parallel at this date. However, the approximately contemporary setting out of Maumbury Rings may provide a parallel: although the resulting shape is nearer to that of the more sophisticated amphitheatres, it has been suggested that the arena at Maumbury Rings was laid out from two overlapping circles (Bradley 1976, 55, fig. 16).

Before the building of the amphitheatre the site appears to have fallen at a gradient of approximately 1 : 19 from south-west to north-east. As a means of creating a raised auditorium or *cavea* the arena was excavated to an average depth of 2.1 m, with an overall slope towards the North Entrance where it drained away to the lower ground beyond.

The spoil from the excavation of the arena was used to build up the height of the enclosing seating-bank and, owing to the slope of the original ground-surface from west to east, more spoil would have been required to construct the eastern half of the *cavea* to the same height as the western half. The volume of spoil excavated from the arena and entrances would have been in the region of 3000 cubic metres. On the assumption that the level of the east *cavea* conformed to that recorded in the section through the western seating-bank, then the amount of spoil required to raise both halves to this level would be approximately 6738 cubic metres. No allowance here is made for the expansion of the excavated material, since the seating-bank as recorded now is fully consolidated; but it can be assumed that the bank would originally have been approximately 10% higher until the natural settlement had taken place.

There is, therefore, a shortfall of 3738 cubic metres, to be excavated and transported from elsewhere. This raises the possibility that, although the western seating-bank was built solely of material excavated from the arena, the eastern bank was built only partly of spoil and was raised to the full height using a timber construction. However, although there has been insufficient opportunity for archaeological investigation during the present excavations to clarify this point, it can be seen from the contour plan (FIG. 2, p. 6) that the eastern seating-bank is even now only a metre or so below the highest point of the western bank and so, even if during the initial construction timber was used to heighten this side, it is clear that additional material must have been used at a later phase in order to build it up to its present (now eroded) level. It seems logical to assume that this was done during the initial phase of construction and, in the absence of archaeological evidence to the contrary, this is the interpretation which has been chosen. There is

indeed a substantial dip in the general ground-level to the east of the amphitheatre, and this may have been the source of at least some of the additional spoil.

The outside of the *cavea* was revetted by a wall of turves whose positions were clearly recorded (FIGS. 6, 38). This is a common form of construction, used extensively by the Roman army for major defensive works (Jones 1975). Such revetments seem to have been capable of retaining quite a steep construction for a reasonable length of time, so long as physical erosion was kept at bay. By measuring the lengths of the lenses recorded from the section through the seating-bank, by interpolating where they no longer exist, and multiplying by the perimeter of the amphitheatre, it is possible to arrive at an approximate area of 6300 m² of grassed land which would have been needed to provide adequate quantities of turves. On the assumption that the land upon which the amphitheatre was constructed was formerly grassed open land, then an area of 3850 m² was available by stripping the site before construction began. This would leave a further area of 2.5 ha to be found elsewhere. Considering that, to be useful, the turves would have to be quite thick, then this further large area of land, probably formerly used for grazing and presumably lying close to the town, would have been denuded of its most productive topsoil.

As a fortunate result of a later heightening of the *cavea*, there is clear evidence preserved for the initial top surface of the seating-bank (FIG. 6, p. 14). A series of five indentations into the general slope of the surface are interpreted as representing the backs of the steps, presumably reinforced by timber or wattle revetment. Either would no doubt have required stakes to hold them in place, and indeed a wattle revetment was used around the base of the exterior of the South-Eastern Gate at Silchester. However, no evidence for stakes was recognised during excavation. Timber revetment has been shown in the reconstruction (FIG. 69). The small lenses of gravel which were discovered adjacent to each of these indentations may have represented a gravelled surface to each terrace which would have worked its way forward to be trapped behind

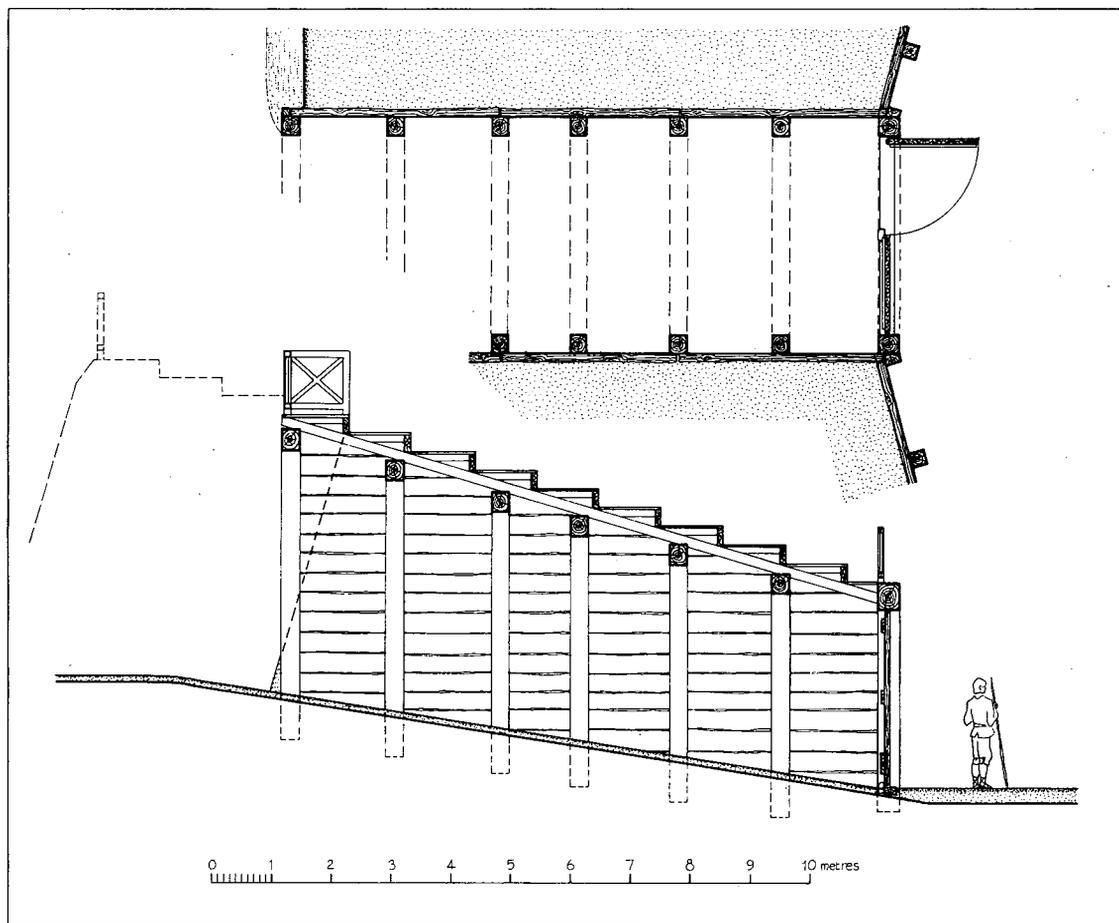


FIG. 68. Reconstruction of South Entrance: Timber Phase 1.

each revetment timber, only to be disturbed when the timbers were perhaps finally removed. Terraces regularly spaced in relation to these indentations would give steps 30 cm high at approximately 1 m centres, and a slope of only 15° to the horizontal. This is a very shallow rake compared with the more usual angles for theatre seating, and perhaps can be more closely paralleled in the terraces of modern football stadia for standing rather than seated spectators.

Projected back to meet the turf revetment and forward to the timber arena revetment, the angle of these terraces fixes quite accurately the height and disposition of the seating-arrangement. The front row of seating would lie immediately behind the balustrade, and in common with normal theatre design there would be no space for a gangway in front of this row (no doubt the expensive seats!). At the back there would be adequate space for circulation behind the rear row of seating.

Quite why this arrangement of wide terraces was chosen rather than a steeper rake of seating across a shorter bank is not clear, but no doubt if it was designed to accommodate standing spectators the capacity would be quite considerable. If we assume that standing spectators would be two deep on each terrace, then a total capacity of approximately 7,250 would be possible, whereas seated the amphitheatre would accommodate about 3,640. This compares with 6,000 at Caerleon (Wheeler 1928, 118), 2,300–2,500 at Chester Phase I and 7,000 at Chester Phase II (Thompson 1976, 228 and 234). The Caerleon figure is not supported by further calculations but is presumably based on the full-strength complement of a legion.

The retaining-wall around the arena was constructed with between 110 and 120 posts, varying in scantling from 24 cm to 26 cm square, set into post-pits 0.5 to 1.1 m deep (below the surface of the natural) and spaced between 1.25 and 1.6 m apart. The height to the first row of terracing would be about 3.2 m above the finished level of the arena floor. The posts are reasonably substantial in size, although at the west axis they would have had to support only 0.5 m or so of built-up seating-bank as the greater height would have been formed by the more stable natural subsoil. Nevertheless, the post-pits would have been inadequate in themselves to prevent the timbers from being pushed towards the arena by the weight of the spoil, and in this instance it would have been a relatively simple matter to provide resistance by anchoring them back to the natural ground-surface as at Maumbury Rings, Dorchester (Bradley 1976, 43). Evidence for these ties would have been destroyed by the Phase I Stone construction. Towards the east side of the arena, however, the natural surface was much lower, and consequently a much more substantial height and weight of unconsolidated spoil would have had to be held back, and a system of raking anchors would have been necessary to provide adequate restraint; there would have been inadequate resistance if the ties had been anchored horizontally into the unconsolidated seating-bank as it was being raised. This method of construction could be checked by archaeological excavation at some future date, as the anchors here would probably have extended beyond the back of the later stone wall.

The spaces between the posts would have been infilled by horizontal timbers acting as shuttering, and a continuous trench for this purpose was discovered either side of the North Entrance. One method of infilling would be for the posts to be grooved along opposite faces and for short lengths of timber to be slotted down the grooves between pairs of posts. Alternatively longer timbers could span behind two or three posts and be staggered one above the other to give a much stronger and more continuous construction. It is unlikely, however, that these horizontals would have provided sufficient stiffness in themselves over such a large radius to obviate the need for the anchors described above.

Towards the north and south entrances the *cavea* appears from the modern contour plan to be reduced in width; this is confirmed by the archaeological evidence, where the construction of the entrance revetment-walls gave support to a width of about 10.5 m of the bank compared with a width of bank near the east-west axis of 14 m. This reduction may have been a gradual gradation from the maximum width at east and west towards the entrances, giving in effect two inward-facing crescent shapes; alternatively the reduction may have predominantly taken place adjacent to the entrances. The reconstruction (FIG. 67) shows the latter alternative. The most likely explanation for this narrowing is the straightforward structural expedient of reducing the height of bank requiring revetting at this point.

The posts lining the entrances (FIG. 68) are in pairs spaced 1.35–1.8 m apart and giving an entrance width of approximately 3.5 m. Their scantling is larger than the posts around the arena, with their wider dimensions up to 44 cm and their narrower dimensions up to 32 cm. The post-pits are not noticeably deeper than those of the arena, and here again some form of anchoring or bracing would be necessary to withstand pressure from the much greater height of unconsolidated bank. A relatively simple alternative to anchoring (which would be difficult because of the height of the posts, and the relative lowness of the natural ground-surface at these positions) would be to insert braces between pairs of timbers across the entrance-way, and this is the method chosen in the reconstruction. The height at the arena gateway would be 2.8 m, just adequate for a horse and rider. The timber threshold of the South Entrance gateway (F1751A) remained in position during subsequent phases. On the assumption that the gateway was divided to give a pair of gates, each approximately 1.65 m wide by the full height of the opening, then substantial pivots would have been necessary upon which to hang them. The usual method for pivoting such gates (attested by evidence from stone thresholds) is that both the threshold and the lintel would be provided with a circular hole into which a pole fixed to the side of the gate would be inserted, allowing the pole to rotate freely within them. No doubt both the threshold and the pole would be constructed of oak or some similarly hard timber to withstand the continual friction at this point. Owing to the slope of the entrance-way the gate would have to open into the arena, and no doubt a 'stop' would be provided to prevent the gates from pivoting beyond the closed position. The large rectangular flint set into the metalled surface on the centre line of the South Gate is too far back to have been used as a stop; but it may have been used to house the bottom end of a wooden stay, which would lean at an angle against the closing edge of one of the gates to act as a reinforcing stop.

The gate piers (F1296 and F1791) were housed in shallow post-pits (0.7–0.8 m deep); this fact lends weight to the argument that the timbers of the arena and entrance-way were anchored back or braced firmly into position, as without this they would be inadequate to support a heavy gate.

The stake-hole near the centre of F1751A may have no connection with the Period I timber gateway and (as already suggested on p. 21), may have been a marker for setting out one of the phases of the amphitheatre. Indeed, it aligns most closely with the centre of the Period II timber gateway, although (if interpreted thus) the Period I threshold would have had to be sufficiently rotten to be pierced in order to drive the stake into the natural.

The North Entrance also retained traces of a timber threshold, 30 cm wide. Here the shallow main drainage-gully from the arena was originally covered with planking and metalling was laid across the top.

There appear to have been recesses built into the seating-bank on the east and west sides of the arena, from which access to them would have been gained. The archaeological evidence for the disposition of the timbers is described on pp. 21, 25, but with so many structural questions unanswered there is little point in attempting a reconstruction.

In studies for the reconstruction of the Period I Chester amphitheatre (Thompson 1976, 228) the present writer attempted to give an estimate of the quantity of timber required for its construction. The approximate nature of the calculations was stressed, but it may be interesting for purposes of comparison to make a similar assessment for Silchester. The volume of timber required is in the region of 242 cubic metres (allowing an extra 15% for cutting-wastage on site). The formula used for Chester requires approximately 27.2 ha (or 68 acres) of natural woodland to provide the sizes and quantity of timber necessary for building the Period I timber amphitheatre at Silchester.

Earthen or timber amphitheatres have tended to be substantially excavated around the arena where the principal structural evidence remains, while the outside of the *cavea* remains relatively unexplored. Unless there is evidence for radial walls within the seating-bank, as at Caerleon and Chester Phase II, to give a clear indication of the method of access to the seating, the route by which spectators ascended to the level of the auditorium has to be conjectural. At Silchester there was evidence for a built-up bank against the rear of the turf revetment at the position of the section through the western half of the *cavea*, and it is suggested that this may be the remains of a ramp or stairs built against the outside of the amphitheatre. In the reconstruction (FIG. 67), six

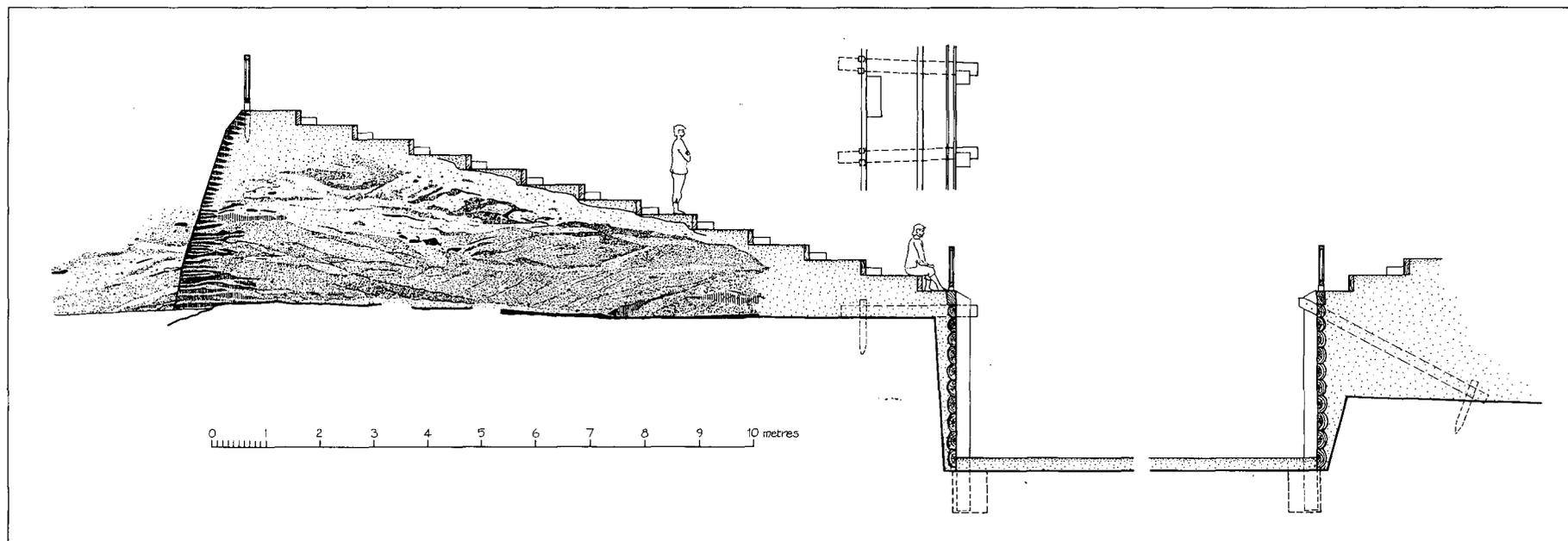


FIG. 69. Reconstruction of a Section of Seating of amphitheatre of Timber Phase 1.

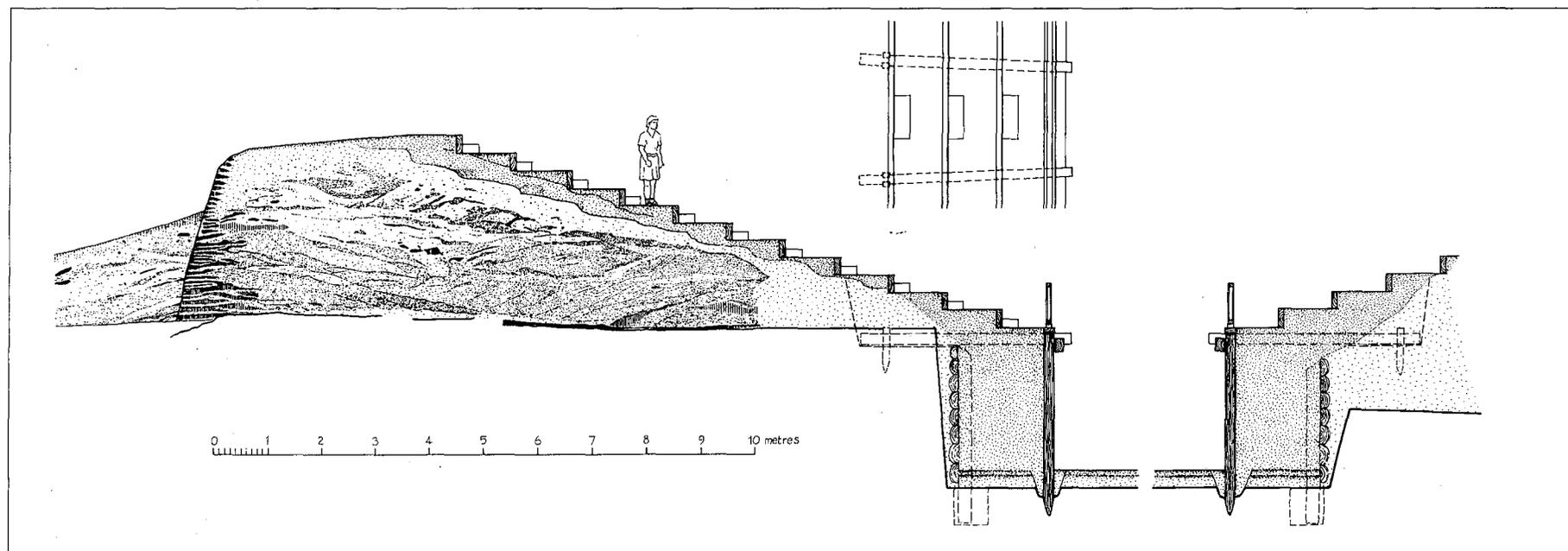


FIG. 70. Reconstruction of a Section of Seating of amphitheatre of Timber Phase 2.

points of access are suggested, and these are shown symmetrically disposed around the perimeter. It is assumed that the initial design for the amphitheatre would have been more formally arranged than subsequent phases, where a more pragmatic approach to access might be adopted once the 'desire lines' had become established.

Phase II Timber Amphitheatre

If we accept a date in the mid second century for the Phase II refurbishment of the amphitheatre, then the original structure would by that time have been getting on for a century old. The wooden structure would no doubt have suffered considerably from decay over that period, with its posts and planking in continual contact with damp subsoil.

Timber which is exposed both to continual damp conditions and to the air will suffer far greater bacteriological decay than timber which is either completely buried below ground in constantly wet conditions or is completely isolated from it. The length of time a timber will survive in contact with the ground will depend on many and varied factors, such as the local climate, the characteristics of the subsoil, the level of the water-table, and the species of the timber. Indeed, the conditions prevailing today may not necessarily be the same as those which were present during the Roman period, and so no hard and fast rules can be laid down governing the likely rate of decay.

Limited evidence (traces of an oak post in F636/696) survives for the species of timber which was used in constructing the Phase I amphitheatre. Susceptibility to decay is directly related to the durability of the species. Poplar, for example, would have an extremely short life under almost any conditions, whereas oak is relatively durable. Would there have been a tradition of knowledge and experience of timber-construction and its durability amongst the local population? Alternatively, if the designers of the new amphitheatre were brought up perhaps in Italy or Southern France, their knowledge might well be lacking in respect of the behaviour of Britain's species of trees used for constructional purposes in Britain's climate. However, if we give them the benefit of the doubt and assume that durable species such as oak were consistently selected from the natural forest, we can give some general indications for the probable life of the Phase I amphitheatre. The Princes Risborough Laboratory over a number of years has carried out tests in which stakes of various species, 5 cm square, were set into the ground in various parts of the country and their rate of decay was measured (Farmer 1972, 8). Oak stakes could have an expected life of between 15 and 25 years. The fungi penetrate at a standard rate, and doubling the cross-sectional area of timber will double its life. Thus oak posts of 20 cm square could last 60 to 100 years before failing. The arena posts which were 24–26 cm² could therefore have lasted up to 120 years; but as they were retaining timber holding back a considerable weight of soil, they may have failed before they had fully rotted through. It would, therefore, seem not unreasonable to suggest that the Phase I amphitheatre might have lasted fairly intact for a century, but that by then many of the arena posts would have rotted at ground-level, the planking would have failed to hold back the retained bank, and the timber anchors may have ceased to hold back the tops of the posts.

Thus general decay and perhaps partial collapse would call for a substantial injection of funds to bring the amphitheatre back into full and safe use. It also offered the opportunity of changing the woefully naive circular plan to something nearer the generally acknowledged 'correct' plan of an oval or elliptical shape for the arena. In fact the modified plan still fell short of this 'ideal', since it seems to have been laid out simply by describing arcs from two centres on the east-west axis, thus making this the short axis and the north-south the long axis (see plan, FIG. 71).

The later construction of the stone wall of the arena obliterated any trace of the method of bridging the gap between the new palisade and the old seating-bank. It is clear that there would have been inadequate spoil from the excavation at the north end to have filled this gap along the full length. On the other hand, if the gap was left unfilled and simply covered by a timber structure, can we assume that the old revetment was still sufficiently stout to have supported the bank? If it was still strong enough, why go to the expense of adding another palisade, whose only

achievement was a slight change in the shape of the arena, and why remove a standing structure at the north end only to re-support it with the new? At Maumbury Rings (Bradley 1976, 53) it was suggested that, as at the amphitheatre at Birten (Vetera) (Lehner, 1930, 68–71), there was a corridor immediately behind the palisade, which perhaps gave access from the entrances to the recessed rooms and carried a level *podium* above at the front of the rows of seats. It is not clear at Silchester what relationship the palisade had with the Period I recesses (discussed on pp. 31, 36); but in any case, even if the gap was used as a corridor, it could not have been provided with access from the North or the South Entrance. For lack of any evidence to the contrary it is assumed, for the purposes of the reconstruction (FIG. 70), that the old revetment-wall must by now have become unsafe, that the new palisade was a replacement for it, and that the space behind was filled with earth rather than left void.

The palisade was constructed of closely-spaced timbers of varying sizes, generally less than 20 cm square or in diameter, set into a shallow trench and then driven into the natural subsoil a further 0.25–0.3 m. If we assume that the ends of the timbers were tapered, it would certainly have been feasible to knock them into the ground to this depth by hand with heavy mauls or hardwood-headed mallets. (Iron sledge-hammers would have split the heads of the posts.)

If this palisade was indeed designed to hold back unconsolidated fill, although at either side of the North Entrance it certainly would have directly held back the bank, then the depth to which the posts were set into the ground would have been insufficient to resist the pressure from behind them. It must therefore have had some system of anchors fixed back into the solid bank and jointed to a horizontal which would have run around the outer edge of the top of the palisade. These anchors could extend horizontally back into the bank both on the east and the west sides, as the whole of the earlier bank would by now be thoroughly consolidated; but no trace of these would have survived the stone re-building.

At the North and South Entrances there appears to be no direct relationship between the positions of the new gates and the pre-existing timber-revetted passage-ways through the *cavea*. It is argued above that the arena revetment had failed as a result of decay of the timbers, and it is similarly assumed that the entrances would also have become ruinous, and perhaps had partly collapsed. Whilst evidence was found for replacement of the posts along the east side of the north entrance-passage (and this would presuppose the existence at that time of the seating-bank to some height), this may have been a repair carried out during the life of the first timber phase. There was also evidence for the removal of posts from the post-pits in the South Entrance, and it is possible that the fully-buried stubs of the posts could still have been sufficiently preserved to require removal for the foundations of the stone re-build 200 years later. There is, therefore, no clear evidence to suggest that the passages were repaired or up-graded as part of the Phase II activity. It seems likely that they were retained in their eroded state, perhaps as grassy banks, and that the new gate-posts formed simple terminals to the newly refurbished arena palisade.

The North Gate in this period is reduced to a width of approximately 1.2 m. The gate-posts seem to have been quite substantial; one was recorded as 0.4 m in diameter. Drainage seems to have been channelled along a wide U-shaped gully through the gateway, and consequently during much of the year this entrance may have been rather wet underfoot.

The South Gate is rather more complex. There would appear to be a gate-post 30 cm square (F1765) on the west, with a similar one in F1719 (a re-cut of F1791) to the east, and linked by a threshold-beam set in a shallow slot (F1751B). F1765 is positioned north of the arena terminal F1294, leaving a gap of approximately 35 cm between the two. F1719 is likewise positioned slightly forward of F1749, but leaving a gap of about 70 cm between the two: this is wide enough for a small door or gate, perhaps allowing entry to the arena without opening the main gates, which would each have been 1.6 m wide. The smaller gap on the west side is more difficult to explain, as it is too narrow for a gate, and would allow access only to a reasonably slim person sliding sideways through the opening. Staggered (but wide) exits such as this can still be found associated with bull-rings, through which the bull-fighter can dodge out of the way of an advancing bull. However, the gap is so narrow that it may simply have been boarded across; but why in that case not use the terminal of the arena palisade as a gatepost? An alternative explanation for the opening to the east of the main gate is that a small room was built into the

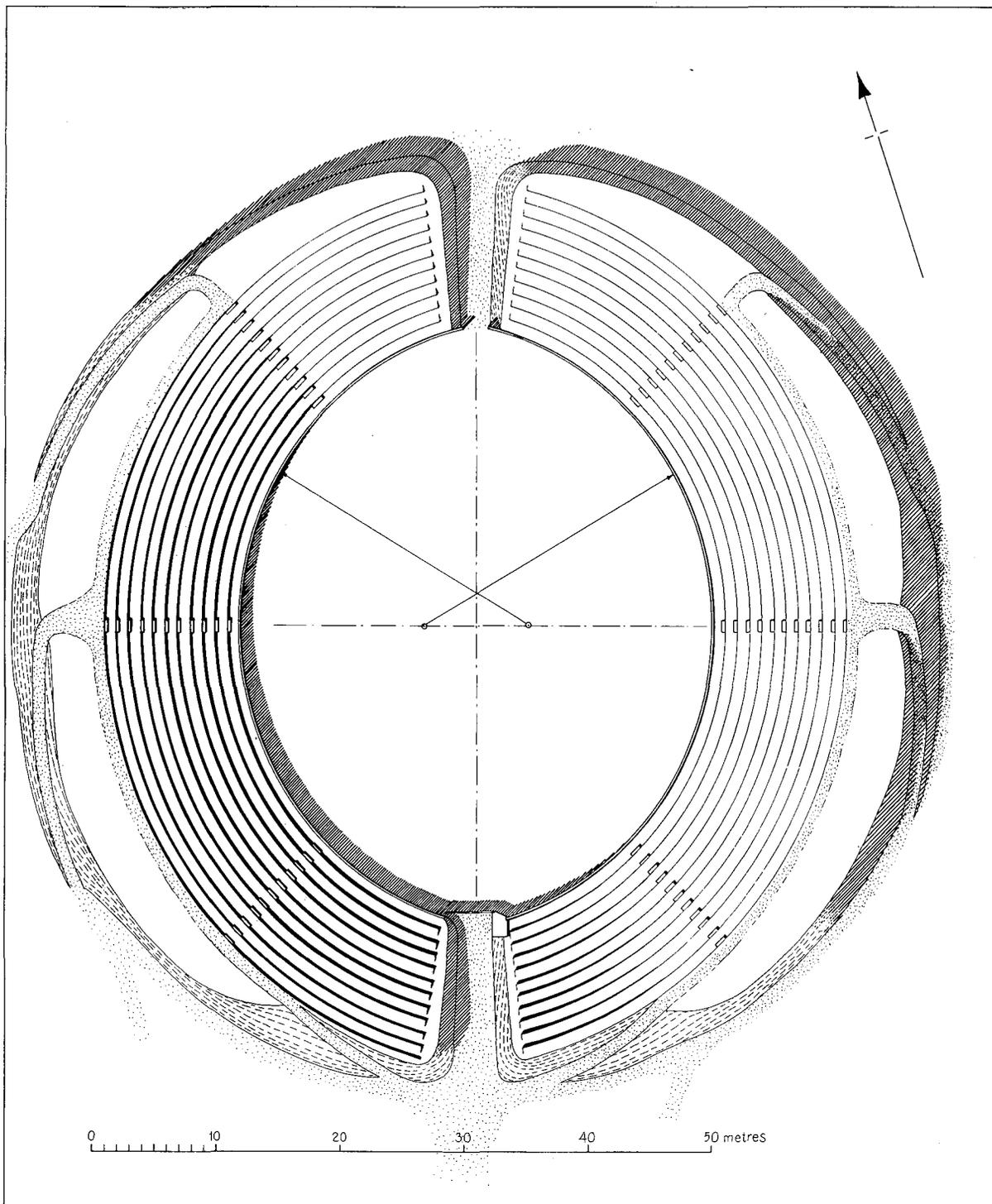


FIG. 71. Reconstruction of amphitheatre of Timber Phase 2: Plan.

bank which could be entered both from the entrance-passage and from the arena. Such rooms were found at Cirencester (Brown and McWhirr 1967, fig. 2) and most recently at London (Frere 1988, fig. 21). Their primary purpose remains a mystery, and at Silchester no evidence has survived of any associated structure.

If we are correct in assuming that the amphitheatre was showing signs of general decay and neglect by the mid second century, and this picture is supported by the increase in tree pollen at about this time (p. 151), the surface of the seating-bank might be expected to show an accumulation of topsoil over the Phase I terraces. In fact none was recorded in the section cut through the western seating-bank, and this might argue conversely for continuity of use. The suggestion has already been made (p. 168) that the timbers which supported the fronts of the

terraces were removed, thus disturbing accumulations of gravel which had built up behind them. Overlying this Phase I terracing is then a layer of clay and gravel, the upper surface of which likewise has indentations, though much less distinct than those of Phase I; these also may reflect the positions of steps or terraces (FIG. 6). There is no dating evidence to place this heightening of the *cavea* into Phase II, but nor does it contain any of the stone which was found in the superimposed heightening, and which is likely to be linked with the stone re-build a century or so later. If this intermediate phase does belong here, there is no obvious source for the spoil within or around the arena, and it may be supposed to have been brought in from outside. Indeed, there was no doubt a need to remodel the seating-bank to conform to the newly-aligned arena palisade. By projecting the line of the top of the heightening forward to meet the palisade it may be postulated that this adjustment was made partly by lowering the height of the *podium* from 3.2 m above the surface of the arena in Phase I to 2.7 m in Phase II, and by steepening the bank to an angle of 18° from the horizontal (see section, FIG. 70). This would still have given a relatively shallow rake for the *cavea*, upon which spectators may have stood rather than sat.

The upper part of the original turf revetment supporting the outside of the *cavea* would no doubt have been eroded to a smooth outline and this would have reduced the number of terraces at the rear of the seating-bank. Since the front of the *cavea* had now been extended at its maximum about 1.5 m towards the arena, the terraces are unlikely to have been reinstated as far back as the original turf revetment, especially since the bank was now heightened. The suggestion may be made that the eroded rear of the original bank was instead left unterraced, and was used to give fairly informal access to the newly-refurbished auditorium. Eleven terraces are restored, which would have given a capacity rather less than the Period I amphitheatre, but perhaps offering more flexibility for the accommodation of larger numbers around the outside, albeit with reduced visibility.

The quantity of timber used for the refurbished Period II amphitheatre would have been only marginally less than that required for Period I. If this was constructed wholly of newly-felled trees, then a similar area of forest would have been necessary as a source of supply; but when the somewhat *ad hoc* nature of the construction is considered, it seems likely that secondhand timbers may have been incorporated.

Stone Phase I Amphitheatre

It was only with the building of the stone amphitheatre that the developed form was finally adopted for the plan (see FIG. 72). The long (east and west) radii are centred on the short axis at b and b_1 , and the short (north and south) radii are centred on the long axis at a and a_1 . The distances $a-x$ and $b-x$ are very nearly the same, $a-x$ being 5.1 m, a_1-x being 5.2 m, $b-x$ being 5.8 m and b_1-x being 5.55 m. These particular proportions of long and short radii were probably chosen to follow as closely as practicable the form of the Period II timber layout. Although they are set out in a similar manner, the amphitheatres at Caerleon and Chester differ in the relationship of the lengths of their radii to the positions on the long and short axes from which they are centred. Caerleon is longer but with more sharply-curved short radii; Chester is proportionately slightly shorter on the long axis and wider on the short axis.

The North and South Entrance are reasonably accurately set out in relation to the long axis, and the East Recess is quite properly centred on the short axis. However, the West Recess is positioned 2.7 m north of the east-west axial line; but its own axis appears to be centred at b_1 . This would appear to be a major error of setting-out when all else is seemingly accurate, and it leads to the suggestion that the position was deliberate. It is interesting to note that at Maumbury Rings the east recess is more or less centred on the short axis, but that the west recess is markedly angled and could indeed have been deliberately set out on an axis with radius centre No. 3.

The new arena wall and the entrance-passage walls were all built on or behind the line of the Period I posts and the Period II palisade. Thus the earlier revetments were removed entirely before the stone construction was begun. This may have been in order to enlarge the arena, and also to gain as much height as possible for the arena wall by excavating into the bank. It has

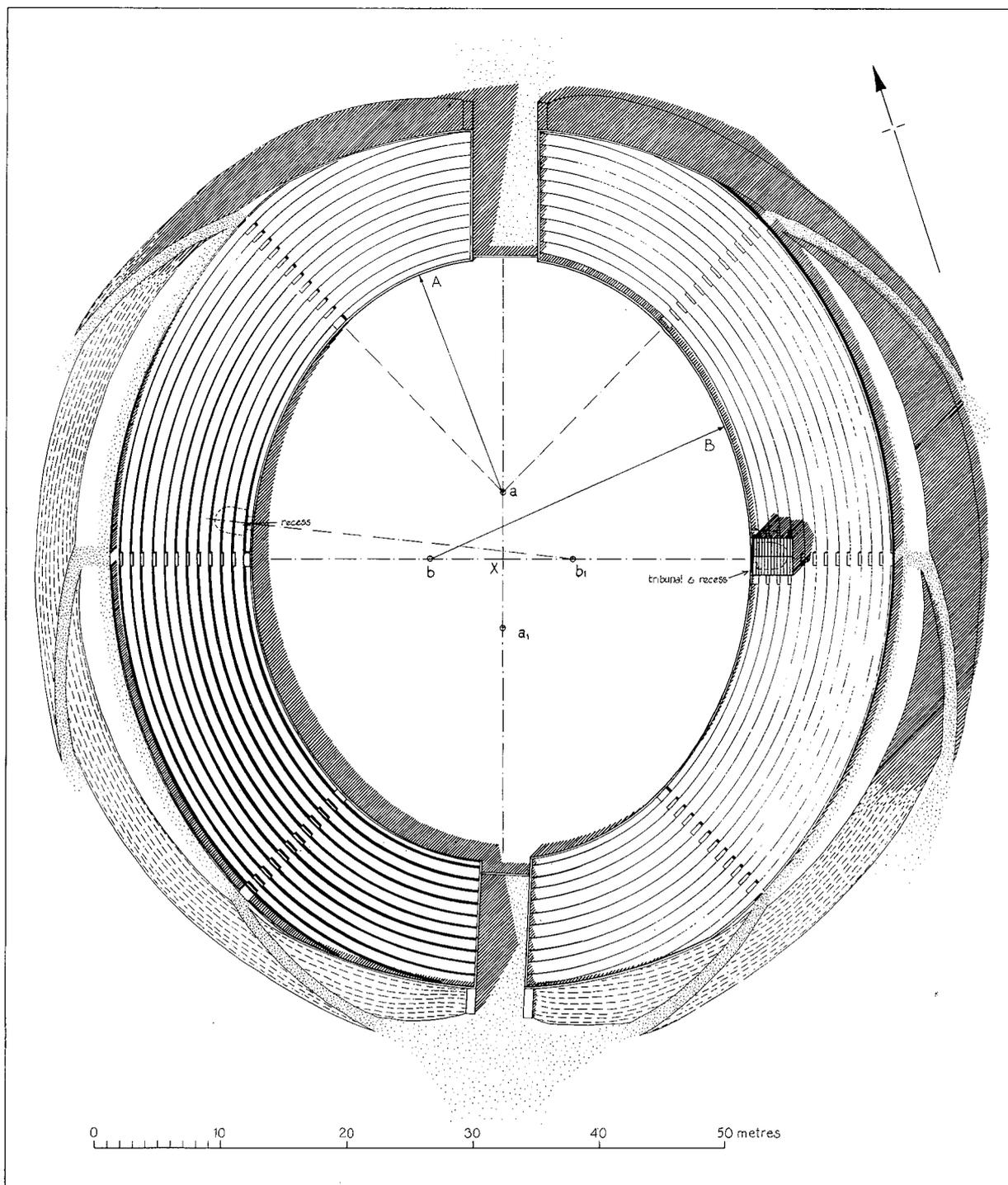


FIG. 72. Reconstruction and conjectural layout of Stone-phase amphitheatre: Plan.

already been noted (p. 168) that the signs of removal of the south entrance-posts belonging to the Period I timber phase could be an indication of the longevity of the buried timbers.

The use of flints with string-courses of stone or brick set in lime mortar was a common method of construction for large walls, and indeed at Silchester the town wall still stands as evidence of this. Although no mortar was found in the matrix of the amphitheatre wall it is highly unlikely that no lime was used as a binding medium, and the fact that at the North Entrance the wall had leaned forward to an angle of 30° from the vertical, but had nevertheless retained its shape, suggests that there must have been some mortar; otherwise the wall would almost certainly have disintegrated under such pressures. However, the fact that movement did occur in a wall 90 cm thick (the arena wall above the foundations had also been pushed forward by the bank in the north-west quadrant) does suggest that the mortar was defective, and it is

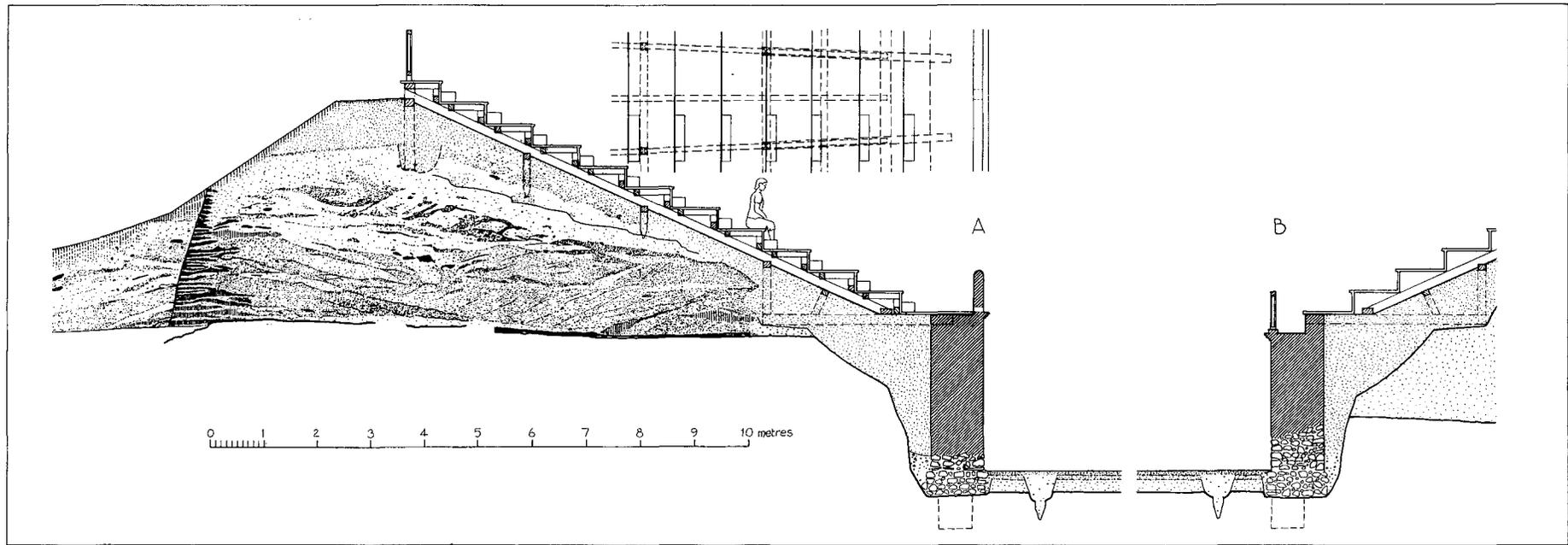


FIG. 73. Reconstruction of a Section of Seating of Stone-phase amphitheatre.

possible that it was mixed with clay to bulk it out. Under these circumstances the lime could have leached and have left no trace.

The original height of the arena wall to *podium* level may be inferred from the height of the timber structure built into the base of the *cavea* and from the (now possibly eroded) present sloping surface of the seating bank. There are two alternative possibilities. Allowing a thickness of 20 cm for the beam spanning the space between the bank and the wall, this establishes a *podium*-level of 3 m above the arena floor (see FIG. 73, Alternative A). On the assumption that the existing bank gives the minimum angle for the original rake of the seating, then an angle of 25° to the horizontal seems possible. This gives a reasonable relationship between the height of the seats (approximately 40 cm) and their depth, allowing space for a seated person and room behind for the legs of the person on the next row. This is not an uncommon rake for modern theatre-seating. Projecting the tiered seating forward to meet the top of the timber beam, we are left with a *podium* 1.3 m in width behind the balustrade. Although it has been postulated that there was such a *podium* at Maumbury Rings (Bradley 1976, 52), it is nevertheless evident that this arrangement will somewhat restrict the view of the arena, and Alternative B (FIG. 73) may be a more likely solution. This gives a height to the podium of 2.65 m above the arena floor, and allows the front seats to be positioned immediately behind the balustrade.

There would have been between 380 and 410 cubic metres of masonry (stone, tile and flint) required for the construction of the wall, (approximately 923 to 996 tonnes, depending on whether Option A or Option B was adopted). Most of this would have been flint. The fact that the majority of flint appears to be in fairly large and generally undamaged nodules would point to a quarry source rather than field flints picked up off arable land. Sources are known within a distance of about eight miles.

Would the balustrade around the edge of the *podium* have been of stone or timber? A large coping-stone was found adjacent to the amphitheatre which George Boon suggested might have come from the outer wall (1974, 148). No dimensions are given, but if it was wider than 30 cm (as is inferred) then it is too large to have been from a balustrade of the form illustrated at A (FIG. 73). As there is no outer wall, the only other location from which it may have come would be the entrance-passage walls or the town wall. A half-round coping stone was found at Chester and is assumed to have come from the arena wall (Thompson 1976, 148), but this was 50 cm wide and may for the same reason have come from another location. A carved stone which was interpreted as a coping stone was also found at Caerleon (Wheeler 1928, 118), but its unusual profile and overall width are not entirely convincing for this purpose. It may instead have been placed at *podium*-level as a kerb and simple cornice, with the post of a timber balustrade housed in the mortice-joint in its top surface, similar to that illustrated at B in FIG. 73. No trace of any such stone-moulding was found at Silchester, but some sort of capping would have been required if a timber balustrade was used. Indeed, a string-course would also very likely have been used as an architectural device to express the podium-level if there was a stone balustrade. It is invariably a problem when dealing with provincial buildings to gauge how sophisticated the architectural embellishments may have been, and a simple square-cut but perhaps projecting course may have been a cheaper option, continuing the theme of the string-courses of brown ironstone which still survive on the face of the arena wall below.

Similarly at the entrances (see FIG. 74) the quoins which reinforce the corners between the walls of the arena and passage may have been constructed with ashlar masonry (as shown in the reconstruction), but none has survived, and a rough brown ironstone or brick may have been used instead. The passage walls are about 0.9–1.0 m thick and, on the assumption that the *cavea* was well consolidated, its function would essentially have been to hold back the loose spoil which was back-filled after its construction, and to prevent any subsequent movement in the bank. A sensible precaution was the large drainage-holes at the base of the passage walls and the smaller 'weep-holes' around the base of the arena walls, since a build-up of water could well make the bank unstable and cause it to shift. This may have been the cause of the collapse or movement at the North Entrance and in the north-west quadrant, where the passage and arena walls were pushed forward, possibly as a result of the 'weep-holes' having become blocked by the building-up of the arena floor.

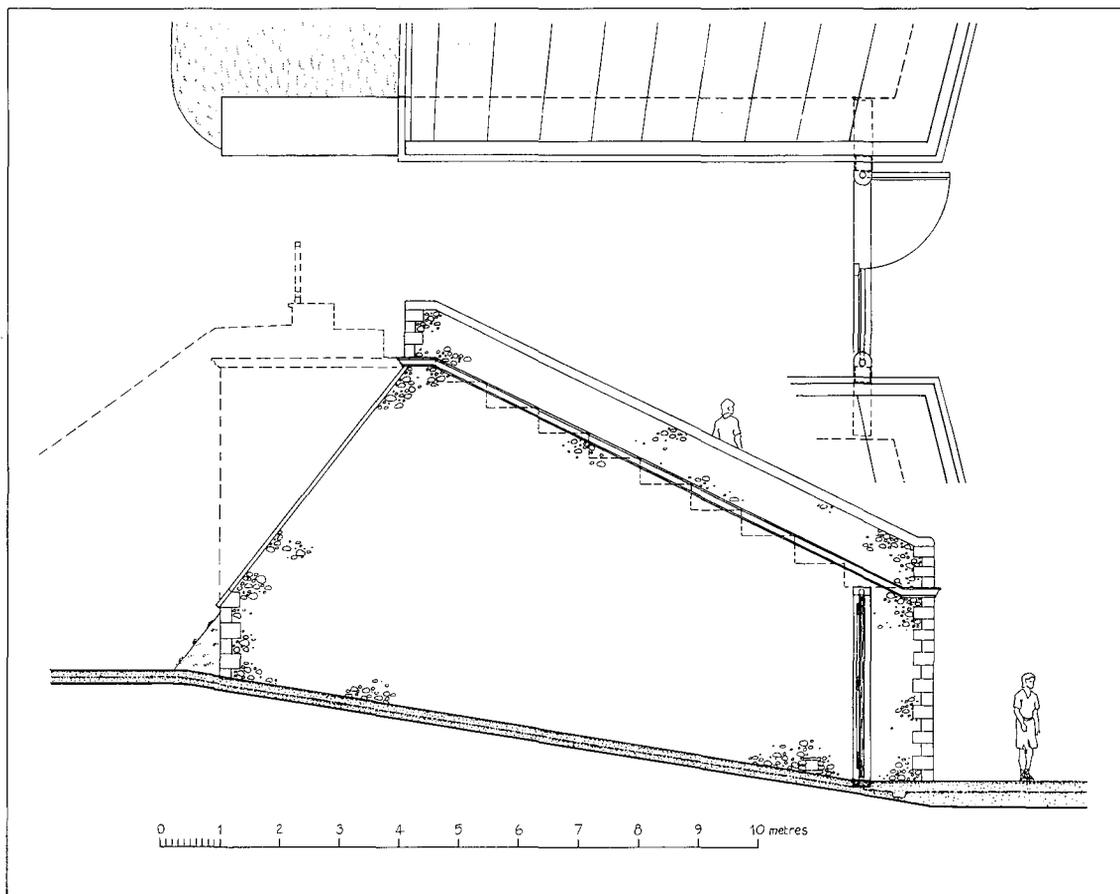


FIG. 74. Reconstruction of South Entrance of Stone-phase amphitheatre.

The passage walls extended 12 m back from the arena and, as in Timber Phase I, this is considerably shorter than the width of the seating-bank at its maximum at the east and west. Since the back of the *cavea* would by now no doubt have lost much of its steep turf revetment through two centuries of erosion, the profile at this point would be closer to the 45° 'angle of rest', and it is likely that the rear of the passage wall would have followed this profile, since nothing would be gained by building it with a vertical end (shown in broken line on FIG. 74).

Although it would have been feasible using large timbers to carry the weight of a seated audience across the wide span of 5.2m at the North Entrance, it is assumed that there would have been little advantage, and that the entrance-passages were more likely left open.

The discrepancy in the widths of the entrance-passages is quite marked, the southern one being 3.8 m and the northern one 5.2 m. This may reflect a change in the position of the supporting facilities outside the arena such as stabling or changing-rooms, giving prominence to the North instead of the South Entrance; alternatively, it may be that the North Entrance was widened to accommodate the drainage-channel which, at least at one stage in its life, ran adjacent to the west passage-wall, the gates being positioned between gateposts F637 and F639, giving a width of 2.7 m as against 3.2 m–3.5 m at the South Entrance. It is interesting to note the projection of the foundation for the arena wall beyond the face of the west passage wall at the North Entrance. Continuous foundations are not uncommon, despite gaps in the wall above, and one is present across the recesses; but a foundation does not continue across the South Entrance, nor for the full width of the North Entrance. The decision to make the North Entrance wider than the south was therefore possibly made after the western foundations had been laid.

The gateposts at the North Entrance are positioned close to the front of the passage, and may have opened away from the arena. Those at the South Entrance had to open into the arena because of the slope of the roadway, and for this reason they appear to have been set about 1 m back from the arena.

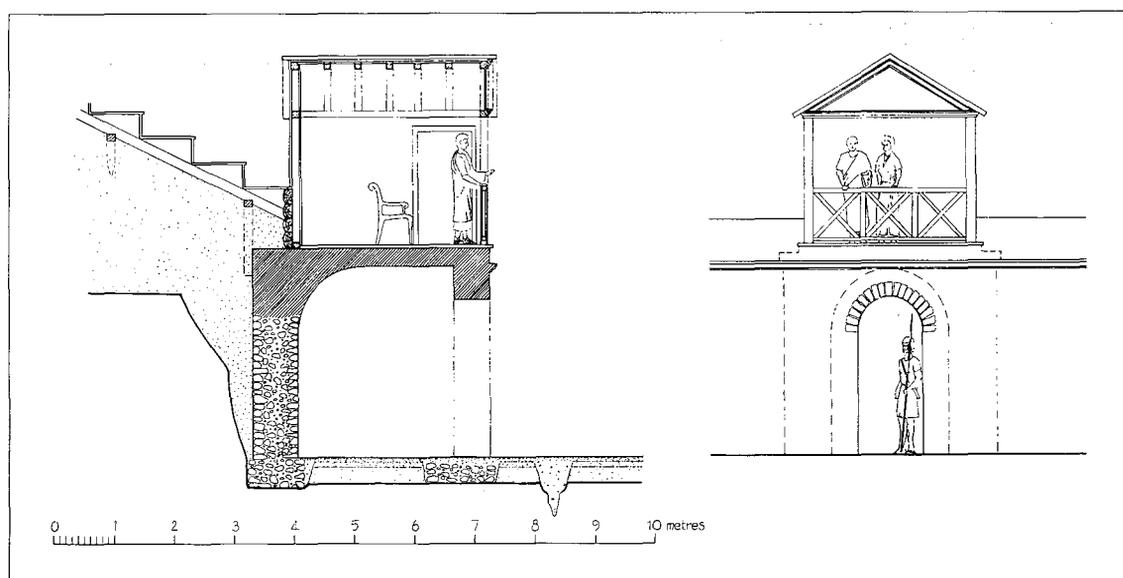


FIG. 75. Reconstruction of East Recess and tribunal of Stone-phase amphitheatre.

The recesses were built in a similar construction to that of the main wall, and presumably at the same time, but with narrower walls about 80 cm thick. The apsidal shape gives the structure considerable strength, and in the East Recess the flintwork survived to a sufficient height to have retained the springing for the vault. If we assume that the vault was semicircular, and if we allow a thickness of 30 cm for the crown of the vault, the floor above would have projected about 30 cm above the *podium* level. This would have provided the opportunity for a raised tribunal over one of the recesses, if not over both (FIG. 75). Similar structures seem to have existed at Caerleon, where staircases giving access to podium-level rose on either side.

The spoil derived from the excavation for the arena walls was presumably used to steepen the angle of the seating-bank, and some stone which may have been derived from the construction-work during this phase was present in this upper heightening. The seating was carried over the soft fill behind the wall on a timber structure supported off a system of radial beams which were soundly carried onto the wall at one end and cut into the bank of the *cavea* at the other. If the seating was supported on an independent timber support at the front of the auditorium, then no doubt this structure would have been used for the full height; and indeed there is a linear trench (F24, F230) around the crown of the bank which may have housed posts with which to carry the rear of the seating. Intermediate supports may have been introduced; but these, being less long, may have been rammed stakes rather than posts, and therefore more difficult to recognise archaeologically. This system of supports would carry concentric rows of beams, and these in turn would carry radial bearers onto which the seating would be built. There would be either eleven or twelve rows of seats, depending on the arrangement at the *podium*, giving a total seating-capacity of around 3,000, allowing a width of 0.6 m per person. It is assumed that access for spectators to the seating would have been via tracks worn into or formed out of the rear of the bank and following the 'desire lines' established over many years of use.

Twelfth-Century Hall

The main structure of the hall as defined by two rows of post-pits, with presumably one post missing from the west side, indicates a building constructed of earth-bound posts enclosing a plan 11–12 m long by 7 m wide. A third and probably now incomplete row of post-pits lies approximately 2.1 m to the east, and suggests the presence of an aisle. The size and construction of the hall is strikingly similar to the two earlier halls at Goltho (Beresford 1987, 62) which date from about two centuries earlier, and which incorporate aisles of a similar width.

Although there were presumably five main posts supporting each long side, pairs of opposite posts are not accurately set out in relation to one another, and it seems unlikely that each pair of posts was jointed directly to a pair of principal rafters joined by ties or collars in the manner of later medieval structures. More probably each row of posts supported a wall-plate and the wall-plates in turn carried closely-spaced trussed rafters with ties or collars to prevent them from spreading and pushing the wall-plates apart. Although the posts were earth-bound, it may well have been considered necessary to stiffen the structure by the addition of cross-bracing between the posts, especially at the ends of the building. The purpose of the intermediate post-holes such as F1322, F1324, F222 and F534 is not clear, but these may have been secondary. Certainly no evidence has survived to suggest the manner of in-filling between the posts, whether this was in the form of staves or some form of wattle with a daub binding.

The closeness of the west wall to the bank would perhaps suggest that a door is more likely to have been placed in the wall of the eastern aisle which faces into the compound as defined by the Roman seating-bank. Indeed the closeness of post-pits F586 and F587, and the fact that these are aligned fairly centrally between F505 and F506, might indicate a possible door here. However, with so few of the wall-post positions of the aisle recovered, this suggestion is tentative.

If we assume that the eaves of the aisle-roof were immediately over a door in the position postulated above, and that the roof sloped in a continuous line from here to the main ridge, then the minimum likely height for the ridge would be about 8.5 m, and the rear (west) wall would be about 4 m high to the wall-plate. These calculations are based on a thatched roof whose minimum slope would be 50 degrees.

PART V: DISCUSSION

1. ROMAN

1.1 Structural Parallels

With varying degrees of confidence about sixteen amphitheatres have so far been identified in Britain (FIGS. 76–80). The best known are those attached to the legionary fortresses at Caerleon (Wheeler and Wheeler 1928) and Chester (Thompson 1976); London's amphitheatre has now been identified (Frere 1988, 461–2) and seven examples are associated with *civitas* capitals. These lie at Aldborough (Collingwood and Richmond 1969, fig. 42 e), Caistor St Edmund (Maxwell and Wilson 1987, 44, pl. III A), Carmarthen (Little 1971), Chichester (White 1936), Cirencester (Wacher 1963, 23–6; 1964, 17–18; Brown and McWhirr 1967, 186–88), Dorchester (Bradley 1976) and Silchester; to which one might add the ill-understood intra-mural structure at Caerwent (Ashby *et al.* 1904, 104–5, pl. X). It is reasonable to expect further discoveries at the *coloniae* and the other *civitas* capitals. The remaining known examples have varied associations: that at Tomen y Mur (Gresham 1938, 198–9) is adjacent to the auxiliary fort, while that at Richborough (Smith 1850, 162; Cunliffe 1968, 248–9, fig. 25) could have served both garrison and *vicus*. The lead-mining settlement at Charterhouse-on-Mendip was provided with a small amphitheatre (Gray 1910) and a further rural example has been convincingly identified at the rural settlement and shrine at Frilford in Oxfordshire (Hingley 1982; Maxwell and Wilson 1987, pl III B). The excavators of the enigmatic Roman earthwork at Winterslow, east of Salisbury, contemplated the possibility that it might have served as a rural theatre or amphitheatre (Vatcher 1963).

The amphitheatre at Silchester is now the fourth monument of its kind to be extensively investigated in Britain. The Wheelers' (1928) excavation at the amphitheatre of the legionary fortress at Caerleon resulted in the total exposure of all surviving masonry including the complete circuit of the arena-wall, entrances and stairways, external retaining-wall, etc. (FIG. 78). Nevertheless, subsequent examination of the *cavea* has revealed important evidence for its structure (Boon 1972, 89–101) but, unlike Chester, investigation below the *cavea* has failed to find any evidence of a timber predecessor (FIG. 77). At the legionary fortress of Chester (Thompson 1976), almost one half of the amphitheatre with all its surviving masonry has been exposed (FIG. 78). Excavation beneath the *cavea* has produced evidence of an original freestanding timber structure. At Maumbury Rings, Dorchester, the earliest amphitheatre to be extensively examined in Britain, efforts were concentrated in the northern half of the arena with selective trenching of both the other half of the arena and the seating-banks (Bradley 1976, fig. 2). Of all the major civil and military amphitheatres in Britain, Dorchester is the only one so far not to have revealed evidence of masonry structure (FIG. 77). Thus, given the size of the excavated areas, it is reasonable to use this small sample of four British amphitheatres for comparative purposes and, with due caution, to attach significance to both the presence and absence of attributes. With a further five, where excavation has been on a more limited scale, (at Caerwent (FIG. 78), Carmarthen (FIG. 79), Charterhouse-on-Mendip, Chichester, Cirencester (FIG. 79), Frilford, and

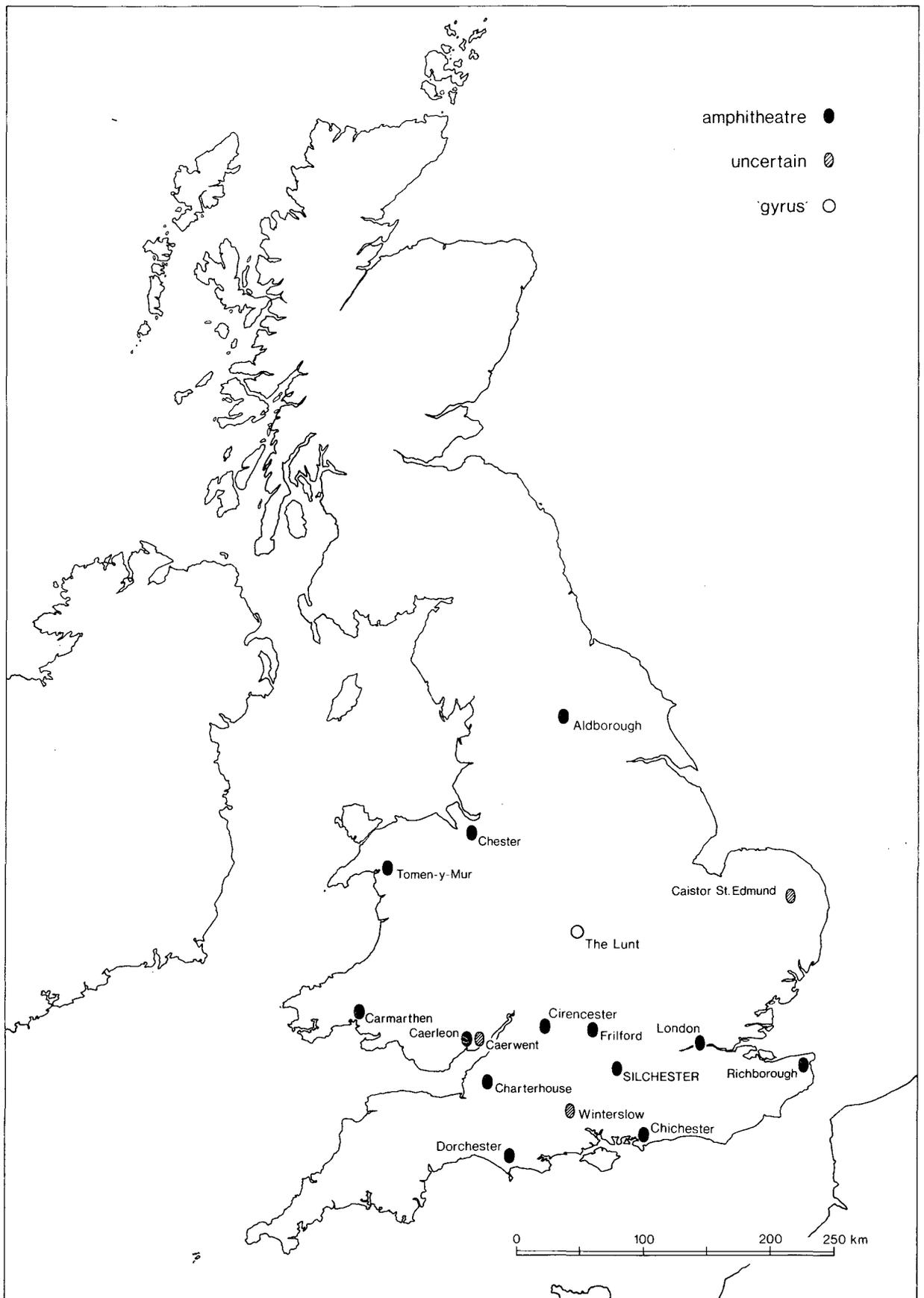


FIG. 76. Distribution of amphitheatres in Britain.

now London (Frere 1988, fig. 21)) significance can only be attached to the presence of features. As for the rest, only limited conclusions may be drawn from the location, size and character of their surviving remains.

Three characteristics are held in common by the majority of British amphitheatres. First, even where the defences are later than the original construction of the amphitheatre, the latter is excluded by the town or fortress walls. London and Caerwent are exceptions, but, at the latter identification of the remains as a possible amphitheatre, when only the circuit of the presumed arena-wall is recorded, is far from certain. The siting of the London amphitheatre seems to have been influenced by the Cripplegate fort, to the south-east corner of which it is adjacent. Secondly, orientation of the monument itself and in relation to street-grids or fortress layouts is variable and is probably influenced by local topography; so the Caerleon amphitheatre is askew to the fortress layout, while that at Chester is aligned with it. Among the towns, the Cirencester amphitheatre is unusual in sharing the same orientation as the street-grid. At Maumbury Rings, the orientation was partly determined by that of the existing earthworks of a Neolithic henge. There is a tendency for the long axis of the known early amphitheatres to run north-south; so Silchester and Maumbury Rings are 17–20° east of north, while those at Chester and Caerleon are 20–25° west of north. As suggested above, the orientation of the street-grid may be influential at Cirencester (about 55° east of north). The orientation of probably later monuments such as the amphitheatre at Caerwent and Carmarthen, respectively 80° and 55° east of north, is closer to an east-west alignment. The third characteristic concerns the structure of the *cavea*: except for the timber phase at Chester, where the presence of rock deterred excavation of the arena, and Carmarthen, where part of the seating was terraced into the hillside, the one common denominator between all the British sites where relevant excavation has taken place was the use of material excavated from the arena to provide the basis of the *cavea*. There is no record of seating carried on a purely masonry foundation. To the extent that redeposited natural conforms to the 'geological' type of amphitheatre, where the *cavea* is supported on the natural rock or subsoil rather than on an artificial substructure, the British amphitheatres, except Chester I (FIG. 77), are all of Class I (Dyggve 1933, 38–41). Further comparisons of detail will follow a period-by-period summary review of the monument at Silchester.

Timber Phase 1

The amphitheatre at Silchester was first constructed in the third quarter of the first century A.D., probably between about 55 and 75 (FIG. 77). It occupies land that was already in use: two substantial ditches were truncated by the excavation of the arena, and the western seating-bank impinges on a pottery-making site. Insufficient of F216 and its environs (p. 9) was excavated to determine whether it might have been of military origin. The latest pottery from beneath the *cavea* is South Gaulish sigillata of Neronian to early Flavian date. The arena is of circular plan with opposing entrances to north and south and recesses on the east-west axis. The sides of the entrance-passage, the arena and the recesses were retained by wooden uprights and wooden shuttering. Drainage was provided by a plank-covered trench leading out through the North Entrance. Spoil from the excavation of the arena was used to make up part of the height of the seating-banks; more spoil had to be introduced from outside the arena. Evidence for wide shallow steps suggests the likelihood of simple wooden seating or terracing, rising at an angle of 25° on the surface of the bank and on beams running out from the base of the bank to link with the uprights around the edge of the arena.

The seating-capacity is estimated at between 3,600 and 3,700; alternatively, if the spectators stood on the wide terraces, as many as 7,250 could be accommodated. The construction of the amphitheatre involved the cutting down of about 27 hectares (68 acres) of woodland and the stripping of some 2.5 hectares of turf over and above what could be taken from the plot to be occupied by the monument itself. The amphitheatre does not share the same orientation as the street-grid, although the latter was probably almost complete by the time the former was constructed. The lifespan of the first structural phase of the monument probably lasted well into

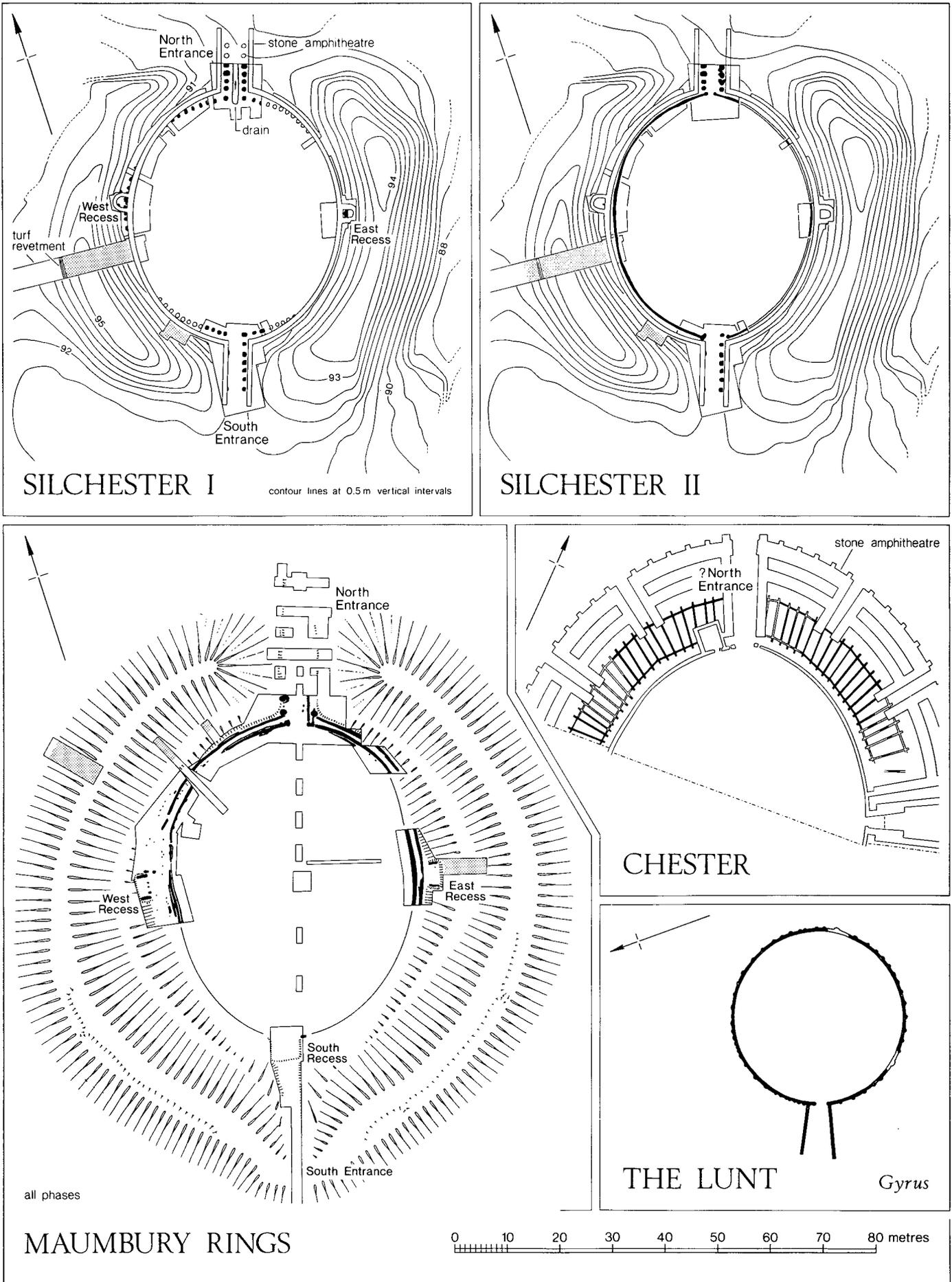


FIG. 77. Comparative plans of timber amphitheatres in Britain. Scale, 1:1000.

the first half of the second century, and some elements appear to have survived and to have been deliberately retained until the third-century stone phase. Up to the time of the second timber phase of about the mid second century, there was a considerable accumulation of silts, particularly around the edge of the arena. This was probably the result of erosion from the seating-banks. There is some evidence that oak started to grow close by during the first timber phase; perhaps it began to colonise the outside of the seating-banks. A rise in grass pollen could reflect colonisation of the inner faces of the seating-banks. There is limited evidence for the renewal of major timbers. In the light of modern studies of timber, it is quite feasible for earthfast timbers of the size used to revet the arena and entrances to have lasted more than a century (Farmer 1972, 8).

There is no close contemporary parallel elsewhere for the first timber phase at Silchester, particularly for the circular layout, although an almost circular arena is to be found at the probable second-century amphitheatre at Frilford (Hingley 1982, figs. 5–6; Maxwell and Wilson 1987, pl. III B) and at the second to third-century amphitheatre of Micia in Dacia (Floca and Vasiliev 1968). The latter may well have been a *gyrus*; Professor Frere informs me that there is no visible trace of a bank or outer retaining wall. Maumbury Rings, Dorchester which, whether Claudio-Neronian or Flavian (Bradley 1976, 73–79), must be close in date to Silchester, has an oval arena (possibly laid out from two overlapping circles although influenced by the Neolithic henge) with recesses on the short axis, and (originally) a third recess rather than an entrance on the south side (*ibid.*, fig. 11). The lack of a second major entrance (*porta pompae*) to the arena is unknown in conventional amphitheatres, but does find a parallel in the so-called *gyrus* inside the fort at The Lunt, Baginton (FIG. 77) which is also circular in plan and, in that respect, comparable to Silchester. However, at 34.06m in diameter, the building at Baginton is a little smaller (Hobley 1973, 30–35, fig. 1). Although circularity may have been determined by function and quite deliberate (below, p. 187) it may possibly be attributable to ignorance on the part of the builder. The latter had, perhaps, heard of amphitheatres, but not, it seems, of the intricacies of their usual layout.

The sizes of the recesses on the short axis at Maumbury Rings are comparable to the estimated dimensions of the Silchester pair, though their widths appear somewhat greater (5.9–4 m and 6.1–4.4 m, as opposed to about 3 m at Silchester). The depths to which they penetrated beneath the *cavea* (3 and 3.6 m) is close to the estimate of 3 m at Silchester (Bradley 1976, 48–50, fig. 14). Although the timber wall of the arena appears to run unbroken in front of these chambers, commonsense suggests that there must have been access from the arena. This will have a bearing on the interpretation of the second timber phase at Silchester. Insufficient survives of the timber amphitheatre at Chester to show whether or not it was equipped with comparable recesses. However, just as at Caerleon, the stone phase at Chester was provided with a small chamber on the short axis, measuring 2.85 m deep and 1.8–2.4 m wide, which could be entered both from the arena and from the exterior via the east entrance, with which it was linked (Thompson 1976, 176, fig. 18). No doubt its partner remains to be discovered in the unexcavated section. At Caerleon too, there was access in the first period to both chambers on the short axis from the outside as well as from the arena. Their dimensions, 3.75 m square and 3.15 by 3.6 m, compare well with the others noted above (Wheeler and Wheeler 1928, 135–42, figs. 9–10). Lack of sufficiently-extensive exploration has precluded other discoveries in Britain except at the rural monument at Frilford, where one chamber has been identified and trenched (Hingley 1982, fig. 6). Elsewhere in the empire, these chambers are recorded widely and their function will be discussed further below (cf. Grenier (1958) for Gaul and Bomgardner (1985) for North Africa). The evidence from the two extensively-excavated timber amphitheatres of Dorchester and Silchester with their earthen *caveae* indicates that the advantage of access to the recesses from the outside could be dispensed with. Equally the lack of any other embellishments around the arenas of either of these monuments points to the importance of these chambers.

In discussing the arrangements of the *cavea*, we must distinguish between the evidence for free-standing timber structures, as at Chester (Thompson 1976, figs. 3–4), Vindonissa (Laur-Belart 1935, 68–74, Taf. 24) and Carnuntum (Klima and Veters 1953, 29 n. 62), and the evidence from those like Silchester and Dorchester, where the seating is supported on material excavated

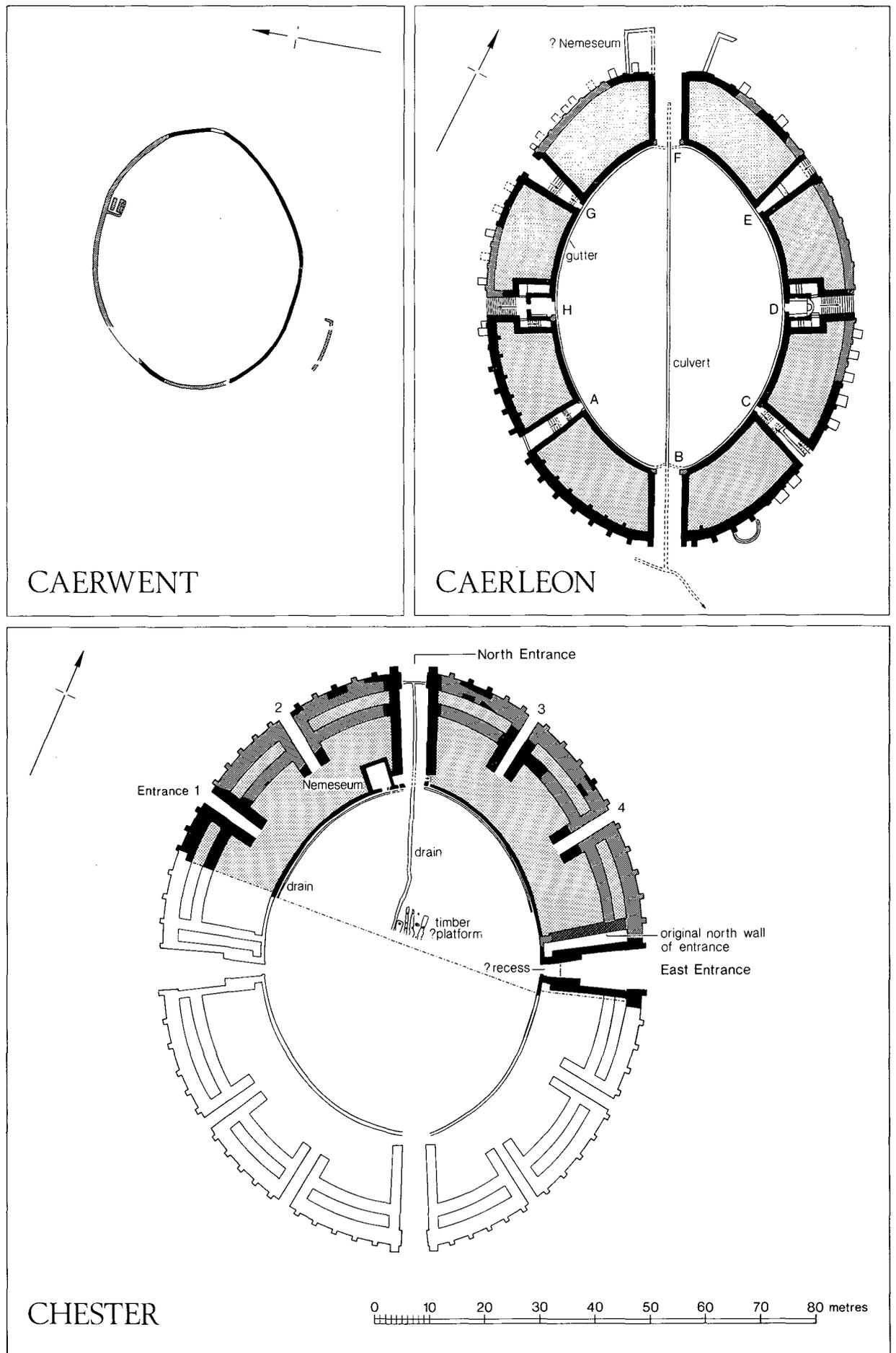


FIG. 78. Comparative plans of masonry or part-masonry amphitheatres in Britain. Scale, 1:1000.

from the arena. This arrangement called for substantial retaining-walls around the arena and along the entrance-passages. The building at Silchester, with its circle of individually-placed posts presumably linked by horizontal shuttering, is different from that at Dorchester where the arena was screened by two concentric rows of close-set posts in continuous trenches. If, as has been suggested (Bradley 1976, 43–8), these were contemporary, they served to define a very narrow gangway (0.6–0.9 m wide) around the arena, broken only by the entrance. Although service corridors are widely attested at more sophisticated amphitheatres elsewhere outside Italy (cf. Grenier 1958), no other example is known from Britain. The timber amphitheatre at Vetera, where two concentric rows of posts around the edge of the arena are recorded, may provide a parallel (Lehner 1930, 68–71, Abb 50–51). Although very little is known of this monument, it shares the essential characteristics of Silchester and Maumbury Rings, that is to say a *cavea* composed of material excavated from the arena, retained by timber uprights around the arena and at the entrances but not around the exterior.

The change in the shape of the arena in the second timber phase (FIG. 77), which was maintained when the arena-wall was rebuilt in stone, has meant that more has survived of the retaining-wall of the Silchester I arena than might otherwise have been expected if there had been no change in plan. This fortunate survival at Silchester raises the question whether evidence for an original timber retaining-wall has been destroyed in other amphitheatres by a replacement with masonry. At the *colonia* at Xanten, for example, the outer double-ring of timber supports has largely survived the individual masonry replacements, whereas it is doubtful whether any traces of timber could survive the effect of the continuous double ring-wall around the arena itself (Heidenreich 1940, 34, 50–51, Taf 6, 9, Abb 1). An alternative interpretation of the sequence at Xanten would have an all-timber amphitheatre replaced by an all-masonry version without – at foundation level at least – a mixture of timber and masonry. Similarly at Micia in Dacia, excavation beneath the *cavea* revealed traces of posts suggesting that the *cavea* was partially free-standing, supported by timber uprights and the stone arena wall. If, on the analogy with Silchester, the masonry wall of the arena was secondary, the first phase at Micia could have been entirely of timber (Floca and Vasiliev 1968, figs. 2, 11–12).

The nature of the seating- or terracing-arrangements at Silchester in its first timber phase can be paralleled at Maumbury Rings, where closely-spaced beams ran into the base of the bank to take the thrust of the *podium*, *tribunalia*, etc. The shallow terracing revealed by the section across the *cavea* at Silchester is not confined to timber amphitheatres. It can also be paralleled at Carmarthen (Little 1971, 59–69, fig. 2) and Cirencester (Brown and McWhirr 1967, 188, fig. 2, pls. XXXI–II, XXXIV) where, as at Silchester in its stone phase, the base of the seating remained the surface of the artificial bank.

Timber Phase 2

The modifications of the second timber phase at Silchester (FIG. 77) are limited to the arena, whose plan was adapted to give it an oval shape. This involved some cutting back into the face of the bank at the north entrance, whereas to east and west the edge of the new arena fell considerably short of the uprights of the first timber phase. At no time was it possible to pass completely around the arena between the new and the old screen wall. The new retaining-wall was constructed of small-diameter posts set side by side in a continuous shallow trench. Although the original entrance layouts were retained essentially unaltered, it is not clear what provision was made on the east-west axis. Was the gap between the old and the new wall covered and used to support seating or a gangway? Were the recesses retained? There can be no certainty of the latter, although there is limited structural as well as circumstantial evidence in favour of their continued existence. Also the fact that they were retained in the stone phase is suggestive. It has been assumed, perhaps wrongly, that the new retaining wall was essentially a replacement of the original and that it stood to a similar height. An alternative interpretation would see it as a low screen-wall designed to keep activities within the arena out of 'dead ground' and so in the view of more spectators, particularly those occupying the central sections of the seating banks.

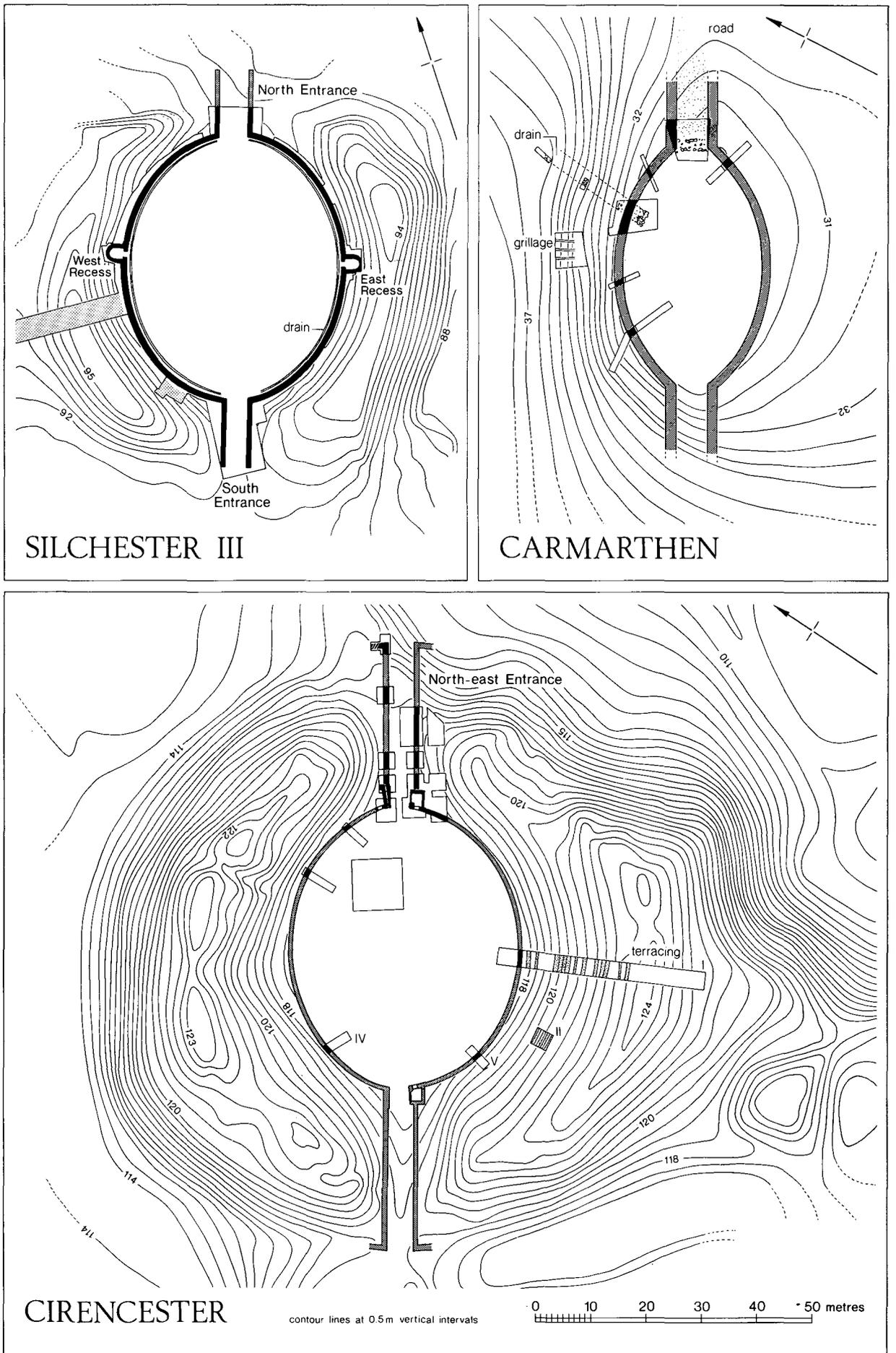


FIG. 79. Comparative plans of masonry or part-masonry amphitheatres in Britain. Scale, 1:1000.

Change in the way that the arena was used is signalled by the narrowing of the North Entrance to a width of about 1.2 m, although this may have been occasioned by partial collapse of the ageing North Entrance passageway. There is no evidence for change on the seating-banks, except for that reduction in height caused by erosion which was complemented by the corresponding raising of the arena surface (about 0.4–0.5 m around the edge). The terracing recorded in the excavation of the seating-bank could equally well belong to the second timber phase as to a late stage of the first-period *cavea*. These modifications to the arena cannot be closely dated, but they do have a *terminus post quem* of the early to mid second century.

The shape of the arena in the second period is as one would expect. In terms of the general structure of the arena wall, Silchester compares best with Maumbury Rings, which provided evidence of close-set posts in continuous trenches (Bradley 1976, 43–8). As at Silchester, these were continuous across the recesses on the short axis and, given that Maumbury's layout did not fundamentally change from its original arrangement, we must assume that there was access from the arena to the recesses, despite the continuous trenches. Maumbury Rings thus strengthens the case for retention of the recesses at Silchester through the second timber phase. The lack of attention to drainage also links the two monuments in this period.

Differences, however, still remain. First, Silchester was not provided with a continuous corridor between its two periods of arena wall. Secondly, although with the later provision of a second entrance on the long axis (*ibid.*, 58–9, fig. 17), Maumbury Rings falls into line with amphitheatres in general, the fact that it is not revetted recalls the reduced North Entrance at Silchester. The latter could not have allowed large animals to pass through with any ease. Thirdly, Nigel Sunter has drawn attention (p. 168) to the possibility of a chamber giving access to both the arena and the south entrance-passage and reminiscent of the arrangement at Chester and Cirencester (FIGS. 78–79). Although we might deduce from these changes some pressure to conform to an ideal arena plan, such changes as there were were not necessarily sufficient to alter the way in which the amphitheatres were actually used. They may simply have been cosmetic or occasioned by structural requirements. The original structure at Silchester would have showed its age by the mid second century. The fact that the amphitheatre was rebuilt in timber, and possibly re-used timber at that, at a time when much urban renewal in Britain was in masonry, also suggests that it was not accorded priority by the townspeople. Nor should we overlook the evidence for the overgrown appearance of the outside and general neighbourhood of the monument with oak and fern increasing in relative importance. Further evidence from the stone phase, which could also be interpreted as showing that either the amphitheatre did not suit the Romano-British temperament or that it lacked suitable resources – human, animal, financial – will be discussed below.

The Stone Phase

In the stone phase at Silchester, the shape of the arena, as established in the second timber arrangement, was retained (FIG. 79). As the new wall was set just behind its predecessor, the area of the new arena was slightly enlarged. The recesses on the short axis are apsidal in plan, presumably with a demi-vault over. Both are smaller than the estimated size of the original recesses, each with an entrance about one metre wide. No evidence was recovered to indicate how they might have been used. The walls of the arena and passages were largely built of flint, although a decorative string-course of brown ironstone was provided for the arena. One implication of this feature is that the walls were probably not plastered as was the case at both Chester (Thompson 1976, 144–7) and Caerleon (Wheeler and Wheeler 1928, 118) and possibly also at Cirencester (Wacher 1963, 25). However, even if the walls had been plastered, it is doubtful whether any trace of it would have survived.

We can reconstruct the walls of the arena and passages to a height of about 3.0–3.25 m. With a parapet or hand-rail they would have reached about 3.75 m, quite comparable with the estimated heights of the arena walls at Chester and Caerleon (both about 12 feet (3.6m) including the parapet) (Thompson 1976, 148; Wheeler and Wheeler 1928, 116). Like the earlier timber walls,

the new stone wall would also have acted as a support for the lower tiers of seating, which continued to be of wood. Some kind of seating-arrangement is assumed, although there is absolutely no certain evidence for it. The *cavea* was heightened with material derived from the building of the new wall.

Drainage was initially primitive. A shallow gutter ran around just inside the wall. However, this was replaced with a new rumble-drain, which led out via the North Entrance, after the surface of the arena had been raised by about 0.5–0.75 m around the edge. This had the effect of giving the arena a pronounced saucer-shape. In the Chester amphitheatre a general raising of the arena surface by 0.3–0.45 m occurred during a period of abandonment in the third century (Thompson 1976, 150–1).

The rebuilding in stone has a Hadrianic-Antonine *terminus post quem*, no different than that for the second timber phase. Some help towards establishing the real date is given by the material associated with the secondary raising of the arena, which is thought to be close in date to the arena wall. This phase dates to about the middle of the third century, perhaps to the time of the celebration of Rome's millenium in 248. Although there is an argument for supposing that the initial construction was only a few years earlier than this, there can be no certainty and an earlier third-century date is possible. An association with the presence of Septimius Severus in Britain between 208 and 211 may explain the occasion of the rebuild. In fact the resources consumed in rebuilding were considerable. The volume of building-stone would have taken some 1800–2000 cart-loads to bring it from the nearest quarries. This assumes about 500 kg as a cart-load (*Cod. Theod.* VIII. 3.8) and that little or no second-hand material was employed from *Calleva* itself. Equally the volume of timber required for the new seating would have been great. Discounting the effect of inflation, the costs of the early third-century refurbishment probably relate more closely to those of the original construction than to those of the second-century repair.

The lack of an external revetment-wall serves to distinguish the Silchester amphitheatre from those at Caerleon and Chester (FIGS. 78, 79). The subsidiary entrances which are a feature of both the legionary amphitheatres are integral with their external revetment-wall. One cannot be envisaged without the other. The implication for those amphitheatres which lack the outer wall and minor entrances is that what they do have represents the minimum necessary for the conduct of the entertainments. The appearance of the exterior and the provision of facilities for the comfort and safety of the spectators were of secondary importance to the structure and appearance of the arena and of the main entrances. The lack of an external revetment-wall at Silchester can be paralleled with some confidence (on the basis of the apparent lack of returns at the outer end of the excavated entrance) at Cirencester and, possibly, at Carmarthen and Chichester.

The lack of radial walls at both legionary amphitheatres implies that there was no vaulted sub-structure to carry additional tiers of seating. Indeed, at Caerleon, as Boon has shown (1972, 93–96), the seating was carried on massive posts in the *cavea* which were buttressed by the external revetment-wall. The same may have been true of Chester, but removal of the body of the seating-bank to search for the remains of the timber predecessor has effectively prevented any examination of this point. While the capacities of Chester and Caerleon, both with larger dimensions than Silchester, are respectively estimated at 7000 (Thompson 1976, 184) and 6000 (Wheeler and Wheeler 1928, 118), that at Silchester in the stone phase is calculated at about 3,000. The inability to support additional tiers of seating had significant implications for the seating-capacity as a whole.

The difference between the legionary and civil amphitheatres in Britain can also be seen in the provision of other features. At Chester a small chamber opening on to the arena and set adjacent to the main north entrance contained an altar to Nemesis (Thompson 1976, 166–70). Its internal measurements are 3.6 by 4.2 m. This is much larger than the completely excavated chamber on the south side of the excavated main entrance at Cirencester, which measured about 2 by 2.4 m. A second room on the opposite side of the Cirencester entrance was only partially explored. These arrangements may have been designed to allow pedestrian access into and out of the arena without opening the big gates. Equally they could have contained animals ready for release into the games. Chambers in this position by the gates would obviate the need for service corridors

around the arena to provide access to the chambers on the short axis which could only otherwise be reached from the arena. The possibility of some such arrangement beside the entrances has been noted at Silchester in both timber phases, but particularly at the South Entrance in Timber Phase II (p. 185). The recesses on the short axis of the arena at Silchester are only a little larger (about 2 by 2.5 m) than that by the entrance at Cirencester. Apart from the latter, none of the other civil amphitheatres in Britain have been explored sufficiently to reveal evidence of chambers opening on to the arena additional to those on the short axis. At Caerleon a rectangular room outside one of the main entrances and dated to Period III was tentatively identified as a *Nemeseum* by the Wheelers (1928, 119–20). Such external *Nemesea* are recorded from amphitheatres in the Danube provinces (*R.E.* xvi (1935), col. 2361). The apsidal recesses at Silchester have no close parallel in Britain, although Caerleon provides a parallel for the chambers on the short axis having been vaulted (Wheeler and Wheeler 1928, 135, 139). However in the remodelling of the Caerleon amphitheatre in the early third century (Period III), one of the chambers (D) on the short axis was provided with an apsidal and half-domed recess to the rear. Also in Period III the same chamber was equipped with stone benches along each side-wall. The entrance from the arena to these chambers varies in width from 0.9 m (Chester), to 1.0 m (Silchester) and 1.2 m Caerleon (D). Earlier, in Period II, access to this chamber from the outside was blocked (*ibid.*, 136–8).

The comparative simplicity of the British amphitheatres is also reflected in the lack of chambers set into the centre of the arena. Only at Chester is there a suggestion of some kind of central arrangement – there, supports for some kind of platform or daïs established in the timber phase. On the continent, in addition to Trier, underground chambers are associated with the amphitheatres at the *coloniae* of Xanten (Heidenreich 1940, Taf. 6) and Sarmizegethusa (Floca and Vasiliev 1968, fig. 14), and with the legionary amphitheatre at Carnuntum (Klima and Vetter 1953).

Although there is distinct individuality about the amphitheatres in Britain, that at Silchester would seem to fall into an urban group, characterised by a simpler layout and smaller size of arena, provision of fewer entrances and less elaborate seating (implicit in the lack of retaining-walls) than is found in the two legionary amphitheatres that have been extensively explored. In terms of arena size Maumbury Rings is the exception because of the underlying Neolithic henge. It is also interesting to note the close correspondence in size of the arenas at Cirencester and Silchester. As a group the British amphitheatres are not only smaller than their continental counterparts (FIG. 80), but each of the two major sub-groups under discussion – legionary and cantonal-capital – falls short of their known equivalents across the Channel in their elaboration and architectural sophistication. The evidence for the way the monuments were used will now be explored.

1.2 Use of the Amphitheatre

Certain features relating to the developing plan of the Silchester amphitheatre and the intensity of use deserve further examination. Throughout its life the monument seems to have retained the use of two entrances on the long axis. As we have seen (p. 33), in the second timber phase the Northern Entrance was reduced to a width of about 1.2 m, which was insufficient if large animals were intended to pass through. Evidence from Maumbury Rings indicates that, in the original layout there, a second major entrance was not regarded as essential. The idea of a single, working entrance links Silchester I with the *gyrus* at the fort of Baginton, because both share a circular plan (FIG. 77), although the latter lacks a *cavea*. Such a tentative connection may suggest a common preference for the way the arena was used, inviting parallels with modern circuses and animal-training arenas. George Boon had pointed out that the short axis of the Silchester arena is about three times the diameter of a large travelling circus (Boon 1974, 149 n. 10).

The evidence of the faunal remains is tantalisingly suggestive; the sample is very small and has clearly been affected by the conditions of the soil. Horse is the most common species represented in the Roman period, but its representation in relation to other species may be influenced by its

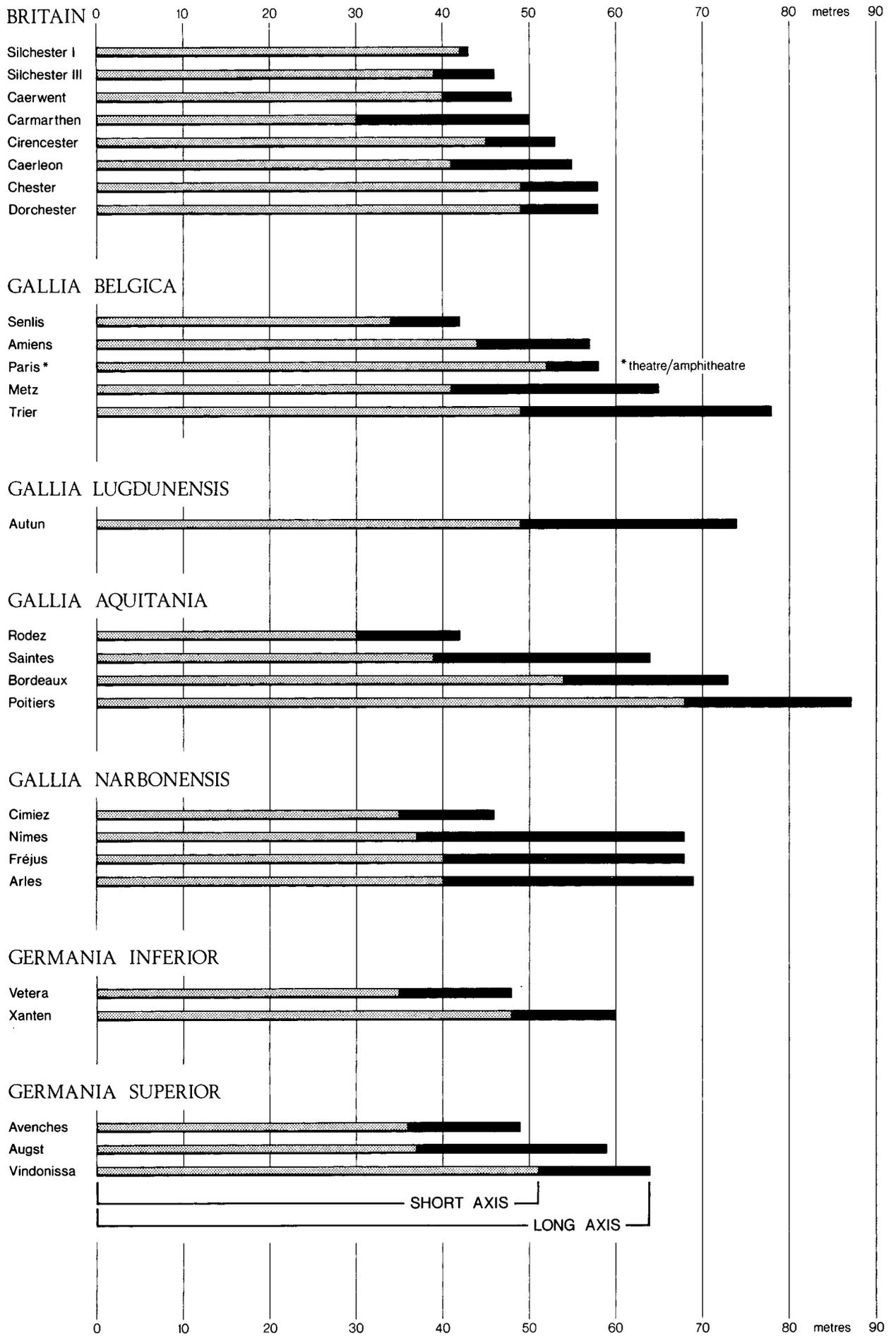


FIG. 80. Arena sizes in Britain, Gaul and Germany.

durability. Nevertheless contexts of Phases 1 and 2 include a probable skull and a jaw, while the greatest incidence of horse occurs in Phase 3. Although the bone may have been introduced with other spoil from outside the arena, its point of origin was probably not very far from the amphitheatre. This is supported by the presence of more pottery waste comparable with that from F216 etc. in the same contexts (3.4). Thus the proportion of horse and the possible ritual associations in early contexts such as the West Recess may well be significant for the use of this animal in entertainments.

The importance of the horse in the arena can be considered under two headings – riding displays and animal hunts (*venationes*). For an example of an equestrian display we can look to that performed by the Trojan boys at the funeral games in honour of Anchises (Virgil, *Aeneid* v, 548–93) and thereafter preserved by Rome as an ancestral rite. In the course of this the boys ‘rode right and left in intertwining circles’ (583–5) and so von Petrikovits (1952) has reconstructed a circular form to their manoeuvres. The circular layout of the timber phase I arena could thus satisfactorily accommodate comparable, but smaller displays. The ceremonial use of horses tends to be associated with the army and this is reinforced by the distribution of horse parade-gear, which is concentrated along the frontiers of the European provinces (Garbsch 1978). However, although civil displays may not have been so elaborate as their military counterparts, some finds of horse parade-gear are known from certain civil contexts.

Although convention underwrites the importance of gladiatorial fights, we should not overlook the popularity of animal hunts (*venationes*) and beast fighting. This seems to have been the case in north Africa where Bomgardner has argued (1985, 88), partly on the basis of the curse tablets from the arena of the Carthage amphitheatre, that *venationes* were more common than *munera gladiatorum*. The Carthage tablets specifically mention bears, bulls, boars and lions (Audollent 1904, Nos 246–54). Some kind of institutionalisation of horse-riding skills, which would originally have been developed for warfare and hunting, could have channelled energies in a diverting and constructive way during the post-conquest period in Britain. Unlike Africa, where a greater variety and abundance of beasts was available, in Britain the provision of suitable animals for *venationes* may well have been difficult. Apart from bulls, there may have been some wild boar (though this was not very suitable), and there is little evidence to suppose an accessible supply of bears. Although this discussion is, inevitably, speculative, its purpose is to draw attention to the layout of the arena, which, in view of the evidence for horse, may well have been partly determined on functional rather than economic grounds. None of the foregoing is evidence for the *absence* of gladiatorial or bull-fighting spectacles. There is limited, circumstantial evidence of the former in Britain (collected by Frere (1967) and Painter (1969)). In the same vein, Thompson has argued that military amphitheatres could have served a variety of purposes and that, in the absence of evidence to the contrary, they should not be regarded strictly as *ludi* (1976, 143).

It is possible, then, that the amphitheatre partly served as an alternative to the circus, of which no examples are known with any certainty in Britain. Humphrey (1986, 431–7) has drawn attention to the pictorial evidence, which provides some support for chariot-racing but no unequivocal support for circuses in the island. To conduct such races no structure is of course necessary and the number of spectators may not have been sufficient to warrant the building of such a monument except, perhaps, in London. An amphitheatre may have provided a venue of appropriate size for spectacles involving horses, though chariot-racing itself seems unlikely.

The other aspect of the arena layout which calls for discussion is the pair of chambers on the short axis. What purpose did they serve? The only relevant evidence is provided by the deposit of the horse jaw-bone, described above (p. 22). Otherwise we can only define attributes held in common – or not – with other amphitheatres. Access could only be gained from the arena; there was no provision for entry from a service corridor, as perhaps there was at Maumbury Rings, or from the exterior, as originally at Caerleon and Chester and common elsewhere in the empire (cf. Grenier 1958; Bomgardner 1985). This facility enabled animals to be loaded into the chambers before the start of the games. Such beast-pens are widely attested, although, as Bomgardner has pointed out (*ibid.*, 141), in north Africa they tend to lie to either side of the major entrances of the larger amphitheatres. On balance, it would seem unlikely that the Silchester chambers were used

for keeping animals until the start of the games. The animals would have had to have been negotiated into the chamber before the start, or at intervals during the games, and some way would have to have been found of getting them out, once the show had started. At no time could access have been gained to the chambers from the rear in order to force animals out. The only possibility is for there to have been access from above, that is by descending beneath the tribunalia. There is, of course, no evidence for this in any phase. Another difficulty would have been the width of the entrances to the recesses at Silchester and at the two legionary amphitheatres which would have precluded large animals. Practical problems seem to outweigh any conceivable advantages. It is not unlikely, as suggested above, that chambers which gave access to both the arena and a principal entrance could have fulfilled this function (above, p. 186). The small chambers with potential access to both the arena and a main entrance-passage, as at Cirencester (FIG. 79), London (Frere 1988, fig. 21) and, tentatively, in the second timber-phase arrangement at Silchester would have served as more effective and easier-to-use beast-pens than chambers with only one entrance.

Bomgardner has also made the interesting suggestion that the gates to and from the arena on the short axis may be identified with the *porta sanavivaria* and the *porta libitensis* – ‘The Gates of Life and Death’; the former giving safe passage out of the arena, the latter leading to the *spoliarium* where the dead and dying were dragged to be despatched and then stripped for burial (Bomgardner 1985, 83). Although at Silchester the recesses did not have access from outside the amphitheatre, it is possible that their original position and retention continued to enshrine this idea. These ideas will be explored further below.

The recesses would have been dark and secret places. It is not unreasonable to speculate that they served as cult-rooms and there is some support from Silchester in the timber phase for this. In this respect the character of the recesses in the stone phase is also suggestive: not only were they smaller than before, but they were also apsidal and vaulted. The idea that they might have been used for some cult-practice must be tempered by the knowledge that at Chester and, possibly, at Caerleon separate and additional chambers were set aside as *Nemesea* (FIG. 78). This also appears to be the case with the Danubian amphitheatres, although the *Nemesea* were located outside those arenas. However, the alteration of one of the Caerleon chambers in the third century to provide it with an apsidal bricked niche (above, p. 187), suitable for a cult-statue, adds support to the idea that at this date and in this case a chamber on the short axis had a cult-function. Boon has suggested that this chamber (D), rather than that outside the main north entrance, served as a *Nemeseum*. Indeed the provision of benches there in Period III invites comparison with the *Nemeseum* at Chester in its first period, where a ledge to support one bench has been identified (Thompson 1976, 167, fig. 14). The rebuilt Period III recess and its niche also resembles a small Mithraeum. Despite the absence of evidence for benches a religious use for one or both of the Silchester recesses seems very probable. Further support for a religious identification is provided by the amphitheatre at Senlis, where both chambers on the short axis were provided with several niches. In one of the chambers fragments of sculptures of Hercules, Venus and Mercury were found (Grenier 1958, 888–9, fig. 291). We may be reminded of Tertullian’s assertion that Mars and Diana were particularly worshipped as patrons of *gladiatores* and *venatores* (*de Spectaculis*, 12.7; Ville 1981, 332–4). At Carthage fragments of sculptures of Diana, Bacchus, Hercules and Neptune (?) were found (Bomgardner 1985, 96). This evidence reminds us of the battered but sculpted fragments that were built into the foundations of the west recess at Silchester. These may well have derived from sculptures set up in the timber-phase recess. At a practical level, such a cult-use need not have precluded them from serving as refuges or waiting-rooms for participants during the course of the games and as temporary stores of essential equipment.

It is now appropriate to return to the idea that these chambers might have served as *spoliaria* for the reception of dead or dying victims, human or animal. Size and convenience argue against such an interpretation; the presence of part of a horse skull in the West Recess at Silchester can hardly be regarded as evidence that an entire dead horse was dragged there. It is difficult to see how it would have fitted, let alone how it would have been manoeuvred into the chamber. Unlike amphitheatres where chambers could lead outside, at Silchester or Maumbury Rings any corpse would have to be dragged back across the arena after the competition.

Thus, of the possible explanations for these recesses, the most acceptable is that the recesses served a religious function; but that this need not have excluded certain practical uses. Interpretations as beast pens or *spoliaria* seem less than convincing.

Aside from the problem of identifying the function of the component parts of the amphitheatre and the way the arena might have been used, there is also the question of how often spectacles were held and what evidence might be relevant to determine this. At Silchester there is not only the stratigraphic sequence and material evidence from the arena itself, but important pollen data as well. The sequence in the arena reveals an accumulation of silts, interrupted by rare gravel lenses denoting arena surfaces. The greatest period of accumulation is during the life of the first timber amphitheatre. While this can be attributed to natural erosion of soil from the seating-banks while they stabilised, it is not clear whether these episodes of formation between the gravel lenses also represent periods of disuse. Is it reasonable to suppose that the arena was only usable with a gravel surface, and only a partial one at that? Certainly in wet-weather conditions use would have been very difficult without such a surface to provide grip. The scarcity of finds in these silts as well as on the surfaces might appear to support a case for disuse. On the other hand we might consider whether we should expect any durable finds in the arena, except for possible casual losses such as coins and personal ornaments which could have been dropped by spectators and then found their way down into the arena. Given the cost of mounting games, it is likely that they were infrequent. Even in Rome the number of spectacles was limited, although individual shows could last many days (Hopkins 1983, 6). If we are right in inferring that the rubbish contained in Context group 3.4 originated from the neighbourhood of the amphitheatre and reflects the way it was used, this implies a fair degree of use between the late second and mid third century.

Another approach to the question of use is to take the evidence of finds from other amphitheatres where there has been a reasonably full presentation of the evidence. Although there were some losses of material between excavation and the final publication of Maumbury Rings, the quantity of published finds (Bradley 1976, 63–71) probably bears some relationship with what was recovered in the first place. As at Silchester, Roman finds are few. Moreover the accumulation of soil in the arena (*ibid*, fig. 18) recalls the similar phenomenon at Silchester. At Caerleon the evidence is superficially different, with large quantities of finds, notably coins, metalwork and pottery, recovered from the site (Wheeler and Wheeler 1928, 155–215). Unfortunately there is no way of establishing the contexts of these finds from the report. As there was a considerable deliberate build-up of the entrance-ways in Periods II–III to compensate for the rising ground outside the amphitheatre and the flooding of entrances, that imported spoil would be an obvious source of finds. At Chester, finds do not appear so numerous, although only half of the monument has so far been excavated (Thompson 1976, 184–210). Apart from the unstratified material, most of what is published derives from pre-amphitheatre or construction contexts and bears no relation to losses during the use of the monument. Leaving aside Caerleon, the three other extensively excavated amphitheatres have produced few finds whose contexts suggest loss during use.

After the initial construction of the stone wall of the arena at Silchester, spoil was dumped around the edge of the arena to raise the surface. This action was either to compensate for raised ground-surfaces outside the amphitheatre, as had happened at Caerleon, or to overcome problems of drainage. It cannot be regarded as evidence of disuse or abandonment. At Chester a layer of black soil, generally about 30 cm but sometimes up to 45 cm thick, accumulated in the arena in the third century and this was interpreted as evidence of a brief period of abandonment (Thompson 1976, 150–51). The length of time over which such an accumulation might occur naturally or through the deliberate dumping of rubbish is uncertain; an alternative possibility remains that this, too, represents a deliberate heightening of the arena surface, although further work will be necessary to discriminate between these possibilities. At Caerleon the period preceding the third-period repairs and modifications was characterised by the Wheelers as one of neglect (1928, 119), with the implication that the amphitheatre had not been used so intensively. However this need not follow; growing dilapidation of the monument does not necessarily imply

that activities were in decline. Rather, the repair of the monument had not been considered a priority by the *legatus* and his staff. The scale of the early third-century alterations at Caerleon matches the investment in the stone phase at Silchester and may have been prompted by the same reasons.

There is little evidence from the later Roman period to chart use of the Silchester amphitheatre. Indeed there is no compelling reason why the wall of the arena could not have been robbed before the end of the Roman period. The only circumstantial evidence for continued use after the late third century is the so-called amphitheatre postern-gate in the town-wall (FIG. 1). However, there is no certainty that a path led from the gate to the South Entrance. None of the British monuments shows evidence of repair in the fourth century, but lack of evidence for dumping of rubbish could imply that they continued in some form of use. However, there is a possibility that Maumbury Rings was abandoned as an amphitheatre in the mid-Roman period (Bradley 1976, 78). The evidence for this is based on the date (first half of second century) given to two pots associated with graves outside the North Entrance. But there is no stratigraphic evidence for the graves being later than the construction of the monument and the date-range of the pottery is greater than was once thought likely (*ibid.*, 64–6). In fact the burials could equally well provide a mid-to-late first-century *terminus post quem* for the construction of the amphitheatre. There need not have been an interruption in use in the second century. Certainly there was no rebuilding in stone, but an episode of soil-formation in the north entrance preceded the construction of a new gate in the late Roman period, between about 250 and 350 (*ibid.*, 79). At Cirencester the entrance-passage appears to have been much reduced in width in the later Roman period and refurbished in timber (Wacher 1964, 18, pl. XX). These changes are reminiscent of the late third-century phase at Chester with its evidence for a patchy re-surfacing of the arena after a build-up of dark earth (Thompson 1976, 150–151). In no case can we be sure that the monuments retained their original function in the late Roman period. Indeed the evidence for burning on the surface of the Chester arena could be construed as positive evidence against it having continued as an amphitheatre. The same may be true of Chichester, where abandonment in the second century was suggested (White 1936, 157). However the scope and quality of the excavations there was insufficient for any certainty on this point.

If we take the incidence of major repairs or renovations as an indication of usage, then the evidence from three of the four extensively-excavated examples points to renewal of original function (although not necessarily at the same level of popularity) as late as the mid third century. At both legionary amphitheatres and at Maumbury Rings a period of abandonment is envisaged by the excavators between the mid second and the mid third century. Although, as the post-Roman re-use of the South Entrance at Silchester shows, it is very difficult to distinguish between the reasons for any refurbishment and for changes in the way the monument was being used, it is perhaps safer to assume that these amphitheatres, including Maumbury Rings, continued to be used as such in the later Roman period. Common to them all is the lack of evidence for structural renewal in the fourth century; at the very least, this surely implies some loss of interest and loss of city income. On the other hand, if the structure at Caerwent is correctly identified as an amphitheatre, it is likely to be of third- or fourth-century date since it overlies a number of earlier buildings (Ashby *et al.* 1904, 105).

The environmental evidence from Silchester provides further interesting commentary on use. The pollen sequence from the North Entrance shows that oak and accompanying fern-cover developed during the second century and then, after a decline when the amphitheatre was remodelled using stone, increased once more. Antonie van Scheepen's experimental work on *Quercus* (p. 152) shows that this change must reflect very local developments, even to the extent of trees becoming established on the outside of the banks and around the North Entrance. It is difficult to see how such developments could have taken place if there was a lot of activity around the amphitheatre and strict controls on access to the seating. None of the changes indicated in the pollen record need reflect developments in the way the arena was used, but they do point to a certain informality in the treatment of the area immediately around the northern side of the monument away from the town as well as to a lack of pedestrian traffic which might keep the vegetation down. The treatment of the North Entrance in the second timber phase is consistent

with a lack of use. In order to investigate the question of use further, detailed excavations of the exterior of the monument and, particularly, outside the South Entrance at Silchester are essential. The nature of ancillary buildings – shrines, stables, booths – as well as access paths to the seating are subjects of which we are still entirely ignorant in Britain, as elsewhere. Such investigations of the exterior are much more likely to reveal information about use and popularity than further work on arenas and *caveae*.

Although it may be presumptuous to deduce too much from the fabric, it can be argued that Silchester's amphitheatre falls into one of two wider British groups, both of which in their own way represent an ultimate simplification of an Italo-Roman model. Even the main features of the arena, the pair of recesses on the short axis, may be regarded as no more than a symbol of the original purpose of such features – to hold, or give passage to, animal and human participants. The symbolic role is emphasised by their small size and shrine-like character in the stone phase. Earlier, the laying out of a circular arena could be regarded as a deliberate response to a need to accommodate horses and circus-type entertainments.

The type failed to thrive in Britain. This is demonstrated by the lack of architectural sophistication in the provision of facilities for the promotion of the games at the level of the arena and by the provision for only relatively modest audiences. The latter might be ascribed to general population levels; but there is no reason to suppose that these were proportionally lower than in other provinces where seating-capacities were more generous. While a number of factors such as lack of appropriate resources might have contributed to this failure to thrive, it is difficult to see why this should have been peculiar to Britain, unless there was also an underlying reluctance to assimilate the idea. The amphitheatre originated in Italy to provide for funeral games involving mainly gladiatorial and wild-beast shows. The level of the amphitheatre's acceptance in Britain is a reflection of the shallow penetration of Italo-Roman, rather than Gallo-Roman ideas. In religious practice for example, the latter were predominant. The evidence of the amphitheatre in Britain points to variations on an insular theme of simplicity. This may be understood in the context of the relatively late conquest of the island by soldiers whose origins by the late first century tended to be outside Italy.

2. THE MEDIEVAL RINGWORK

Compact and with its seating-banks offering a ready-made foundation for a defensive circuit, the amphitheatre was an obvious choice for a fortification. There was one serious disadvantage. The arena floor lay 2–3 metres below the level of the surrounding ground and it therefore required adequate drainage. However effective the drain through the North Entrance might still be, the arena served as a natural collection-point for all the water draining off the seating-banks and down through the South Entrance. Without a much more elaborate system of drainage, the arena was not the obvious location for a long-term residence. It was probably only defensive needs that encouraged settlement in the amphitheatre at all.

While it is tempting to think of the amphitheatre as a defensible refuge of the immediate post-Roman period, there is no evidence for its re-use before the late eleventh century at the earliest. The amphitheatre at Cirencester has come to be regarded as providing evidence of fortification in the sub-Roman period. As at Silchester, one entrance-passage (north-east) produced evidence for refurbishment, with revetments of wooden posts and a reduction in the width of the gate into the arena. These alterations were associated with late fourth-century coins. In addition, some post-holes of a timber building were discovered in the arena, but they were undated (Wacher 1963, 26; 1964, 18, pl. XX). By 1975 this evidence was being tentatively interpreted as a possible late, or sub-Roman fortification (Wacher 1975, 314); by 1978 the case was put more strongly: 'it seems that, at Cirencester, the nearby amphitheatre was fortified as a

stronghold' (Wacher 1978, 266). However, until all the evidence has been examined and published, the case for sub-Roman fortification must remain open.

The unequivocal evidence of medieval date from the Silchester amphitheatre consists of the hall in the arena and the various pits in and around the South Entrance which contained medieval pottery. It has been argued that the refurbishment of the South Entrance and associated evidence for a palisade along the crest of the seating-bank are contemporary since it is difficult to conceive of the one without the other. Other undated pits in the south-west quadrant, possibly related to some kind of platform on the seating-bank, and the traces of another minor structure in the same area are also regarded as medieval.

The main arena building is interpreted as a single-aisled Hall, constructed no earlier than the late eleventh century. On the basis of the general range of pottery as a whole from the amphitheatre a date within the twelfth century would seem more probable. Indeed the evidence of the pottery from the fill of the post-holes of the arena building gives a rough *terminus ante quem* for the date of construction of about the mid twelfth century. Excluding Romano-British aisled houses, there is a respectable ancestry for high-status double-aisled halls from the seventh (Yeavinger) and tenth centuries (Cheddar, Goltho and Portchester) (Beresford 1987, 64–7). However, there are few examples of single-aisled halls. The early medieval manor at Goltho in Lincolnshire provides the best parallel, with a succession of comparable earthfast structures of similar dimensions from the mid tenth century (Period 4) through to the Period 6 Motte and Bailey castle of the late eleventh to mid twelfth century. In the last period (7), dating from the mid twelfth century, the hall was provided with aisles on all four sides (Beresford 1987). Beresford also advances the claims of the Period 1 structure at Wintringham (c. 1175) as a single-aisled hall, though the published plan by no means provides unequivocal support for an aisle (Beresford 1977, 210–11, fig. 8). Dating from approximately the same period is the somewhat larger timber hall (20 m in length) at Ellington, like Wintringham now in Cambridgeshire, which is described as having pentries or outshots four feet wide (1.2 m) on its north and west sides (Tebbutt *et al.* 1971). Both of these sites were moated or became moated in subsequent structural phases. Thus, though rare, parallels to the Silchester building were still being constructed up to the last quarter of the twelfth century. However, the significance of the distinction between the single- or double-aisled hall, whatever that may have been, was not as great as that between buildings with aisle(s) and those with none at all. As Beresford has pointed out 'The list of known aisled halls indicates that such buildings are only to be found at royal palaces and houses of ecclesiastical and secular magnates during the Saxon and Norman periods.' (Beresford 1987, 65–6). At risk of invoking a circular argument, this association between structure and status therefore helps to strengthen the hypothesis that the amphitheatre building is no ordinary domestic structure and that it is integral with the defences with which it has been assumed to be contemporary.

Since the pottery from all the closed groups (Context groups 5.1, 5.3 and 5.12) appears to be contemporary and of mid to late twelfth-century date, the occupation of the amphitheatre would appear to have been brief. Nevertheless it is tempting to regard the hall as the manor-house of Silchester during this period. However, it lies about 270 metres from the church to whose earliest existing aisleless fabric, which dates from about 1125–50, it is close in date. A closer physical association of the church and manor might have been expected, if they were being built at about the same time. Indeed just to the north of the church (FIG. 1, p. 4) there is an impressive timber-framed building of at least sixteenth-century date which probably served as the manor-house from the time of its construction. If we assume that the present building to the north of the church had a predecessor, this might date from as early as the late twelfth or early thirteenth century, by which time the amphitheatre ringwork had been abandoned. Support for this suggestion comes from the church, where the principal doorway is, unusually, on the north side, facing the existing manor house. It is of thirteenth-century date.

At the time of Domesday, Silchester had been held by Ralph Bluet and Ralph de Mortimer; the latter's holding had passed to the Bluets by 1167 and they continued to hold the manor through the twelfth and thirteenth centuries (Page 1911, 52–3). Since no church is recorded in Domesday, the occasion for the building of St Mary's might have been the moment when the Bluets obtained

all of Silchester. Ralph de Mortimer and his successors held Stratfield Mortimer from 1086 until the reign of Edward IV (Page and Ditchfield 1923, 423). The amphitheatre now lies just within the parish boundary of Mortimer West End, which before 1870 was a tithing of Stratfield Mortimer. If this boundary, which runs along Wall Lane, is ancient, the amphitheatre would have belonged to the Mortimers. If so its position vis-à-vis the Silchester parish church is irrelevant. Yet, at the same time it is also peripheral to the Mortimers' lands and its use can only be envisaged if either relations with the Bluets were tense or conditions generally were difficult. Given the contiguity of the amphitheatre to Silchester's church and the core of the medieval village, it is likely that the parish boundary is later than the thirteenth century. Further documentary research may elucidate the ownership of the amphitheatre at this time and clarify its relationship with Silchester.

Such a period of tension existed during the anarchy of the reign of King Stephen (1135–54). Much of the fighting took place in the south of England. In 1147 the *Gesta Stephani* (ch. 109) recorded that Stephen captured '*Castellum siquidem, quod dicebatur de Silva*', a victory that was shortly followed by the surrender of '*castellum de Lidelea*', which belonged to the Bishop of Winchester. There is no certain identification of either of these places. King and Renn had suggested (1971) that Lidelea could be identified with *Beddelie* in the manor of Crondall (Hants), which belonged to the monks of Winchester Cathedral. As Davis has pointed out 'The basic conditions for any site must be . . . (since it was captured by a company of Brian fitzCount) that it should be in striking distance of Wallingford' (1976, 208–9, n.4). On the basis of this idea Davis suggested that the *Castellum de Silva* might be identified with the motte-and-bailey castle at Woodgarston Farm in Wootton St. Laurence (Hants). An alternative was to look at West Woodhay, where the bishops of Winchester had a park (*idem.*) Before this, Woodchester (Glos.), as a literal translation of the name, had been a possibility; but no remains of a castle have yet been discovered there. In this context the identification of *Castellum de Silva* with Silchester on the basis of a punnish re-working of that placename by the author of the *Gesta* immediately becomes attractive (Fulford 1985, 77–8). Both Silchester and *Beddelie* (Crondall) can be seen, along with Wallingford, to be on the periphery of a broad band of castles held for the Empress in 1146–7 (Davis 1967, 90).

The excavated evidence from the amphitheatre, though far from prepossessing, is not incompatible with its use as an adulterine castle. The ringwork contained the hall and perhaps one ancillary building; apart from the palisade on the crest of the former seating-bank there are indications from the south-west and south-east quadrants of the provision of a more elaborate fighting-platform. Future excavation should be able to elucidate these aspects of the site. The amphitheatre was a damp and unattractive place for permanent settlement. The short-lived occupation and its date suggest that the reason for re-using the Roman monument was to take advantage of its defensive potential.

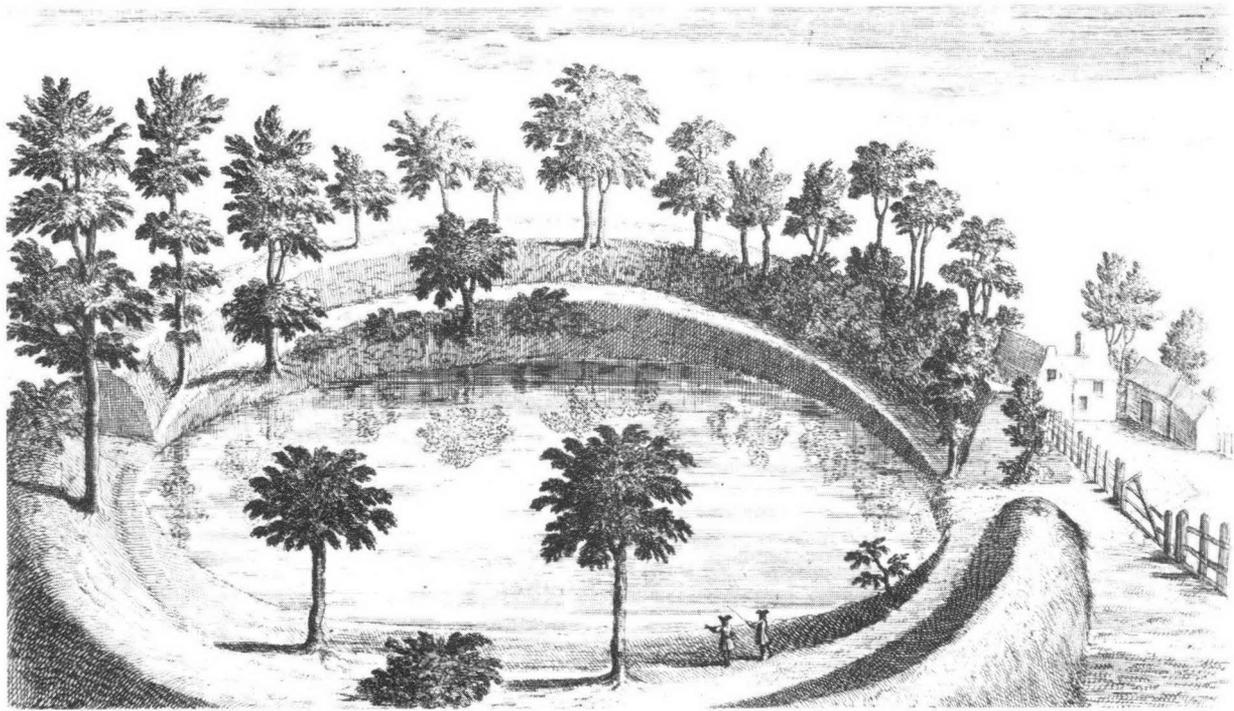
3. LATE MEDIEVAL AND POST-MEDIEVAL USE

The early character of the cruck-built farmhouse, now called 'The Mount', outside the North Entrance indicates that it dates from at least the early fifteenth century. From the time of the construction of the house until the 1970s the arena served as a yard area for that farm. To this end it was metalled over by the seventeenth or early eighteenth century. As Stukeley observed in 1722, the site 'has from times immemorial been a yard for cattle, and a watering pond' (1776, 178). Late seventeenth- to early eighteenth-century pottery, glass, building-material, etc from rubbish-pits and their general vicinity in the South Entrance may be evidence that a cottage stood in the small plot of land between that entrance and Wall Lane. If so, it had disappeared by the time Stukeley visited Silchester and recognised the amphitheatre for what it was. No cottage is recorded on his plan of Silchester of 1722, when the plot is shown as an orchard (Stukeley 1776, pl. LXI).

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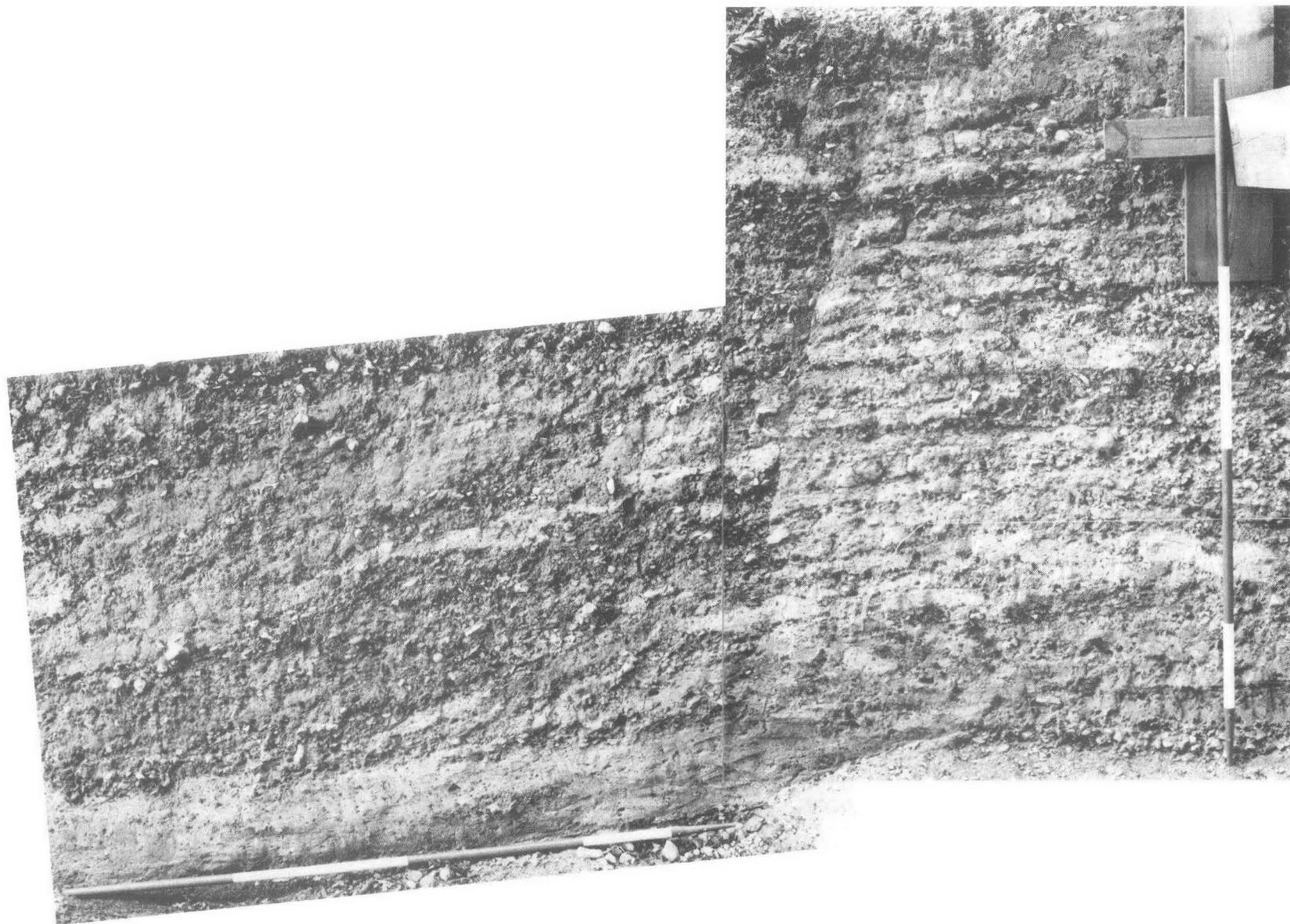
PLATES



PL. I A William Stukeley's drawing of the amphitheatre, 1724.



PL. I B General view across arena to South Entrance in course of excavation, 1980.



PL. II West seating bank: turf revetment, outside of bank to left (p. 14, FIG. 6).



PL. III A Tail of amphitheatre seating bank over filled ditch, F216 (p. 9, FIG. 6).



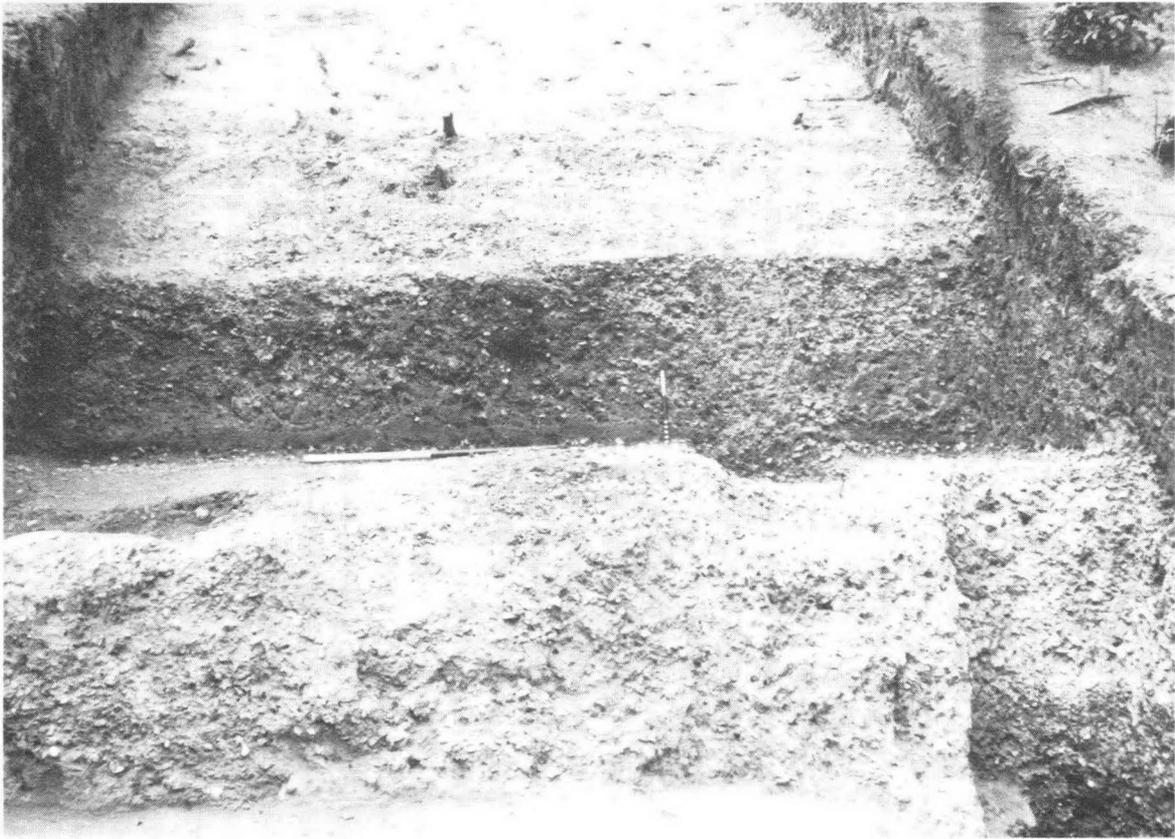
PL. III B West seating bank; secondary 'ramp' against exterior of turf revetment (p. 14, FIG. 6) (Scale, 2.0 m).



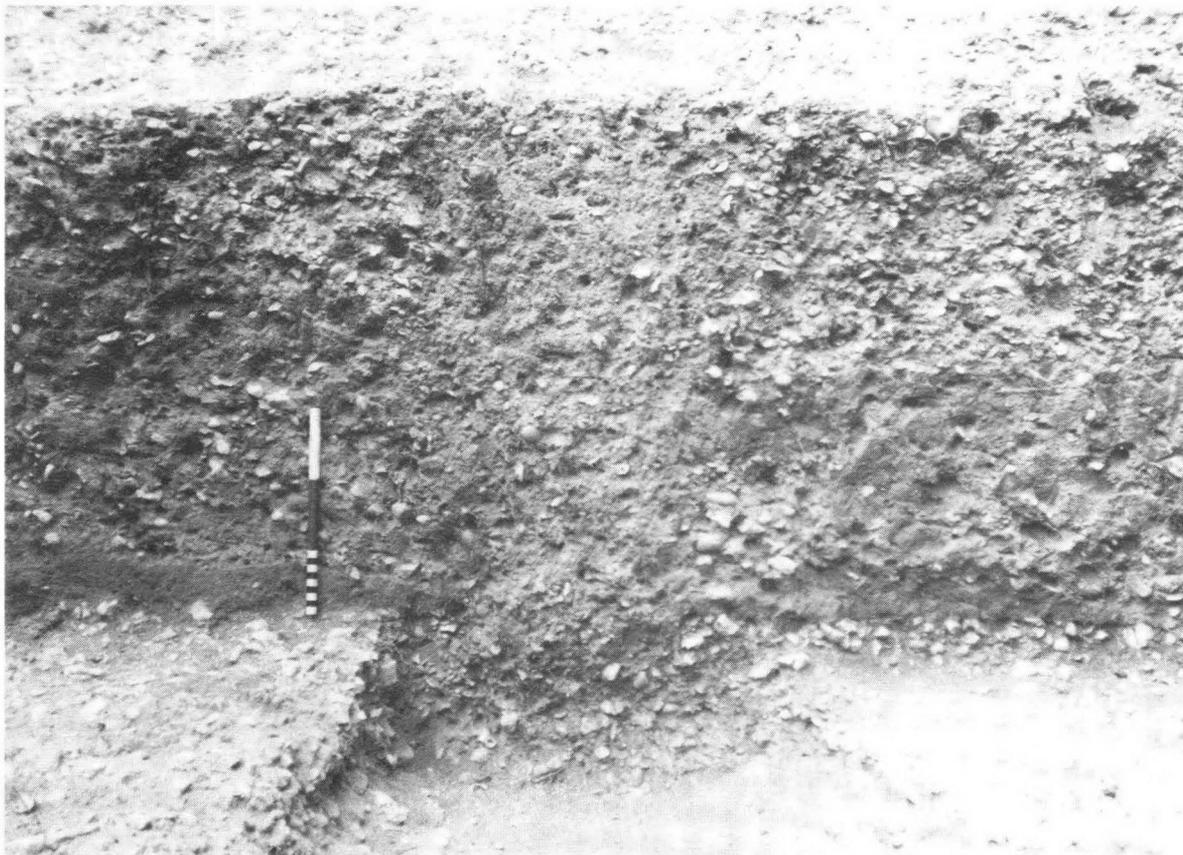
PL. IV West seating bank: composite of lower part of south section (p. 14).



PL. V West seating bank: composite of upper part of south section (pp. 14-15).



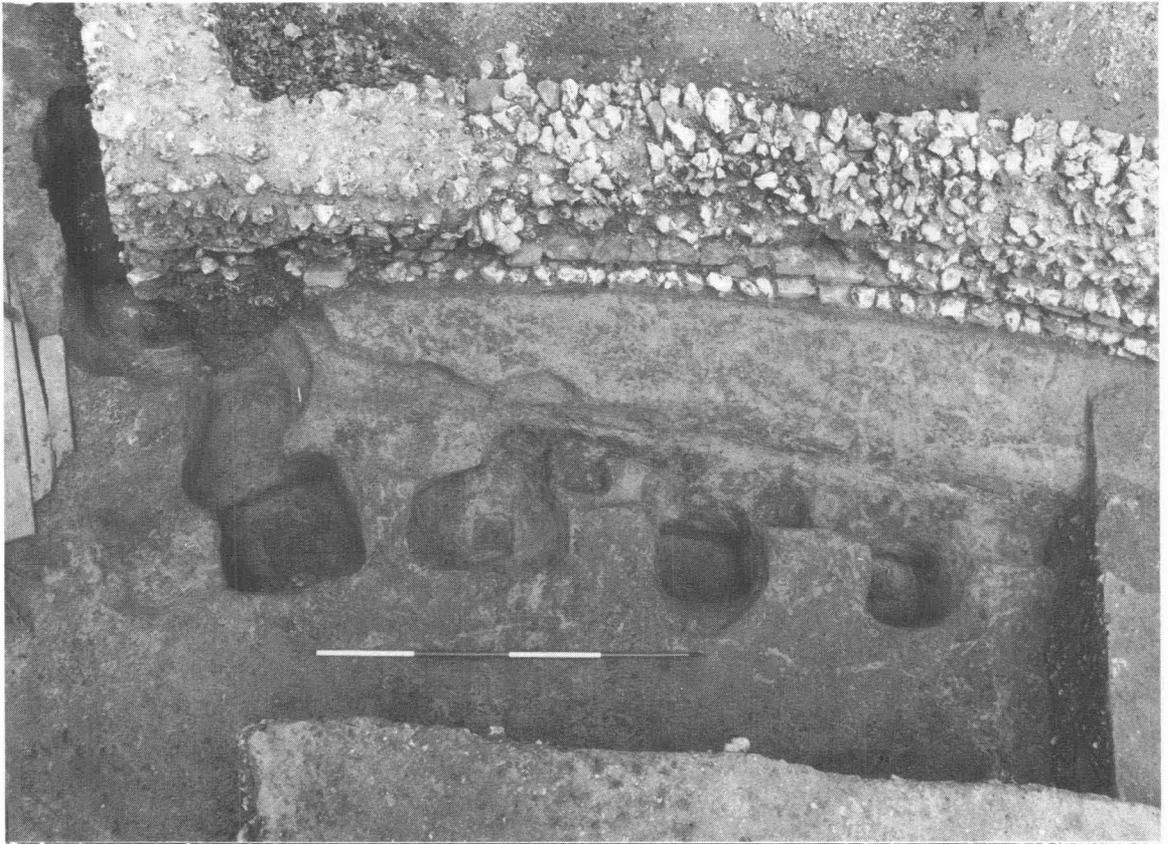
PL. VI A West seating bank looking west: beam-slot, F212, to right of photographic scale (= 0.3 m). cut by excavation-trench (p. 15, FIG. 6)



PL. VI B West seating bank looking west: arena base, beam-slot F212 to right (p. 15, FIG. 6) (Scale, 0.3 m).



PL. VII A Timber Phase 1: South Entrance looking south; completed excavation of post-pits; view from arena to south (Scales, (left) 1.0 m; (central) 2.0 m).



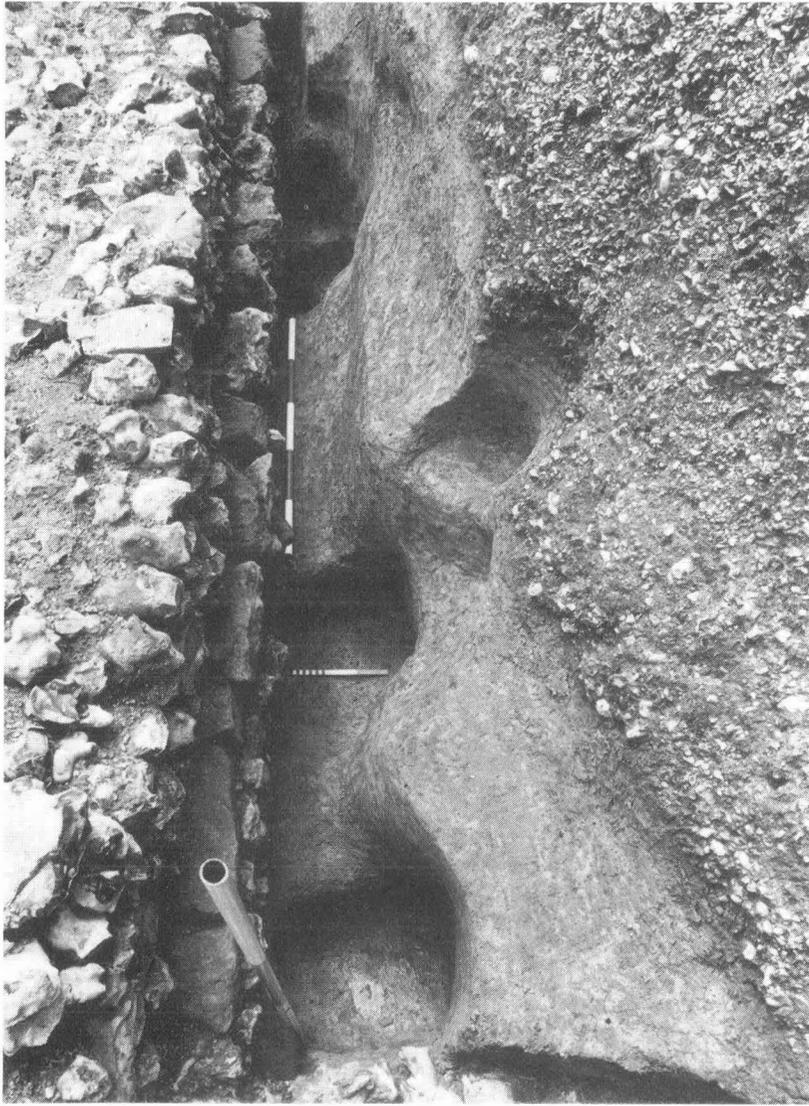
PL. VII B Timber Phase 1: south-west quadrant; post-pits F1298, 2100 excavated showing remains of posts; view from South Entrance (bottom of photo) (Scale, 2.0 m).



PL. VIII A Timber Phases 1 and 2: South Entrance; completed excavation of post-pits; view across the gate from the east (Scales, 1.0 m (foreground); 2.0 m (central)).



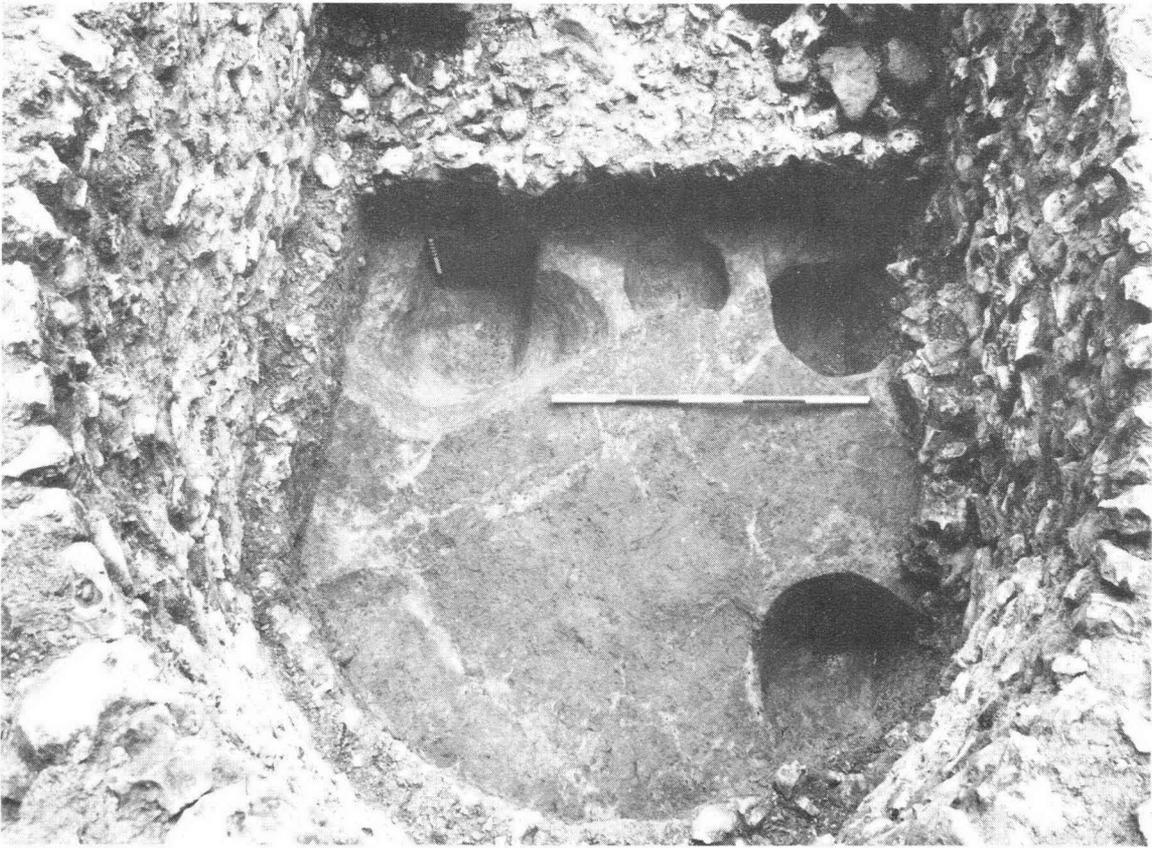
PL. VIII B Timber Phase 1: south-west quadrant, south of West Recess; post-pits F1343-1345 in course of excavation (Scale, 0.3 m).



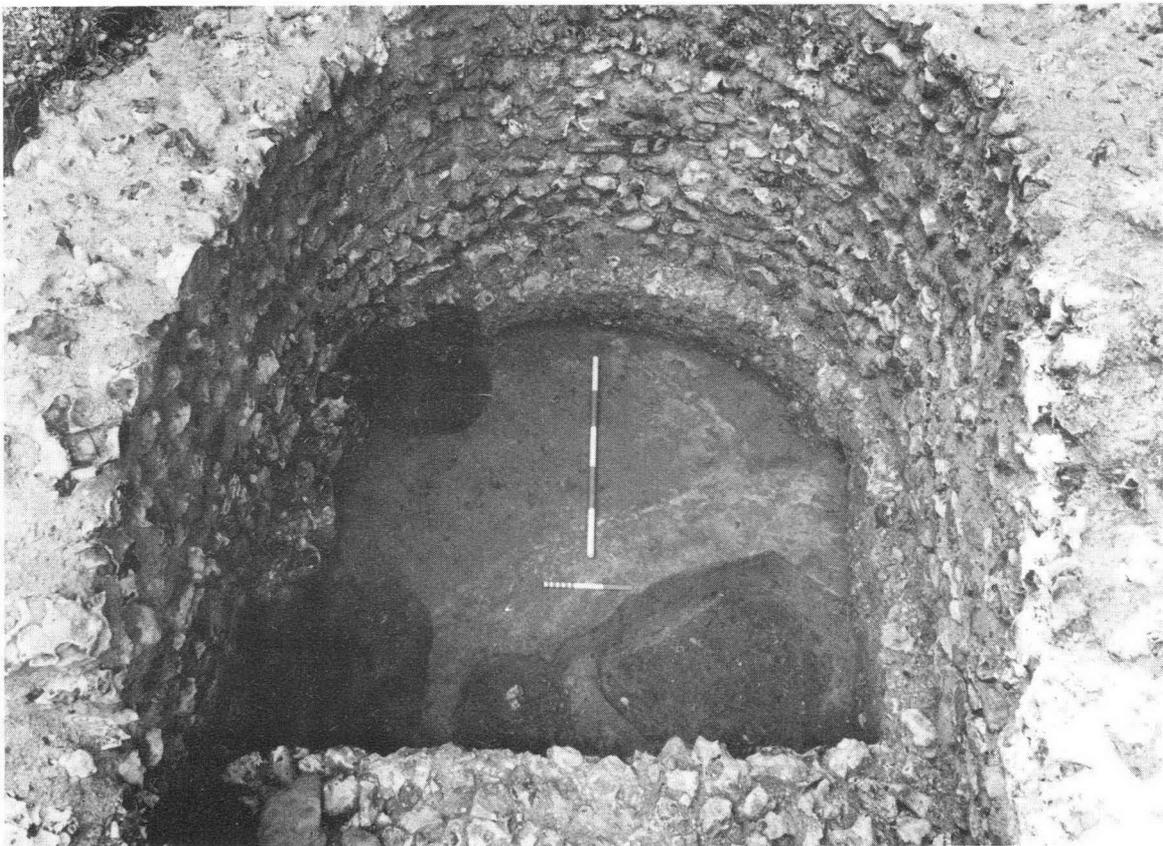
PL. IX A Timber Phase 1: south-west quadrant, south of West Recess; completed excavation of post-pits F1343-1345; view south from recess (Scales, 1.0 m (upper); 0.3 m (central)).



PL. IX B Timber Phase 1: south-west quadrant, south of West Recess; remains of post in F1344 (south at top of photo) (Scale, 0.3 m).



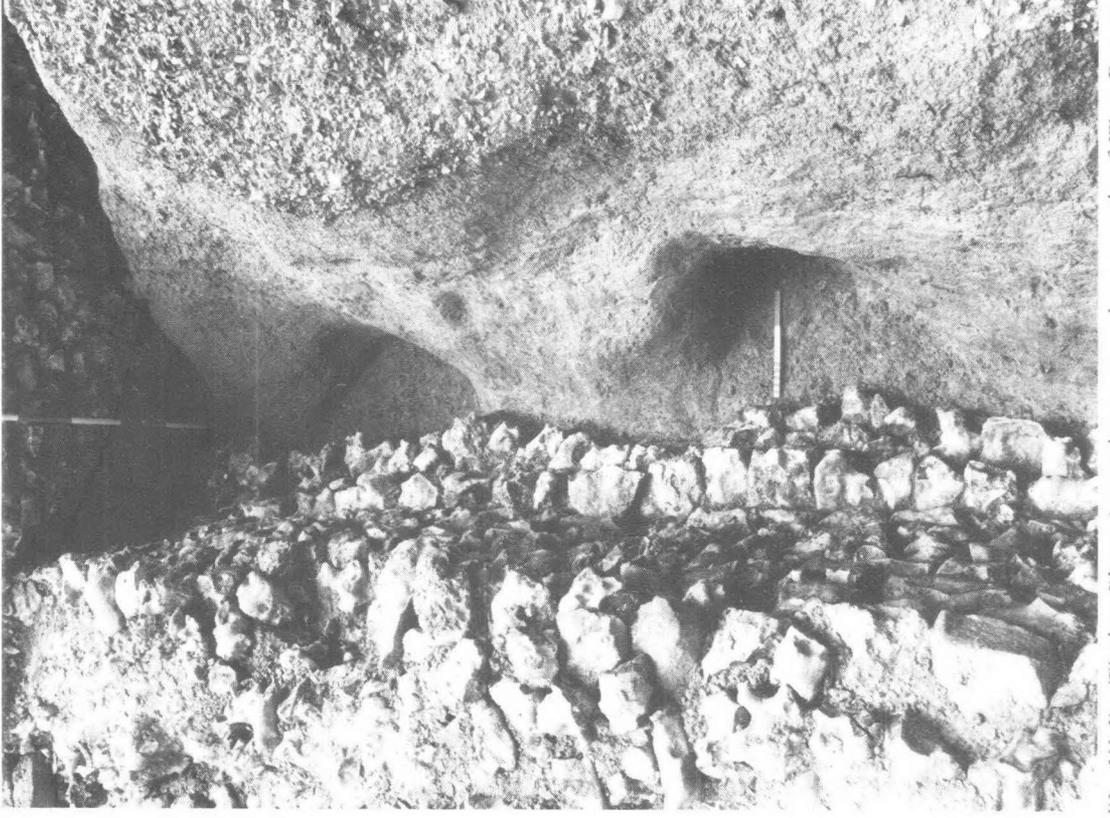
PL. X A Timber Phases 1 and 2(?): West Recess; completed excavation of post-pits; view from west, arena at the top of photo (Scales, 0.3 m and 1.0 m).



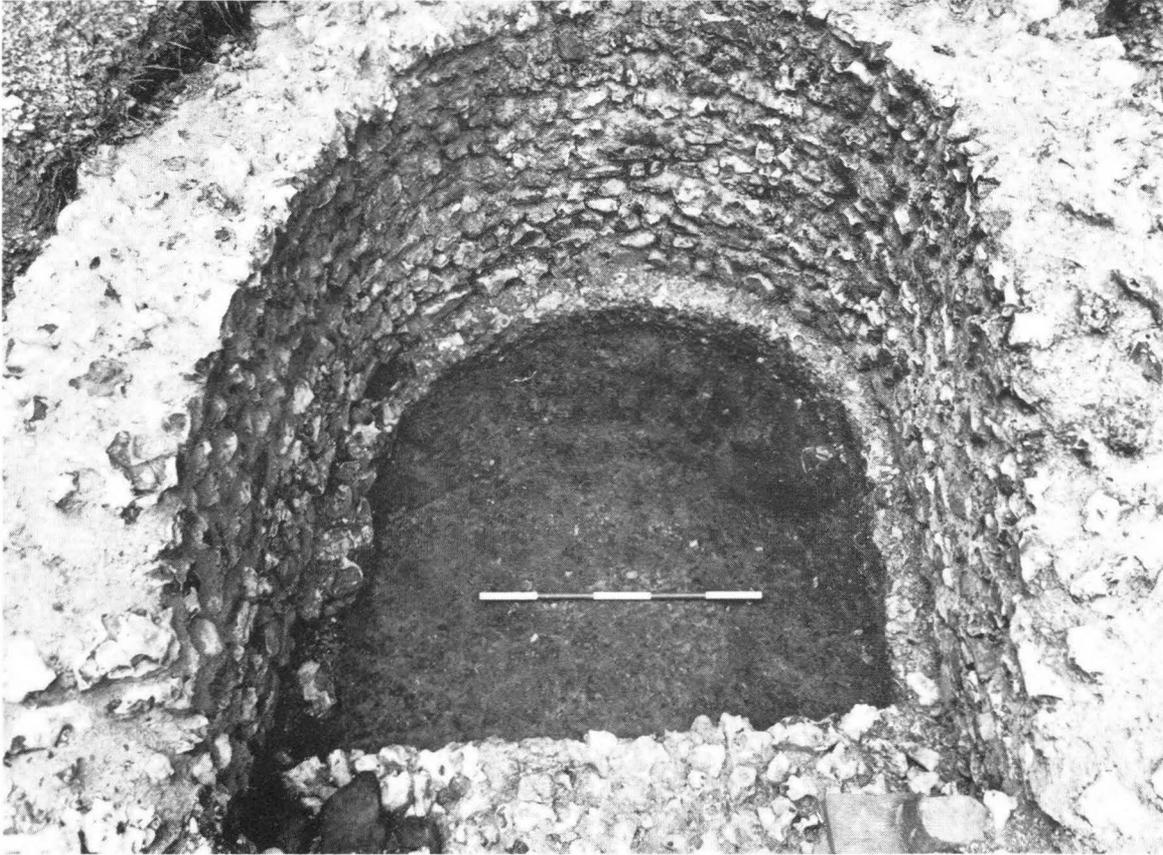
PL. X B Timber Phases 1 and 2(?): West Recess; post-pits in course of excavation (Scales, 0.3 m and 1.0 m).



PL. XI A Timber Phase 1: north-west quadrant, north of West Recess; completed excavation of post-pits F1349, 1348, etc., view to south (Scales, 0.3 m and 1.0 m (upright)).



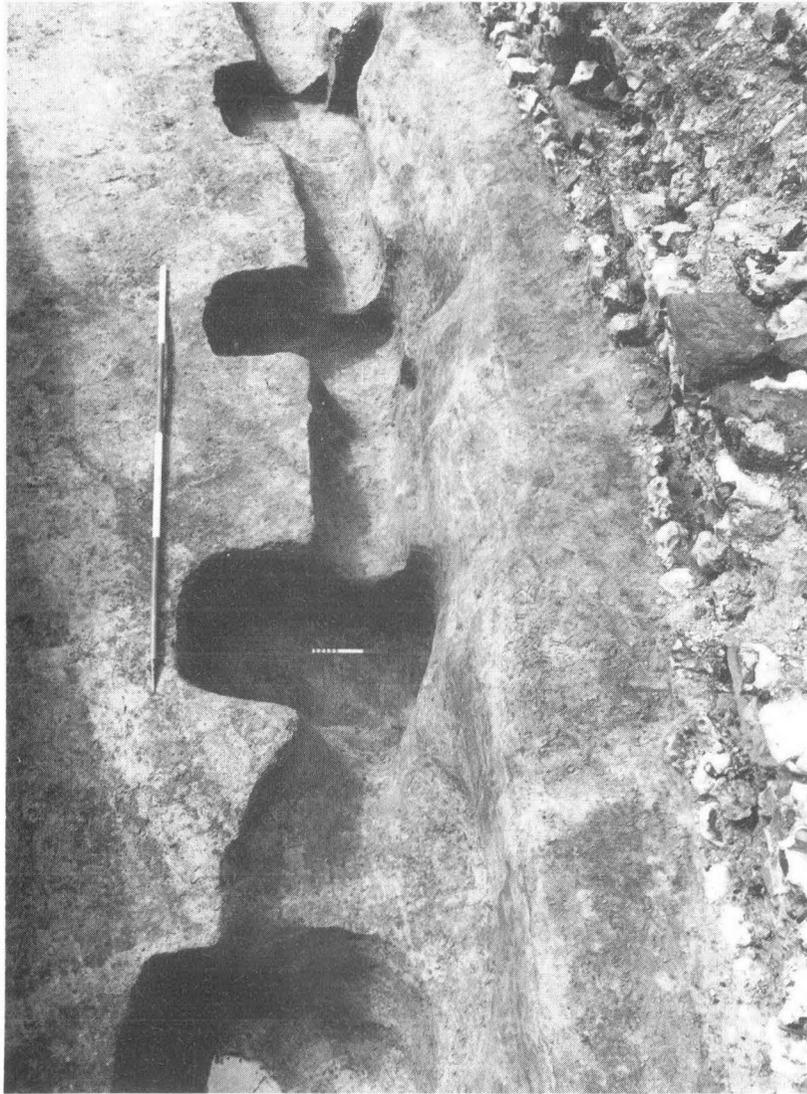
PL. XI B Timber Phase 1: north-west quadrant, north of West Recess; post-pits F1349, 1348, etc. in course of excavation; view to south (Scales, 0.3 m (lower); divisions of 0.2 m (upper)).



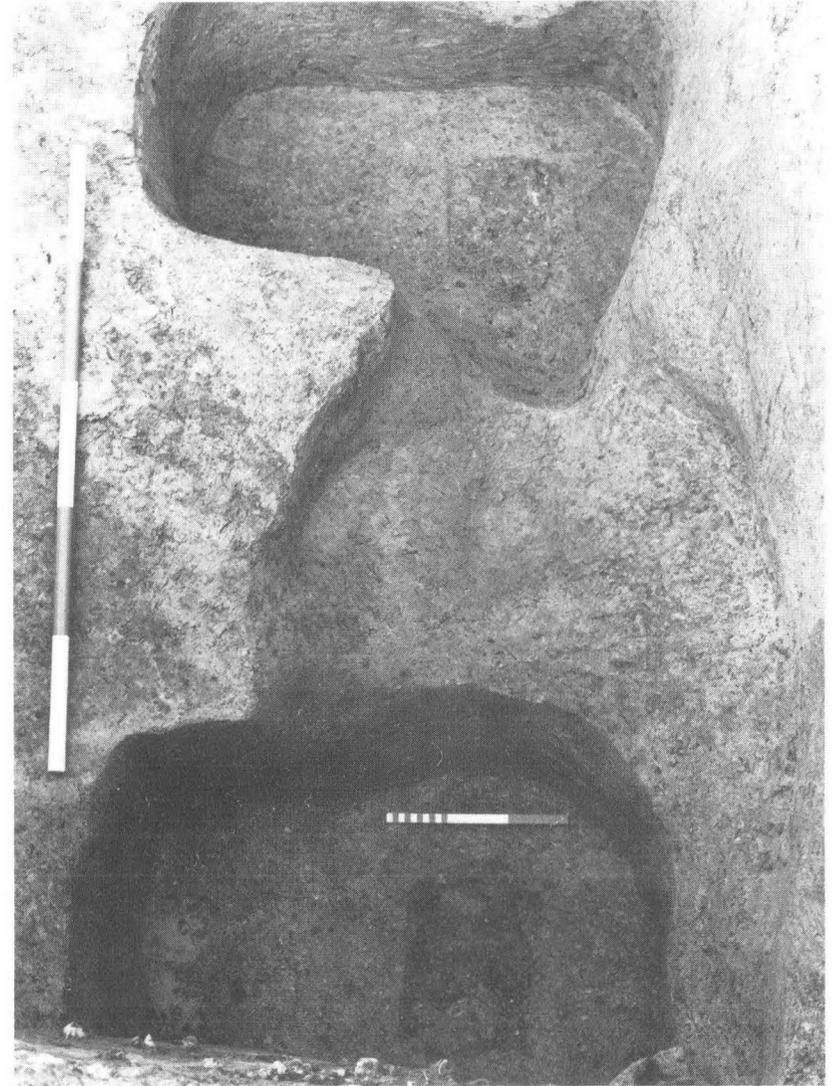
PL. XII A Timber Phase 1 or 2: West Recess; spread of charcoal (1902) and horse-jaw (right); view from arena to west (p. 22, FIG. 10) (Scale, 1.0 m).



PL. XII B Timber Phases 1 and 2: North Entrance; excavation of post-pits and drain completed (Scales, 1.0 m (lower); 2.0 m (central); 0.3 m (post-pit)).



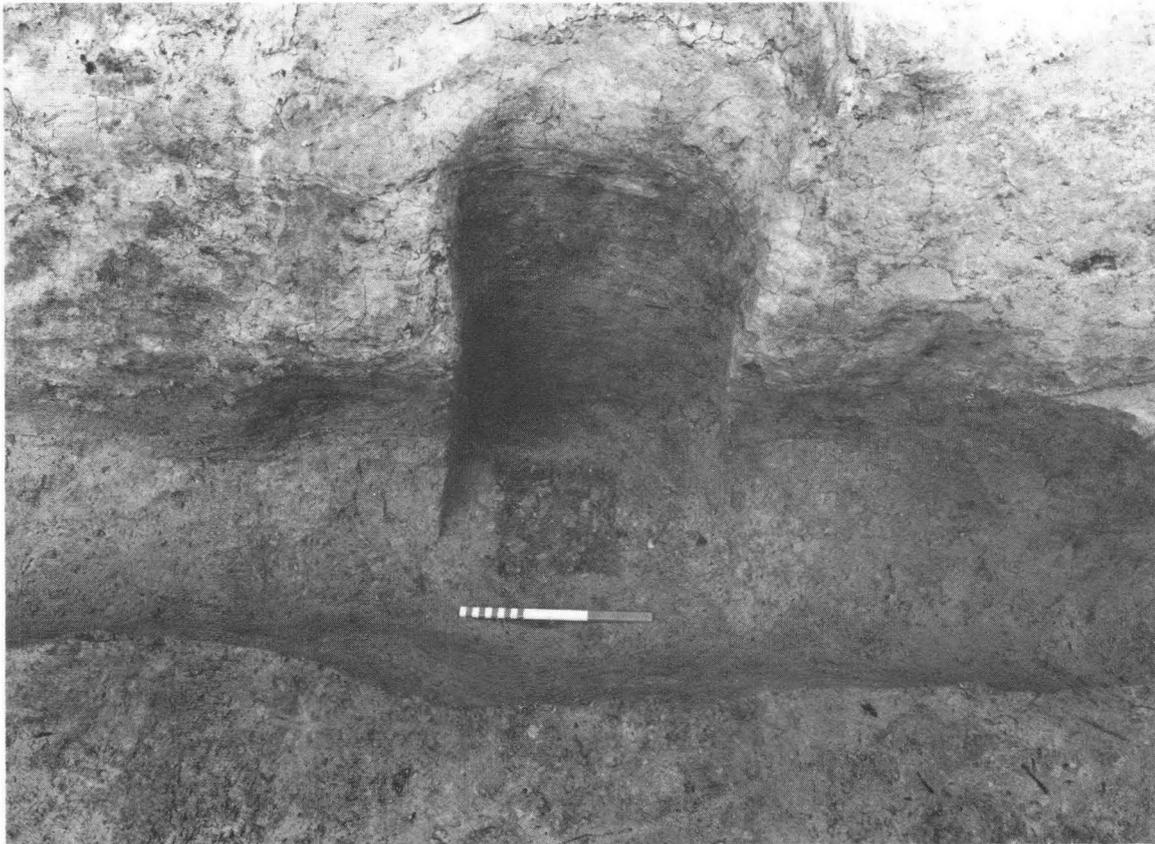
PL. XIII A Timber Phases 1 and 2: north-west quadrant; completed excavation of post-pits F1509 etc.; view from north (Scales, 2.0 m and 0.3 m).



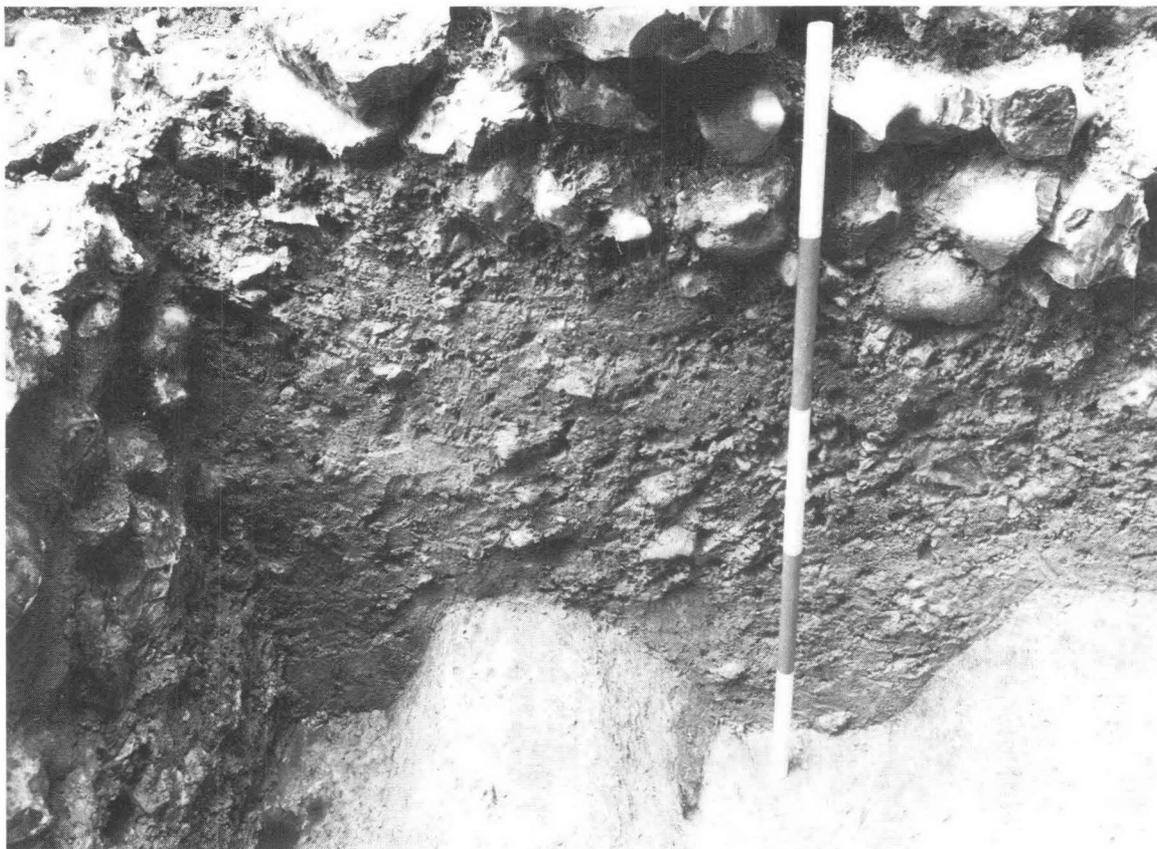
PL. XIII B Timber Phase 1: north-west quadrant; remains of posts F1509 (lower) and F1506 (upper) (Scales, 1.0 m and 0.3 m).



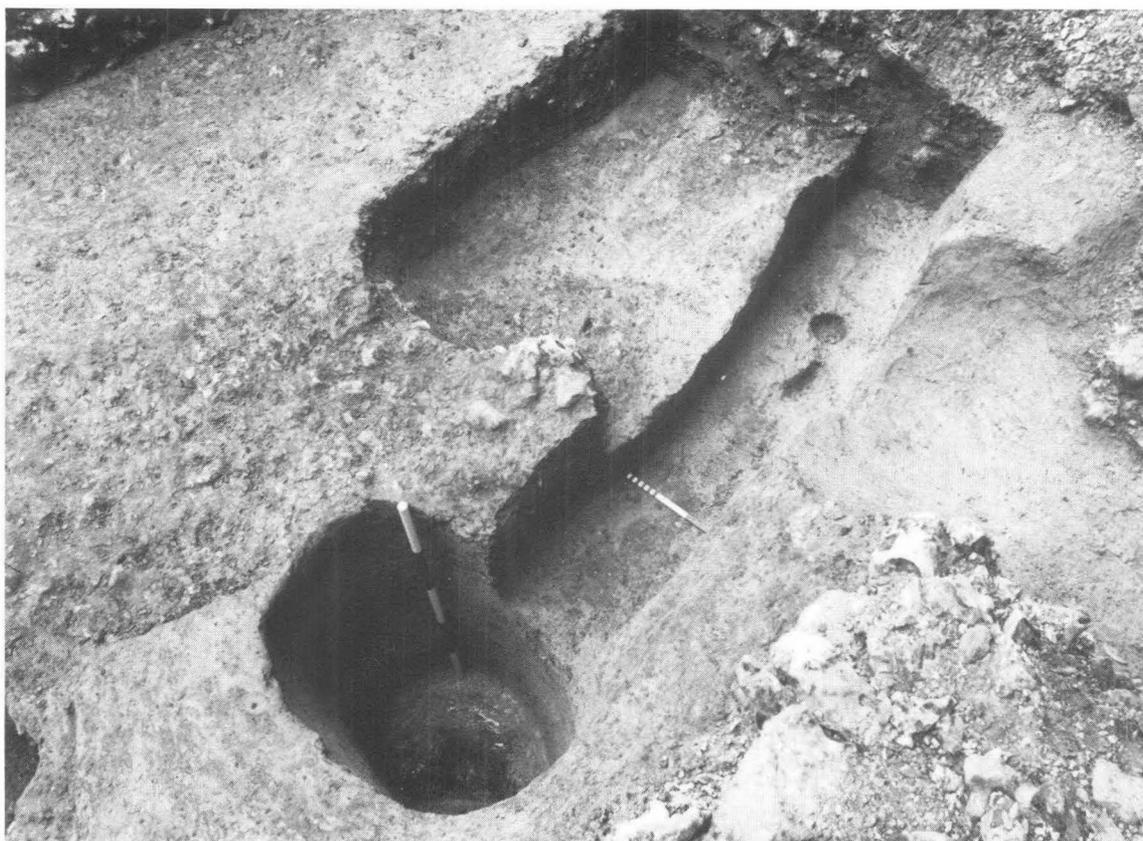
PL. XIV A Timber Phase 1: north-west quadrant; F1503, remains of post (p. 23) (Scale, 0.3 m).



PL. XIV B Timber Phase 1: north-west quadrant; F1504, remains of post (p. 23) (Scale, 0.3 m).



PL. XV A Timber Phase 1: East Recess; revetment F716 (left) and F717 (right), north section (p. 15, FIGS. 13, 43) (Scale, 1.0 m).



PL. XV B Timber Phase 2: South Entrance, east side; arena revetment and terminal post F1749; view from the entrance (Scales, 1.0 m (F1749) and 0.3 m).



PL. XVI A Timber Phase 2: South Entrance looking south; threshold F1751B in foreground and associated surfaces and pit F1753 (right) before excavation (Scale, 2.0 m).



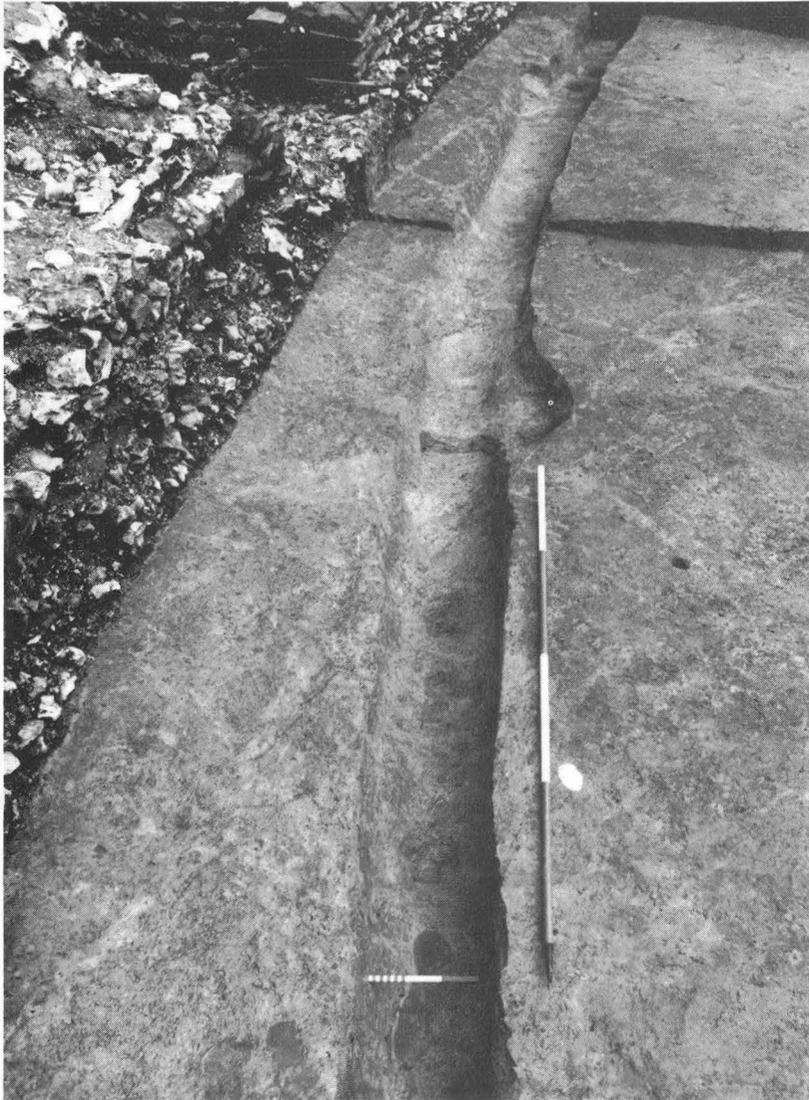
PL. XVI B Timber Phase 2: South Entrance; threshold F1751B and associated gate posts F1719 and F1765 excavated. Excavated terminal post of arena revetment F1749 to left. View from the arena (Scale, 2.0 m).



PL. XVII A Timber Phase 1: North Entrance; remains of gate post F446 (p. 23) (Scale, 0.3 m).



PL. XVII B Timber Phase 2: South Entrance, west side; F1294 foreground and arena revetment F1285 behind; view from the entrance (Scales, 0.3 m (F1294) and 2.0 m; scale at top is in divisions of 0.2 m).



PL. XVIII A Timber Phase 2: revetment trench F1351/1358 south of West Recess, excavation completed; view to north (Scales, 0.3 and 2.0 m).



PL. XVIII B Timber Phase 2: revetment trench F1351/1358, etc. south of West Recess, partly excavated to show traces of posts (Scales, 0.3 m and 2.0 m).



PL. XIX A Timber Phase 2: arena revetment F1333 in north-west quadrant in course of excavation, from south (Scales, 1.0 m and 0.3 m).



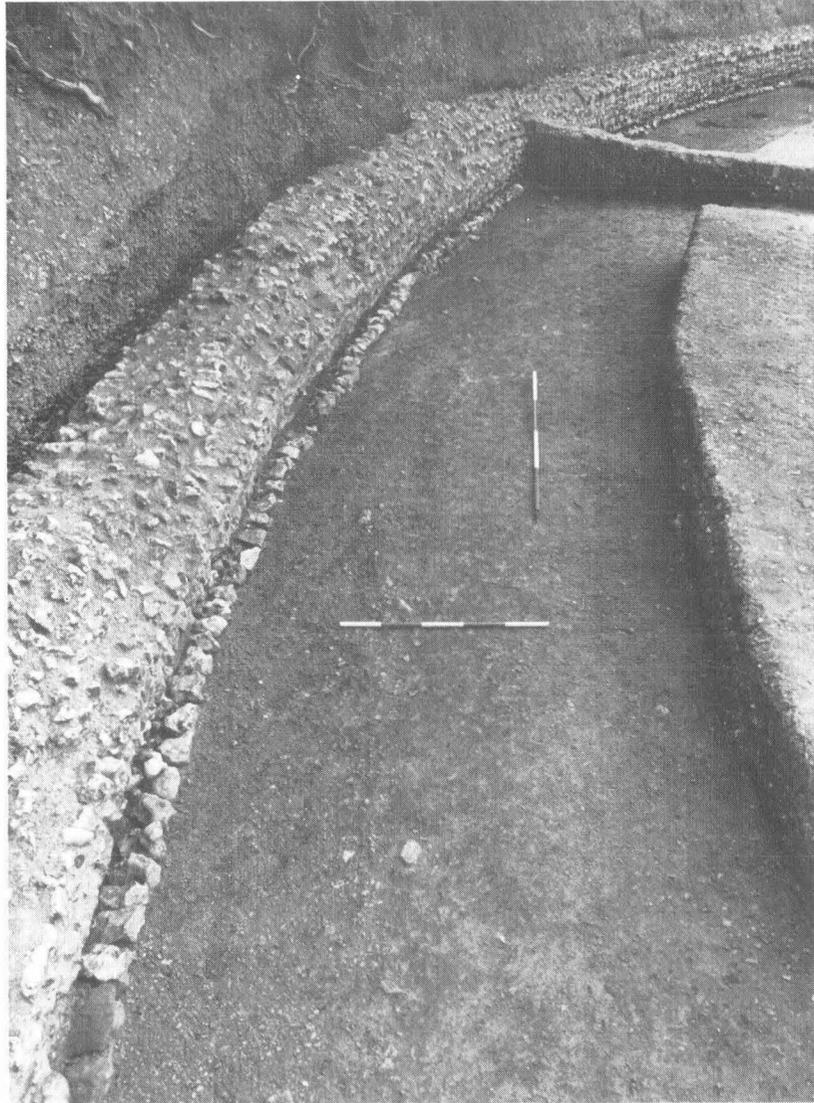
PL. XIX B Timber Phase 2: arena revetment F1505 in north-west quadrant in course of excavation. View from north (Scales, 0.3 and 2.0 m).



PL. XX A Timber Phase 2: arena revetment (west), pointed stake F597 (p. 31, FIG. 6) (Scale, 0.3 m).



PL. XX B Timber Phase 2: posts of arena revetment F1800 outside East Recess (p. 34, FIG. 19), from east (Scale, 1.0 m).



PL. XXI A Arena wall: south-east quadrant, showing foundation plinth; view to south (p. 37) (Scales, 1.0 m (foreground) and 2.0 m).



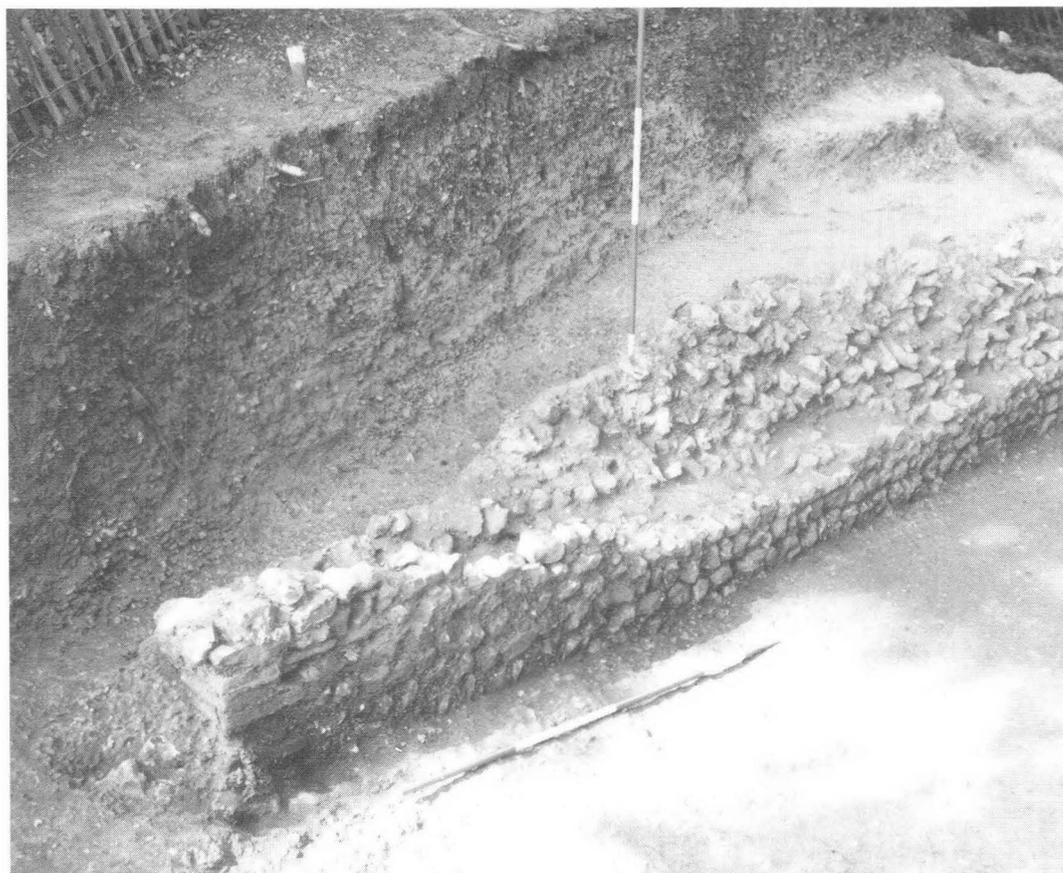
PL. XXI B Arena wall: East Recess, showing foundation plinth; view to south (p. 37) (Scales, 0.3 m and 2.0 m).



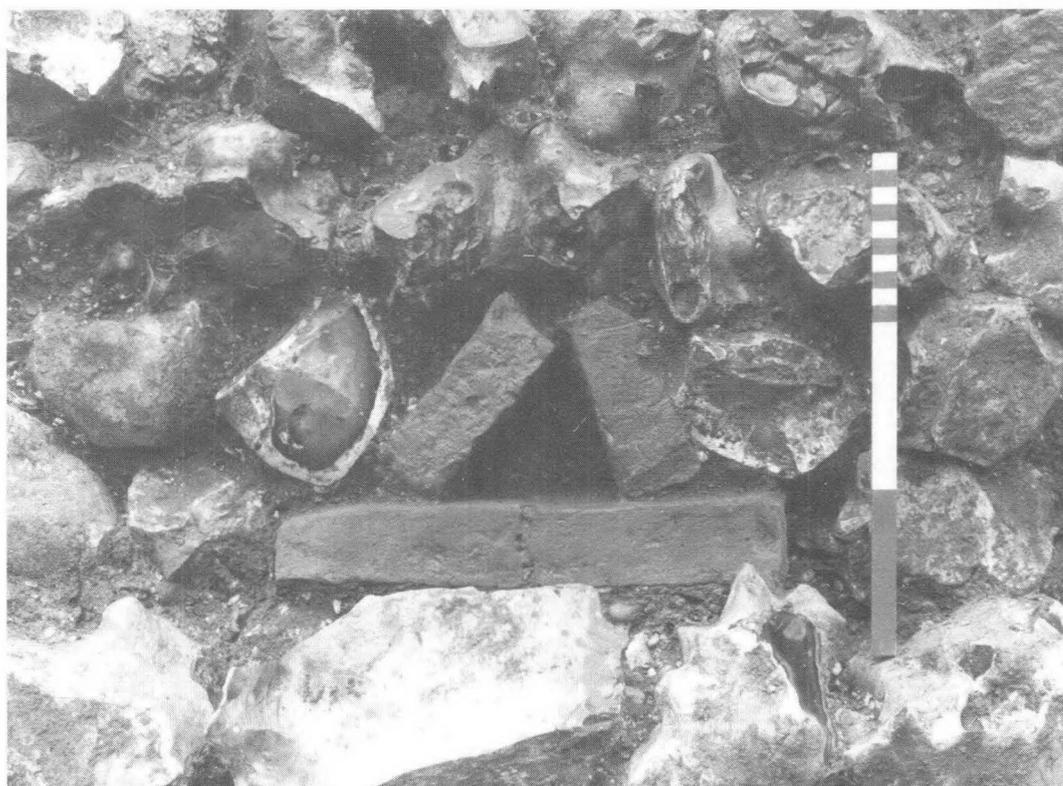
PL. XXII A Arena wall: section of elevation of north-west quadrant (p. 37).



PL. XXII B Arena wall: section of elevation of north-east quadrant (p. 37).



PL. XXIII A Stone Phase: South Entrance; elevation of southern end of western passage wall showing brick quoining and robbing caused by late medieval gully, F9 (pp. 37, 65) (Horizontal scale, 2.0 m).



PL. XXIII B Arena wall: triangular drain of tile in north-west quadrant (p. 37) (Scale, 0.3 m).



PL. XXIV A Arena wall: drain of tile and ironstone (over) in north-west quadrant (p. 37) (Scale, 0.3 m).



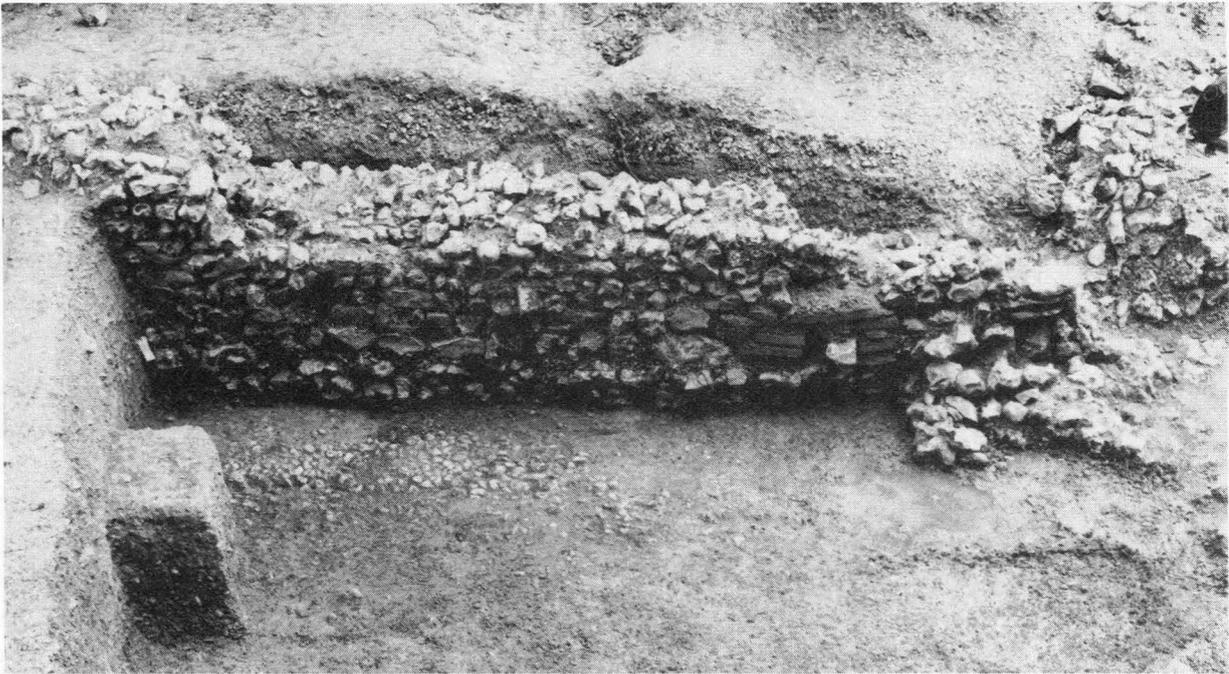
PL. XXIV B Stone Phase: South Entrance; tile drain at northern end of east passage wall (p. 37) (Scale: division = 0.5 m).



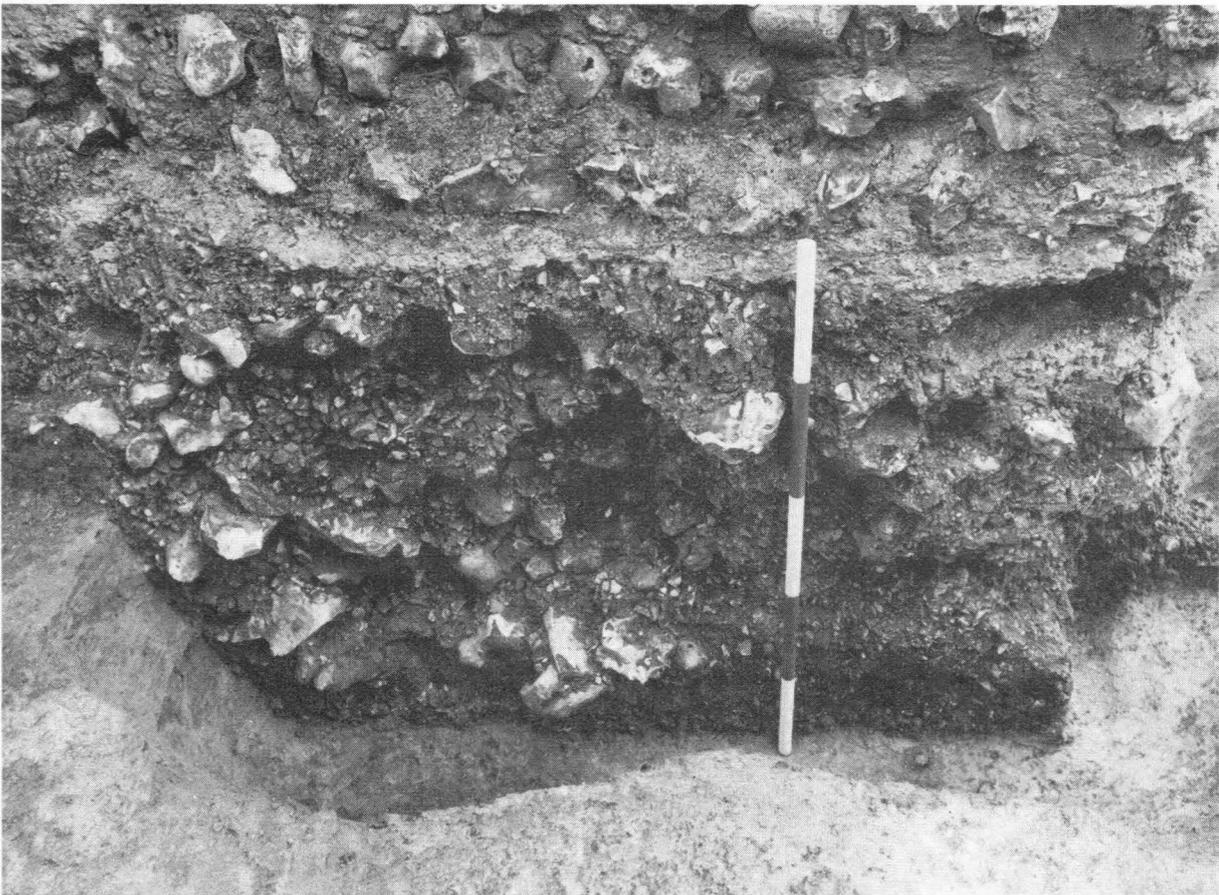
PL. XXV A Stone Phase: South Entrance in course of excavation; general view from the south (Scale, 2.0 m).



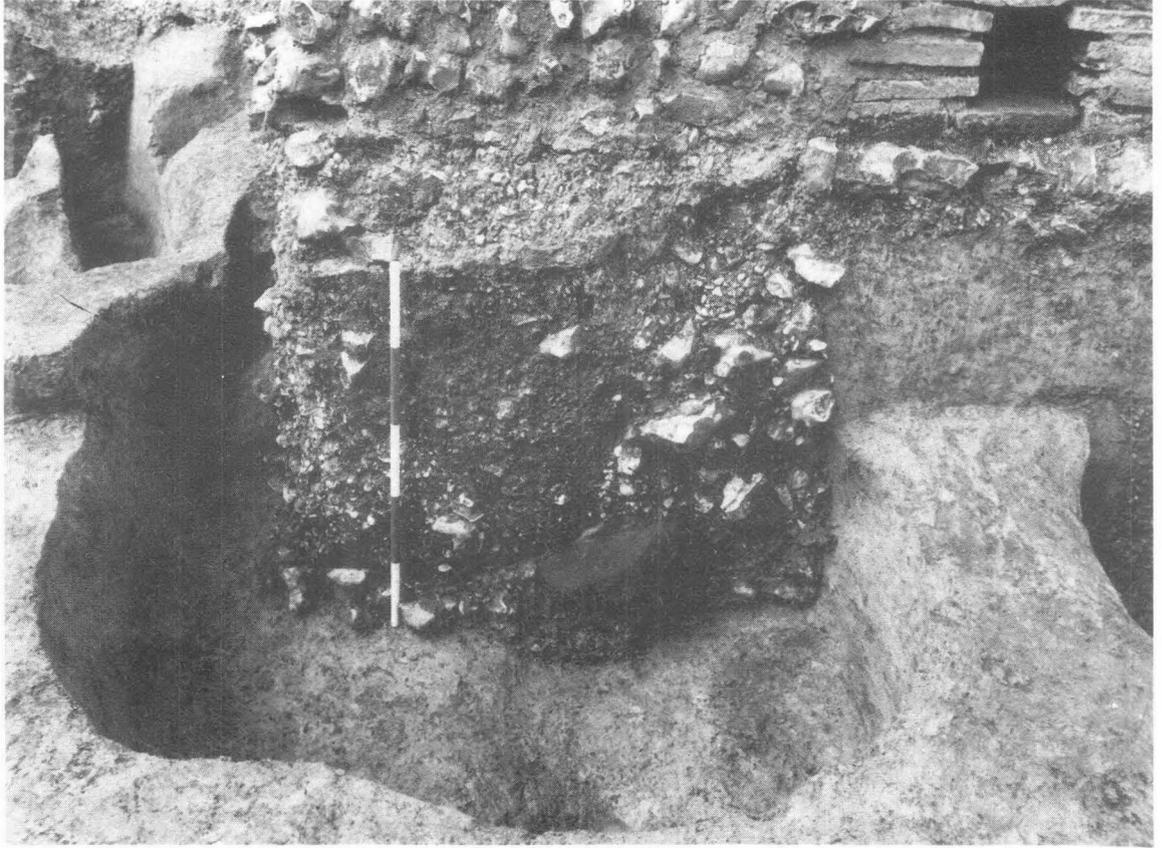
PL. XXV B Stone Phase: South Entrance looking east; elevation of eastern passage wall; timber phase 1/2 post-pits in middle ground (Scale, 2.0 m).



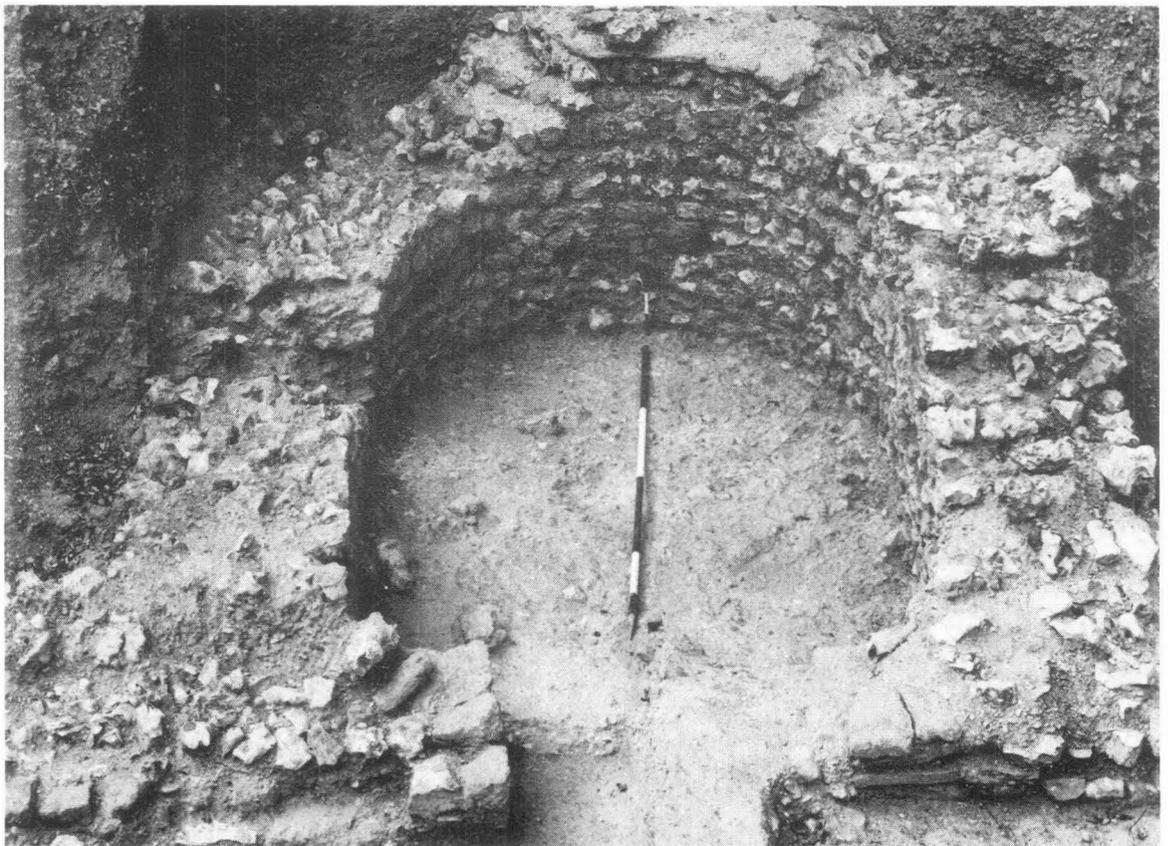
PL. XXVI A Stone Phase: South Entrance; elevation of northern end of west passage wall, showing tiled-drain and remains of the flint packing of post pit F1722.



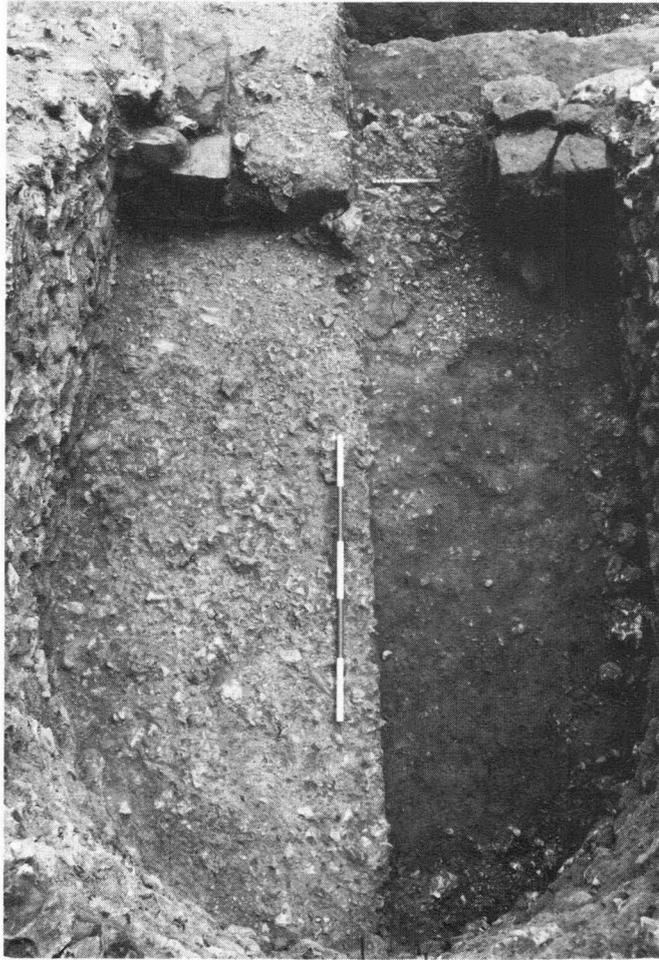
PL. XXVI B Stone Phase: South Entrance; west gate-post pit, F1722, from the east. Reconstructed (1983) passage wall above ancient fill (p. 39) (Scale, 1.0 m).



PL. XXVII A Stone Phase: South Entrance; east gate-post pit, F1717, from the west. Reconstructed (1983) passage wall and drain above (pp. 39, 67) (Scale, 1.0 m).



PL. XXVII B Stone Phase: West Recess; general view from the east (1983) (Scales, 2.0 m and 0.3 m).



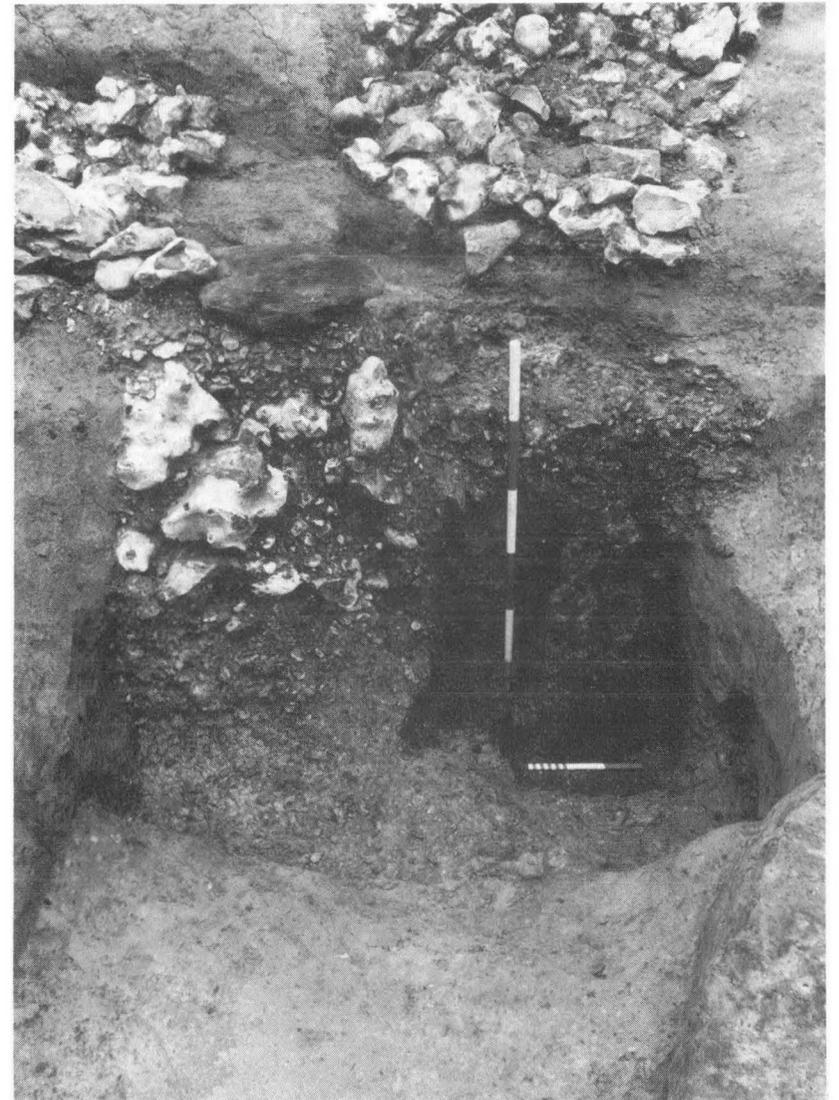
PL. XXVIII A Stone Phase: West Recess; interior showing cobbled (Stone Phase 1) surface (left); underlying clay (right) (p. 39) (Scales, 1.0 m (middle) and 0.3 m).



PL. XXVIII B Stone Phase: West Recess; interior showing detail of northern door-jamb and flints laid on the cobbled surface (p. 39) (Scale, 0.3 m).



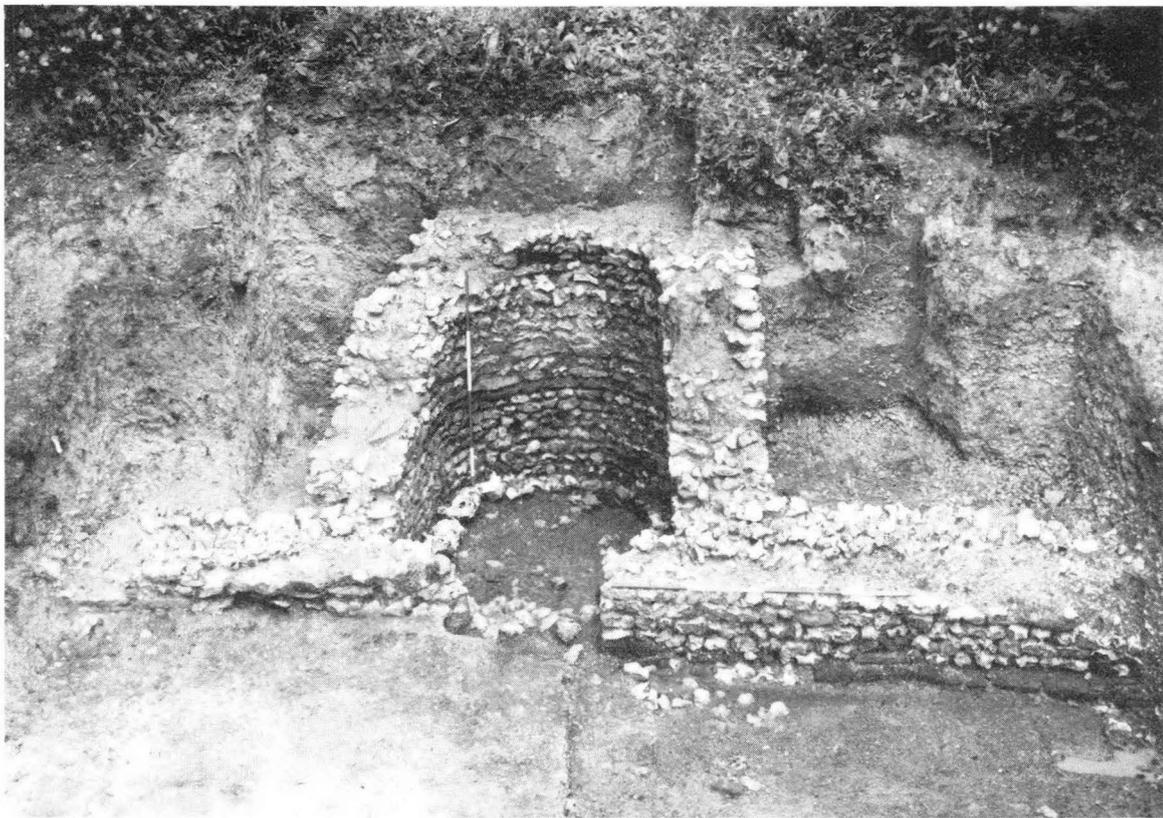
PL. XXIX A Stone Phase: West Recess; showing the location of the carved stone fragments in the foundation trench at the angle of the exterior of the recess and the arena wall on the north side (pp. 39, 136) (Scale, 0.3 m).



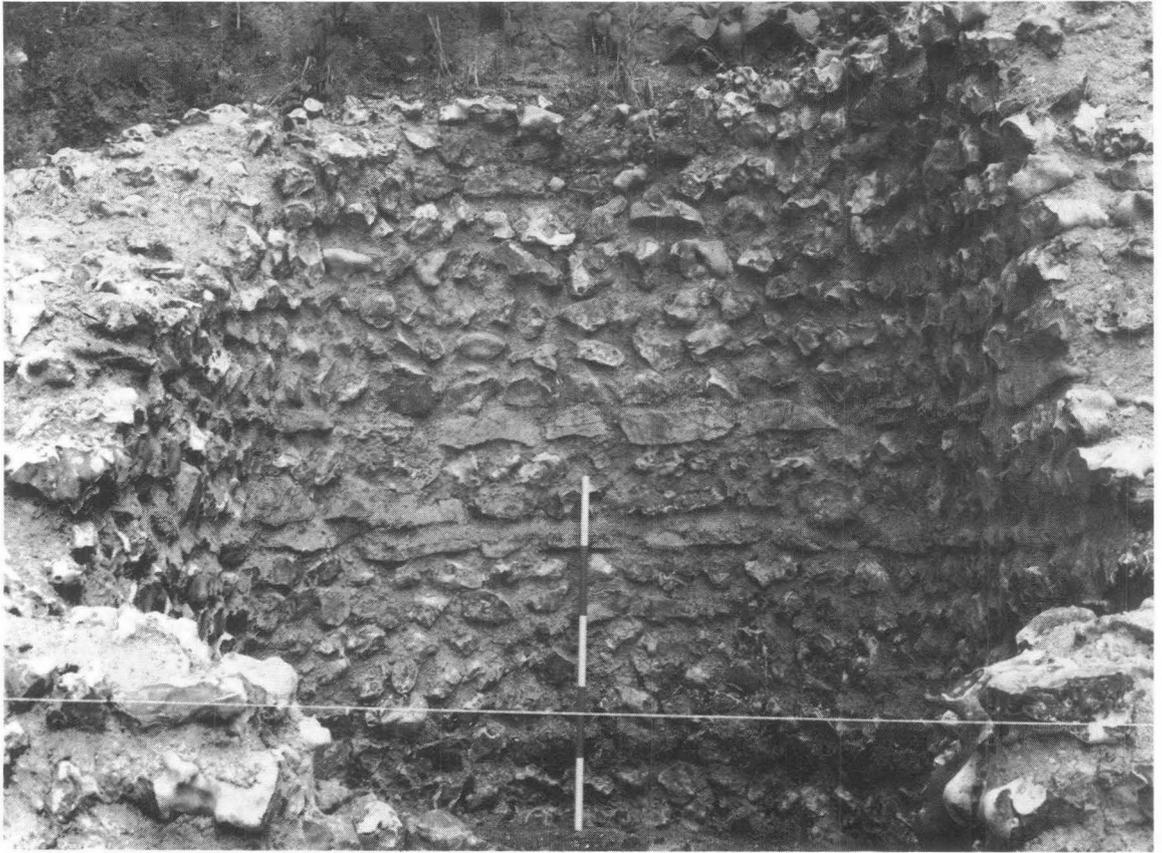
PL. XXIX B Stone Phase: North Entrance; gate post pit F639, from the west. The remains of the gate post are clearly visible (pp. 39, 139) (Scales, 0.3 m and 1.0 m).



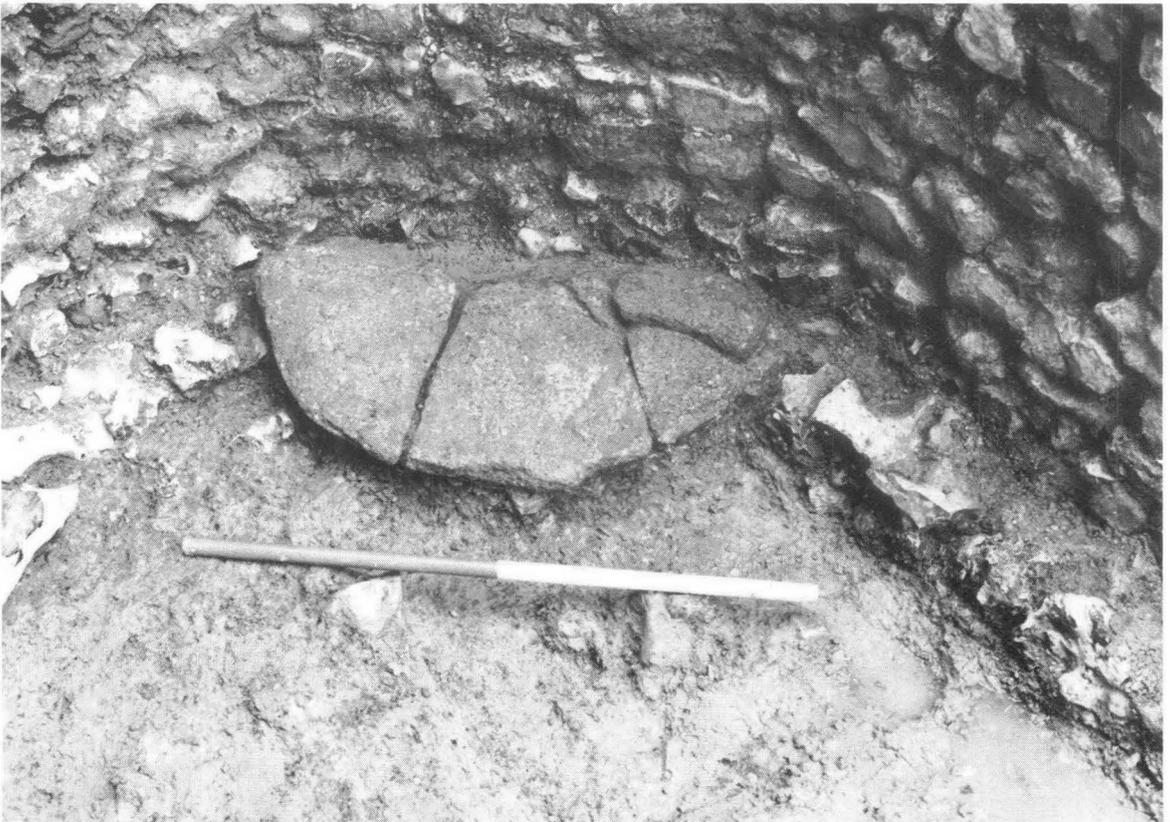
PL. XXX A Stone Phase: North Entrance; gate-post pits F637, 639; Timber Phases 1-2 post-pits and drain in course of excavation. Timber phase 1 threshold in foreground (F645/646) (Scales, 2.0 m (foreground) and 1.0 m)



PL. XXX B Stone Phase: East Recess; general view from the arena (Scale, 2.0 m).



PL. XXXI A Stone Phase: East Recess; detail of interior (Scale, 1.0 m).



PL. XXXI B Stone Phase: East Recess; shattered greensand slab lying on the foundation plinth (p. 47) (Scale, 1.0 m).



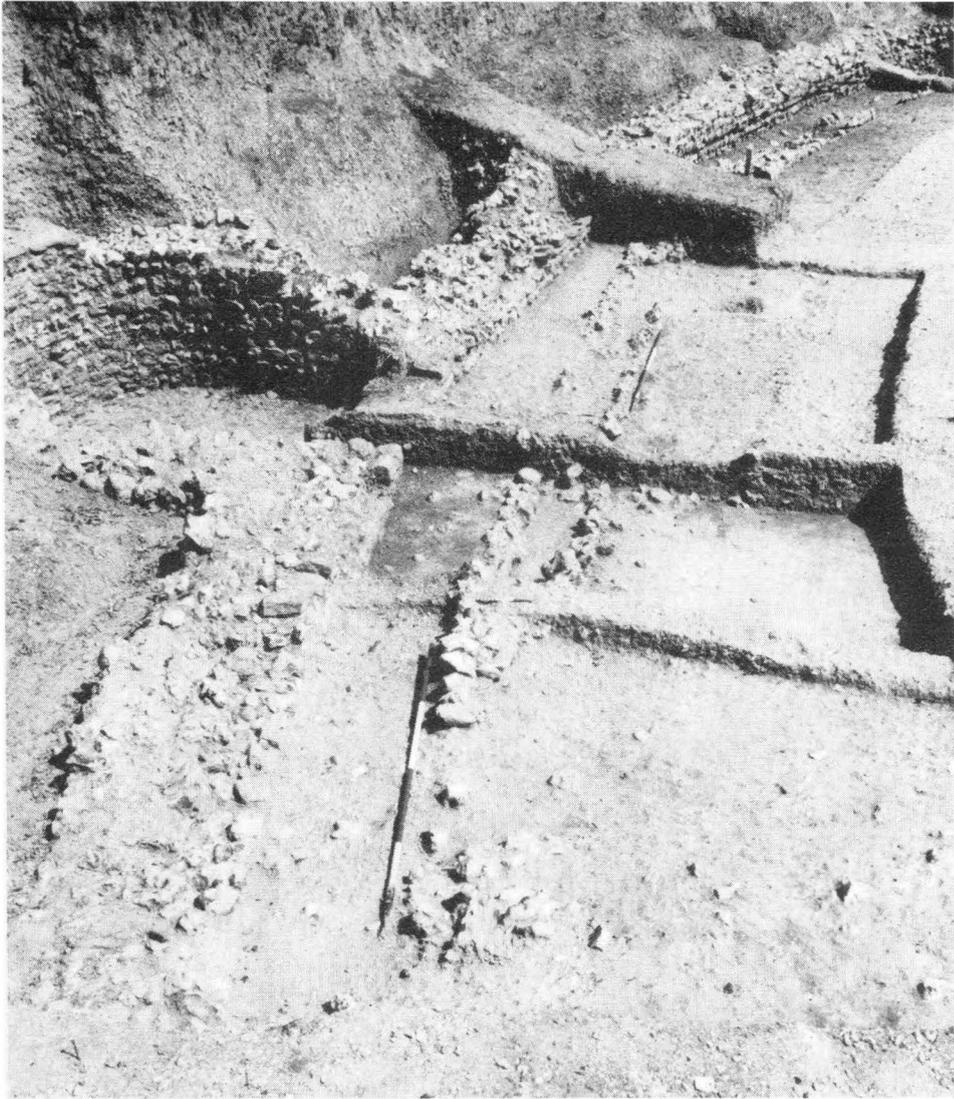
PL. XXXII Arena wall: south-east quadrant; general view (1982) (Scale, 2.0 m).



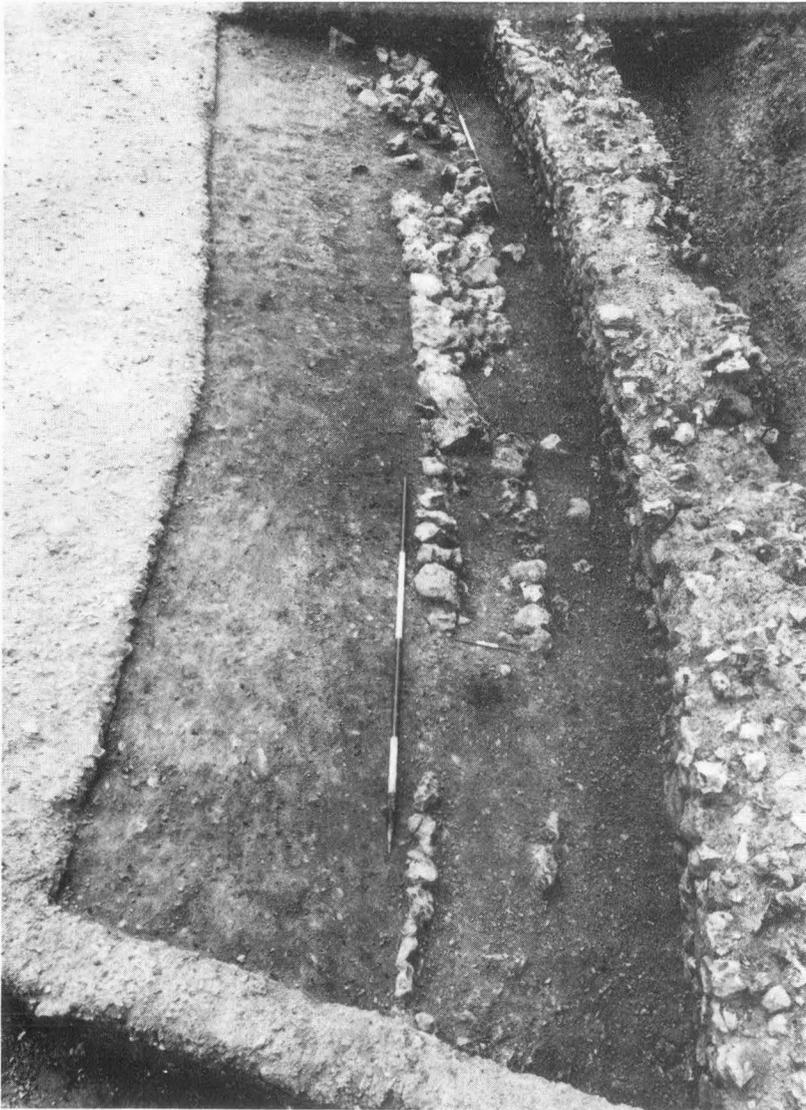
PL. XXXIII A Stone Phase 2: south-west quadrant; the late drain (F22, 568) from the South Entrance (Scale, 2.0 m).



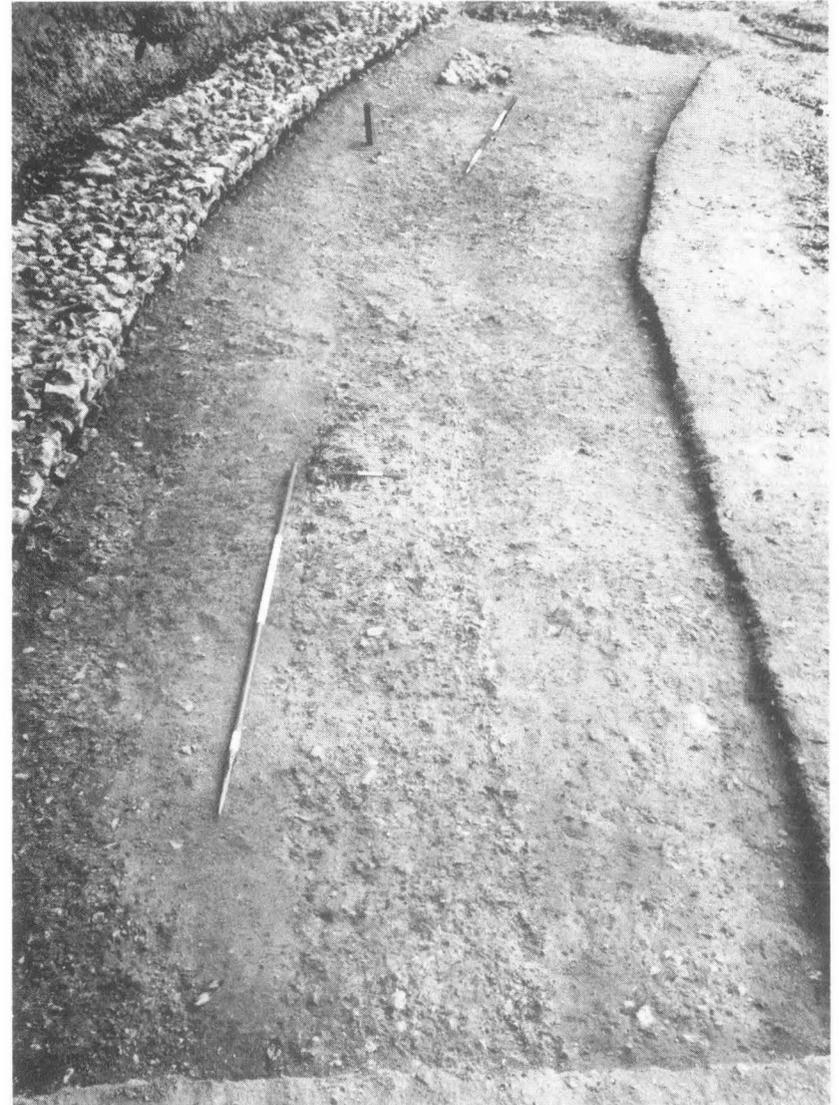
PL. XXXIII B Stone Phase 2: south-west quadrant: the late drain (F22, 568) cut by the later F1235 (see FIG. 33); from the south (Scale, 2.0 m).



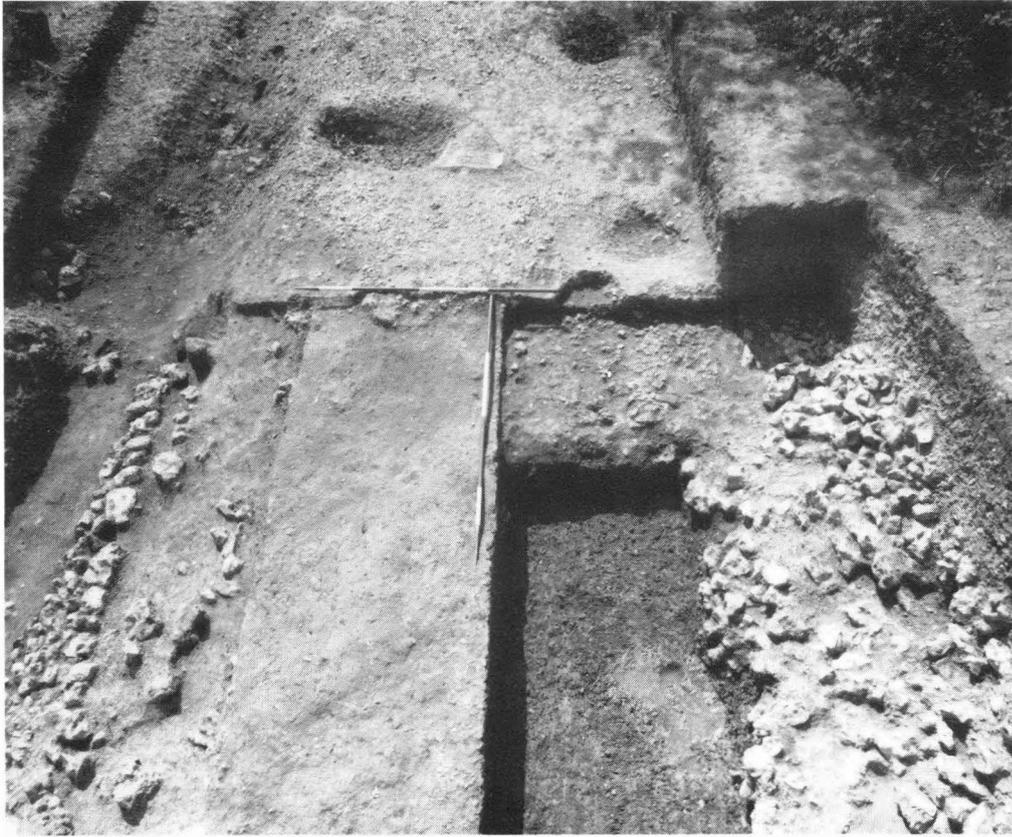
PL. XXXIV Stone Phase 2: the late drain F502 in front of the West Recess (Scale, 2.0 m).



PL. XXXV A Stone Phase 2: north-west quadrant; the late drain, F502, from the north (Scales, 2.0 m and 0.3 m).



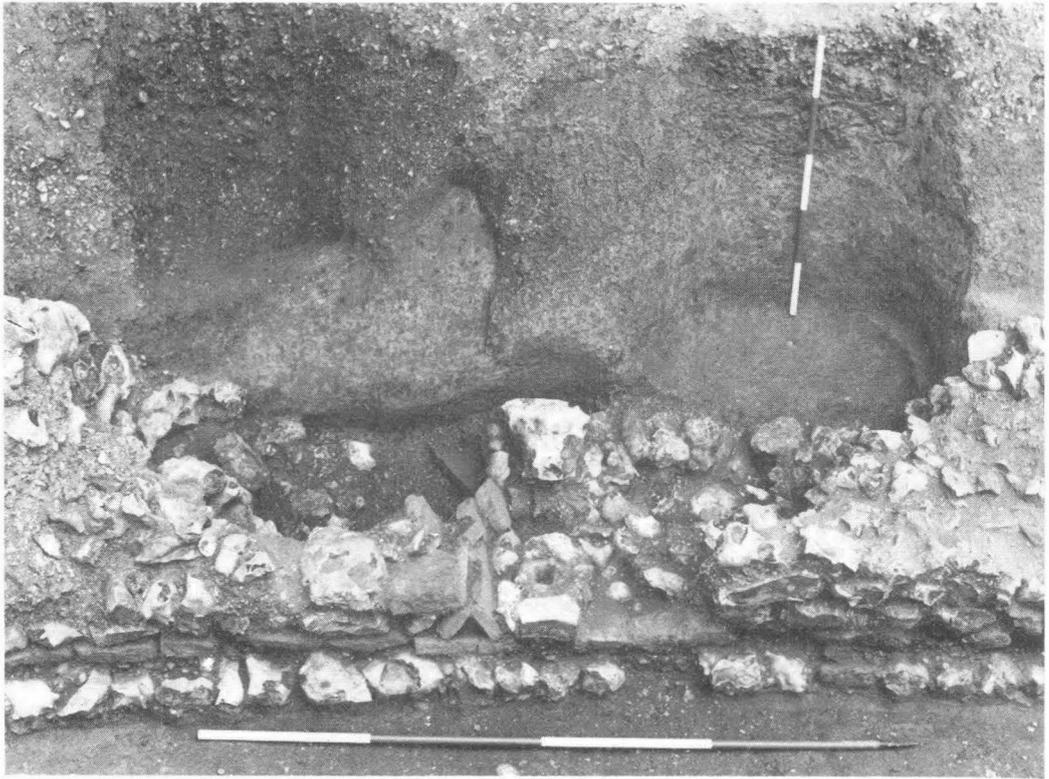
PL. XXXV B Stone Phase 2: south-east quadrant; the late drain, (F1103, etc.); view towards the South Entrance (Scales, 2.0 m and 0.3 m).



PL. XXXVI A North Entrance: general view from the north showing collapsed west wall (p. 57) (Scale, 2.0 m).



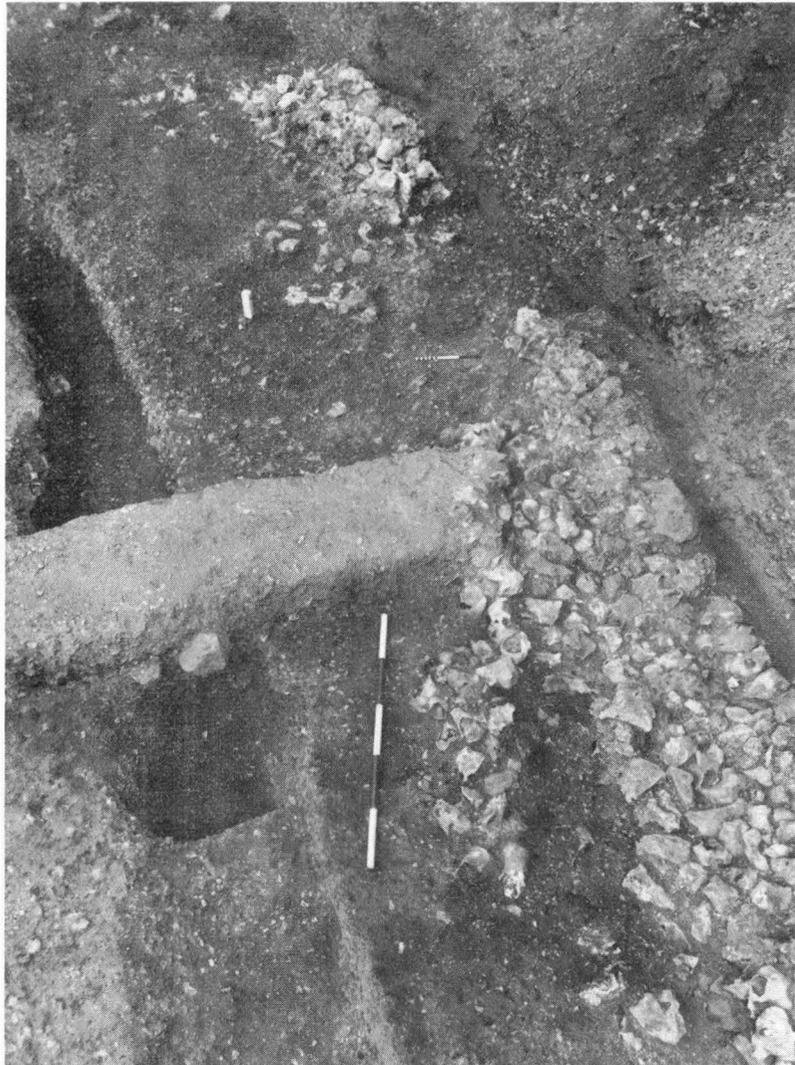
PL. XXXVI B Medieval Hall (p. 59): post-holes of east wall in course of excavation (1981) (Scale, 2.0 m).



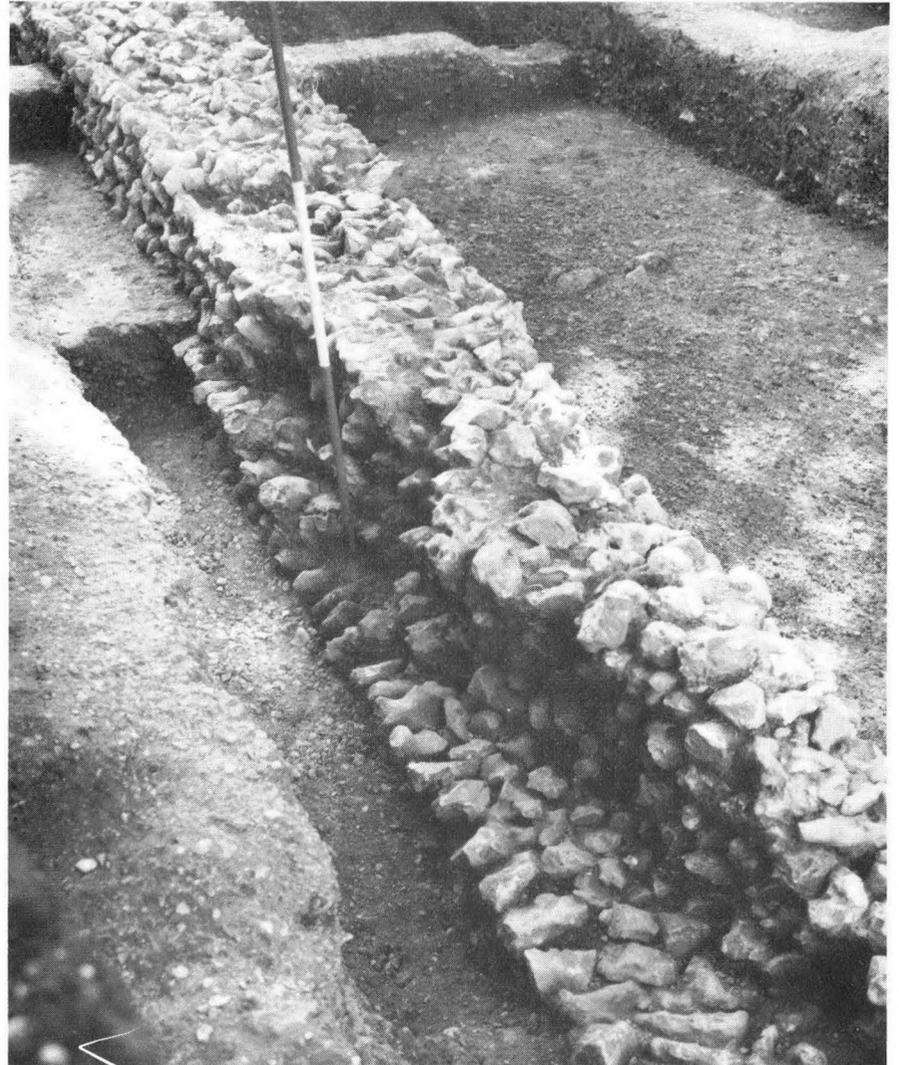
PL. XXXVII A Medieval occupation: south-west quadrant; post-pits F1216/1219 and 1218 (p. 62) (Scales, 2.0 m (foreground) and 1.0 m).



PL. XXXVII B Medieval South Entrance: palisade-trench F24 astride the angle of the Trench; west seating bank (p. 61) (Scale, divisions of 0.5 m).



PL. XXXVIII A Medieval occupation: south-west quadrant; un-mortared flint footings F1235, view towards unexcavated post pits F1216/1219 and 1218 (p. 62) (Scales, 1.0 m and 0.3 m).



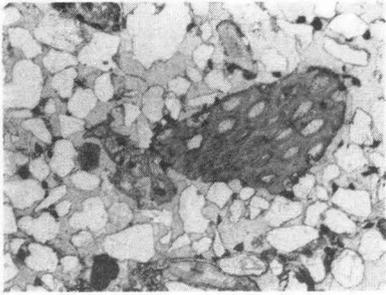
PL. XXXVIII B Medieval South Entrance: east seating bank, palisade trench cutting away the Roman east passage wall; view from the north (p. 64) (Scale, divisions of 0.5 m).



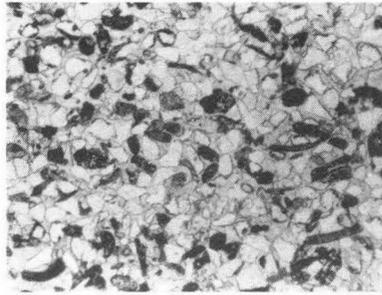
PL. XXXIX A Medieval South Entrance: east seating bank; section (north face) showing cut for palisade-trench coming forward over robbed wall (p. 64) (Scale, divisions of 0.5 m).



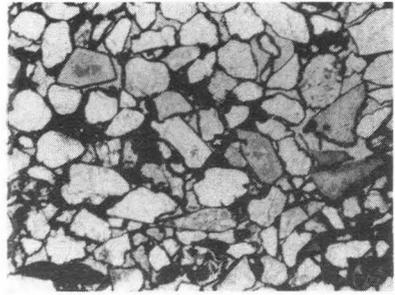
PL. XXXIX B South Entrance in course of excavation, from the arena: medieval robbing of the Roman passage walls and post-medieval stone-lined pit F3 are clearly visible (Scale, 2.0 m).



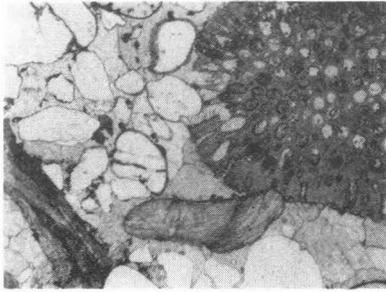
1



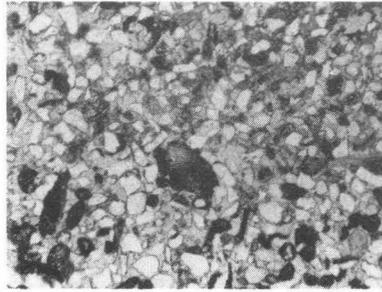
2



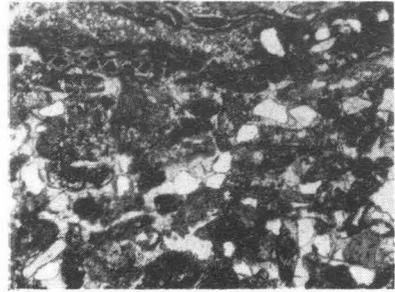
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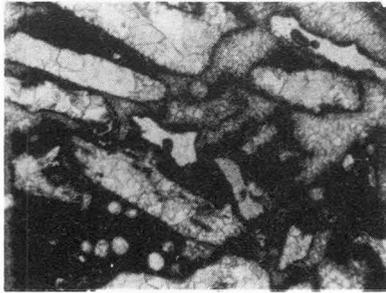
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5



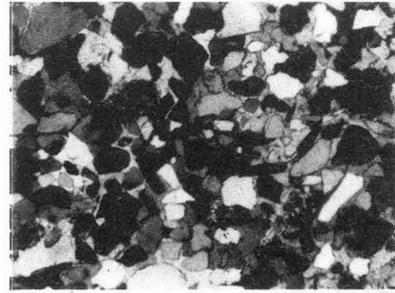
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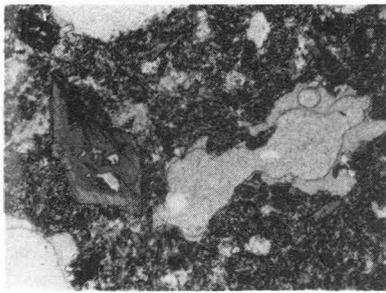
7



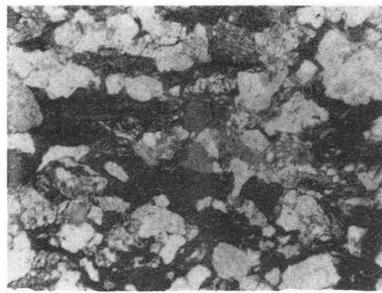
8



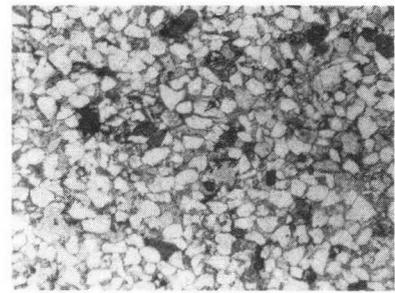
9



10



11



12

PL. XL Photomicrographs from thin-sections of specimens taken from the area wall (Nos. 1-9, pp. 140-2) and from querns and whetstones (Nos. 10-12, pp. 133-6). Plane-polarising light view except Nos. 4 and 9 (crossed-nicols). Scale, 15:1.

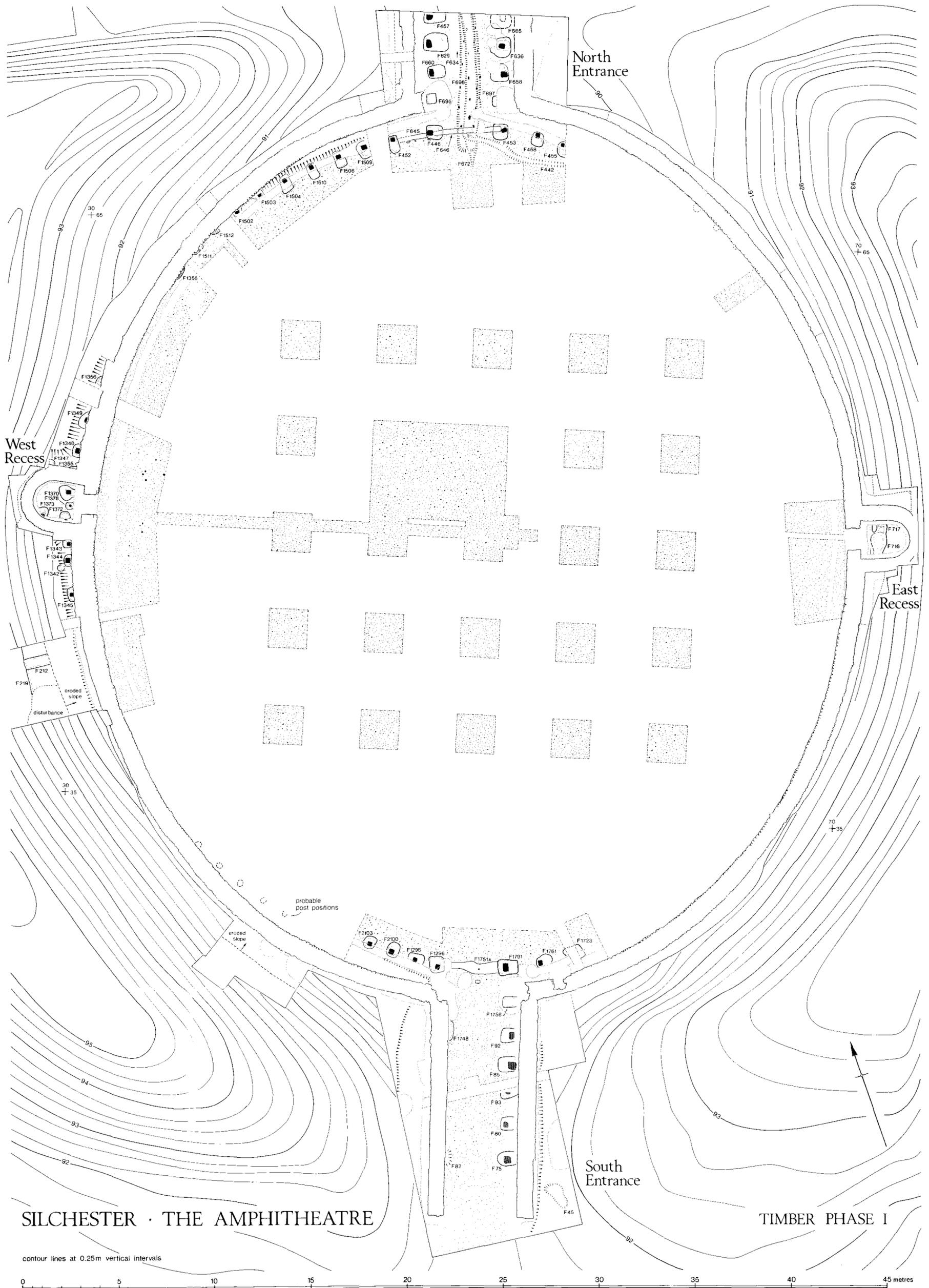
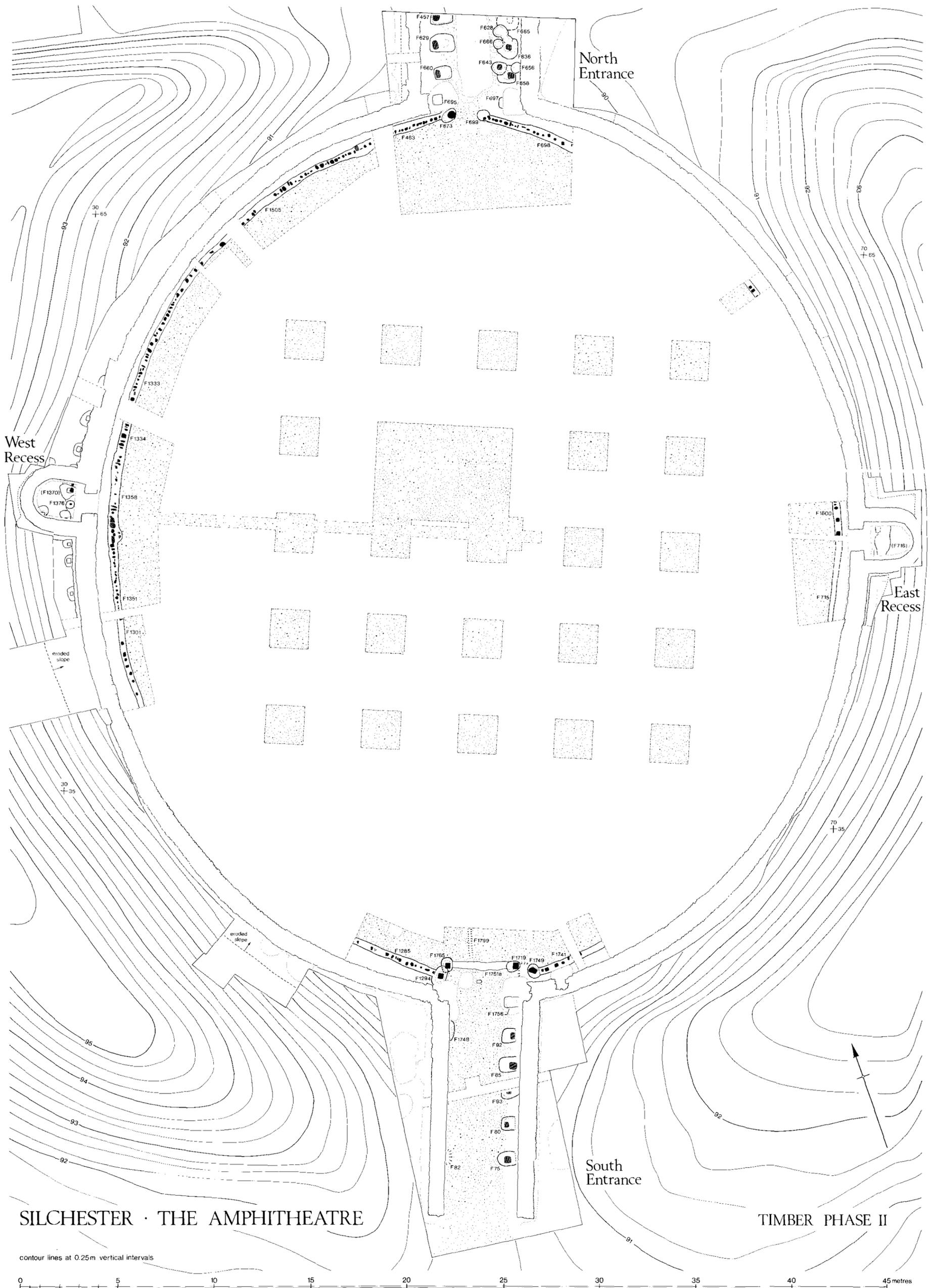


FIG. 81. Plan of Timber Phase I Amphitheatre (Scale, 1:150).



SILCHESTER · THE AMPHITHEATRE

TIMBER PHASE II

contour lines at 0.25m vertical intervals

0 5 10 15 20 25 30 35 40 45 metres

FIG. 82. Plan of Timber Phase 2 Amphitheatre (Scale, 1:150).

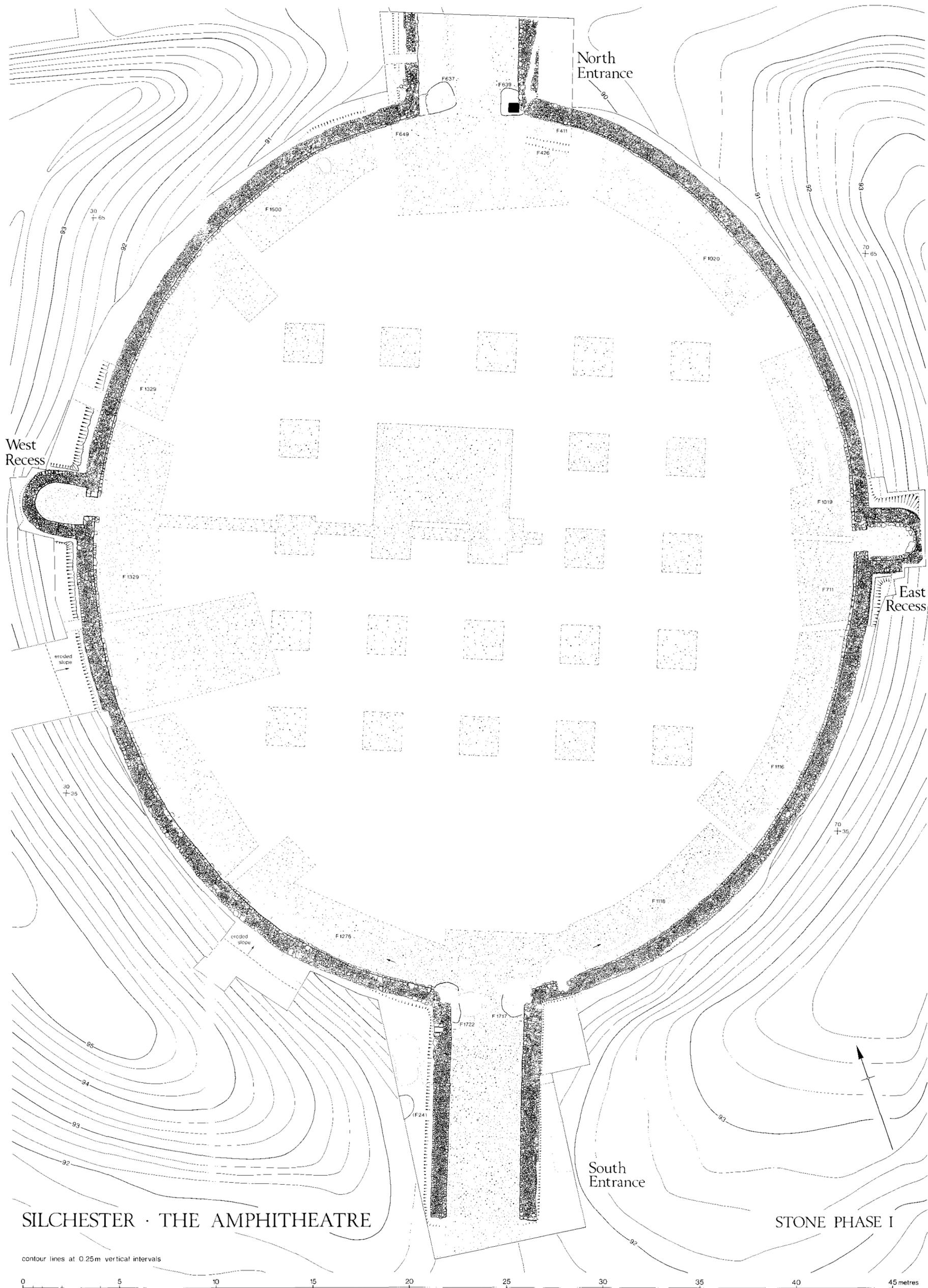


FIG. 83. Plan of Stone Phase 1 Amphitheatre (Scale, 1:150).

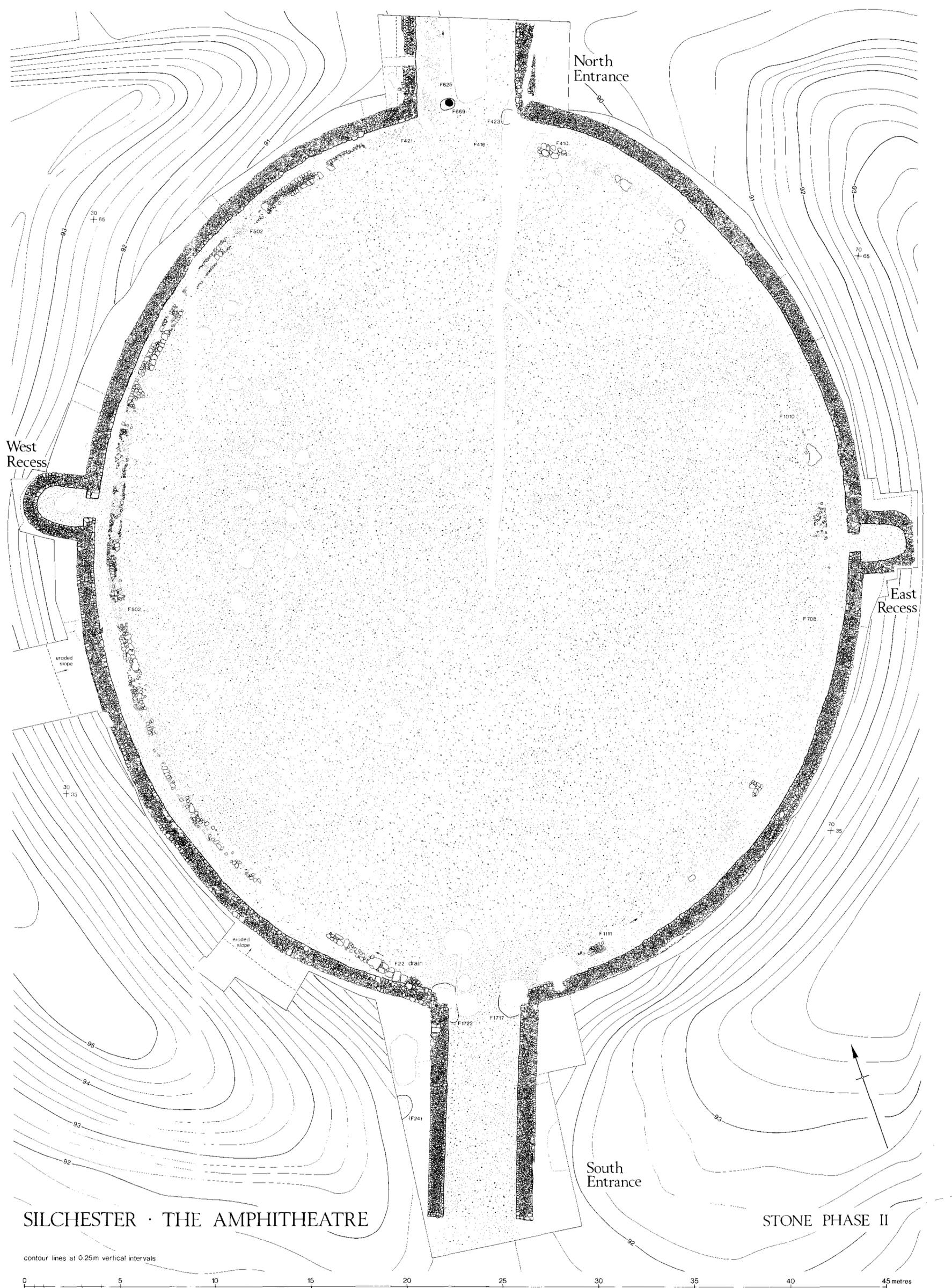


FIG. 84. Plan of Stone Phase 2 Amphitheatre (Scale, 1:150).

