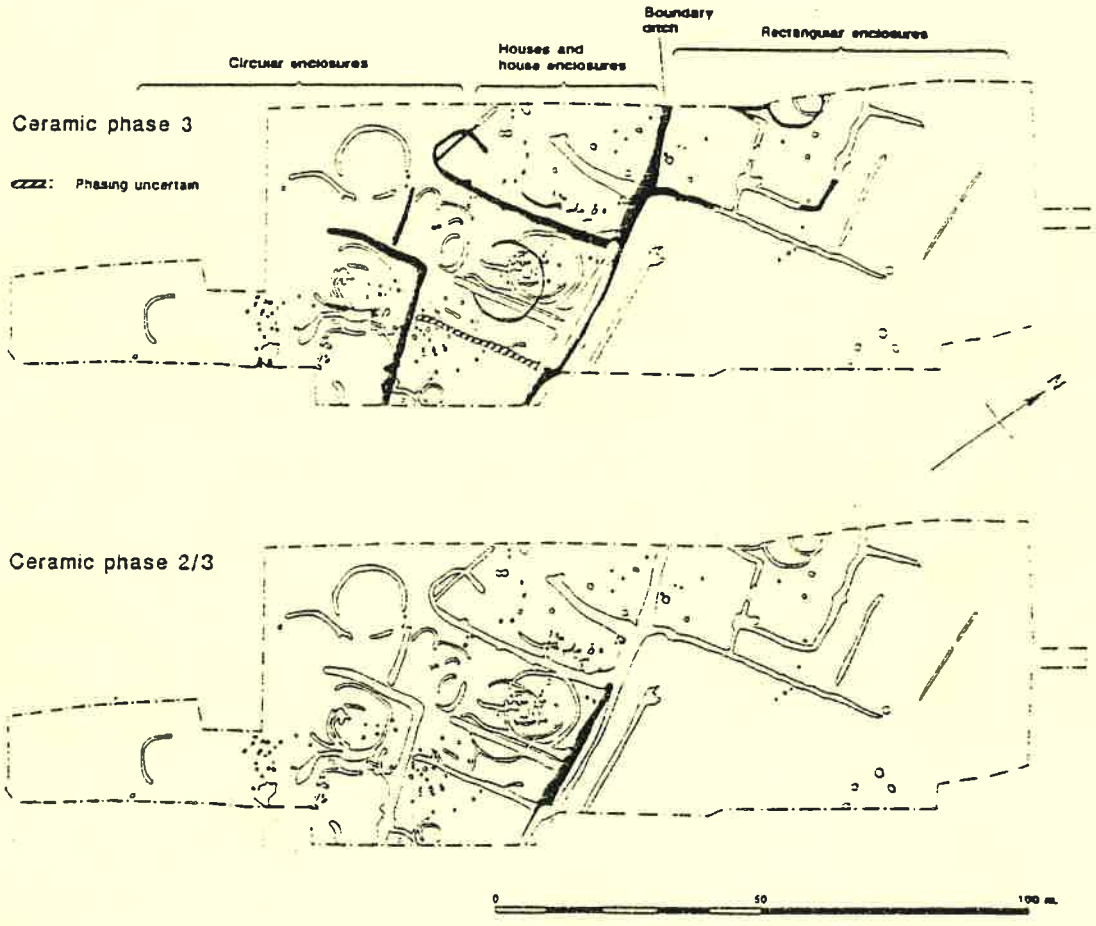
Excavations at Park Farm, Binfield, Berkshire, 1990

An Iron Age and Romano-British Settlement

and Two Mesolithic Flint Scatters



Oxford Archaeological Unit

Excavations at Park Farm, Binfield, Berkshire, 1990

An Iron Age and Romano-British Settlement and Two Mesolithic Flint Scatters

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Abstract

Investigations were undertaken in advance of the construction of housing, a hotel, a golf course and a road, following on from an archaeological assessment of approximately 85 ha carried out the previous year. Three areas were selected for more intensive examination:

Area E was the site of a small rural settlement, occupied from perhaps the first century BC to the second century AD and consisting of a nucleus of houses surrounded, and eventually enclosed, by two areas of enclosures. It is unusual in

being located on London Clay, in the high frequency of loomweights among the finds, and in the quantity of oak charcoal recovered. The organisation and function of the site and its place in the local settlement hierarchy are discussed.

Areas B and A/M both contained Mesolithic flint scatters. Fieldwalking, test-pitting and sieving methods are described and their results assessed, the technology and typology of the collection are described, and the scatters are placed in the context of contemporary regional settlement.

The archive will be housed in Reading Museum.

1. INTRODUCTION

Excavations at Park Farm, Binfield were conducted by the Oxford Archaeological Unit in 1990 in advance of development by Bryant Homes, Beazer Homes and Luff Developments Ltd. The sites had been identified in the course of the East Berkshire Archaeological Survey (EBAS) carried out by Thames Valley Archaeological Services (Ford 1987a) and an evaluation carried out by the Oxford Archaeological Unit (Oxford Archaeological Unit 1989).

1. Location and Topography (Figs 1 and 2)

Binfield is situated in East Berkshire on a band of London Clay between the Chalk to the north and Plateau Gravel to the south. The parish lies in the south-west centre of a northward loop of the Thames. Park Farm lies east of the village. Area E, the Iron Age and Romano-British settlement, lay at SU 853705 on the east side of Park Farm next to a stream known as the Cut, although its course at this point appears to be natural. The site sloped gently, from 48 m OD in the NE to 51 m in the south-west, rising towards the highest point of the parish at Amen Corner. The natural subsoil consisted of lenses of clay and concreted iron-rich gravel. Areas A/M and B, the Mesolithic sites, lay west of Park Farm on the east side of the ridge occupied by the modern village of Binfield, on the lip of the slope at SU 846706 and 847704. The natural subsoil of both was clay.

2. Previous Investigations

No cropmarks are visible on the aerial photographs of the excavated areas. The East Berkshire Archaeological Survey recorded three flint scatters (Areas A-C) and

two finds of Roman pottery (Areas D and E; Ford 1987a). In 1989 the Oxford Archaeological Unit carried out an evaluation of some 85 ha on behalf of Bryant Homes and Beazer Homes in advance of the construction of housing, a hotel, a golf course and a road. This demonstrated a low level of prehistoric and post-medieval activity over most of the area and tentatively identified a palaeochannel north of Area E, which subsequently proved to be disturbance from the laying of sewer mains.

In Area E, shovel test pitting identified a scatter of medieval or post-medieval tile and brick and one medieval sherd. Trenching, however, located two parallel ditches and other features containing 1st-2nd century AD pottery. These were interpreted as representing a Romano-British settlement, the approximate limits of which were established by negative evidence from surrounding trenches.

Shovel test pitting recovered struck and burnt flint from the areas of the known scatters. The only feature identified within them was an undated pit in Area C.

Following the evaluation the County Archaeologist specified that Area E and the apparent palaeochannel beside it were to be excavated and that the Area B flint scatter, now demonstrated to be confined to the ploughsoil, should be fieldwalked, shovel-test pitted, and sieved. Similar investigations would be extended to other scatters if they were to be disturbed during golf course construction. In the event this applied only to Area A/M.

3. Documentary Evidence

The Binfield area is not ideal for settlement, as it lies on heavy clay soil away from large rivers. Nevertheless, by the time of the first documentary evidence for the existence of the village of Binfield in 1167, when the priest witnessed a document (E. Mosses pers. comm.), Binfield was already a flourishing community with a church. In the 13th century the parish was part of Windsor Forest, within whose boundaries there were many small villages. Binfield was part of Cookham Manor, perhaps as a woodland/pasture outlier, and was owned by the Crown, forming a portion of the lands awarded to the Queens of England on their marriage.

On Pride's map of 1790 the area of Park Farm is indicated as Binfield Common. The areas of medieval common land in parishes around Binfield are flat. Although probably wooded, with mature oak trees interspersed with coppices, these commons would have been more accessible than the more heavily wooded clay hills and may represent the most easily exploited land in the forest.

Just to the north-east of Area E is Binfield Manor. An independent manor at Binfield seems to have been a late development; it is first mentioned in 1544 and should probably be seen as part of the 16th- and 17th-century pattern of division into smaller portions of manors which had been previously been parish-sized or larger.

The area of Park Farm is next mentioned in the mid 18th century, when one

Francis Wilder owned a small enclosure to the west of Binfield Manor. This enclosure was north of Tippets Lane, which ran from the ford at the south of the manor grounds to the Golden Cross south of what is now Park Farm. This lane and Wilder's enclosure are clearly visible on Roque's map of 1761 and Pride's map of 1790 and can be seen to the north of area E on Figure 2; Tippets Lane forms the NE/SW field boundary starting at the footbridge and the enclosure is represented by the lozenge-shaped fields immediately to the north of the area E and west of the Cut. The wood which lies to the south-west of Park Farm changed its name between 1761 and 1790, as the two maps name it as Hawkswood and Popeswood respectively. This commemorates the poet Alexander Pope (1688-1744), who lived in Binfield as a boy. The village of Binfield is thought to have shifted south from its original focus (Victoria County History of Berkshire, 119).

2. AREA E, THE IRON AGE AND ROMANO-BRITISH SETTLEMENT

1. Method of excavation (Fig. 3)

The ploughsoil was stripped using a 360° excavator. The modern ploughsoil and a slightly older but still recent ploughsoil were removed in three trenches, 107, 108 and 109, over an area which eventually totalled 10300 m^2 (Fig. 2). The surface of the natural clay thus revealed was hand-cleaned to clarify the features cut into the natural, and the site was planned immediately while the features were still fresh. This strategy was not totally successful, as it transpired that visibility was at its best three to six weeks after stripping; this led to the far from ideal circumstance of further features (e.g. ditch 1246) being identified on the

penultimate day of the excavation.

[Insert Figure 3]

The initial excavation was planned to take place over six weeks on an area of 7500 m^2, corresponding to the extent of the settlement as indicated by the evaluation, with a further two weeks' contingency funding available for an additional area of 2500 m^2, which was taken up. The number of features located meant that the site had to be sampled selectively, some being sampled during stripping to aid in the formulation of the excavation strategy. The strategy adopted was as follows (see Fig. 3 for location of features).

i) A large boundary ditch running from north-west to south-east across the site and rectilinear enclosures to the south-west of it were sampled for stratigraphic relationships and dating evidence.

ii) A large single penannular gully (1020) in the south-west was investigated to see if it formed part of a house.

iii) An area of pits in the centre of the site north of two intersecting ring-gullies was examined to determine whether they formed an aisled building (this possibility was excluded).

iv) The two intersecting ring-gullies (Houses 1 and 2) were excavated.

v) A post-built roundhouse (House 3) was defined, although the complete set of postholes was not found until the area to the south-east was stripped during the contingency phase.

vi) A concentration of small circular and subcircular gullies in the angle of a ditch

in the south-west was cleaned and excavated, resulting in the definition of a further post-built roundhouse (House 4).

vii) A complex of rectangular enclosures north-east of the boundary ditch was sampled for stratigraphic relationships and dating evidence.

viii) Furrows to north-east of the boundary ditch were investigated and were found to be later than the 15th century.

ix) Large, round, charcoal-filled features in the north-east were excavated and found to date from the 15th-century.

x) The contingency funding was used to strip another 2800 m^2 of overburden to see whether and how far features extended beyond the limits of the original trench. These areas can be seen to the SW and SE of the original trench on Figure 2 and were hand-cleaned. The very few archaeological features located were sampled to determine their nature and date.

xi) A small trench was dug towards the Cut to locate the apparent palaeochannel and to determine its relationship, if any, to the settlement.

2. Problems of Phasing

Stratigraphic relationships were not as useful, nor as numerous, as might have been expected. This has entailed reliance on the three principal ceramic phases (CPs) defined in detail by Paul Booth in the pottery report. They are:

CP1 'middle Iron Age'

CP2 late Iron Age-early Romano-British ('Belgic type')

CP3 Romanised, probably dating from the later 1st century AD

Features ascribed to each are shown in Figures 16-18. There are anomalies between stratigraphy and ceramic phasing, especially in the successive cuts of the central boundary ditch. These may be attributed in large part to the redeposition of material in the course of the silting and recutting of the ditch over at least a couple of centuries. Many features produced little or no datable material. The site is therefore described by elements or areas rather than phase-by-phase.

3. Site Description (Fig. 3)

Four main elements were identified within an organised layout: a large boundary ditch, up to four houses with their domestic areas, an extensive area of circular enclosures, and a network of rectangular enclosures.

It is possible that the northern and north-western edges of the settlement may have been destroyed by the construction of sewerage mains (Fig 2). The effect of ploughing on its peripheral areas can only be guessed at.

[Insert Figures 4 and 5]

The Central Boundary Ditch (Figs 3, 4, 6 and 7)

There was a long-term boundary, consisting of at least ten cuts on the same alignment, running roughly north-west to south-east between the domestic area and the rectangular enclosures. The northern terminals of three cuts, 1017, 1040 and 1154, were identified, but the southern terminal of only one, 1051, was located. Stratigraphic relationships indicated that the ditch 'moved' southward, i.e.

that each successive recut started south-east of the previous one.

Three cuts (1011) were visible in section at the north-west edge of the site (Fig. 4). They were just over 1.0 m deep and just under 2.0 m wide (Fig. 6e). Overlying their fills was a top layer of silting (1155 in Fig. 6e) containing large quantities of domestic debris. In one section (1011/D) this layer contained 1.75 kg of burnt flint, as well as the only stratified metal small find, a copper alloy brooch pin. All the layers of the ditch, from top to bottom, contained pottery of CP3. 16 m to the south-east was the north-west terminal of a second cut (1154), again with a topmost silting layer (1155, Fig. 6d and e), both containing pottery of CP3. 10 m to the south-east again, these four cuts, of which only one was visible in section (1087), were cut in turn by the north-west terminal of a third cut (1040: Figs 6c and 7) the upper fills of which contained pottery of CP3 and the lower fills a small amount of pottery of CP2 -- one of the potential anomalies between stratigraphy and ceramic phasing noted above. The upper fills of 1040 contained hawthorn and abundant oak charcoal dumped with a large amount of pottery and loomweight fragments. 16 m to the south-east, 1051, the earliest of three cuts visible at the north-west edge of the excavation, terminated. It contained no finds. The terminal was visible it lay slightly south-west of the rest of the cuts (Fig. 4).

7 m to the south-east these phases of the ditch were cut by the terminal of the fourth cut, 1017, which continued off the site to the south-east. It contained pottery of CP3. Just visible in the section at the south-east edge of the site was an earlier cut (1018) which also contained pottery of CP3. At this point 1027 had

as one of its upper fills a layer of burnt flint: over 100 kg were excavated from two sections. This part of the ditch also contained abundant oak charcoal and possible loomweight fragments.

No gaps with opposed terminals, permitting passage across the ditch were identified. Earlier gaps may have been removed by later cuts.

North-east of this complex of ditches and parallel to it was a small ditch, 1015, which terminated just south-east of the terminal of 1154. It had no stratigraphic links to any other features, and the single excavated section contained no pottery.

Enclosures South-West of the Central Ditch (Figs 4 and 5)

A series of shallow gullies and one large ditch (1064) were aligned at right-angles to the boundary ditch. All were cut by the successive terminals of the boundary ditch and contained loomweight fragments. They are described from north-east to south-west.

[Insert Figures 6 and 7]

1064 was the largest of these features, 3.00 m wide and 1.00 m deep. Its east terminal was just cut by the boundary ditch (Figs 4 and 6e).

1029, 1.28 m wide and 0.55 m deep, was cut by the terminal of ditch 1040 (Fig. 6a and 6b). It could not be determined from the sections whether 1029 turned to run

within the line of the boundary ditch or terminated at the intersection (Fig. 7). This feature contained many finds of CP3 and its dark fill suggested domestic activity nearby. It had two cuts, an earlier shallow gully and a later, deeper, V-shaped one which may not have extended much further south-west than pit 1060, which it cut (Fig. 6b). Loomweight fragments were found in 1029 and 1060.

1004 and 1005, two almost parallel gullies, lay 1.0 m north-west of the terminal of boundary ditch cut 1051. 1004 was 0.82 m wide and 0.16 m deep, 1005 1.32 m wide and 1.31 m deep, with two cuts. Both contained pottery of CP 1/2 and 1004 contained abundant alder/hazel and hawthorn charcoal. They were cut by boundary ditch cuts 1051 and 1040 (Fig. 6c). The gully of House 1 (1116) cut both 1004 and 1005 while the gully of House 2 (1047) was cut by 1004.

The most south-easterly of these features consisted of an initial cut, 1003, replaced and/or extended in its north-east part by 1038. 1003 ran through House 3 but no stratigraphic relationship was discernible. 1038 lay at right-angles to and was cut by the terminal of boundary ditch cut 1017 and apparently turned at this point to become 1016/1043, running parallel to the boundary and slightly north-east of it. Both 1003 and 1038 were of similar dimensions, 0.90 m wide and 0.30 m deep; 1016/1043 was slightly larger, 1.20 m wide and 0.42 m deep. 1016 contained a substantially complete samian bowl.

[Insert Figure 8]

Structures

Post-pipes could not generally be distinguished. The dimensions of postholes are given here where appropriate.

House 1 (Figs 4 and 8) consisted of penannular gully, 1116, with an internal diameter of 14.10 m and a central posthole, 1118. The gully was very slight, at most 0.09 m deep and 0.26 m wide, and the only break in its circuit suggested a south-west-facing entrance. The gully also contained a large quantity of burnt material which was presumably domestic in origin, consisting of alder/hazel, oak and ash charcoal (Table 5). The gully cut gullies 1004 and 1005 as well as 1047, the ring-gully of House 2, and 1117, an arc of gully parallel to 1047 and within it. The location of the 'central' posthole 1118 may be entirely fortuitous, since there were numerous nearby postholes (Fig. 4), but it lay slightly to the south of them and contained pottery of the same ceramic phase (CP3) as the gully. The posthole was 0.40 m in diameter and 0.24 m deep.

The section of the boundary ditch (1040) next to House 1 contained carbonized plant remains likely to represent the dehusking of grain (Robinson, below). This was the only context to contain carbonized plant remains, suggesting that this activity was localilzed.

House 2 (Figs 4 and 8) was formed by two concentric features, penannular gully 1047, 0.70 m wide and 0.23 m deep with an internal diameter of 13.2 to 13.6 m, and 1117, an arc of gully, perhaps a wall slot, 0.12 m wide and 0.09 m deep, 1.55

to 1.20 m inside 1047. 1047 contained pottery of CP1. Among the many postholes within the circuit, 1217, 1218 or 1219 may have been central to the structure, but this is conjectural. These postholes ranged from 0.20 m to 0.35 m wide and from 0.10 m to 0.14 m deep. The gap in the circuit of 1047 provided a south-west-facing entrance on a similar alignment to that of House 1. Postholes 1129 and 1260, cut into the terminals, may mark a later modification of the entrance. Both were rather larger than the possible internal postholes. 1260 contained abundant oak charcoal, 1129 contained loomweight fragments, and one small, possibly intrusive, sherd of CP3.

[Insert Figure 9]

House 3 (Figs 5 and 9) has been tentatively identified within a cluster of postholes south of Houses 1 and 2. It was represented by a subcirclar setting of nine postholes (1065, 1066, 1141, 1142, 1144, 1145, 1208, 1146, and another, unnumbered, between 1145 and 1208), 13.9 m in internal diameter with a central posthole 1092. The postholes in the circle ranged from 0.12 m to 0.36 m deep and from 0.25 to 0.80 m wide. Only one, 1208, contained pottery, of CP1. A west- or south-west-facing entrance may have been destroyed by ditches 1002 and 1003 (Fig. 5); alternatively, 1145 and 1144 might represent a north-east-facing entrance, especially as they lay slightly outside the line of the other post-holes.

House 4 (Figs 5 and 9) was identified among a cluster of post-holes south-west of House 3. It seems to have had an inner ring 10.20 m in internal diameter,

surviving as ten postholes (1197, 1210, 1222, 1226, 1229, 1238, 1242, 1244, 1245 and 1247) which ranged from 0.40 to 0.47 m wide and 0.12 to 0.29 m deep. A slighter outer ring or the remains of another structure may be represented by the arc of 1194, 1195, 1196, 1197, 1198, 1209 and 1230, postholes between 0.18 and 0.48 m wide and 0.05 and 0.29 m deep. There appeared to be three central postholes, 1248, 1249 and 1250, which ranged from 0.35 to 0.55 m wide and were about 0.10 m deep. In the inner ring, posthole 1222 contained 0.25 kg of burnt flint and 1210 contained 0.50 kg. In the outer arc, posthole 1209 contained 1.00 kg. of burnt flint and posthole 1194 pottery of CP1. 1245 and 1247 may have formed a north-east facing entrance, alternatively, a west- or south-west-facing entrance may be reflected by the disposal of rubbish in the form of charcoal and large quantities (3.625 kg) of fired daub in pits 1223 and 1224, immediately to this side of the structure.

Internal and external features. There was a dense group of 35 pits and postholes within the area of House 2 (Fig. 4), but these did not appear to form any recognisable structures. There were also two short lengths of gully (1115 and 1128) where the circuits of Houses 1 and 2 intersected. Gully 1128 cut the gully of House 2. Two of these features and both the gullies contained pottery of CP1, three contained pottery of CP2, six of CP 2/3 and three of CP3. Gully 1128 contained a small amount (0.25 kg) of burnt flint. Loomweights were found in 1128 and in several small pits and postholes (1129, 1130 and 1147).

Within the area of House 3 (Fig. 5) there were 13 features (1067, 1069, 1070, 1071,

1078, 1079, 1080, 1081, 1082, 1086, 1101, 1240 and 1241) in the south-west quadrant, three short lengths of gully (1225, 1227 and 1237) in the north-west quadrant and two postholes to the south-east (1077 and 1093). 1070 and 1086 contained pottery of CP1 and 1071 of CP3. 1067 and the gully 1237 contained a small amount of burnt flint (together 1 kg). Two postholes (1086 and 1070) within the circle contained pottery of CP1.

North-west of Houses 1 and 2 was an area of 30 pits and postholes extending about 20 m south-west from the boundary ditch (Fig. 4). Noteworthy among them were three large, round, charcoal-filled pits (1048, 1052 and 1053). They varied in depth, from 0.09 m to 0.52 m, and were between 0.96 and 1.40 m wide. Pit 1048 contained abundant alder/hazel and oak charcoal and 1052 and 1053 contained oak charcoal. There were also three short lengths of curved gully (1095, 1096 and 1061). Two postholes (1097 and 1104) contained pottery of CP1, two pits pottery of CP2 (1048 and 1056) and one pit (1088) pottery of CP2 or 3. One posthole (1054) and two large pits (1060 and 1052) produced pottery of CP3, as did two of the gullies (1096 and 1095). The other gully (1061) contained pottery of CP2. Loomweight fragments were found in 1060, 1075, 1083, 1088 and 1096. Posthole 1054 yielded abundant oak charcoal. Posthole 1083 contained 2.25 kg of burnt flint.

North-west of House 4 (Fig. 5) were three small pits (1223, 1224, 1251). 1223 and 1224 contained charcoal and burnt daub and 1251 contained 1.50 kg of burnt flint. 1223 contained pottery of CP2. Inside House 4 were three postholes (1233, 1252

and 1253). Just to the south-west of House 4 were several closely intercut features, one gully aligned roughly north-west to south-east (1190), another aligned north-east to south-west (1191), and a pit (1192). These had been filled by later silting (1202), which was very dark and contained 2.50 kg of burnt flint. It was subsequently cut by stakeholes or animal burrows (1199, 1200 and 1201). Gully 1190 contained pottery of CP1, 1202 pottery of CP3.

Domestic Focus

All the features described so far lay south-west of the boundary ditch. In contrast to the numerous small pits and postholes in this area, there was only one small pit (1119) north-east of the boundary. The pit itself was 1.20 m wide by 0.38 m deep and contained pottery of CPs 1 and 2, abundant alder/hazel and oak charcoal and 4.25 kg of burnt flint. The combination of small, non-linear features and probable houses in a single area

of the site corresponds to a concentration of artefacts, food remains, charcoal and burnt flint -- the debris of occupation, exemplified by the distribution of daub, loomweights and charcoal (Fig. 15). No domestic debris was found to the N of 1064, the most north-westerly of the ditches running a right-angles to the central boundary. There is a distinct impression of domestic focus defined by 1064 to the north-west and the central ditch to the south-east, with an outlier in the area of House 4.

Circular and Subcircular Enclosures (Figs 3 and 5)

Most of the south-west of the site was occupied by large, shallow, subcircular

enclosures, roughly the same size as the gullies of Houses 1 and 2, but with no internal features and little domestic debris, and sometimes with more than one entrance. Only one, 1166, lay within an incomplete enclosure. There were no enclosure ditches to the south-west.

1013 was horseshoe-shaped with a diameter of about 8.0 m and was 1.65 m wide and 0.62 m deep. Its entrance was quite large and faced north-east. It was the only circular enclosure which clearly had only one entrance and the only one of these enclosures to postdate a linear feature, cutting both the south-west (earlier) end of 1029 and 1012, which ran north from the end of 1029.

1020, south-west of 1013, had an internal diameter of 11.2 to 12.0 m and two entrances, to the north-east and south-east. It was 0.60 m wide and 0.22 m deep. Lapping the larger, south-east entrance was an arc of gully (1028). 1039, which formed the western arc of the circuit between the entrances, contained pottery of CPs 1 and 2 as well as loomweight fragments.

1050, south-east of 1020, was an almost circular gully 0.40 m wide and 0.18 m deep, with an internal diameter of 10.2 to 12.8 m, which formed two-thirds of a circuit. The missing arc was formed by either 1166 or 1172, making entrances to the south-east and north-west. This gully and others to the south-east of it lay in the angle of ditches 1002 and 1049. Both 1002 and 1049 contained loomweight fragments and may have marked the division between this area and that of Houses 1-3.

South-east of 1050 was an area of very shallow gullies, on average only 0.10 m deep, which probably formed a series of superimposed circular features. They contained pottery of all three ceramic phases. They were poorly preserved, and there was not time in which to excavate them fully. They seemed superficially similar to 1020 and 1050.

1150 at the south-west edge of the excavated area (Fig. 3), was a semicircular gully. No finds were recovered from it.

Smaller subcircular gullies, not easily visible in plan, were grouped north of ditch 1049. Not all of these were excavated, but two of the larger features, 1124 and 1125, were sectioned and were found to be 0.22 m and 0.60 m wide and 0.08 m and 0.20 m deep respectively.

Rectangular Enclosures North-East of the Boundary Ditch (Fig. 3)

The north-eastern half of the site comprised a southern part consisting of one large area and a northern part divided into several smaller plots by rectilinear ditches and gullies.

These two areas were separated by ditch 1014, which ran north-east from the junction of the boundary ditch and ditch 1064. It was 1.44 m wide and 0.44 m deep and was cut by the boundary dtich.

Ditch 1107/1127 ran at right-angles to, and was cut by, 1014. 1107/1127 was 0.41

m wide and 0.30 m deep. Its line was continued by a ditch 0.43 m wide and 0.20 m deep which turned south-west just before the edge of the excavation as 1207. The enclosure bounded by these ditches and the boundary ditch measured 16 m x 18 m.

1126 cut 1107/1127 and ran north-east at right-angles to it for 15 m then turned north-west as 1175, continued by a recut, 1176, which turned slightly east again as 1114. This feature gained in depth and width, eventually becoming 1.40 m wide and 0.45 m deep. The dimensions of this second enclosure were at least 24 m x 15 m.

1113 ran north-east from the junction of 1176 and 1114, at right-angles to and of the same dimensions as 1114. Its north-east end was destroyed by a nineteenth-century drain and the main line sewer.

The area north-east of 1176 was subdivided by two gullies, 1231 and 1221, at right-angles to 1014. Their only relationship to the other features is a spatial one. 1231 was 0.65 m wide and 0.35 m deep, 1221 0.40 m wide and 0.18 m deep.

In trench 109, south-east of the main excavation (Fig. 2), were two north-west-south-east ditches, only one of which was excavated (1167). The excavated section did not contain any finds.

The small quantity of pottery from ditches in this half of the site, less than 30

sherds in all, is of CP3. Intersections such as those of 1014 and 1107 and 1107/1127 and 1126 indicate more than one phase in the layout. Once 1107/1127 was silted up, the gaps between 1014 and 1126, 1231 and 1221 could have provided an entranceway.

Curvilinear Features North-east of the Boundary Ditch (Fig. 3)

Within the second of the two enclosures described above were three intersecting curvilinear gullies, 1177, 1181 and 1205, running into the north-west edge of the excavated area (Fig.3). Their internal diameters ranged from 4.8 m to 9.8 m and they were from 0.60 to 0.40 m wide and 0.25 to 0.11 m deep. Finds were very few. 1181 contained three sherds of CP1, 1177, which cut it, one small sherd of CP3.

Sewerage pipes

The small trench excavated to the north-east of the main area revealed a gently sloping bank with evidence of tree roots. This was undated and could have been recently buried by the construction of the sewerage pipe. The bank overlay iron-concreted natural gravel. The entire edge of the field had been built up about 1.5 m by the soil dumped when the Bracknell sewerage pipe trench (which was 2.5 m deep and up to 12 m wide) was backfilled. Further north-west the sewer pipe was 50% larger, as the Wokingham sewerage pipe ran parallel to the north-west edge of the trench in the next field and joined the Bracknell sewer. Any archaeology in this area would thus have been destroyed.

4. The Finds

Iron Age and Romano-British Pottery by Paul Booth

Introduction. The 1990 excavations at Binfield produced 1712 sherds of Iron Age and Romano-British pottery, weighing 29 kg and totalling c 18.52 EVEs (see below). The pottery ranged from handmade material of middle Iron Age type to a Romanised assemblage of about the middle of the 2nd century AD. There was very little material which need have been later than this date.

All the sherds were examined macroscopically, and many fabrics were checked under a microscope at 20x magnification. Quantification was by sherd count, weight and estimated vessel equivalents (EVEs: based on the sum of percentages of rim circumference represented by the surviving sherds). Details of fabric, manufacture and ware (see below) were recorded, as well as information relating to vessel form, and rim, base and decoration types etc. The soil conditions on the site were not favourable for the preservation of pottery; many sherds were badly eroded, with the result that evidence for surface treatment and decoration was generally lacking.

The pottery bears out the more-or-less continuous development suggested by the stratigraphic sequence. Three principal ceramic phases (henceforth CP) were defined, which probably followed one another in close succession and may be subdivided on the basis of the stratigraphy. These are:

CP1 a 'middle Iron Age' phase,

CP2 a late Iron Age-early Romano-British 'Belgic type' phase, and

CP3 a Romanised phase probably dating from the later 1st century AD.

These are discussed in greater detail below. Representative vessels are illustrated in Figs 10-14.

Fabrics were defined on the basis of their principal inclusion types and an indicator of the fineness of these inclusions (on a scale of 1 (fine) to 5 (coarse)). The principal inclusion types were A - quartz sand, F - flint, G - grog or clay pellets, I - iron oxides?, M - mica and V - vegetable or organic material. Z was used for voids of uncertain origin (e.g. organic or calcareous) and N to indicate an absence of obvious inclusions, particularly for some of the finer Roman fabrics. For the purposes of coding the fabrics only the two most common inclusion types were used, though many fabrics contained three or more inclusion types (for detailed descriptions see Appendix, Fiche).

Individual fabrics were assigned to 'ware groups'. These were less objectively characterised than the fabrics themselves but were felt to provide meaningful groupings of fabrics for the purposes of interpreting the assemblage. Fabrics were thus assigned to, for example, groups of oxidised or reduced coarse wares, or specialist ware types such as mortarium fabrics or white wares. In the case of the handmade Iron Age pottery, in particular, there was quite a wide range of variation of fabric within what were considered to be individual 'wares'. The Roman material, on the other hand, was more consistent in its production, though

even here some wares combined sherds in several different fabrics. In some cases, however, an individual 'ware' had only one fabric definition, the two thus amounting to the same thing.

Table 2 (microfiche) shows the correlation between individual fabrics and wares, expressed as numbers of sherds. Some fabrics occurred several times in different 'wares' - e.g. fabric AI2 in M22, Q25, 26 and 31, E22, O33, O51 and R21, 22, 32 and 33 as well as the Iron Age ware P12. This reflects the ubiquity of sand as a tempering agent and the occurrence of iron oxides in the clays used for potting. It also indicates the general suitability of moderately fine sand-tempered fabrics for a variety of purposes, from ordinary domestic pottery (for cooking?) of Iron Age date through to specialist Romanised vessels such as flagons and mortaria.

The breakdown of ware by fabric also shows the technological trends suggested by the ceramic phases mentioned above and discussed in more detail below. For the handmade middle Iron Age pottery quartz sand was almost always the dominant tempering agent, and there were only two sherds (of fabric VG4) in which sand was not one of the two principal inclusion types. The incidence of grog/clay pellets was uncommon and these probably never occurred as deliberate inclusions. The same was true of iron oxides. Deliberately used inclusion types were organic material and, to a lesser extent, flint, though even in P14, the only Iron Age ware to contain flint, the flint inclusions were usually uncommon.

In the late Iron Age and Romano-British periods there was a greater variety of

fabrics. Sand tempering was still dominant, but only c 56% of the sherds had sand as the major inclusion type. Grog-tempered fabrics amounted to almost 30% and flint tempering also became quite significant, up to 12%. Both these inclusion types were particularly common in the late Iron Age-early Romano-British phase. The use of flint tempering continued in the Romanised reduced ware R22, but here it was always secondary to sand temper, and this was probably the only flint-tempered fabric to have outlasted the 1st century AD.

Fifty-two wares were identified at Binfield, including five ascribed to the Iron Age. Twenty-seven of these were of relatively minor importance, with less than ten sherds of each. 'Fine and specialist' wares (samian, fine wares, mortaria, white and white-slipped fabrics) were rare, amounting to only 5% of the total sherds.

Samian (S) and Fine (F) Wares

15 sherds, 0.9%; 692gm, 2.4%; 1.65 EVEs, 8.9%.

There were only 14 sherds of samian ware from the site, 9 ?South Gaulish and the remainder probably from Lezoux. Most of the sherds were badly eroded. There were no decorated pieces, although one base sherd might have been from a Drag 37. Other forms represented were 18, 18/31, 33, 38 ?Curle 11 and possibly 15/17. None of these vessels is likely to have been of pre-Flavian date. The only vessel of note was a substantially complete Drag 38 inverted in the fill of feature 1016/A. This may have been one of the latest vessels on the site, but even so was probably of early rather than later Antonine date. The sole fine ware sherd was a tiny fragment, probably of Central Gaulish 'Rhenish ' ware.

Mortaria (M) and White (W) Wares

49 sherds, 2.8%; 702 g, 2.4%; 0.31 EVEs, 1.7%.

There were two sources of mortaria at Binfield, the Verulamium region and Oxfordshire industries, with five and four sherds respectively. Each industry was represented by a single rim of late 1st- to early 2nd-century type. The Verulamium region was probably also the principal source of white wares, the majority of which were in the sandy fabric AN3. These included several thick-walled sherds which must have been from a very large flagon or (perhaps more likely) from a Dressel type 2-4 amphora such as were produced at Brockley Hill (cf Castle 1978). The sources of the other white wares are uncertain. W25 was not distinctive. W31 was a fine ware used for a bowl with a small bead rim and rouletted decoration (no. 54), but there was also the base of a ?butt beaker in this ware. Fine butt beakers in this type of fabric were often imported (Rigby 1989, 137), but it is uncertain if this was true of W31.

White-slipped (Q) Wares

20 sherds, 1.0%; 137gm, 0.5%; 0.51 EVEs, 2.8%.

Four distinct wares were represented, of which one (Q26) was probably the same as the oxidised coarse ware O51 with a white slip. This and the other wares in this group were mainly fairly fine sandy fabrics with iron inclusions. Q25 was characterised by its fine sand temper; Q27 was similar but with the addition of sparse organic inclusions. Both Q25 and the reduced ware Q31 occurred in indeterminate ?jar forms, but nevertheless the principal vessel types in these

wares were probably flagons. Examples were the ring necked form no. 55 and a substantial two-ribbed handle, both in ware Q25. None of these wares can be ascribed to a known source.

'Belgic type' etc (E) Wares

354 sherds, 20.7%; 5261gm, 18.1%; 4.14 EVEs, 22.3%.

This term has been used for a generally distinctive group of wares, mainly dating to the 1st century AD, comprising principally fabrics and forms of 'Belgic' character (cf Thompson 1982). Such fabrics were mainly wheelthrown, although the method of manufacture could not always be determined owing to the poor surface condition of many of the sherds, but several handmade flint-tempered fabrics in a rather different tradition (the E60 wares) were included in this group, mainly because they seemed to share a similar chronological range.

The E ware group had three main subgroups; E20 wares, which were principally sand-tempered, the flint-tempered E60 wares and grog-tempered E80 wares. E20 wares were the smallest component. E21 was the most important of these; it was tempered chiefly with sand and organic material, though grog and occasional iron inclusions were also characteristic. E22 and E23 did not contain grog, but both had occasional flint temper. Vessel types in these wares consisted entirely of jars, mostly of forms with curving everted rims but also including simple bead rim jars.

It was in the E60 wares that flint was of major importance. In all except a few sherds of E63 such tempering was common and the inclusions were often large

and obtrusive on the surface of the sherds. There was considerable variation among the E60 wares, however. E61 contained quartz sand, grog and (particularly) organic material as well as flint. E63 was similar but usually rather finer. E62, E64 and E65 all contained sand in addition to flint. The sand grains varied considerably in size and frequency; in E62 they were small and sparse, in E64 larger and more common, and E65 contained very large (up to c 2 mm) quartz sand grains. Only ware E66 appears to have been tempered with flint alone. Despite the variations in fabric, however, there can be little doubt that all the E60 wares were variants on a common theme. All appeared to have been handmade.

Vessels in these wares were consistently of bead rim and related types with the exception of no. 11, a fairly straight-sided bucket/barrel-like vessel of middle Iron Age type. This vessel, in ware E62, can probably be seen as a link between the middle Iron Age and late Iron Age-early Romano-British traditions. The E60 wares may therefore have developed out of the former, though the evidence does not suggest that this development was a lengthy process (see below). There are some similarities between the E60 wares and fabrics classified as 'Silchester ware' (Fulford 1984, 135; Timby 1989, 85), but most of the E60 fabrics were more mixed in composition and the rim forms were less well-defined than classic Silchester ware (J Timby pers. comm.). The only exception was E66, with the clean matrix characteristic of Silchester ware. This fabric was rare at Binfield. The E60 wares and Silchester ware nevertheless seem to derive from a common tradition. The E60 wares are likely to have predated the floruit of Silchester ware around the middle of the 1st century AD.

The E80 wares were characterised by dominant grog inclusions. The most common, E82, also contained sand and organic temper, and E83 was distinguished by the presence of small amounts of flint in addition to these. As with the other E wares the range of vessel types was restricted entirely to jars, but there seems to have been a slightly wider variety of forms in the E80s, including narrow mouthed and bead rim types as well as a range of medium mouthed jars. These types are all found within the 'Belgic' ceramic repertoire of south-east England.

The sources and overall date range of the E wares remain uncertain. Local production seems likely but cannot be proven. It is impossible to determine when the E20 and E80 wares came into use, though this is likely to have been some time before the conquest. Nevertheless there is some evidence that E80 wares in particular might have been in use generally rather later than the E60 wares (see discussion of CP2 below).

Oxidised (O) Coarse Wares

417 sherds, 24.3%; 1065gm, 36.4%; 0.85 EVEs, 4.6%.

These wares formed a somewhat heterogeneous group, emphasised by their widely varying importance as a proportion of the whole assemblage, depending on the quantification method used. Only four wares (O26, O51, O71 and O73) were of any numerical significance.

O20 and O30 wares were sand-tempered, of varying coarseness; O26 was consistently moderately sandy with iron inclusions. The O20 wares were

unsourced, but the O30s are paralleled in north Wiltshire at kiln sites such as Purton (Anderson 1980) and may have originated in that area. This would probably account for their relative rarity at Binfield. The single sherd of O43 may have come from even further afield; it was thought to be a Severn Valley ware, although this identification was not certain. The fabric of this sherd was distinct from those of the other oxidised wares in the assemblage. The only vessel rim in these wares was from a flagon (no. 64) in O33. It is unclear, however, if such vessels were among the repertoire of the north Wiltshire potters (cf Anderson 1980, 57), although this is possible.

O50 wares were generally fine. O51, with very fine sand and occasional clay pellet and iron inclusions, was numerous in terms of sherd count, but the sherds were extremely small, weighing on average c 5.5 g (the average sherd size for the site was c 17 gm). Rims, which were scarce, were consequently not identifiable to specific types.

The major part of the O ware group was taken up with O70s - coarse-tempered wares. O71 was much the most important of these, and was the commonest single ware at Binfield both in terms of sherd count and weight (respectively 16.4% and 31.2% of the assemblage, but only 2.1% of EVEs). O71 was characteristically tempered with grog and organic inclusions, though in a small number of sherds quartz sand was the most common inclusion type. Iron also appeared infrequently. O71 was the same in composition and character as the reduced ware R81. Some sherds in both wares were unevenly fired, and the distinction between O71 and

R81 probably had no real significance, reflecting accidental rather than deliberate variations in firing conditions. O71/R81 was used exclusively for large storage jars, and it was the only important ware to span CP2 and CP3 (see below).

Like O71, O72 and O74 had grog tempering, associated with flint and organic material respectively. Both were scarce. O73 was slightly more common and was characterised by coarse sand inclusions, with no other inclusion types evident. Of these three wares only O73 was represented by a rim sherd - from a substantial bead rim jar (no. 38) closely comparable to those found in the flint-tempered E60 wares. The remaining oxidised ware was a single sherd of O81, perhaps pink grogged ware with a source in the Milton Keynes area (Booth and Green 1989). The fabric of the Binfield sherd was, however, atypical in containing some organic inclusions, so the identification is uncertain.

Reduced (R) Coarse Wares

608 sherds, 35.5%; 7137gm, 24.6%; 9.58 EVEs, 51.6%.

These wares were the most important component of the Romano-British assemblage except in terms of weight. The date of their earliest appearance is unknown, but as there are similarities in fabric, for example between some sherds of E21 and R24, and R22 contained flint inclusions in the same way as E22 and E23, a development of at least some of the R wares out of the E20 ware group can be postulated. This development is likely to have been under way by the Flavian period at the latest, and could have commenced rather earlier.

The principal R wares were all sand-tempered. In the most common, R21, sand was probably the only deliberate tempering agent since the iron oxides also found in this ware are likely to have occurred naturally in the clay body. Clay pellets and organic inclusions were found only very rarely in R21. In R24 and R31 organic inclusions were more common and were second only to sand in importance, although even they were fairly sparse. Although both R24 and R31 were relatively fine wares the sand in R31 was consistently less common and slightly smaller grained, thus allowing the distinction to be sustained.

Only the R80 wares differed from the remainder of this group in being principally grog-tempered. R81, the most common of these, has been discussed above.

The R ware vessel type repertoire was dominated by jars of various forms, totalling over 90% of the vessels in these wares. Beaker (in R31), bowl (R21 and R22), dish (R22 and R31), bowl/dish (R24 and R31) and lid (R21) forms also occurred, but all were rare.

Black-burnished (B) Ware

10 sherds, 0.6%; 281gm, 1.0%; 0.21 EVEs, 1.1%.

The small quantity of black-burnished ware at Binfield is consistent with occupation at the site having ceased before the end of the 2nd century. Most of the sherds came from some of the stratigraphically latest features (e.g. 1002 and 1029). Identification of the fabric was hampered by the poor surface condition of the sherds, but all seemed to be BB1 of Dorset origin. The three vessels

represented, two cooking pots (e.g. no. 35) and a flat rimmed bowl/dish, were all 2nd century types.

Hand-made Iron Age (P) Wares

239 sherds, 14.0%; 4227gm, 14.6%; c. 1.27 EVEs, 6.9%.

Five wares were distinguished, of which P13 and P15 were of minor importance. Sand tempering was dominant in these wares, and in P11 was often the only visible inclusion. Although P12, in particular, apparently exhibited fairly wide variations in fabric there was nevertheless still considerable consistency within the ware. The principal inclusions were sand and organic material,

but iron and clay pellets were also present to the extent that they occasionally formed the second most important inclusion type.

P11 and P12 dominated the assemblage in the 'middle Iron Age' phase (CP1). P13 (1 sherd) and P14 (2, or possibly 3 sherds), were rare in this phase and were found mainly in CP2, while sherds of P15 occurred only in the fully Romano-British phase (CP3), though they must have been residual there. It is possible, therefore, that P14, in which flint was important as well as sand, and P13 and P15, with particularly prominent organic, iron or clay pellet inclusions, were only late introductions to the repertoire in CP1. The small numbers of sherds concerned, however, make this uncertain, except perhaps in the case of P14, of which there were sufficient sherds (34) for its almost total absence in CP1 to be considered significant.

P ware vessel forms were very simple, consisting almost entirely of barrel shaped jars with, at most, slightly everted rims. One vessel in P12 was rather more globular and had a slightly beaded rim. This form is typologically later than the other P ware vessels and was common in CP2, particularly in the flint-tempered E60 wares.

The ceramic phases. Three ceramic phases were defined without reference to the stratigraphic sequence. Each context assemblage was assigned to one of these phases - or, in a few cases, to transitional phases 1/2 and 2/3 - on the basis of its ceramic content. The allocation of context groups to ceramic phases took no account of the possibility that some groups of CP1 and CP2 were contaminated by later material. A few groups may therefore have been assigned to a phase later than that of their deposition. Nevertheless the percentages of material from earlier ceramic phases occurring in deposits of CP2 and CP3 were not particularly high, suggesting that there was relatively little contamination of this kind and, moreover, that the inevitable occurrence of residual material was not a major problem here. This is perhaps surprising in view of the fact that many of the largest assemblages derived from ditches - a context type which tends to produce mixed groups with a large proportion of redeposited material.

The contents of the ceramic phases are presented in summary form in Table 1. Their definitions and characteristics are discussed below.

[Insert Table 1]

Phases 1 and 1/2

CP1 consisted of those groups which contained only handmade pottery of middle Iron Age character (in effect, P wares). Almost two thirds of all P ware sherds occurred in this phase. As noted above, wares P13-P15 were not common in this phase and it is possible that they were later developments in CP1, supplementing the sand-tempered wares P11 and P12, and being thus more likely to occur in contexts of the following phase. The few vessel types in wares P13-P15 do not, however, indicate any typological development over those in P11 and P12. This, and the relatively low percentage of P wares in groups assigned to CP2, suggest that the replacement of the P wares by 'Belgic type' and related wares may have been a fairly rapid process. Only one very small group was assigned to the overlap between CP1 and CP2. Here a single sherd of E21 was very small and may have been intrusive.

Phases 2 and 2/3

CP2 consisted of groups which contained principally 'Belgic type' wares, those assigned to the E ware group. Such groups amounted to 12.4% of the total site assemblage but comprised 72.9% of this phase. Apart from P wares, which totalled 17.8% of the sherds in CP2, and of which not all were necessarily residual, the only other significant component of the assemblage was sherds of O71/R81. There seemed no good reason to suppose that these were not contemporary with wares of the E group, particularly as they shared with some of the latter the characteristic of grog tempering. The majority of sherds in these wares occurred in the following phase, however.

The pottery in this phase was dominated by E60 wares, which make up 54% of the total sherds while E20 and E80 wares together amounted to only 21.7% of the assemblage. Almost two thirds of all E60 sherds were found in this phase, whereas less than half the E20 sherds and only 16.8% of E80 sherds occurred in CP2. These data can be interpreted in several ways. They could suggest that groups which should have belonged to CP3 were assigned to CP2 because their sole or principal contents were E60 sherds, wrongly thought to have been restricted to CP2. Alternatively, and more probably, CP2 may have been genuinely dominated by E60 wares. These are likely to have been the earliest E wares in use in this phase. The occurrence of 77.6% of all E80 sherds in CP3 suggests that these grog-tempered wares continued in use in that phase. This need not necessarily imply that E80 wares were only introduced late in CP2, although this could have been the case.

CP2 was thus characterised by two very different ceramic traditions. The flint-tempered (E60) one, while still handmade, contrasts with the earlier P ware tradition in fabrics and forms, though there are hints which point to its development from the P wares. In its turn it seems to have been supplemented and then supplanted by the wheel thrown and largely grog-tempered Belgic tradition. There is apparently therefore a contrast between the trend observable at Binfield and that seen at Silchester, where flint-tempered 'Silchester ware' seems to have largely replaced grog-tempered wares 'by the Claudian period' (Timby 1989, 84). The significance of this contrast is uncertain. It could reflect sample bias arising from the relatively small size of the Binfield assemblage;

alternatively it could represent a genuine difference in the development of pottery supply to higher and lower status sites.

A few groups, with a total of 53 sherds, were assigned to CP2/3. These were groups where there was some uncertainty about their character. Most of them were small, but were dominated by E wares and (in particular) sherds of O71/R81. In several cases the groups consisted solely of the latter wares. Since most sherds in O71/R81 were found in CP3 contexts it is likely that some of these groups were of that date, but as this could not be certain it was decided to assign them to the transitional either/or phase.

Ceramic Phase 3

Pottery groups assigned to this phase accounted for 75% of the sherds on the site. They were characterised by the presence of 'Romanised' reduced coarse wares, which amounted to c 47% of the assemblage, and other Romanised wares such as samian and mortaria, though these were never numerous. The degree of overlap between the CP2 and CP3 assemblages is uncertain, but it has been suggested that some R wares developed out of E20 sand-tempered wares, and as the majority of E80 wares were found in CP3 some at least of these may have been in contemporary use with more Romanised fabrics. Nevertheless, E and P wares only totalled 17.3% of the CP3 assemblage, so at worst the residual component of the assemblage is unlikely to have been more than c 20% (this figure allows for the possibility that some sherds of O71/R81 may have been residual from CP2) and

was probably rather less.

Sherds in O71/R81 were the main component of the assemblage apart from those already mentioned, although their importance was probably exaggerated as the result of the occurrence of large numbers of sherds, probably from a single vessel, in 1040. There is no doubt, however, that such vessels were in use alongside sand-tempered and other wares. The long term persistence of the grog-tempered tradition for the manufacture of large storage jars can be paralleled elsewhere (e.g. in the Oxfordshire industry, Young 1977, 202).

Vessel types. The vessels were divided into a number of major classes (flagons, jars, beakers etc) which were then subdivided where possible. Classes and their subtypes were designated by letter codes (see Table 3 (microfiche).

The range of vessel types at Binfield was quite narrow. The assemblage was dominated by jars, which amounted to 80.2% of all vessels (figures for vessel types are expressed as a percentage of EVEs), with a further 1.9% of uncertain jar/bowl types. While a number of other vessel types did occur, all were poorly represented and the range of forms within these types was very limited. These facts reflect the date range of the site, since jars tend to be rather more common in late Iron Age and early Romano-British assemblages than in those of the later Romano-British period (cf Millett 1979, 37-39). All the identifiable middle Iron Age vessels were classified as jars or jar/bowls, but their removal from the overall figures makes very little difference to the overall representation of jars.

There was considerable variation of form within the jar category, but the main types were the barrel shaped Iron Age forms (type CB), narrow mouthed (type CC), medium mouthed (type CD; a general category) and bead rim jars (type CH). Uncertain types (where insufficient of the body survived to allow specific identification) constituted 42% of all jars.

The correlation of vessel types with particular wares or ware groups shows that the barrel shaped forms occurred exclusively in P wares, as might have been expected. Bucket shaped, globular and squat, high-shouldered jars (types CA, CG and CE) were found solely in E wares, which also accounted for about two thirds of the bead rim (type CH) jars. The latter type was also found in wares P12 and O73. Since there were only two examples in R wares (both in R21) the type may be considered characteristic of CP2. It was the most common individual jar type in E wares.

With one possible exception in ware E82, narrow mouthed jars were confined to R wares, and about 85% of the general 'medium mouthed' jar class were also in R wares. Carinated and angled everted rim types (types CF and CI), both rare, were found solely in R wares. Jars of 'cooking pot' form (type CK) were also scarce, with a single example in R21 and two in black-burnished ware (B11). The rarity of this type may be a result of chronological factors, and indicative of the absence of late Antonine (and later) occupation, by which time the type would be expected to be quite common. Storage jars (type CN) occurred exclusively in grog-tempered fabrics (O71/R81 and E83), with the exception of a single example in the flint-

tempered ware E62.

Apart from jars, only bowls amounted to more than c 2% of the assemblage (8%), and this figure was inflated by the presence of an almost complete Drag 38, emphasising the extent to which relatively small assemblages can be distorted by a few substantial rim sherds when quantified as EVEs. Bowls occurred mainly in samian ware, but were also found in reduced wares R21 and R22 and in white ware W31. The only obvious chronologically aberrant sherd in the assemblage was the rim of a bowl (no. 74) in ware R31 (though the fabric was atypical) from 1112/A/1, a medieval furrow nonetheless containing an otherwise 2nd-century group. This vessel was of a characteristically late 3rd- to 4th-century type, closely comparable e.g. to the Alice Holt type 5B.8, dated AD 270-420 (Lyne and Jefferies 1979, 46). The fabric does not seem to indicate an Alice Holt origin, however.

Like bowls, the majority of dishes were also of samian ware, of forms 18 and 18/31, with occasional examples in reduced wares. Indeterminate bowl/dish forms were found in reduced wares and black burnished ware. Of the remaining types, flagons totalled 2.1% of the total EVEs, but there were only two vessels, in Q25 and O33. There were likewise only two mortaria, beakers, cups and lids were each represented by a single vessel, in R31, samian ware and R21 respectively.

[Insert Figures 10-14]

Catalogue (Figs 10-14). The illustrated vessels are arranged in groups by ceramic

phase. Within each CP group the contexts are arranged in an approximate geographical sequence across the site, from south-west to north-east. Sherds have not generally been illustrated where there was clear stratigraphic evidence that the groups to which they belonged must have been later in date than the CP to which they were assigned. Some clearly residual pieces are included, however, if they represent, for example, otherwise unparalleled ware/type combinations which amplify the range of material from the site. Detailed descriptions of individual sherds are not provided, but fabric, ware and type classifications (all explained and discussed above) are given for each piece and unusual characteristics are commented upon.

Ceramic Phase 1 (Fig. 10)

1 1179/A/1 Fabric AN3, ware P11, type CB

2 1208/A/1 Fabric AV2, ware P12, type CB

3 1070/A Fabric AI2, ware P12, base

4 1239/A Fabric IA2, ware P12, base

5 1128/A/1 Fabric AI2, ware P12, type CB

6 1097/A/2 Fabric AV2, ware P12, type CB

7 1104/A/2 Fabric AV2, ware P12, type D

8 1119/A/2 Fabric AN3, ware P11, type CB

The small group from this phase contains typical vessels to which can be added nos. 14, 19 and 20 from CP2 and 41 and 56 from CP3. These vessels are mostly from features comprising or adjacent to houses 2 and 3.

Ceramic Phase 2 (Figs 10 and 11)

9 1223/A/1 Fabric FA4, ware E62, type CH

10 1257/A Fabric AI3, ware R21, type H

11 1039/C/2 Fabric FA5, ware E62, type CA

12 1004/C/1 Fabric FA4, ware E62, type CH

13 1004/C/1 Fabric FA5, ware E62, type CH

14 1061/B/1 Fabric AI2, ware P12, type CH

15 1061/B/1 Fabric AV2, ware E21, type CD

16 1084/A/1 Fabric AI2, ware E22, type CH

17 1013/A/6 Fabric VG3, ware E63, type CG

18 1011/B/10 Fabric GV3, ware E82, base

19 1027/B/2 Fabric AI3, ware P11, type C

20 1027/A/2 Fabric AV2, ware P12, type C

21 1027/B/2 Fabric FA4, ware E62, type C

22 1027/A/2 Fabric FV4, ware E62, type CG

23 1027/A/2 Fabric FA5, ware E64, type CH

24 1027/A/2 Fabric FA5, ware E65, type CH

25 1040/C/8 Fabric GV3, ware E82, type CE

26 1040/C/6 Fabric AV2, ware E21, type C

27 1040/A/5 Fabric FV5, ware E61, type CH

Nos. 9-11 are from the S part of the site. The remaining vessels derive from features to E and W of house 2 (nos. 12-17) and from the fills of ?early components

of the main boundary ditch complex through the centre of the site (nos. 18-27). It is possible that all of these ditch contexts belonged to CP3, but the contents of the lower fills were quite consistently distinguishable from those of the upper fills which were clearly of CP3, they are therefore regarded as CP2 assemblages. The only R ware vessel amongst this material (no. 10) is a 'Surrey bowl' (cf Marsh and Tyers 1978, 576-7). Although sometimes considered to be of Flavian and later date a pre-Flavian date is also possible. The fabric of this vessel suggests an origin in the vicinity of Staines rather than the known production centre at Alice Holt (K Crouch pers comm). This piece may be intrusive in this phase.

Ceramic Phase 2/3 (Fig. 11)

28 1140/A/1 Fabric AV2, ware E21, type CH

29 1140/A/1 Fabric GA4, ware E83, type CH

Two vessels from a pit in the area of house 2.

Ceramic Phase 3 (Figs 11-14)

30 1182/A Fabric AF3, ware R22, type CD

31 1002/A/2 Fabric AI3, ware R21, type C

32 1049/C Fabric AI3, ware R21, type CC

33 1002/D/1 Fabric AI3, ware R21, type CD

34 1002/A/2 Fabric AF3, ware R22, type H

35 1002/C/2 Fabric AN3, ware B11, type CK

36 1246/A Fabric GA4, ware E83, type CN

37 1013/B/3 Fabric AI3, ware R21, type CD

38 1088/A/2 Fabric AN4, ware O73, type CH

39 1060/A/2 Fabric GV4, ware O71, type CN

40 1060/A/2 Fabric AF3, ware R22, type CL

41 1029/G/2 Fabric VA4, ware P15, type CB

42 1029/G/3 Fabric AF3, ware E23, type CD

43 1029/G/2 Fabric GA3, ware E81, type CD

44 1029/C/2 Fabric AV2, ware R31, type C

45 1029/B/3 Fabric AI3, ware R21, type CD

46 1029/C/2 Fabric AI3, ware R21, type CD

47 1029/C/1 Fabric AF3, ware R22, type CD

48 1029/G/3 Fabric AV2, ware R24, type CD

49 1029/C/2 Fabric AV2, ware R24, type CD

50 1029/B/2 Fabric AI3, ware R21, type CH

51 1029/G/3 Fabric AV2, ware R31, type D

52 1029/G/2 Fabric AI3, ware R21, type HC

53 1029/B/5 Fabric AV2, ware R31, type JA

54 1029/B/2 Fabric AN1, ware W31, type H

55 1029/B/1 Fabric AI2, ware Q25, type BA

56 1011/B/1 Fabric IA4, ware P13, type CB

57 1011/B/4 Fabric GA3, ware E82, type CC

58 1011/D/1 Fabric FA5, ware E65, type CH

59 1011/B/2 Fabric GV4, ware O71, type CN

60 1011/B/4 Fabric AV2, ware R31, type CD

61 1011/D/1 Fabric AV2, ware R24, base

62 1018/A/1 Fabric AV3, ware R22, type CD

63 1040/A/1 Fabric AV2, ware E21, type D

64 1040/A/2 Fabric AI2, ware O33, type BB

65 1040/C/3 Fabric AV2, ware R24, type CC

66 1040/C/2 Fabric AI3, ware R21, type CK

67 1040/C/2 Fabric AI2, ware Q31, type C

68 1043/A/2 Fabric FA5, ware E62, type CH

69 1043/A/3 Fabric AF3, ware E22, type C

70 1154/B/2 Fabric GV3, ware E82, type CG

71 1154/B/2 Fabric AI3, ware R21, type CF

72 1154/B/2 Fabric AI3, ware R21, type L

73 1175/A/1 Fabric AF3, ware R22, type C

74 1112/A/1 Fabric AV2, ware R31, type IA

Nos. 30-36 are from features in the south-west part of the site, including nos. 31-35 from ditch 1002/1049 south-west of House 1 and no. 36 from adjacent, related ditch 1049. This group includes the first occurrence of black burnished ware on the site (no. 35). Nos. 37-40 are from features north-west of (and in the case of 1060, nos 39-40, cut by) ditch 1029, which defines the north-west side of the House 1 compound and nos. 41-55 are from the ditch itself. This is one of the most varied groups from the site, including a flagon, bowls (of which no. 52 is a second 'Surrey' type) and a dish (no. 53). The surfaces of this last vessel are in

poor condition but might possibly have been mica-dusted, in which case an origin in the Staines area is likely. The remaining material derives from the principal boundary ditch complex (nos. 56-72) and a ditch bounding one of the enclosures to the north-east of it (no. 73). The exact form of no. 72 is uncertain but it is probably a lid, and if so is the only example from the site. No. 74, from a post-Roman plough furrow, is the only certain late Romano-British piece in the assemblage.

Discussion and conclusions. The date of the earliest occupation at Binfield is uncertain. The site seems to have been continuously settled up to about the middle of the 2nd century AD. Pottery from the latest ceramic phase, which probably commenced in the 3rd quarter of the 1st century AD, comprises the bulk of the material. The handmade fabrics of middle Iron Age tradition characteristic of CP1 amount to only 14% of the total sherds. Allowing for the fact that the overall level of pottery use may have been lower in CP1 than later, and that the extent of settlement (i.e. the number of households present) could have been less, it is still possible to interpret this figure as indicating that CP1 was of relatively short duration. In this case occupation of the site may have commenced no earlier than the 2nd century BC at the earliest.

There are few assemblages within the region with which Binfield can be compared. At Ufton Nervet, north of Silchester, a middle Iron Age component was not explicitly identified in the assemblage, though handmade vessels of middle Iron Age type did occur (e.g. Thompson and Manning 1974, 33-34, nos. 116, 119, 120,

123 and 124). A date 'perhaps not long before the Roman conquest' was suggested for this material (ibid., 33). At Aldermaston Wharf middle Iron Age pottery, all to a greater or lesser degree flint-tempered, was broadly dated to the 3rd to 1st centuries BC (Cowell, Fulford and Lobb 1977, 3). A later group, dominated by grog-tempered wares, was dated c. AD 1-30, although it was thought that it could have started as early as c. 50 BC (ibid., 25-26). This evidence complements and does not contradict that from Binfield, but it does not allow refinement of the dating. The more westerly sites such as Ufton Nervet contrast with Binfield in that the conquest period groups are dominated by Silchester Ware which is almost totally absent at Binfield.

The traditions of the Binfield pottery are therefore comparable with other assemblages in the region, but are not exactly the same. In particular the use of flint as a tempering agent is less prevalent at Binfield, especially in the middle Iron Age. Quartz sand remains a major temper type throughout the period, though its importance was diminished for a while in the late Iron Age/early Romano-British period (CP2). Much of the pottery in all periods must have come from local sources, although in most cases these are not known in detail. One possible source for some of the flint-tempered fabrics is Knowl Hill, some 9 km north of Binfield, where coarse flint and sand-tempered pottery tentatively dated to the 1st half of the 1st century AD was associated with a possible pottery kiln (Over 1973, 66). A source in the Staines area is thought possible for both fine and specialist ware fabrics and types such as the flagon no. 55 (and perhaps the dish no. 53 if it was mica dusted) as well as reduced wares such as the Surrey bowls nos. 10 and 52

and the biconical jar no. 44. If most or all of the other R21 and R31 vessels were from the same general area it would have been a major source for Binfield. This remains to be confirmed, however. The other likely major local source for Binfield pottery is the Alice Holt industry. The extent of its contribution is, however, uncertain, although fabric D (Lyne and Jefferies 1979, 18) has been tentatively identified here (see wares O73 and R23).

The various extra-regional sources represented only provided a small proportion of the total pottery. Samian and a single sherd of Lezoux ware were the only cross-channel imports. Mortaria were from Oxfordshire and the Verulamium region, the latter also producing whitewares, and non-local oxidised wares included possible North Wiltshire, Severn Valley and Milton Keynes area products. All of these were found in very small quantities and presumably cannot indicate direct trade from these diverse sources, but rather occasional purchases from a local market centre.

The overall level of prosperity indicated by the pottery evidence is quite low, with a total fine and specialist ware component of only 5% of the sherds (see above). The low representation of samian and fine wares and the total absence of amphorae are indicators of a low status assemblage. This conclusion is supported by the breakdown of vessel types (see above). While the high representation of jars (80%) is to be expected in a group of this chronological range, the paucity of other vessel types also suggests that this is a somewhat conservative assemblage. There is nothing in the range of vessel types to suggest that the assemblage had distinctive functional characteristics.

Fired Clay by Mark R. Roberts

Introduction. The excavations at Binfield produced fired clay weighing 23.205 kg from 78 stratified contexts of various types – 40 ditch or gully sections and 38 pits or postholes. All the pieces were examined macroscopically. Quantification was by fragment count and by weight within context. Details of fabric and type were recorded as far as they could be determined.

[Insert Table 4]

Fabrics and types (Table 4). The range of fabrics is not wide. Three main fabrics were defined by variations in the amounts of sand and small (up to 10 mm) flint inclusions. This definition was fairly subjective, as the fabrics thus distinguished represented shades within a continuous spectrum. Fabrics is not always consistent within each fragment, as might be expected with such 'low technology' artefacts.

Fabric 1: few sand inclusions and occasional pieces of flint

Fabric 2: common sand inclusions and occasional pieces of flint

Fabric 3: the same level of sand inclusions as fabric 2, but with common flint inclusions

The main categories recorded were loomweights, daub (probable structural fragments) and unidentifiable fragments. If a context contained several identifiable fragments, unidentifiable fragments from it were recorded as belonging to the identified type.

Loomweights were defined as fragments with one or two holes for the attachment of vertical threads and one or two flat sides or faces, or as having three sides but no holes. Possible loomweight fragments were identified as having one flat side with a corner/edge or two flat sides. Daub was recognised by three or more wattle impressions in two directions or impressions of larger stakes/timbers. Possible daub had wattle/twig impressions in two directions. The unidentifiable fragments of fired clay were amorphous or had one flat side but no other distinguishing features (see Table 4).

Loomweights.There were 17 definite and 31 possible loomweight fragments (Tables 4 and 5), plus over 200 small fragments of baked clay which from their fabrics may have been from loomweights. These three categories weighed 7.225 kg, 5.255 kg and 3.400 kg respectively. Where the shape of the loomweight fragments could be discerned they were triangular. One large loomweight from ditch 1002 was 60 mm thick and 130 mm high: the sides were about 180 mm long. It seems to have only two holes, at angles of 60° to the sides. No other fragments are sufficiently complete to allow the number of holes to be determined. Two loomweights from 1040 in the central boundary ditch are; one has a hole at 60° to its side and the other a corner where three sides join, two of which are at 60° to each other. The side of a loomweight from posthole 1142 in House 3 is 180 mm long. One from posthole 1147 in the area of House 2 has two 60° corners and a side measuring 180 mm.

Daub. The only recognisable daub came from two adjacent pits, (contexts 1223 and 1224) west of House 4. It weighs 8.175 kg and is very fragmented, consisting of over 213 pieces. Although some pieces are quite large (90 x 80 x 40 mm thick), with clear impressions of wood, many of them are too small for any characteristics to be recognised.

The impressions in the daub are of two types: wattles and larger timbers. The wattles were c. 15-22 mm in diameter and in some cases seemed to be arranged in a very loose weave with (in a few measurable instances) spaces of at least 40 mm between them. In other instances there was evidence for two wattles lying immediately next to one another. The other impressions are of abutted stakes or timbers about 50 mm in diameter. These may represent a stake wall or the abutting ends of two wattle hurdles. None of the pieces is large enough to show this clearly; the stakes may have lain horizontally rather than vertically.

[Insert Figure 15]

Discussion of evidence for weaving (Fig. 15). Including the possible fragments, 48 identifiable loomweight fragments were recovered from the site. Their occurrence in features of all types and ceramic phases (Fig. 15) indicates that weaving went on throughout the occupation of the site. Where shape could be reconstructed the loomweights were large and triangular, an Iron Age type which differs from Romano-British forms (Wild 1970, 63).

Given the small proportion of feature fills excavated at Binfield (Figs 4-5), the

loomweight fragments recovered must be a fraction of the total discarded there. Comparable sites on different terrains do not seem to have had such a high frequency of loomweights. A 1:36 ratio of loomweight fragments to sherds at Park Farm (48:1712) stands out from ratios of 1:1600 for Iron Age contexts at Ashville Trading Estate, Oxfordshire (5:8000; Parrington 1978, 40, 37), 1:85 for Iron Age features at Farmoor, Oxfordshire (15:1275; Lambrick and Robinson 1979, 35, 57), 1:120 for Watkins Farm, Oxfordshire (12:1446; Allen 1990, 34, 53), and 1:1549 for Mingies Ditch, Oxfordshire (2:3098; Allen and Robinson 1993, 70, 78). This disparity in frequency must surely indicate differences in economy.

Weaving would have been a labour-intensive activity. The fibres, of whatever origin, had to be gathered and prepared. Preparation included retting, pounding and hackling for hemp and linen and scouring, washing, cording, combing and dyeing for wool. The fibres were then spun into threads by hand using the spindle and the distaff. The spin direction, either lefthand or righthand spin, made a difference to the quality of the thread and thus to its potential use. The warp or vertical threads were sometimes of a righthand spin direction and the weft or horizontal threads lefthand to improve the durability (the warp needs to be harder wearing as the weft is beaten over it) or felting properties of the cloth (the lefthand spin produces softer thread which mats together and also fills the spaces in the warp quickly: Nyberg 1990, 76). This required sorting and storing the correct quantities of thread required for each piece of cloth, complicated by the fact that different threads were required for the starting band or selvedges, which probably needed to be stronger than other parts of the weave. Checkered patterns

and borders were produced inside and outside the Roman Empire (Wild and Jorgensen 1988, 76-82), and these too must have required organisation of the necessary threads.

Spinning with a drop spindle uses both hands; it can be carried out while standing or walking (Nyberg 1990, 79-80), but obviously other manual tasks cannot be performed at the same time. It takes many hours of spinning to produce the yarn for a single garment, and spinning probably took up much of the spare time of the adult female population even in settlements which were not producing a surplus of textiles.

In Iron Age and Roman Britain the sorted threads were woven on two main types of loom, a warp-weighted loom and an upright beam loom. The principal technical difference was that the weft was beaten upwards on the weighted loom and downwards on the upright beam loom; the principal archaeological difference is that no evidence is likely to survive of the use of an upright beam loom, since the tension was provided by the lower beam, whereas the stone or clay weights from the warp weighted loom are commonly found during excavation. Numbers of weights vary depending on the size of the loom, but around 50 are usual. The beating was done with bone combs, solid or pin beaters, all of which may survive archaeologically, or by hand. Wild cites Seneca (c.AD 63) and Julius Pollux (c.AD 180-192) as evidence that the warp weighted loom was displaced by the upright loom by the 2nd century, although he points out that according to Festus linen continued to be woven on the weighted loom in the late 2nd century (1970, 67).

It is generally assumed that since baked clay loomweights were a low technology artefact they were disposable. However, the correct weighting of the warp would have been excessively time-consuming if the weights had to be weighed and rematched for each use, and suitable sets of well matched weights may have acquired an heirloom value. Hoffman describes the use of a set of soapstone weights which had belonged to the weaver's Greataunt, although these would have had a longer life than baked clay weights (1964, 39-46).

The loomweights were the only evidence recovered for weaving. The acid, dry conditions would have destroyed organic artefacts such as combs or pin beaters of bone or wood.

Carbonized Plant Remains by Mark Robinson

A total of 23 soil samples from throughout the site were investigated for carbonized plant remains. They ranged in size from 2 to 10 litres. Each sample was broken up in water and the light fraction washed over onto a 0.5 mm mesh sieve. The material recovered was then dried and sorted under binocular microscope for carbonized plant remains. The remains were identified with reference to the collections of the Environmental Archaeology Unit in the University Museum, Oxford. The results from those samples from which identifiable material was recovered are listed in Table 6 (carbonized seeds and cereal chaff) and Table 5 (charcoal). Spikelet forks have been enumerated as two glume bases. Charcoal has been recorded as + present and ++ abundant. In addition, a single glume of Triticum dicoccum or spelta was recovered from ditch

1002 and an unidentifiable cereal grain was present in 1055, a pit cutting ditch 1029. All the samples from which carbonized remains were identified were Romano-British in date.

The only two samples to contain abundant carbonized plant remains other than charcoal were from 1040, the boundary ditch. The remains are mostly comprised glumes of Triticum spelta (spelt wheat) and T. dicoccum or spelta (emmer or spelt wheat). They greatly outnumbered the grain and even fewer weed seeds were present. It is probable that these two samples represented waste from the de-husking of spikelets of spelt wheat prior to the milling of the grain. Two glumes of T. dicoccum were identified and it is possible that emmer was growing as an impurity amongst the spelt. Some oat remains were present. They could not be identified to species but it is likely that wild oat was a weed in the wheat crop.

Over half the samples contained significant quantities of charcoal, the amount of Quercus (oak) charcoal being particularly high. The ratio of charcoal to carbonized cereal remains was greater than is usual on low status Romano-British settlement sites. This suggests that there could have been a non-domestic activity taking place which involved burning. Some of the charcoal was from pits in which burning had occurred but it is not possible to relate this to any particular process.

4. Discussion

Dating (Figs 16-18)

It is not possible to date the first occupation of the site with any precision. The site produced a small quantity of middle Iron Age pottery (250-50 BC), with which three of the four houses were associated (Fig. 16). The Romano-British pottery continues up to the third quarter of the 2nd century AD, at which point the site went out of use. A nearby site at Cabbage Hill has little 1st-century pottery but seems to have continued through the 2nd to 4th centuries, perhaps indicating a change of settlement location.

Layout, Development and Structures (Figs 3-5, 16-18)

The evidence of the evaluation, summarised above in 'Previous Investigations', suggests that most of the settlement plan was recovered, although sewer construction may have destroyed some of it to the north and north-west (Fig. 2), and the effect of ploughing on peripheral areas can only be guessed at.

The concentration of artefacts, building material, charred cereals, burnt flint and charcoal south-west of the central ditch and south-east of transverse ditch 1064, coinciding with three of the four probable houses and with almost all the small pits and postholes on the site (Figs 15-18), indicates a single domestic focus throughout the life of the site. Further, unidentified structures may be represented among the gullies, post-holes and pits in this area, especially between transverse ditches 1064 and 1004 (Fig. 4). This consistent division between the north-east and south-west of the site indicates an early origin for the boundary represented

by the central ditch, itself apparently of late Iron Age/early Roman date.

The large posthole circles (Houses 3 and 4) are probably to be dated to the Iron Age on typological grounds, even though the associated pottery was sparse; only one posthole in each containing pottery of CP1. They may be linked by a common orientation, with possible entrances to the north-east (Fig. 9). Daub in pits adjacent to House 4 indicates wattle-and daub construction.

The replacement of post-ring structures, like Houses 3 and 4, by others surrounded by penannular gullies, like Houses 1 and 2, would conform to a pattern observed in the Upper Thames Valley at a rather earlier date (Allen, Miles and Palmer 1984, 100). At Binfield the gullies themselves were so slight, the larger surviving to at most 0.23 m deep and 0.70 m wide, as to suggest that they demarcated house areas rather than drained them or excluded animals from them, both functions suggested for more substantial house gullies elsewhere (Parrington 1978, 34; Allen 1990, 75).

This may imply that animals were kept away from the houses, as at Mingies Ditch, Oxfordshire (Allen and Robinson 1993, 97). At Binfield, this function could have been served by a series of rectilinear enclosures formed by the central boundary and the ditches running at right-angles to it, most convincingly for House 1, but also possibly for Houses 2 and 3. Ditch 1002, apparently early Roman, may have formalised a distinction between the domestic area and the area of relatively sterile subcircular enclosures to the south-west.

Economy

Status. The pottery suggests a low status site. The vessel types are mainly confined to jars; only a few fine wares are present; and the fabrics indicate a limited, largely local, trading area (Booth, this report).

Craft Activities. Two of the most interesting aspects of the site are the high frequency of loomweights and the abundance of oak charcoal (Fig. 15). Local comparisons are precluded, since no similar sites have been excavated nearby, although 73 loomweight fragments were found at Ashridge Wood some 3 km to the west (Ford 1987a, 86), perhaps implying that loomweights are abundant in the area.

The unusually high frequency of loomweights and the fact that they were found in features of all types and ceramic phases (Fig. 15) suggests that weaving occupied a special position in the economy of the site throughout its occupation. The loomweights were all of a large, triangular Iron Age type, irrespective of whether they came from Iron Age or Romano-British contexts. Loomweights are usually found only on the least Romanised sites (Wild 1970, 67), but the pottery from Park Farm suggests that although the site was of low status some Roman influence was present.

It is not known what activity or activities the abundance of oak charcoal on the site represents. When burnt oak produces a high temperature and an even heat; its drawback as fuel is that the wood is very hard and difficult to cut. This

generally means that, unless oak is the only fuel available, it tends to be used only in specific craft activities where temperature control is critical. It may represent the deliberate production of charcoal for use in subsequent tasks or the generation of charcoal in the course of other processes. At Binfield oak charcoal was concentrated in large pits with in situ burning north-west of House 1 (Fig. 15), and was present in features of all ceramic phases. This may indicate that the charcoal-producing activity was confined to this area.

Farming. The most salient feature of the site plan is its division into north-eastern and south-western sections (Fig. 3). The rectangular enclosures north-east of the boundary ditch contained very few finds and no burnt flint, unlike the circular enclosures south-west of the domestic focus which contained rather more finds. This may, however, simply reflect their proximity to the occupied area. The difference in size and shape of these two groups of enclosures suggests distinct functions. The juxtaposition of circular enclosures and houses echoes the layout of Thornhill Farm, Gloucestershire, an 'un-Romanised' settlement of the first centuries BC and AD, with subcircular enclosures adjacent to post-built round houses and interpreted in terms of stock management (Palmer and Hey 1989, 44). The protection of at least some of the Binfield houses by surrounding ditches suggests that animals were indeed kept on the site. The two groups of enclosures may have served for different aspects of animal management.

The larger, rectangular enclosures may alternatively have surrounded arable plots, although probable granaries and grain storage pits were absent, as was grain-

processing equipment, and the spelt and emmer remains from Romano-British levels in the boundary ditch are likely to represent dehusking (Robinson, this report) and do not necessarily demonstrate on-site cultivation. The group of curvilinear gullies within one of these enclosures may be analagous to shallow circular gullies sometimes interpreted as rick-rings. Their position in the area away from the houses would accord with this. At 4.8 m to 9.8 m in diameter, however, they are rather larger than most such features. Those at Thornhill Farm, for example, were approximately 3m in diameter (Palmer and Hey 1989, 44).

The economy of the site may to some extent be inferred from fuller evidence for contemporary farming elsewhere, although most of this is from sites on the Chalk or on valley gravels. This would have been one of the many small, mixed-economy farmsteads which predominated in the middle to late Iron Age and continued virtually unchanged into the 1st and 2nd centuries AD. The late Iron Age agricultural intensification documented on the upper Thames gravels (Lambrick 1992, 97-99, 105) may be reflected in the extension of occupation to areas such as this. Grant's (1984, 116) suggestion that sheep were substantially more important on chalk downland sites than on wetter low-lying ones may apply to other upland areas away from river valleys. If so, it would accord with the frequency of loomweights at Binfield.

The Site and its Surrounding Area (Fig. 1)

The Iron Age and Romano-British settlement at Park Farm lies on the London Clay between the hillfort at Caesar's Camp and the villa at Wickham Bushes on

the plateau gravel to the south and the Romano-British temple complex at Weycock Hill on chalk to the north (Fig. 1c). Few other sites have been recognised on the London Clay of East Berkshire; the East Berkshire Archaeological Survey located one site per 2.4 sq km on this geology, fewer than were found on adjacent geologies (Ford 1987a, 93-5). Outside the East Berkshire Archaeological Survey transect the density of located sites is only one per 19.5 sq km on the clay as opposed to one per 8.5 sq km on the Upper Chalk and Reading Beds.

The nearest known site to Park Farm is Cabbage Hill, 1 km to the north-east, where the Berkshire Archaeological Group located a 1st- to 4th-century settlement by fieldwalking, test-pitting and sieving. 2 km to the east of Park Farm, at Park Farm, Warfield, an evaluation by Thames Valley Archaeological Services located some Roman ditches. The next nearest Iron Age and Romano-British site was located by the East Berkshire Archaeological Survey at Ashridge Wood 4 km to the west (SMR no. 3397). This consisted of two discrete scatters of finds about 15 and 25 m across located by fieldwalking (Ford 1987a, 86). Four more potential sites on the London Clay (Berkshire SMR nos 260, 261, 669 and 729) have not been excavated (Fig. 1c).

Employing criteria applied in other regions for the Iron Age and Romano-British periods, high status settlements can be identified nearby at Weycock Hill, Wickham Bushes and Caesar's Camp, although Ford found no evidence for such settlements on the London Clay itself (1987a, 94-95), while the Park Farm settlement would have been near the bottom of the local hierarchy.

It is clear from the experience of Binfield that sites on clay may be extremely difficult to detect. The site was originally located by the recovery of fewer than three sherds. During the subsequent field evaluation no Iron Age or Romano-British artefacts were recovered from the ploughsoil by shovel test-pitting and the excavated trenches revealed only two ditches and three pits, despite the fact that one of these trenches ran over the nucleus of the settlement; Houses 1 and 2 and the wide boundary ditch were not identified. On this geology it can be extremely difficult to distinguish features. If a site as extensive as Binfield was so difficult to identify it is quite conceivable that many of the findspots on Figure 1c may also represent Romano-British sites. The pottery and loomweight scatter at Ashridge Wood, for example, was also relatively discrete and may signal the existence of a similar site.

Conclusions

The site at Park Farm, Binfield shows many elements common to middle Iron Age to early Romano-British settlements. It is possible to see it as a farmstead, going through successive modifications and exhibiting the basic components seen elsewhere, as in the late Iron Age phase of Barton Court Farm (Miles 1986, fig. 4) or the successive early Roman layouts of Old Shifford Farm (Hey 1990), both in Oxfordshire. A combination of enclosure (piecemeal at Binfield), one or two houses, pits, and subsidiary, non-residential enclosures, recurs through such sites, although in varying forms and configurations.

The frequency of loomweights at Binfield may indicate a specialised economy with

an emphasis on textile production. The abundant oak charcoal hints at a craft activity which may perhaps be linked to textile production, although this is not demonstrable.

The discovery of a middle Iron Age to early Romano-British settlement which produced such meagre surface traces, either in the form of cropmarks or of artefacts, may indicate that further sites on the clay may be represented by finds of one or a few artefacts.

4. THE MESOLITHIC FLINT SCATTERS

The Mesolithic flint scatters (areas A/M and B) lay west of Park Farm on the east side of the ridge on which modern Binfield is built, sited on the lip of the slope (Fig. 2). Area B sloped steeply, with a drop of 9.0 m from north-west to south-east. Area A/M was rather flatter, highest in the north-west, sloping gently to east and south and steeply to the north. The underlying geology of both was clay.

1. Methods of Excavation

Area B

A 70 x 70 m area was gridded out from the National Grid with reference to the finds located by the East Berkshire Survey and the Oxford Archaeological Unit evaluation. It had been ploughed only 10 days before excavation and there was no substantial rainfall to weather the clay and thus aid the recovery of finds. Four methods of investigation were used;

i) total collection fieldwalking on a 5 m grid

ii) 0.30 x 0.30 m sieved shovel test pits on a staggered 5 m grid

iii) 0.5 x 1.0 m sieved shovel test pits on a staggered 10 m grid.

iv) the struck flint collected by all three methods was plotted, brick and tile from the ploughsoil also being plotted as a control. An area equivalent to 30 x 30 m where the plots showed the struck flint to be densest was stripped of ploughsoil to locate any features. The resulting surface was hand-cleaned to clarify any soil marks. The ploughsoil stripped off was monitored as closely as possible to increase the recovery rate of finds, but could not be monitored consistently because of the shortage of time.

Area A/M

A 70 x 70 m area was gridded out in the same way as area B. In the light of the results of the investigation of area B it was decided not to strip any topsoil, as no significant features had been detected by this means; to dig 0.30 x 0.30 m sieved shovel test pits rather 0.5 x 1.0 ones; and not to plot burnt flint, as this had not proved useful in area B. There was in any case little or no burnt flint in area A/M, in contrast to a total of over 14 kg from area B.

The area had been ploughed and power-harrowed only nine days before work started. Substantial rain fell on one day. The power-harrowing greatly increased the ease of sieving the sun-baked clay soil and did not seem to have destroyed or damaged a significant number of artefacts.

Four methods of investigation were employed:

i) total collection field walking on a 5 m grid

ii) 0.30 x 0.30 m sieved shovel test pits on a staggered 5 m grid

iii) the results were plotted and transects of 2 x 2 m shovel test pits were aligned over the densest concentration of flints. Alternate (east and west) halves of the test pits were sieved.

iv) the unsieved halves of the large (2 x 2 m) test pits were monitored to check the results against those of sieving.

Results

223 pieces of struck flint were recovered from area B by fieldwalking and shovel

test-pitting, and 51 by topsoil monitoring and cleaning the subsoil surface. 357 pieces were recovered from Area A/M by fieldwalking, and 421 by shovel test pitting (Table 8; Fig. 19).

When flint from areas B and A/M and tile/brick from area B were plotted they formed a grid pattern which followed the field edges and the lines of ploughing outside the investigation area (Figs 20, 22 and 23).

There was a cluster of about 50 pieces in both ploughsoil and subsoil in the north-west corner of area B, centred around SU 84750 70510. A slighter concentration of flint at the bottom of the slope in the south of the area was at least partly due to soil movement. Ploughing had moved the flints to the base of the steep slope, where ploughsoil containing struck flint overlay a substantial layer of colluvium which in turn overlay slightly plough-disturbed natural clay. The colluvium also overlay a small relict stream which had been canalised to some extent while it was still open in the 19th century.

There was no clear cluster of flint in area A/M, although material was concentrated in the north-west quadrant (Fig. 19). The results of the East Berkshire Archaeological Survey (Ford 1987) suggest that ploughing may have displaced artefacts from the investigated area, as in area B, spreading them downslope to the north and to a lesser extent to the south and east.

2. The Struck Flint (Fig. 24) by Steve Ford

1063 pieces of struck flint were recovered, which can be divided into four categories:

1) Material from the detailed investigation of flint scatter area A/M

2) Material from the detailed investigation of flint scatter area B

3) Residual material from later archaeological contexts

4) Other unstratified material

Raw Materials

Most of the flintwork is certainly or probably from a good flint source such as the Upper Chalk or the lowest parts of the Reading Beds. The nearest material is available about 8 km to the north (Fig. 1). A small number of pieces are of poor quality material which would have been available locally. This emphasis on chalk flint caused some difficulty in distinguishing between ancient and recent imports -- the latter could have been included with powdered chalk for liming or with post-medieval building rubble. Pieces of possibly doubtful origin are excluded from the totals. This process of selection is not perfect and the totals here have probably excluded some prehistoric artefacts.

The two flint scatters (areas A/M and B) were originally identified by the East Berkshire survey (Ford 1987a) as sites 470 and 320. Site 470 (Area A/M; SMR 3370) produced 19 items (from a 4% surface sample), albeit from a restricted area, and was thought likely to be of later Neolithic date on the basis of its retouched component. It was noticed at the time that a blade core was present and that 33%

of the struck flints were blades. Site 320 (Area B; SMR 3068) produced only 12 items from a wider area. It was undated but again it was noted that 16% of the struck flints were blades.

Area A/M

Total collection while fieldwalking on a 5 x 5 m grid within a 70 x 70 m area produced 357 pieces with an additional 46 spalls, bashed lumps and core fragments.

Three components were used to date the collection as a whole: shape, core type and retouched types. Struck flints were sorted by eye into shape categories of blade, possible blade and flake. A distinction was made between broken and intact pieces so that the potential for metrical analysis could be determined. The flake component for the fieldwalked finds was measured and analysed as set out below.

For the whole collection approximately 35% of struck flints were of blade-like proportions, a quantity typical of Mesolithic assemblages (see Ford 1987b and the site on St Catherine's Hill, Guildford, Surrey, in Gabel 1976). Similarly, blade cores and possible blade cores account for 76% of all cores, again a Mesolithic characteristic. Finally, the retouched component contains a number of common items such as scrapers and awls (Fig. 24, 4 and 11), but also includes three microliths (two obliquely blunted points and one rod; Fig. 24, 3, 2 and 1). There were no items that were certainly of post-Mesolithic date. This also applies to the

finds from the original (EBAS) fieldwalking. The rod microlith dates from the later Mesolithic.

Some 28 flakes and blades had small amounts of retouch including possible notched pieces. Several other examples were noted where there was some doubt as to the origin of the retouch. Some obviously showed recent accidental damage. Two pieces are possible microburins and one broken flake is a possible burin.

Serrated pieces (microdenticulates) are certainly represented by one broken blade and possibly by a second. A further four pieces probably belong to a similar category, as they show very delicate retouch (Fig. 24, 7 and 12). A much larger group of material shows probable or possible utilisation damage but this could not be consistently distinguished from accidental (post-depositional) damage. An awl (Fig. 24, 9), a fabricator (Fig. 24, 8) and a possible knife were recovered during the original widely spaced fieldwalking.

There are very few items of special note. A single large blade is apparently crested and bears some similarity to pieces found in upper Palaeolithic/early Mesolithic long blade industries. Several other crested blades and core rejuvenation flakes were noted but none was exceptionally large. Another feature of note is the presence of two small flakes (spalls) with fine retouch forming a point (Fig. 24, 5 and 6). They may be of similar function to the drill bits (aré cou) of Indonesia (White and Thomas 1972, 286). One or two of the flakes may have resulted from axe manufacture and one core may be classed as a dubious axe

roughout.

319 flints from the fieldwalking were subjected to more detailed measurements following the methods set out in Ford 1987b. Of the 98 intact flakes 25% had a length:breadth ratio equal to or exceeding 2:1. This is a characteristic of Mesolithic/earlier Neolithic assemblages. One problem with length:breadth ratios is that blades are frequently under-represented, presumably because of their proneness to accidental damage and their deliberate selection for tool manufacture (e.g. of microliths). To compensate for this, broken pieces were also analysed. Of 221 broken pieces, 41% were broken blades or possible broken blades, a proportion more strongly characteristic of a Mesolithic date. When the broken and intact totals are combined, 36% are of blade-like proportions, a Mesolithic characteristic.

A second measure of the numbers of blades in an assemblage is the proportion of pieces with dorsal blade scars. For the combined total of broken and intact pieces, 17% had blade scars, which is again a strong Mesolithic characteristic.

Area B.

Total collection fieldwalking, again over an area of 70 x 70 m, produced a total of 121 flints with an additional 20 spalls, bashed lumps and core fragments. Interpretation of this material is problematic. The density and extent of the clustering is very much lower than for area A/M. Some activity in the area in the Mesolithic is indicated, but whether this was a small occupation site (now dispersed by ploughing) or an 'off-site' activity area (Foley 1981) adjacent to the

settlement focus of area A/M is unclear.

The dating of the flintwork is similar to that of the collection from area A/M. The proportion of blade-like flakes for the whole collection is about 25%. Blade cores and possible blade cores account for 50% of all cores. Eight pieces were retouched or possibly notched. One core may have been used as a hammerstone. The small number of common retouched pieces includes a microlith tip. Again there is no reason to doubt that the collection is largely or wholly of Mesolithic date.

The other flints. In the other contexts a similar range of material was present. The only item of note was a microlith from context 301.

Local Context

The main contribution of this study has been the clarification of the nature and the dating of two possible sites. It has shown that area A/M is a definite concentration of material, while area B may be best interpreted as a very small occupation site or as off-site activity area. It is significant that these sites occurred only as scatters of material within the topsoil so that extensive unexamined topsoil stripping would have removed them without trace.

Metrical analysis and more subjective assessment of the remaining flintwork have shown that the collections are largely or wholly of Mesolithic date. Closer dating was more difficult, with insufficient material to demonstrate a clear early or late Mesolithic date (Jacobi 1976) or to show affinities to transitional 'Horsham'

industries (Clark 1935; Saville 1981). The rod microlith from area A/M suggests a late Mesolithic date.

The results of the East Berkshire Archaeological Survey (Fig. 25; Ford 1987a) suggested that much of the flintwork on the Tertiary geologies of East Berkshire was of Mesolithic date, and this site is an addition to the small number already recorded. In a wider perspective it helps to enlarge the topographical and geographical range of Mesolithic activity. To the north and west the Mesolithic settlement pattern is dominated by the Thames and Kennet Valleys, as Clarke's (1976) work would lead one to expect. The site here, along with the others newly located in East Berkshire, has more affinities with the variably located small, and occasionally larger, sites of Surrey and East Hampshire (Rankine 1954; Gabel 1977; Field et al. 1987).

The density and spread of flintwork are slightly greater than but broadly comparable to those at two other East Berkshire sites investigated in a similar manner at Hungerford Lane (EB 250) and Easthampstead Park (EB 340; Ford 1988), located respectively on a ridge and knoll. The density is much lower than at the recently fieldwalked site at Paddington Farm, Abinger, Surrey (Field et al. 1987), and at sites in the major river valleys of Berkshire such as Whistley Court Farm (EB 480; Harding and Richards forthcoming). It is hard to assess whether these differences are due to the effects of distance on raw material procurement or the nature and extent of the settlements.

Table 9 (Ford 1991) summarises selected characteristics of the site A/M collection along with those from 15 other sites in the region. Eight of these were investigated by excavation of little-disturbed stratified deposits, the remainder were flint scatters discovered by fieldwalking. The density was calculated by using the surface counts from the more productive parts of the distribution and adjusted upwards, assuming that 2% of material occurs on the surface. This is a coarse measure, taking into account subjective judgements on the extent of the dense parts of a scatter and a variable surface:topsoil ratio. It does, however, show that site A/M at Binfield falls at the lower end of the range. Assuming that the site has been spread to a greater or less extent by ploughing, it is still not of comparable density to many of the other sites in the table.

3. Discussion by Steve Ford and Mark R. Roberts

The spread of worked flint within the ploughsoil is all that survives of the Mesolithic activity on this site. Features were uncovered by excavation but these were modern. Both ploughing and slope seem to have had an influence on the observed distributions. This is more obvious in the case of area B, where the brick and tile form the same pattern as the flint. Only the concentration of flint in the north-west corner is apparent above this 'background noise', creating a discrepancy in the distribution even after topsoil movement (ploughing and hillwash).

The much larger quantity of flint in area A/M reduces the 'visibility' of concentrations (Fig. 19). The plots of cores and retouched forms (Figs 21 and 23) show the same gridded pattern as in area B although the distribution plots are

affected by the larger pits sieved to bulk up the assemblage. The lack of a single concentration (Fig. 19) may suggest that successive scatters were deposited in almost the same place, creating a dense distribution of flints, such as those shown by Schild (1989, 98) which represent use of a site over thousands of years. Plots of blades (Fig. 22), retouched forms (Fig. 23) and the total finds from the fieldwalking (Fig. 20) hint at many superimposed flint concentrations. The collection procedures complemented each other. Both fieldwalking and shovel test pitting identified the concentration in the north-west of area B, but area A was less susceptible to interpretation by these techniques because of the density of flints.

Many years of ploughing on this site have caused some movement of the flints, although studies of artefact distribution in ploughsoils suggest that such movement may be expected to be minimal (Odell and Cowan 1987, 481). The slope of the sites at Binfield may have had an influence on this observed distribution. Odell and Cowan did not describe the topography of their experimental area nor did their experiment simulate the number of ploughings, which at Binfield may have been carried out annually since enclosure in the early 19th century and may number as many as 200. The effect of ploughing is demonstrated by the hillwash, itself containing struck flint, which buried a 19th-century stream/drain in area B and may have lowered the top of the hill.

The flint is not diagnostic enough to suggest a date within the Mesolithic. The range of retouched forms may indicate that the site had more than one main use,

i.e. it was not task-specific. This range matches those of large riverside sites interpreted as base camps (Mellars 1976, 391). This may signify that smaller groups of people were carrying out the same activities as at large base camps, either independently of large riverside groupings or as part of a dispersal strategy, possibly seasonal, in order to exploit food resources.

Burnt flint found in large quantities at Park Farm, Warfield, c. 1.5 km to the east of the Binfield sites, suggests prehistoric domestic activity. The amount of burnt flint found in area B at Binfield suggests a similar activity, rather than naturally occurring flints scorched by stubble burning. While burnt flint is generally more usual and more abundant in later prehistoric than in Mesolithic contexts, it may be noted that it occured in alluvial silts containing a Mesolithic industry at Jennings Yard, Windsor (Healy 1993), and at the Mesolithic occupation site at Thatcham, both in Berkshire (Healy et al. 1992, table 2).

Prior to the East Berkshire Archaeological Survey local Mesolithic activity was thought to be focussed on the river margins, but the extensive fieldwalking showed a much more extended pattern (Fig. 25). The two Park Farm scatters fit into this pattern as small, low-density sites away from the main base camps by rivers. Their location on a spur overlooking a small valley may be related to the main criteria for location of Mesolithic sites noted by Kvamme and Jochim, namely view, nearness of water, shelter and landform (not necessarily in this order). The siting of many (seasonal) Mesolithic sites on ridges and high places (Kvamme and Jochim 1989, 1) may perhaps be deliberate, in order to provide a vantage point

over the surrounding area (Jacobi, cited by Kvamme and Jochim 1989, 2). This may have been a factor in the location of the Binfield sites, although neither the degree of contemporary tree cover nor the extent of any clearance (Mellars and Reinhardt 1978, 256) can be determined. Nearness to water may have been a consideration, since a pond, perhaps spring-fed, lies to the south-west of the sites, roughly 120m from Area A/M and 80m from Area B (Fig. 2). There is no bias towards shelter (Kvamme and Jochim 1989, 8). High ground was preferred but no directional bias is apparent: area A\M faced north, away from the sun.

The range of natural resources available to Mesolithic hunter-gatherers would have been wide and abundant. Clarke (1976, 475) describes the immense variety of animal and vegetable foodstuffs which would have been available in temperate deciduous forest such as would have obtained through most of the period. The theoretical planned exploitation of these resources is described by Binford (1980, 18-9), and the sites at Binfield may have been used seasonally to exploit nearby food supplies by a society organised around systematic food-gathering over a large area. It is impossible to tell whether they were part of the population exploiting the river valleys or belonged to a separate social group.

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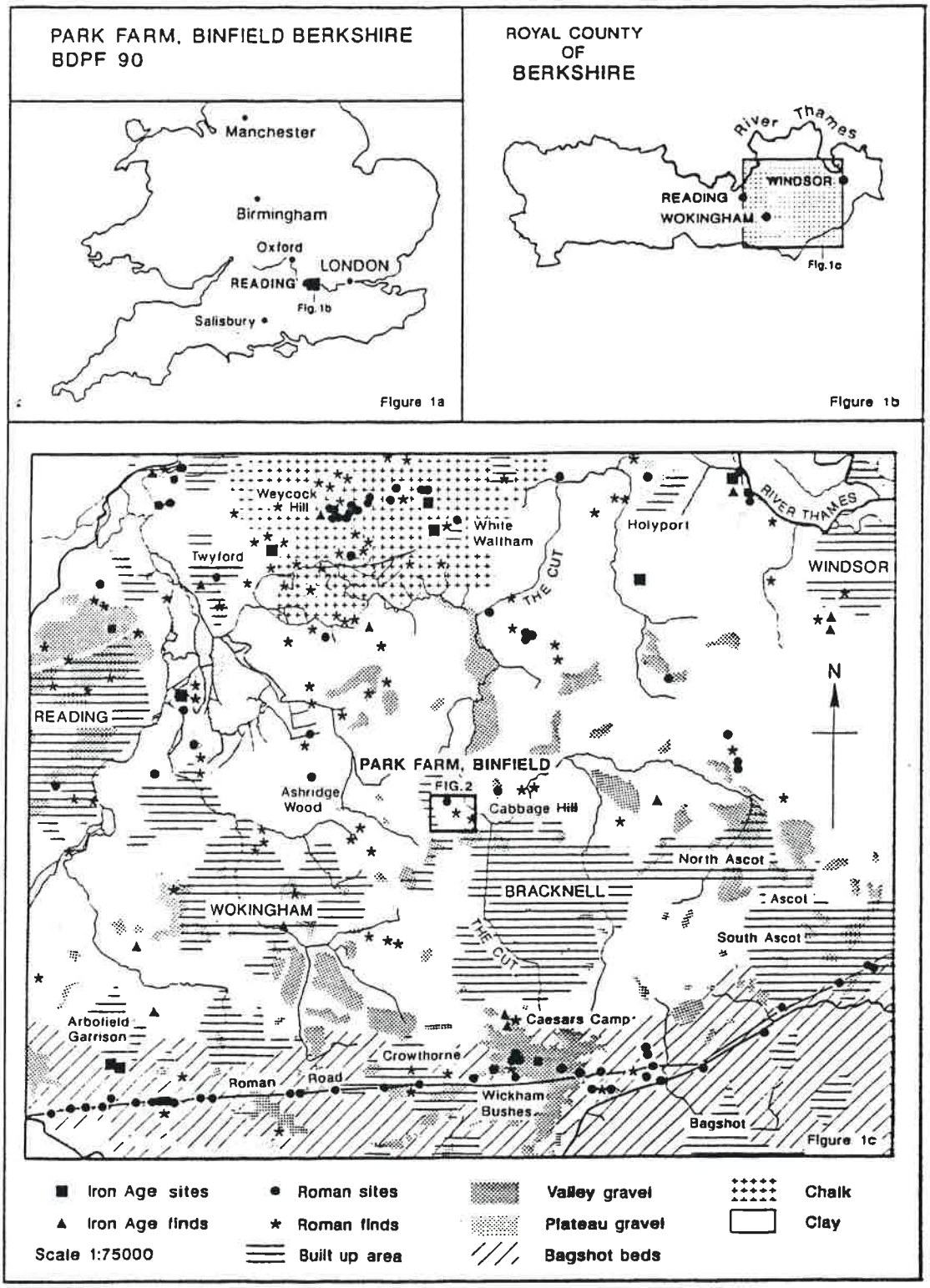

PARK FARM, BINFIELD BERKSHIRE
BDPF 90
Manchester
Birmingham
Oxford
LONDON
READING
Fig. 1b
Salisbury
Figure 1a
ROYAL COUNTY
OF
BERKSHIRE
River Thames
WINDSOR
READING
WOKINGHAM
Fig.1c
Figure 1b
Weycock Hill
White Waltham
Twyford
Holyport
RIVER THAMES
WINDSOR
THE CUT
N
READING
PARK FARM, BINFIELD
FIG.2
Ashridge Wood
Cabbage Hill
North Ascot
BRACKNELL
Ascot
WOKINGHAM
THE CUT
South Ascot
Arborfield Garrison
Caesars Camp
Crowthorne
Roman Road
Wickham Bushes
Bagshot
Figure 1c
Iron Age sites
Iron Age finds
Scale 1:75000
Roman sites
Roman finds
Built up area
Valley gravel
Plateau gravel
Bagshot beds
Chalk
Clay

figure 1

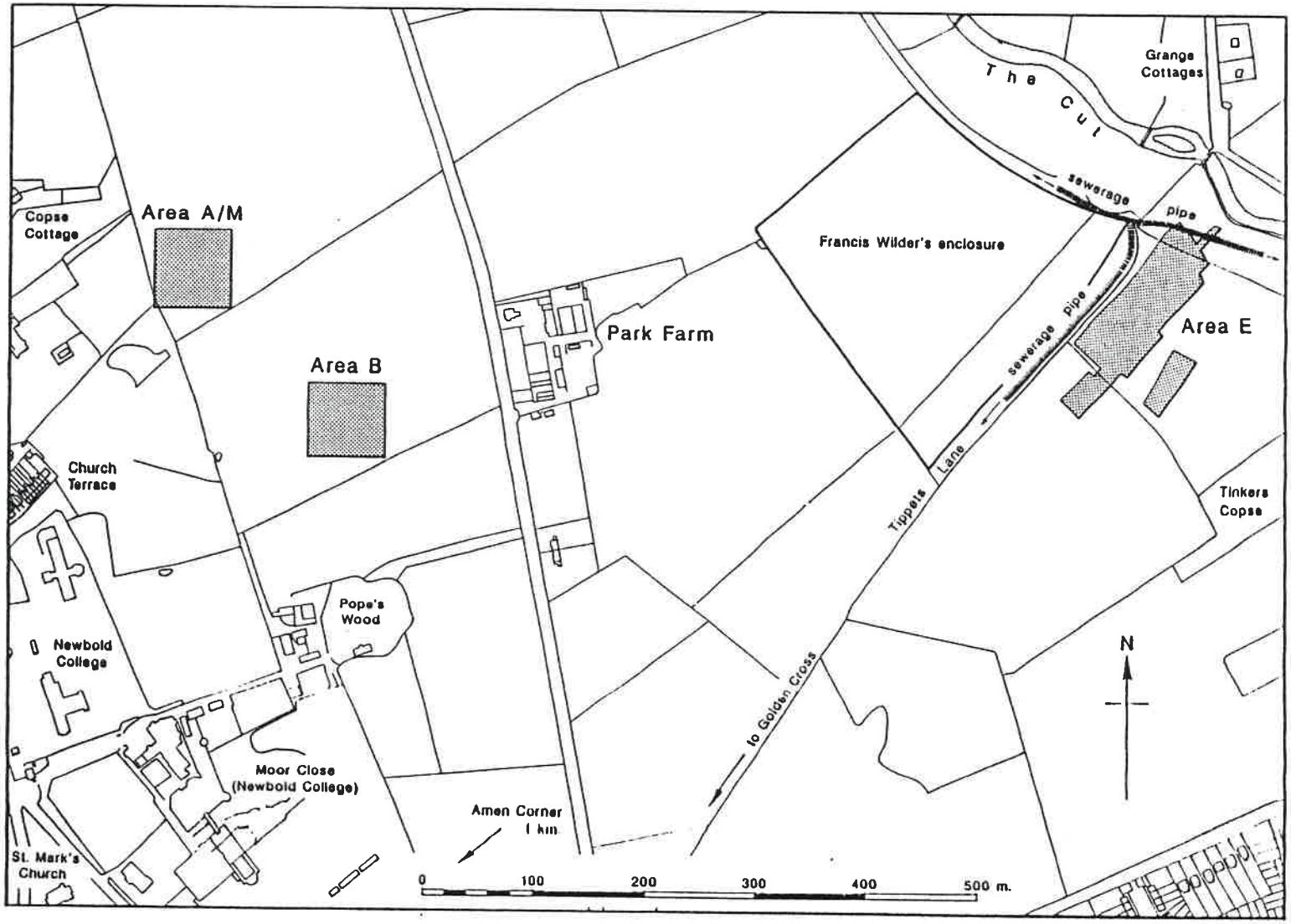

Area A/M
Area B
Copse Cottage
Church Terrace
Newbold College
Pope's Wood
Moor Close (Newbold College)
St. Mark's Church
Park Farm
Amen Corner 1 km
to Golders Cross
Francis Wilder's enclosure
The Cut
Grange Cottages
sewerage pipe
sewerage pipe
Area E
Tippets Lane
Tinkers Copse
N
0
100
200
300
400
500 m.

figure 2

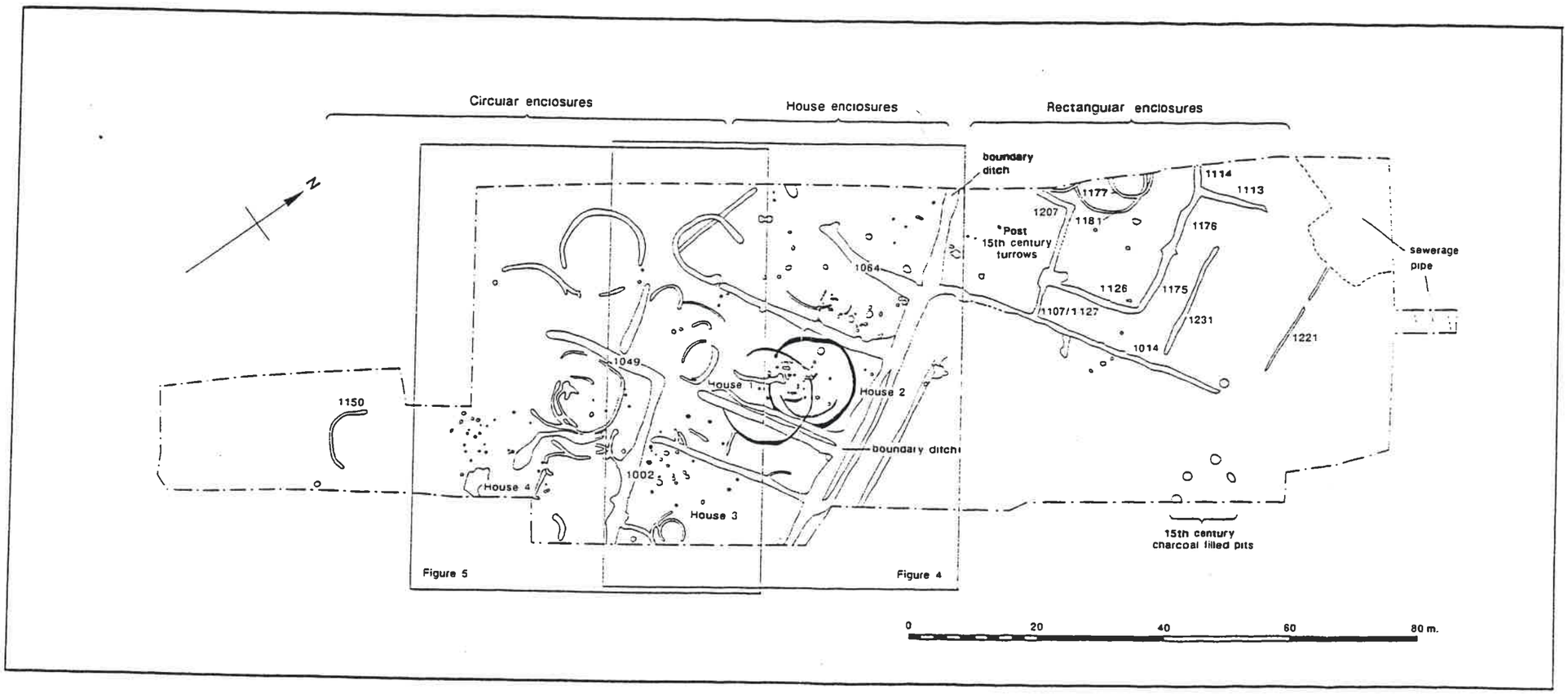

Circular enclosures
House enclosures
Rectangular enclosures
N
boundary ditch
1177
1114
1113
1207
1181
1176
Post 15th century turrows
sewerage pipe
1064
1126
1175
1107/1127
1231
1014
1221
1049
House 1
House 2
1150
boundary ditch
1002
House 4
House 3
15th century charcoal filled pits
Figure 5
Figure 4
0
20
40
60
80 m.

figure 3

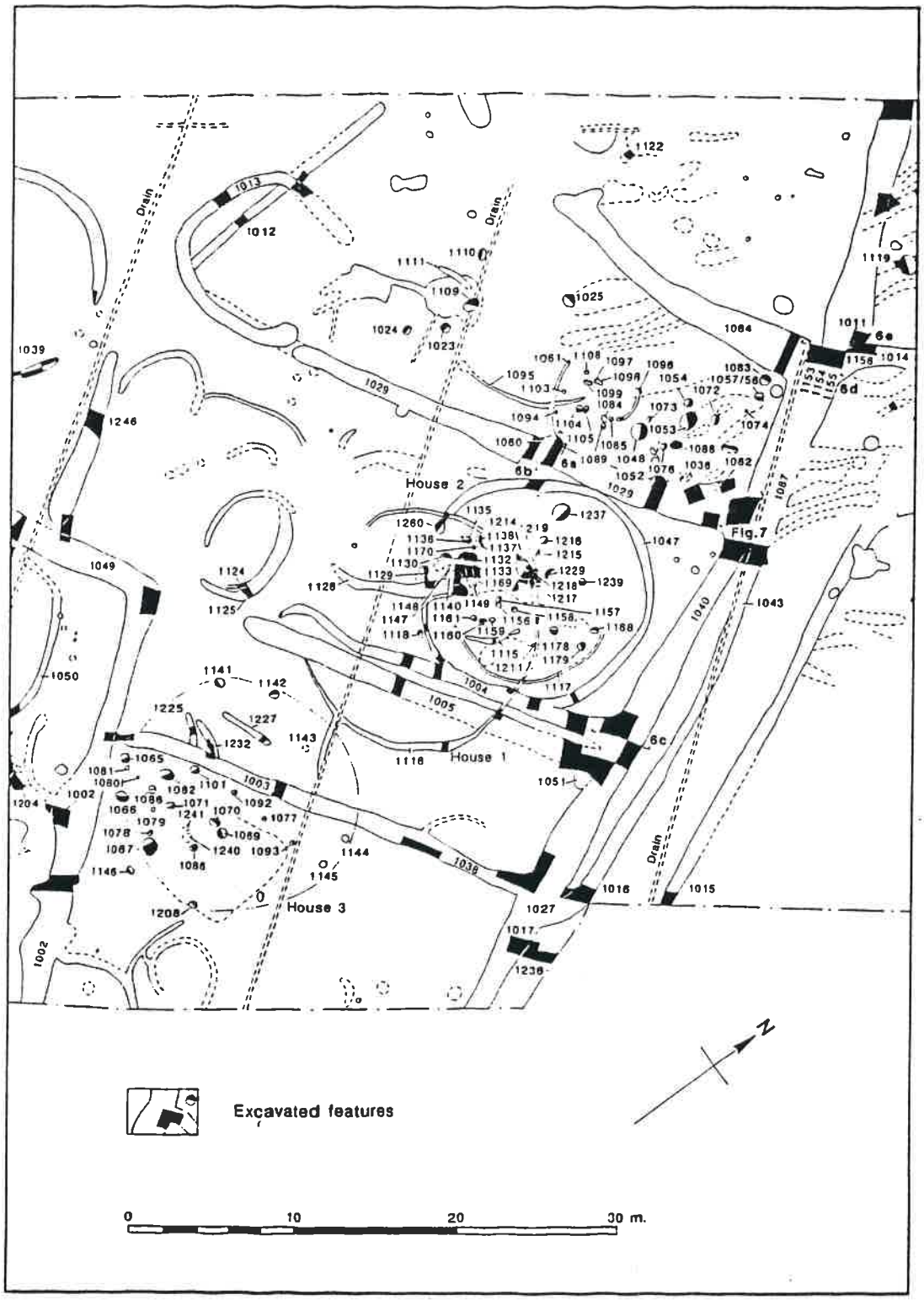
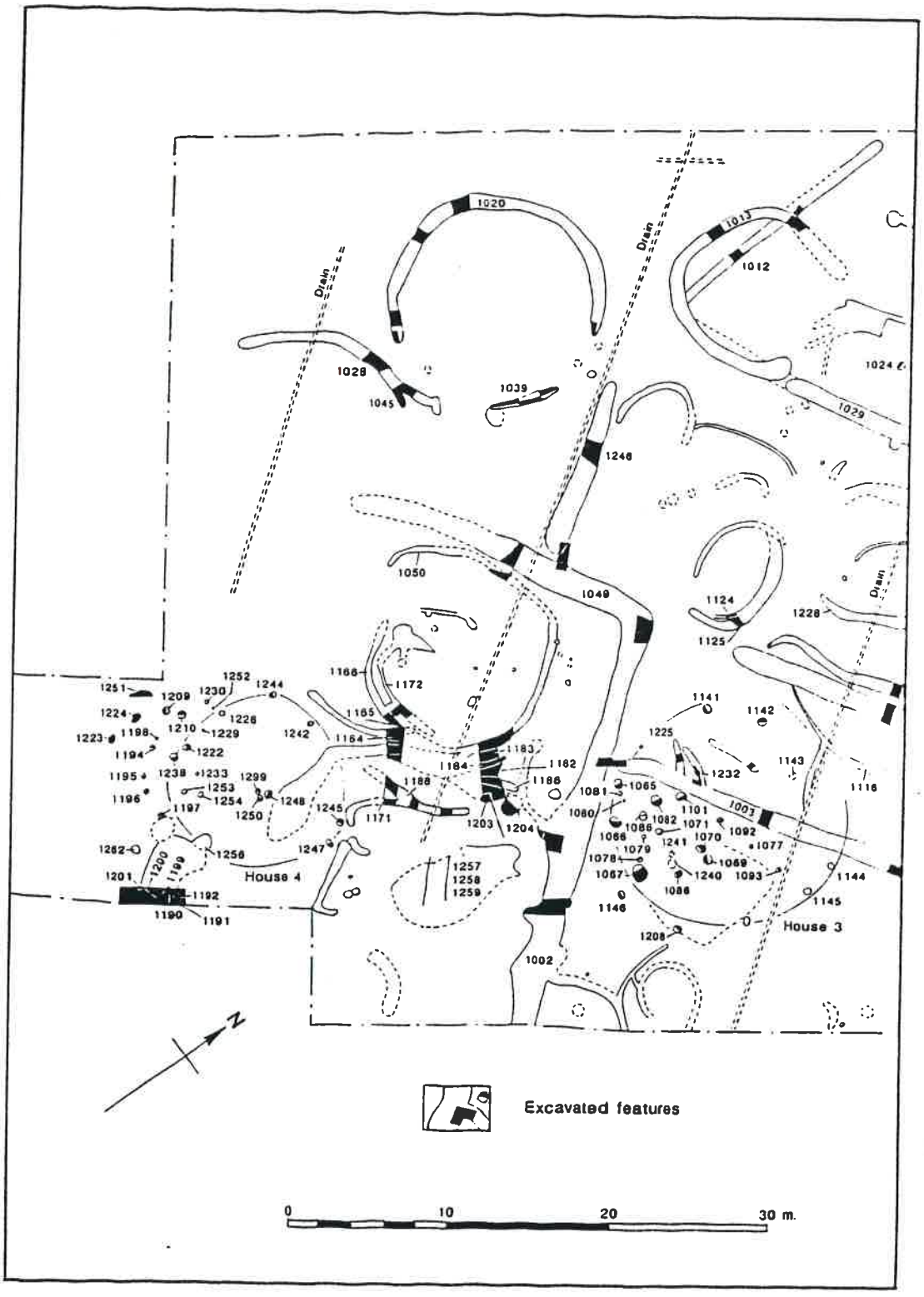

Drain
Drain
Drain
House 1
House 2
House 3
6a
6b
6c
6d
6e
Fig.7
Excavated features
N
0
10
20
30 m.

figure 4


Drain
Drain
Drain
1020
1013
1012
1024
1028
1045
1039
1029
1246
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1228
1166
1172
1165
1164
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1194
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1299
1253
1196
1254
1197
1256
1262
1200
1199
1201
1192
1190
1191
House 4
1141
1142
1225
1143
1232
1116
1081
1065
1080
1101
1003
1082
1086
1066
1071
1092
1241
1070
1077
1079
1078
1069
1067
1240
1093
1086
1144
1146
1145
1208
House 3
1002
N
Excavated features
0
10
20
30 m.

figure 5

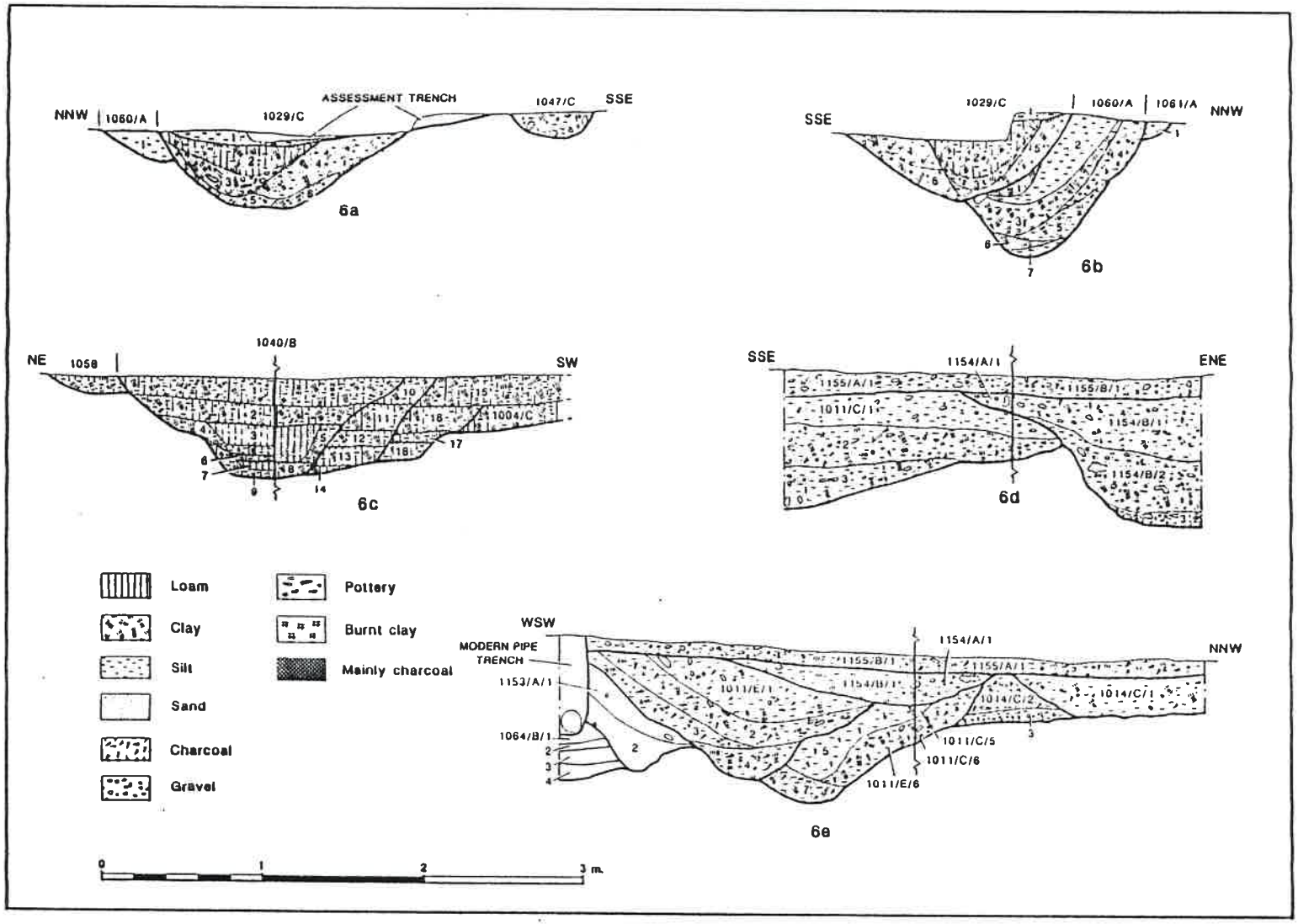

NNW
1060/A
1029/C
ASSESSMENT TRENCH
1047/C
SSE
6a
SSE
1029/C
1060/A
1061/A
NNW
6b
NE
1058
1040/B
SW
1004/C
6c
SSE
1154/A/1
ENE
1155/A/1
1155/B/1
1011/C/1
1154/B/1
1154/B/2
6d
Loam
Clay
Silt
Sand
Charcoal
Gravel
Pottery
Burnt clay
Mainly charcoal
WSW
MODERN PIPE TRENCH
1153/A/1
1064/B/1
1154/A/1
NNW
1155/B/1
1155/A/1
1154/B/1
1011/E/1
1014/C/2
1014/C/1
1011/C/5
1011/C/6
1011/E/6
6e
0
1
2
3 m.

figure 6

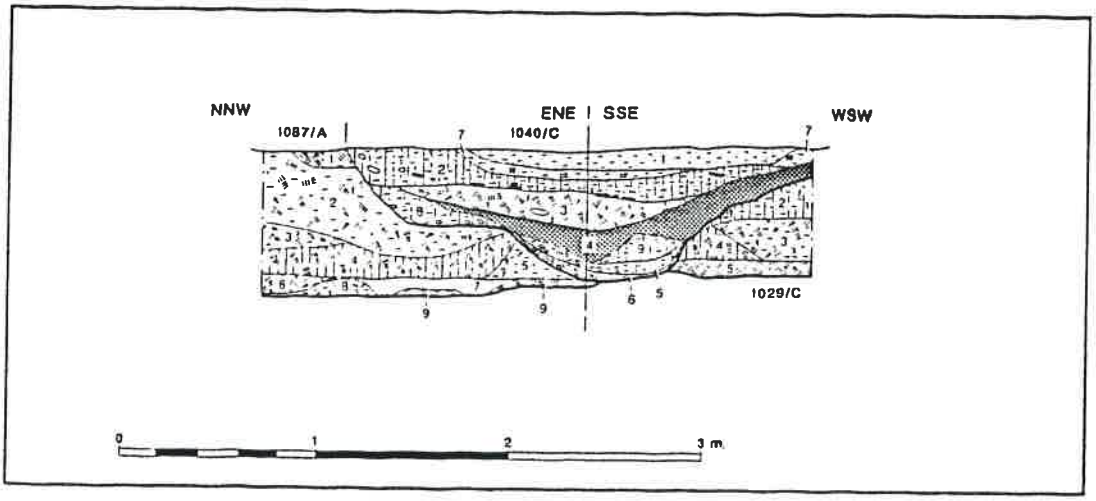


figure 7

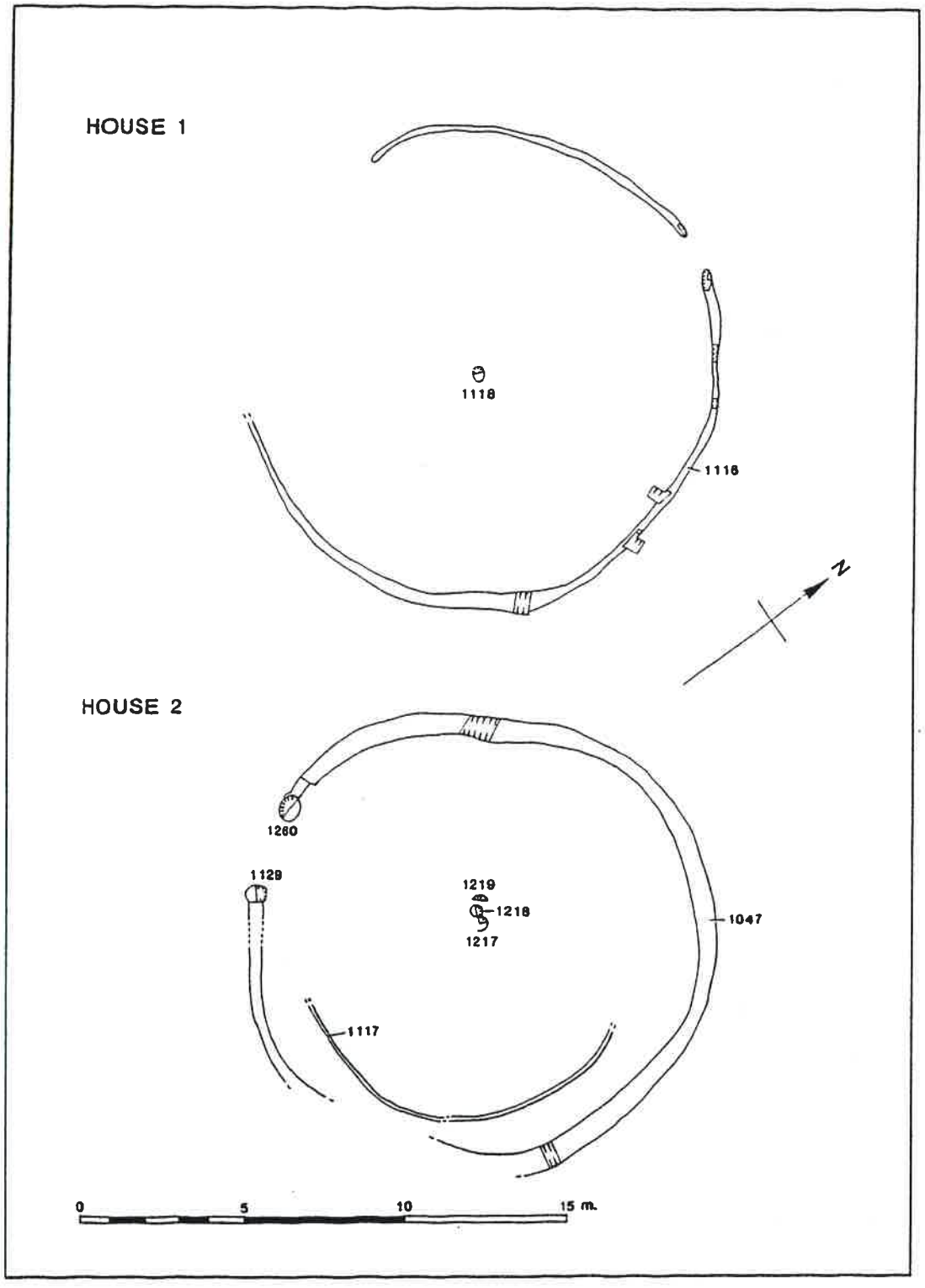

HOUSE 1
1118
1116
N
HOUSE 2
1260
1129
1219
1218
1217
1047
1117
0
5
10
15 m.

figure 8

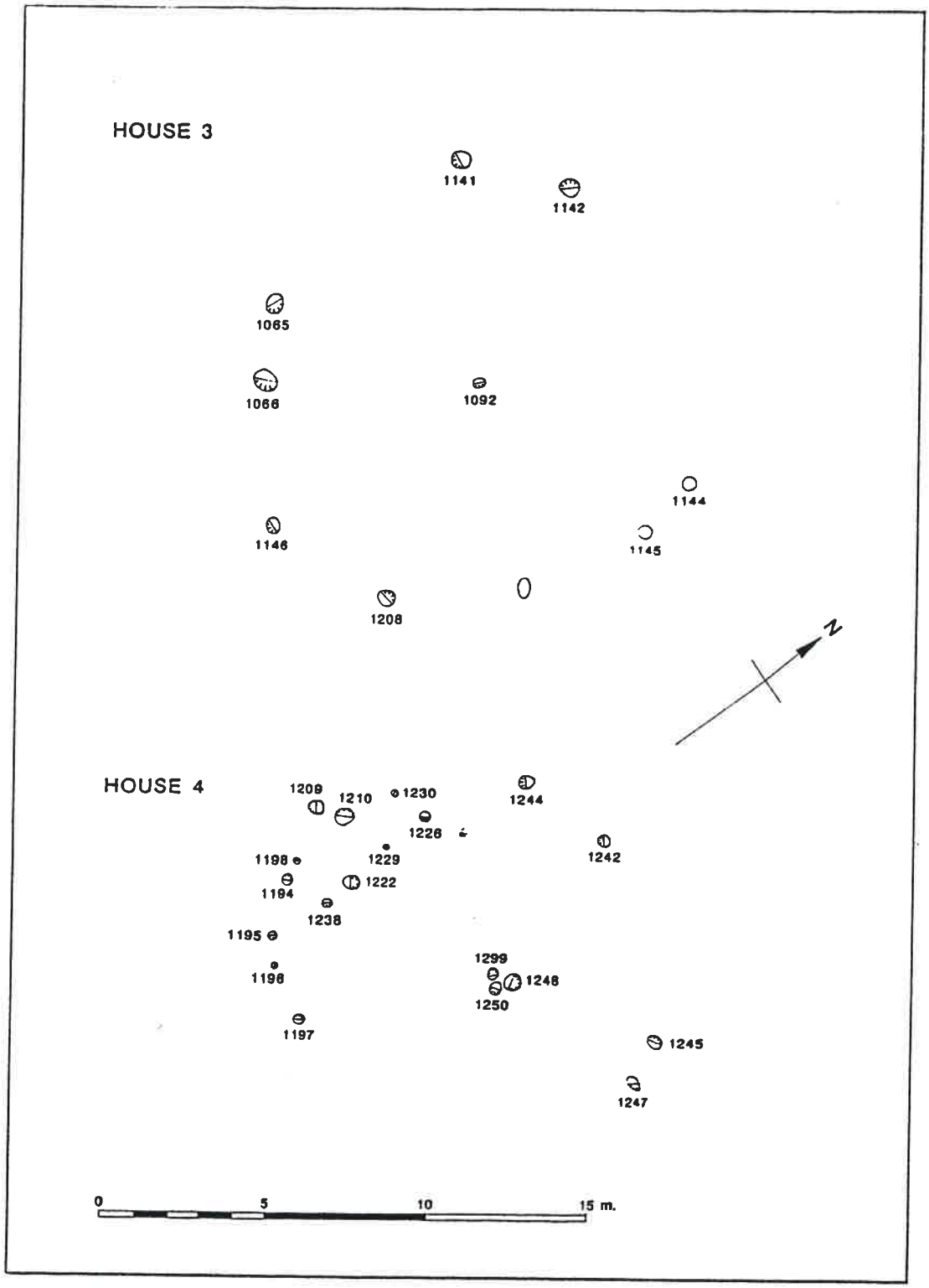

HOUSE 3
1141
1142
1065
1066
1092
1144
1146
1145
1208
N
HOUSE 4
1209
1210
1230
1244
1226
1242
1198
1229
1222
1194
1238
1195
1299
1198
1248
1250
1197
1245
1247
0
5
10
15 m.

figure 9

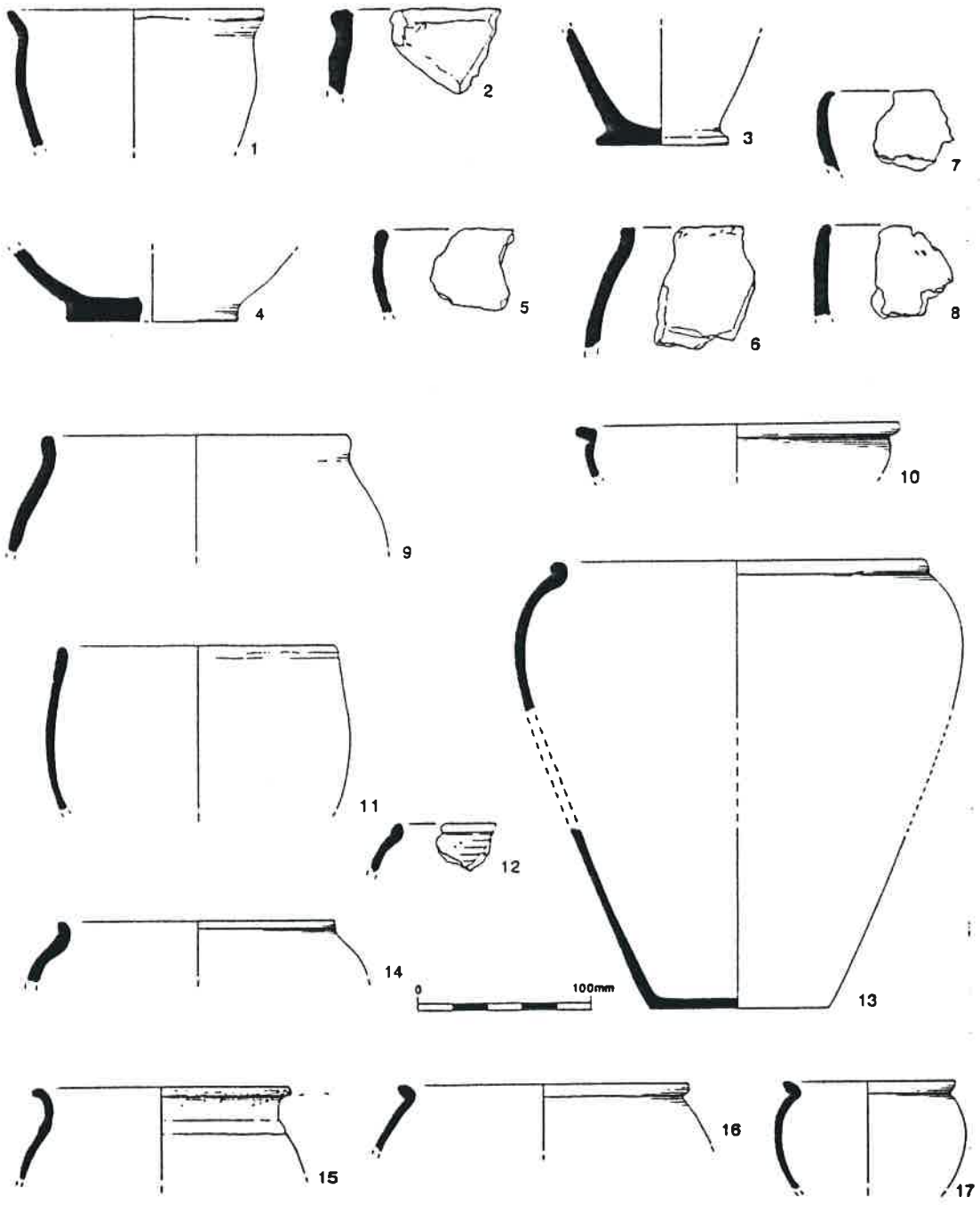


figure 10

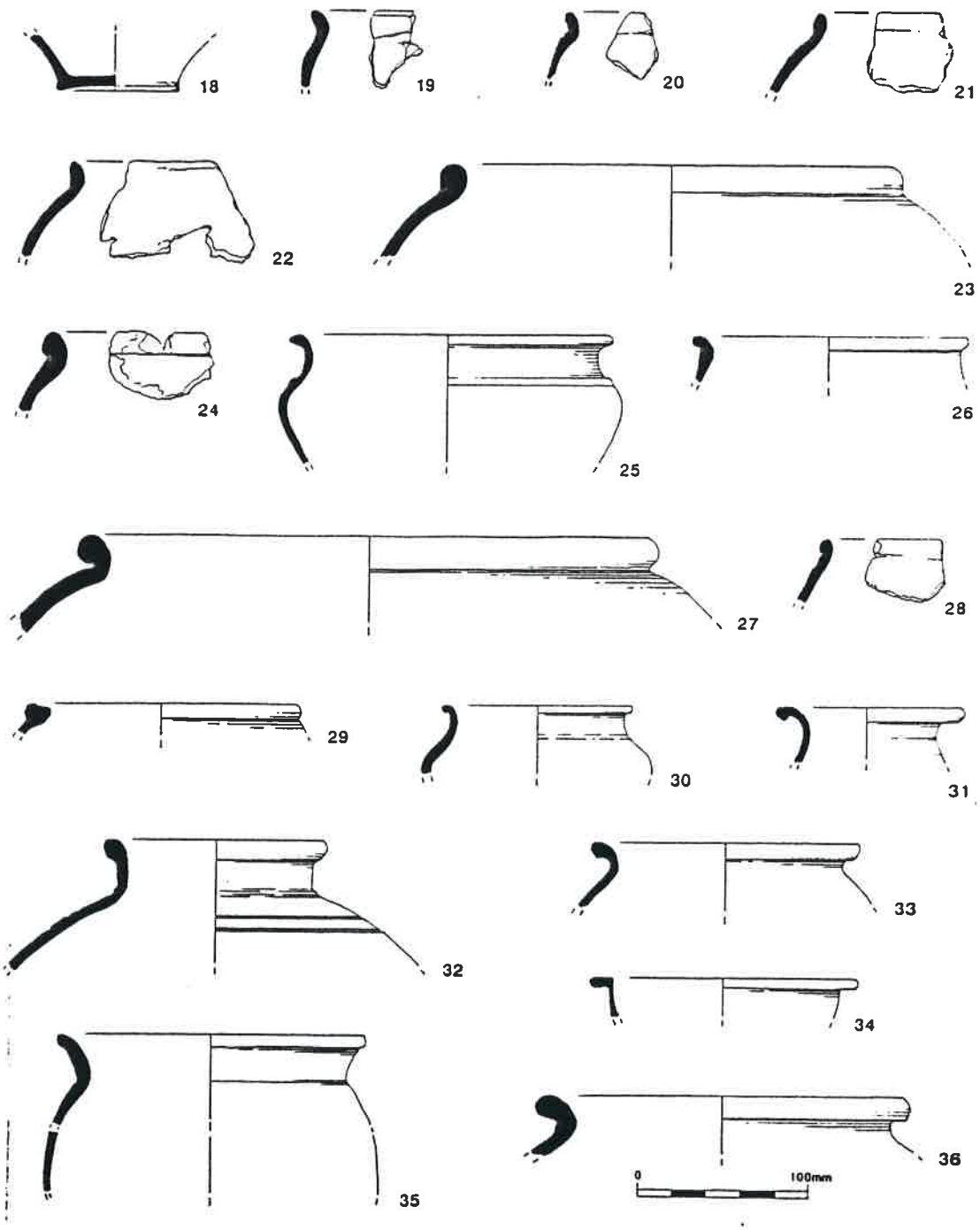


figure 11

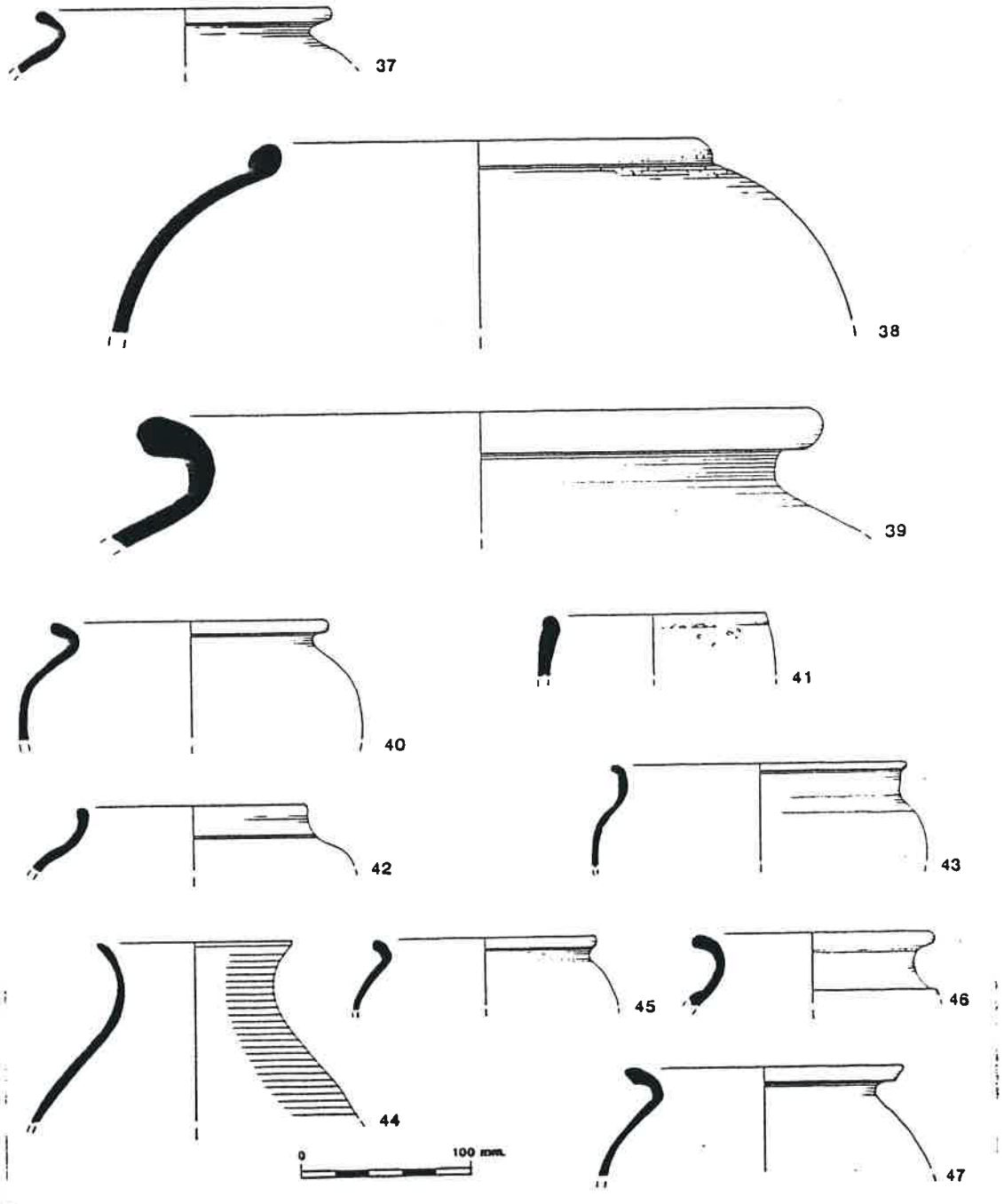


figure 12

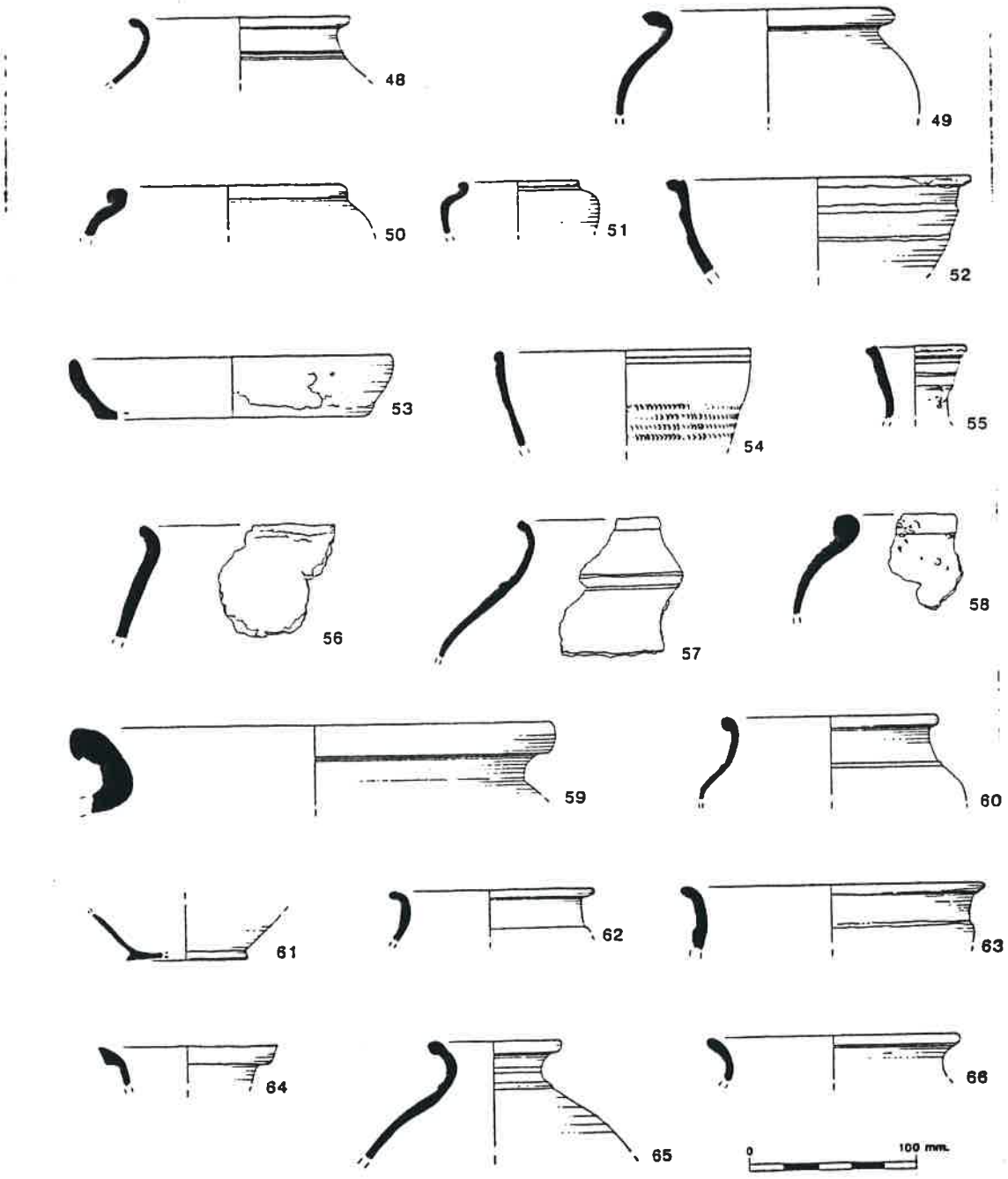


figure 13

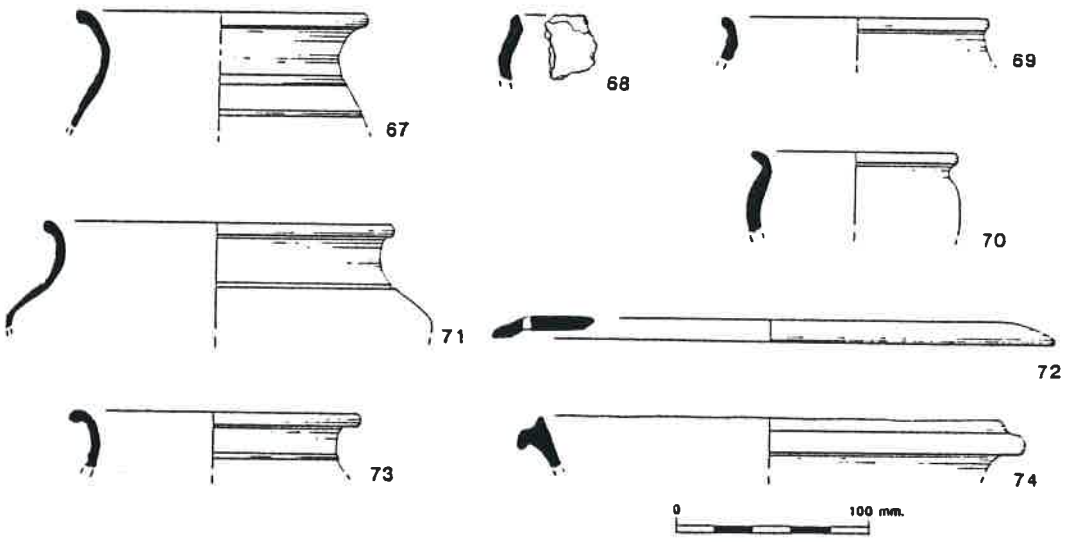


figure 14

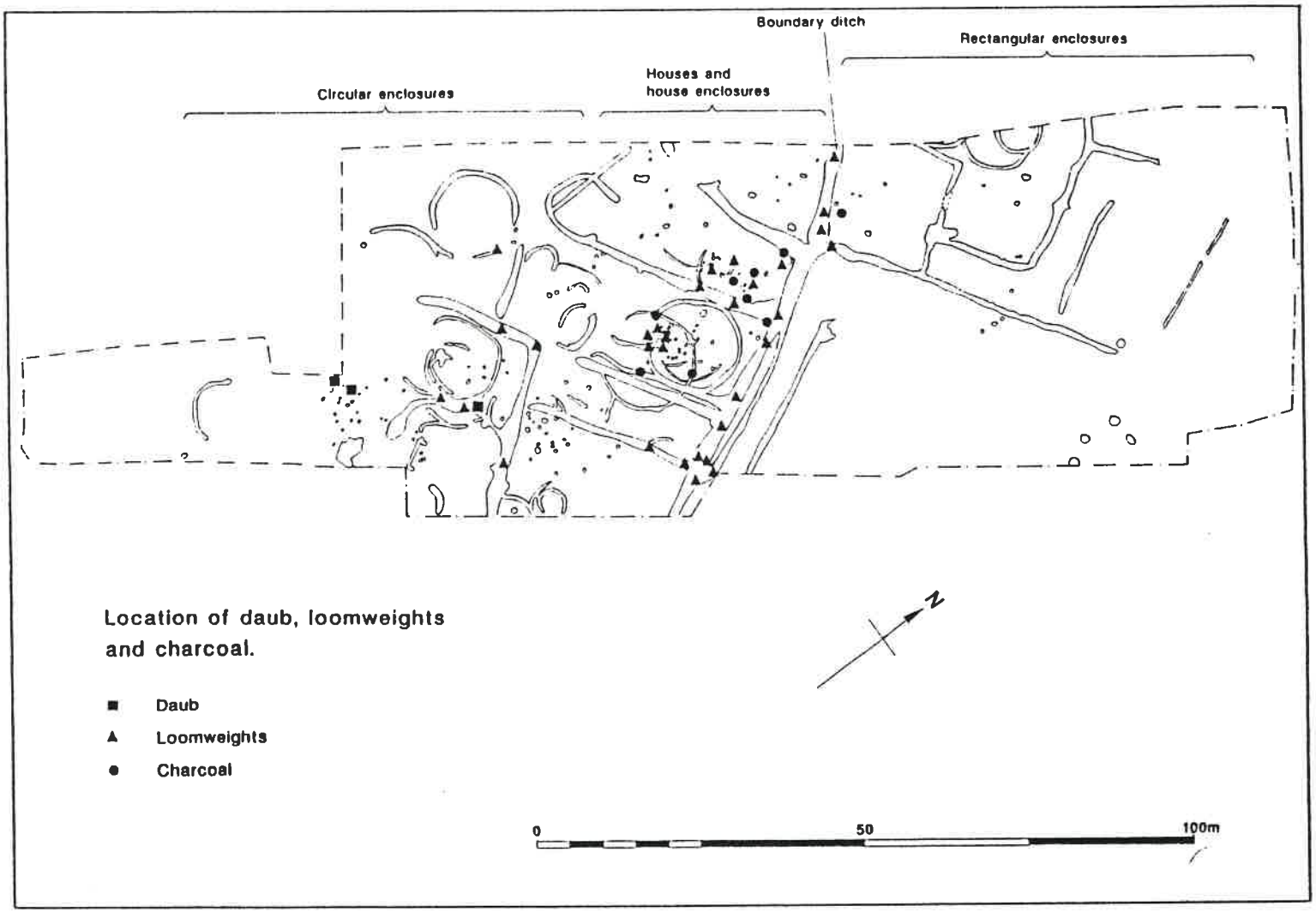

Boundary ditch
Rectangular enclosures
Houses and
house enclosures
Circular enclosures
Location of daub, loomweights
and charcoal.
Daub
Loomweights
Charcoal
N
0
50
100m

figure 15

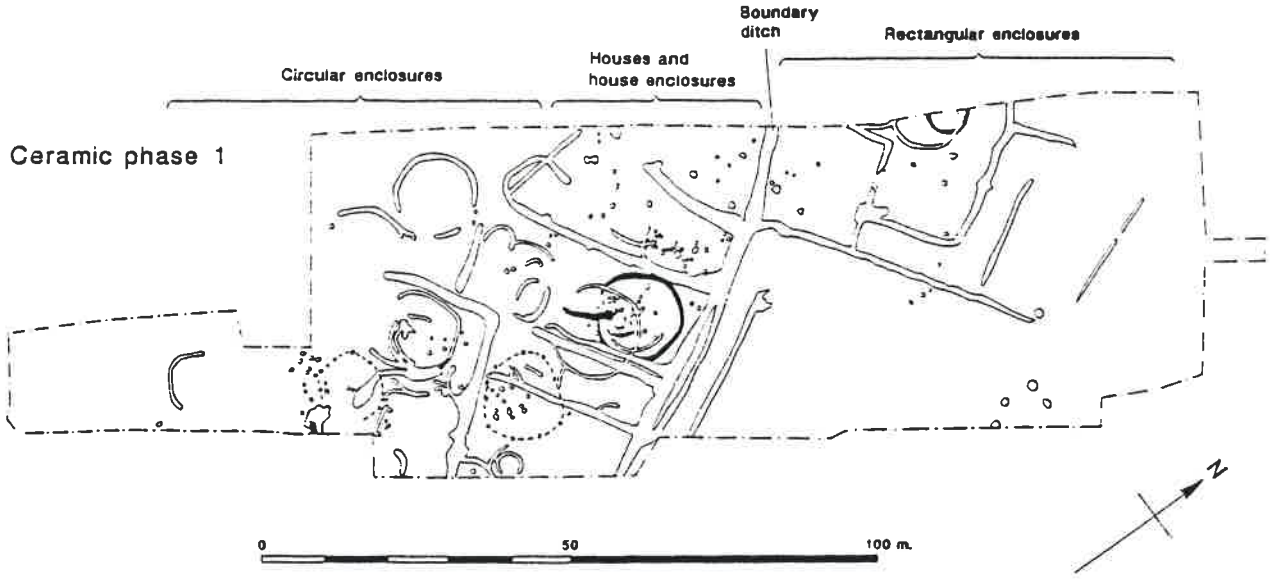

Boundary ditch
Rectangular enclosures
Houses and house enclosures
Circular enclosures
Ceramic phase 1
0
50
100 m.
N

figure 16

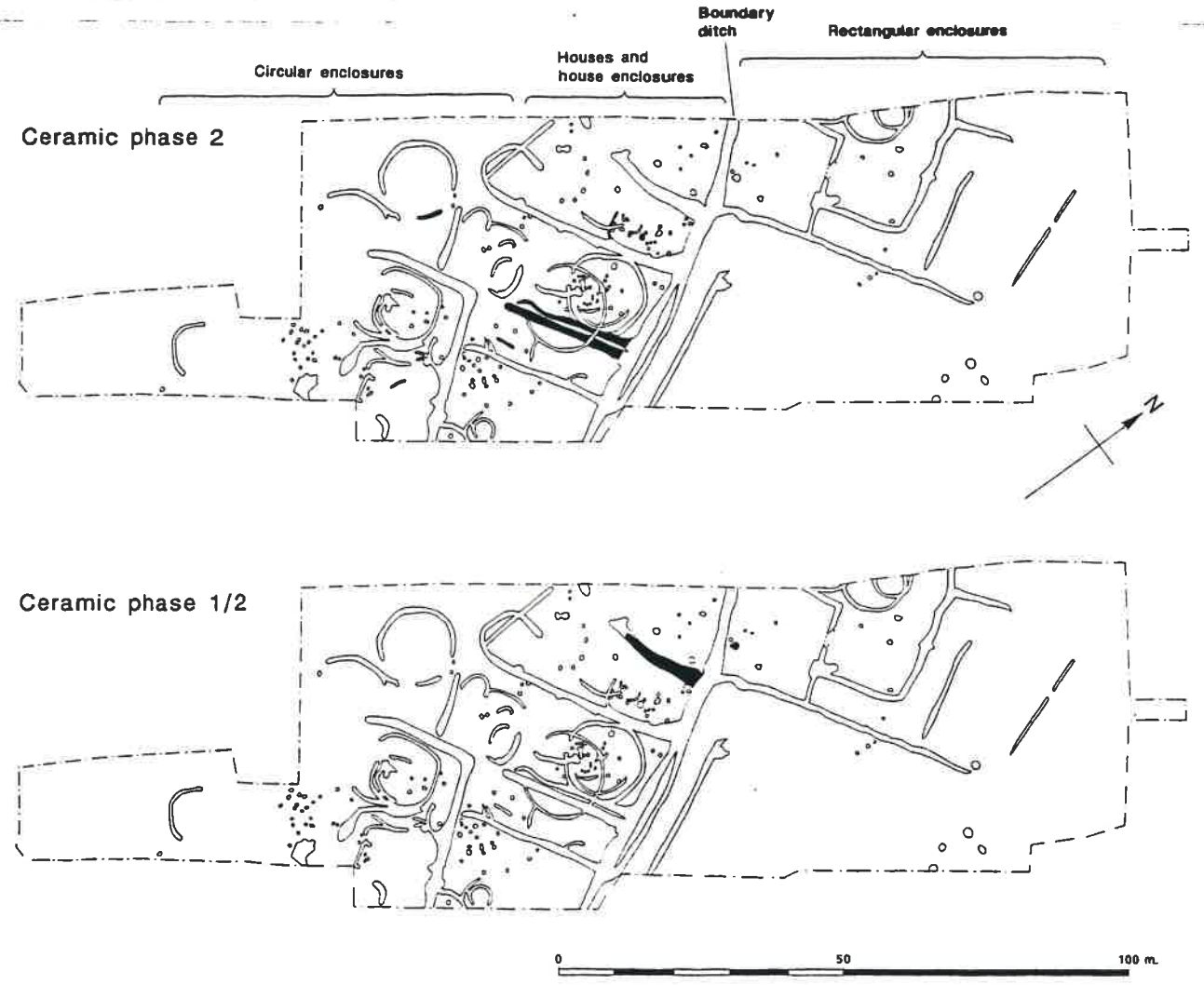

Boundary ditch
Rectangular enclosures
Houses and house enclosures
Circular enclosures
Ceramic phase 2
N
Ceramic phase 1/2
0
50
100 m.

figure 17

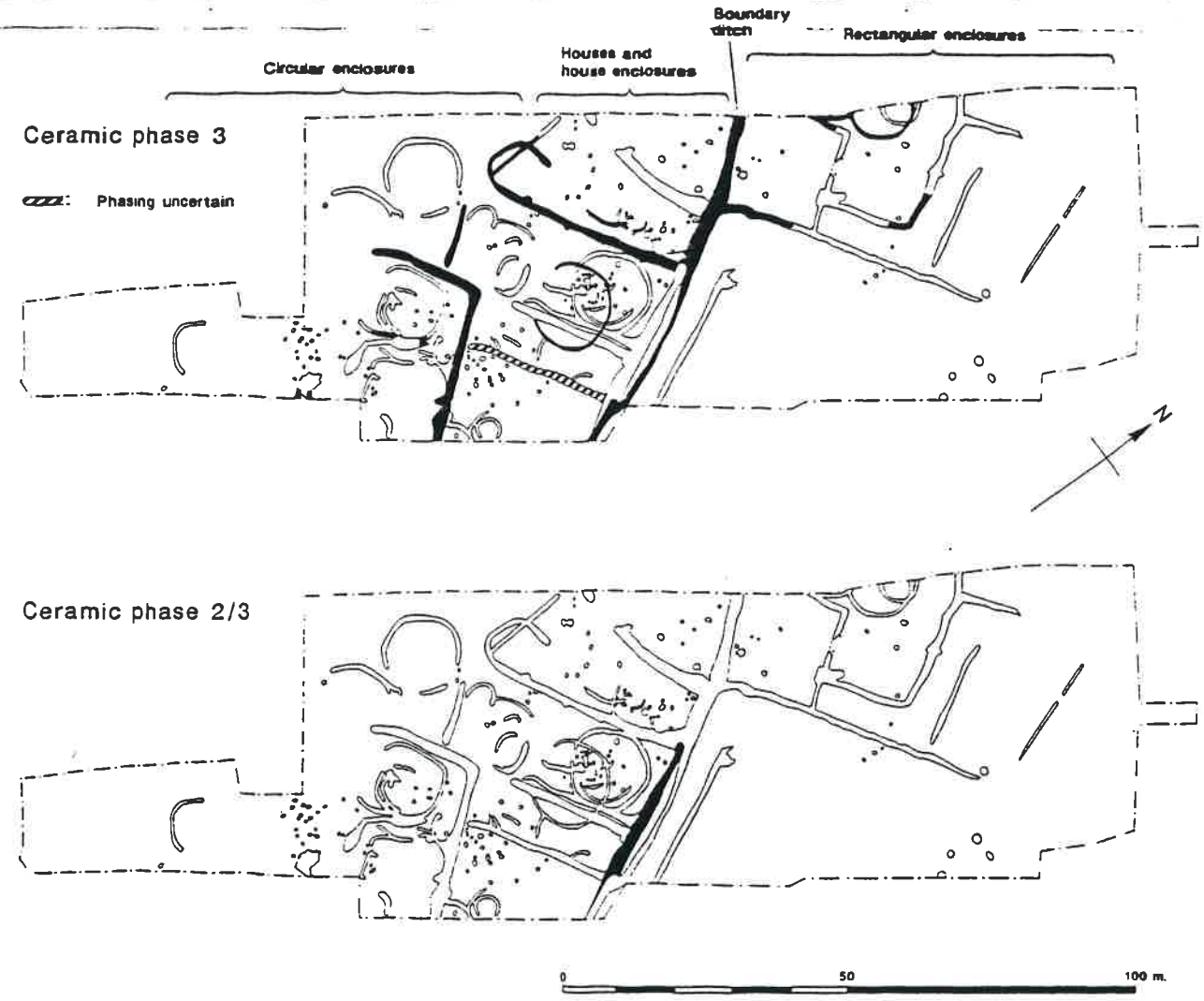

Boundary ditch
Rectangular enclosures
Houses and house enclosures
Circular enclosures
Ceramic phase 3
Phasing uncertain
N
Ceramic phase 2/3
0
50
100 m.

figure 18

4	2	3		2	1	1	1			1		2	
5	1	10	2	3			1	2	1				
2	3	15	2	1	3	2	2			1		2	
1	1	2	2	4	1	1	1	1				3	
		2	1	2		2	1			1	1	1	
	1		1	1	3		3					2	1
	1	2	4	1		4		1	2	1	1	1	
	3	1	2	6				6	1	1		1	1
1	1	4				3			2				1
	1		1			1	1	5	2	2		4	
	1				1	1	1	1	1	1	1		
	1	1		4			2	3			3	1	
2		1		2				3		1	1	1	
4	1			1		1		1	3		1	3	

SU 8470 7040 ↑ N

Area B: distribution of all struck flint

2	6	8	4	1	6	4	3	3		2	4		1
2	1	18	5	1	7	3	6	5	2		1		1
1	4	23	11	1	1	4		3	3		2		1
6	2	19	2	1	2	1	2	1			1	1	3
2	15	25	30	14	14	16	8	14	5	1		1	
3	6	22	4	4	5	5	1	7	2	1			1
4	2	11		6		4	4	4	2	1		1	
16	18	26	14	18	8	3	7	14	1	6		5	
1	1		3		1	3	6	2	2	1	3	2	
1	2	11			3		2		3		2	1	1
4	2		3	5	8	6	5	3	3	1	3	2	
	5	6		1	1	3	3	3	2	2	2	1	2
	2	3		1	5	1	7	3	5	3	1		1
		3			3	1	6	3	2		5		

SU 8460 7060 ↑ N

Area A/M: distribution of all struck flint

figure 19

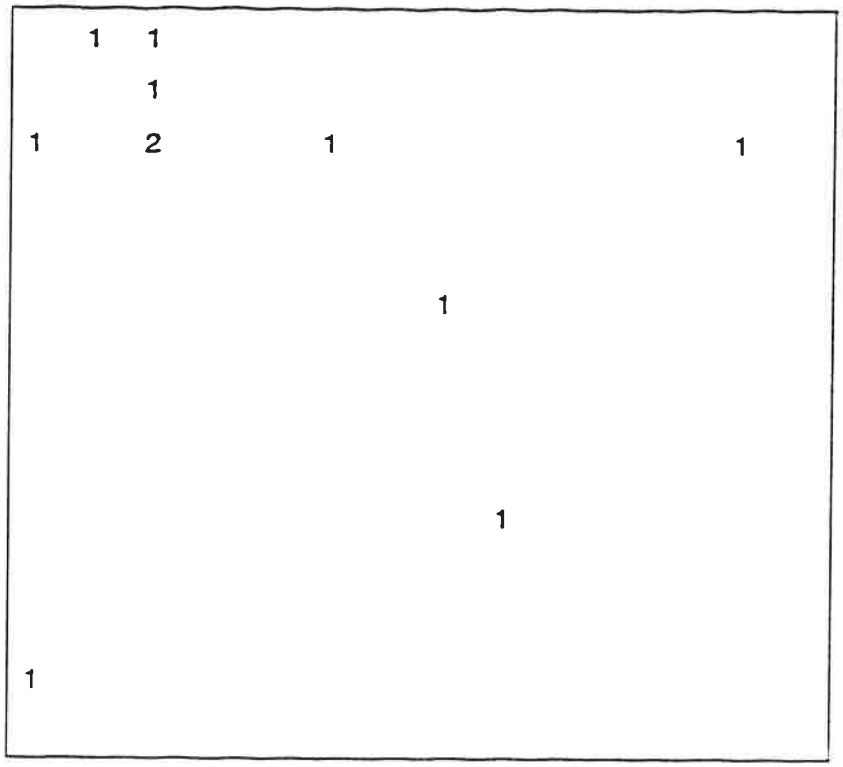
3	2	2		2	1	1	1					1	
1	1	1	1				1		1				
1	3	5	1		3		1						
	1			1	1	1		1					
		1				1	1					1	
	1		1		3		2						1
			3			2		1	1			1	
	3		1					1		1			
		4				2			1				
	1		1						2	2		1	
					1		1	1	1	1			
	1	1		1			2				2		1
1		1						3				1	
	1	1				1		1	3		1		

SU 8470 7040 ↑ N Area B: distribution of struck flint from fieldwalking

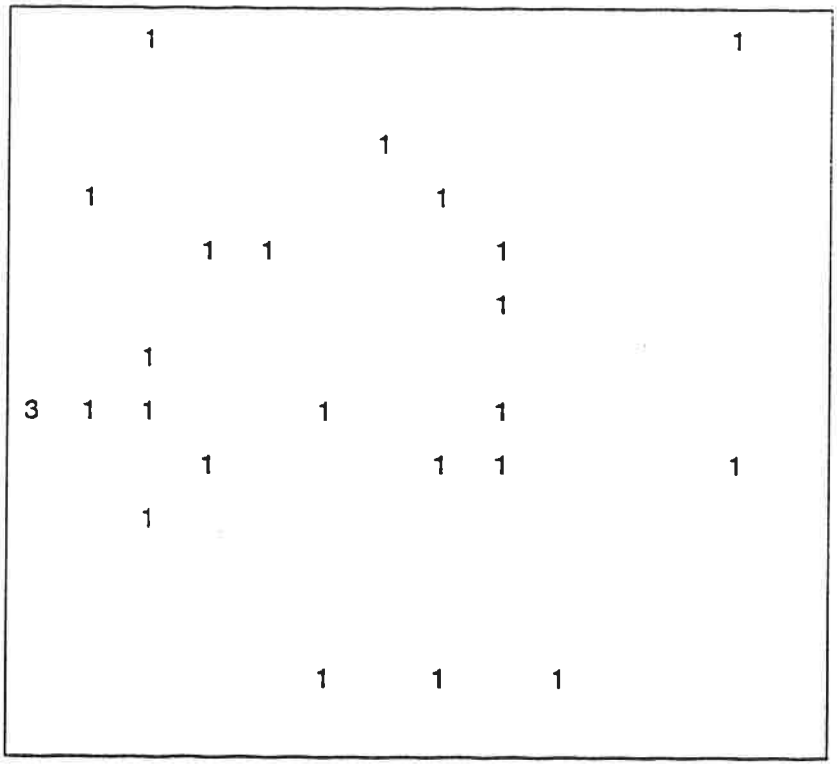
1	6	2	4	1	4	4	2	2		2	4		
2	1	4	5		4	3	5	3	1		1		1
1	1	5	11		1	4		2	3		2		1
5	11	4	2		1	1	1				1	1	1
		7	12	3	9	5		2	1			1	
2	2	7	4	1	5	5	1	4	1				
3	1	4		6		2	3	3	2	1			
1	6	5	1	3	5	2	3	7		1			
1	1		2		1	3	2	1	1	1	3	1	
1	1				1		1		3		2		
4	1			2	7	6	2	1	2	1	3	1	
	1			1	1	3	3	3	1	2		1	1
	1			1	5	1	2	2	4	3	1		
					1	1	5	3	1		5		

SU 8460 7060 ↑ N Area A/M: distribution of struck flint from fieldwalking

figure 20

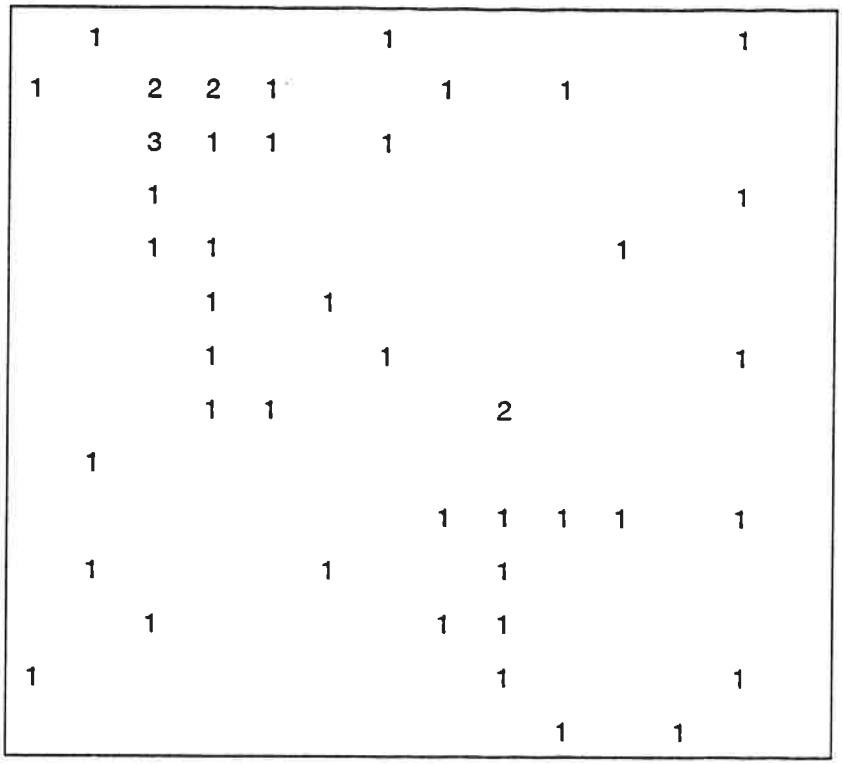


Area B: distribution of cores



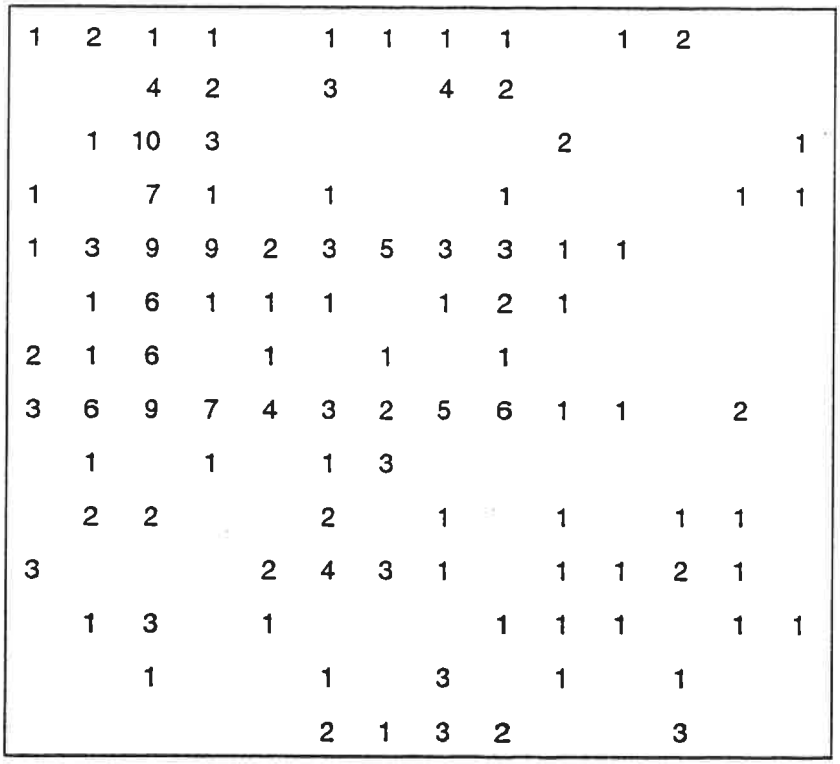
Area A/M: distribution of cores

figure 21



SU 8470 7040 ↑ N

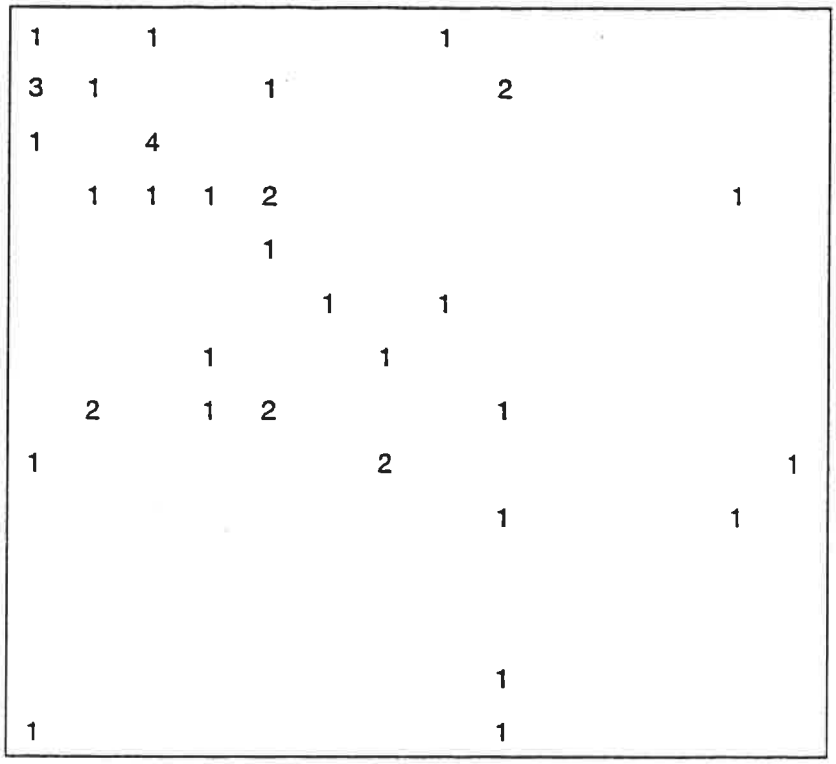
Area B: distribution of blades



SU 8460 7060 ↑ N

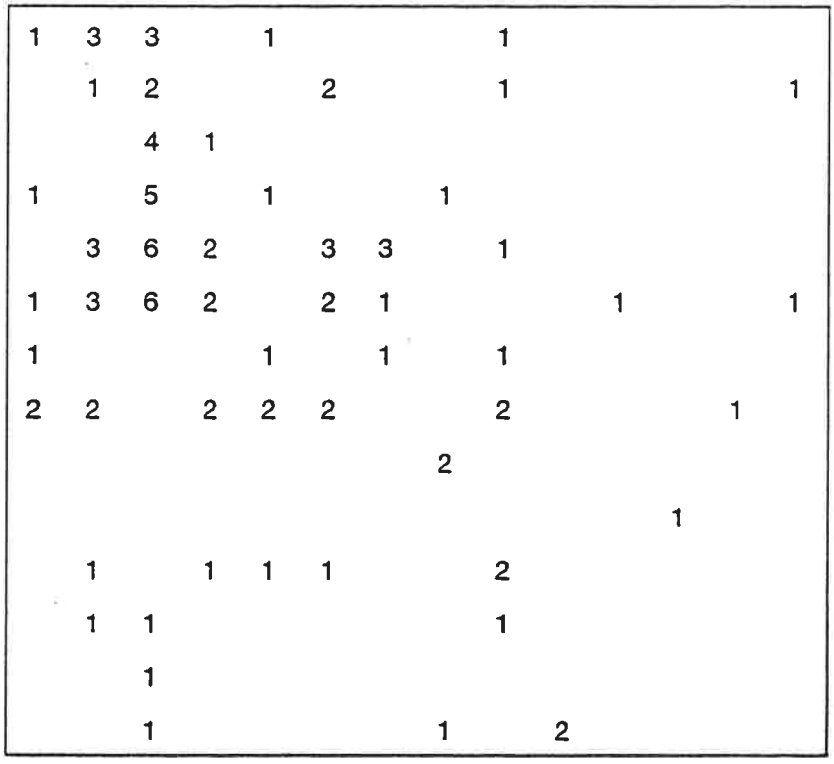
Area A/M: distribution of blades

figure 22



SU 8470 7040 ↑ N

Area B: distribution of retouched pieces



SU 8460 7060 ↑ N

Area A/M: distribution of retouched pieces

figure 23

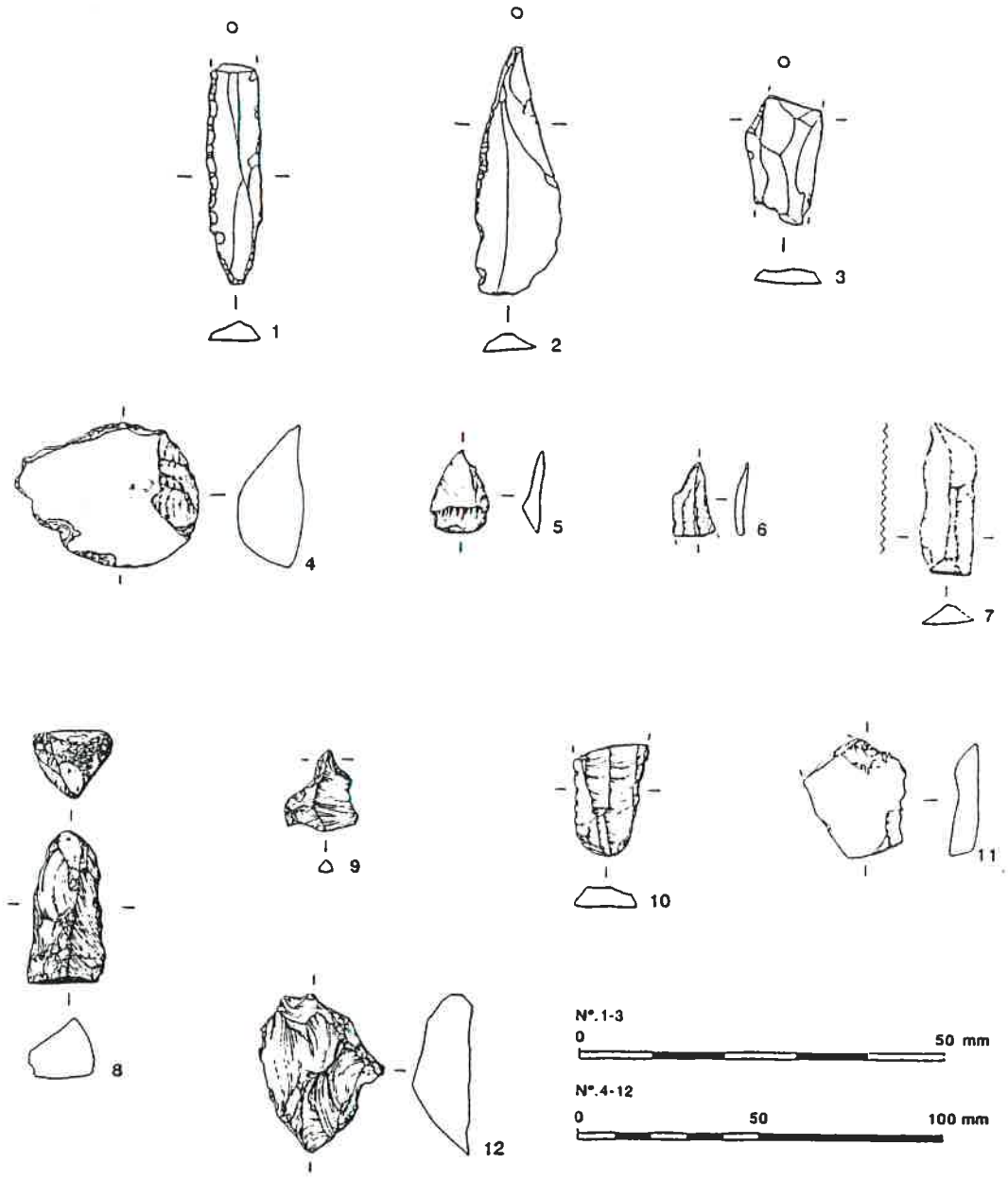


figure 24

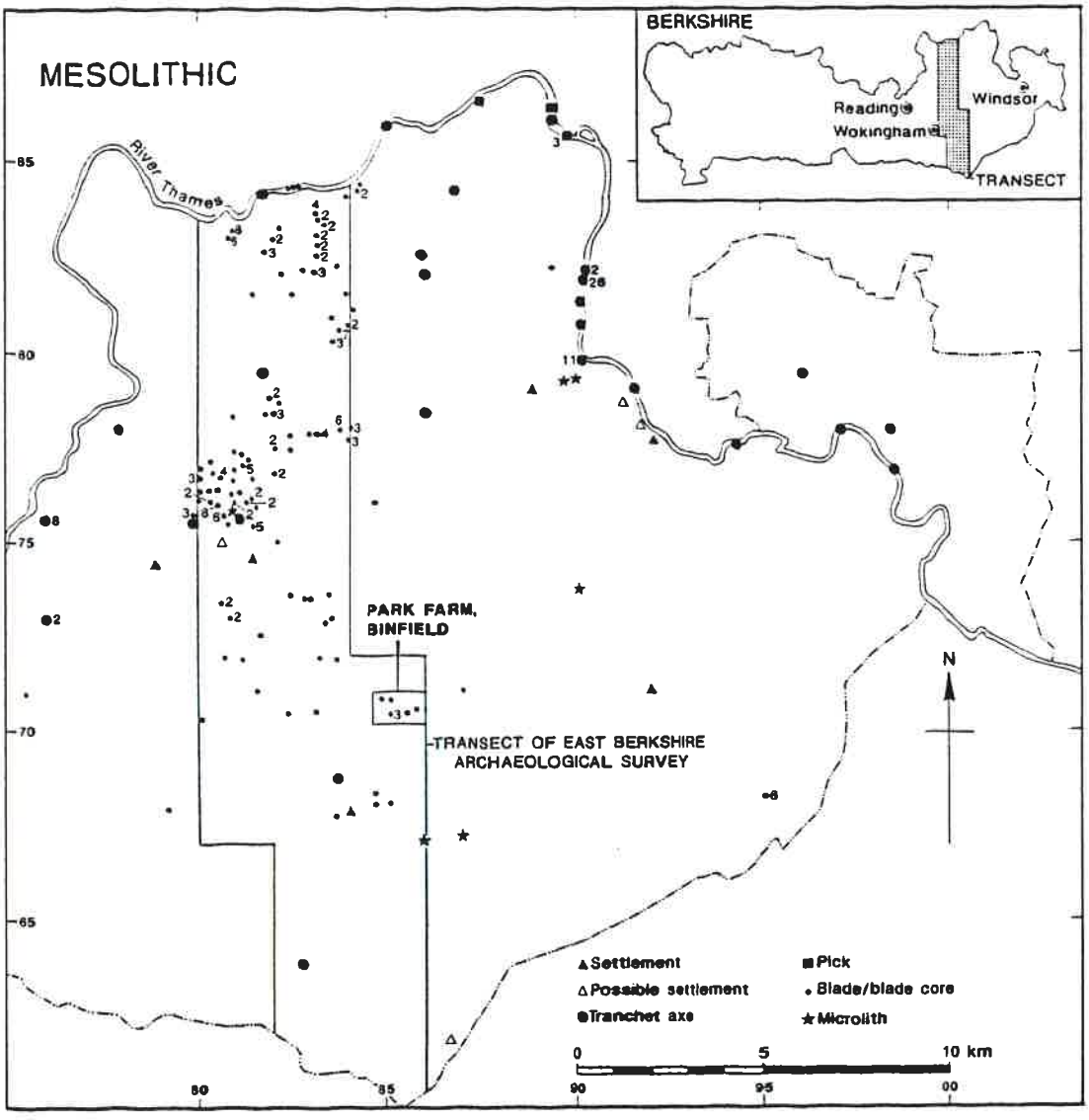

MESOLITHIC
BERKSHIRE
Reading
Wokingham
Windsor
TRANSECT
River Thames
PARK FARM, BINFIELD
TRANSECT OF EAST BERKSHIRE ARCHAEOLOGICAL SURVEY
N
▲Settlement
△Possible settlement
●Tranchet axe
■Pick
• Blade/blade core
★Microlith
0
5
10 km
85
80
75
70
65
80
85
90
95
00

figure 25

Table 1: Incidence of ware groups by ceramic phase (quantification by number of sherds)

Ware	Ceramic phase					Sherd total	%
	1	1/2	2	2/3	3		
S					14	14	0.8
F					1	1	0.1
M					9	9	0.5
W					40	40	2.3
Q					20	20	1.2
E20		1	23	2	24	50	2.9
E60			115	5	59	179	10.5
E80			18	7	100	125	7.3
E subtotal		1	156	14	183	354	20.7
O20					37	37	2.2
O30					11	11	0.6
O40					1	1	0.1
O50			1	1	48	50	2.9
O70			12	25	280	317	18.5
O80					1	1	0.1
O subtotal			13	26	378	417	24.4
R10					3	3	0.2
R20			1	3	466	470	27.5
R30					102	102	6.0
R80			6	7	20	33	1.9
R subtotal			7	10	591	608	35.5
B					10	10	0.6
P	152	3	38	3	43	239	14.0
TOTAL	152	4	214	53	1289	1712	
%	8.9	0.2	12.5	3.1	75.5		

Table 4: Weight in grammes of fired clay by type and fabric

Fabric	Loomweight	Possible loomweight	Daub	Probable daub	Other (? loomweight)
1	2550 g	3350 g	3625 g	150 g	1025 g
2	3025 g	1605 g	-	-	2150 g
3	1650 g	300 g	-	-	225 g

Table 5: loomweight/possible loomweight fragments, fabric by ceramic phase

	Loomweight/possible loomweight fragments					
Fabric	**CP1**	**CP2**	**CP2-3**	**CP3**	**Undated**	**Total**
1		3		5/4	/1	8/5=13
2			1	1/20	4/3	6/23=29
3	/2			/1	3	3/3=6

Note: of the 31 possible loomweight fragments, 8 were found in context 1011 and 4 in context 1154, both of CP3. Each of these 12 fragments appeared to derive from a different loomweight.

Table 6: Carbonised seeds and chaff

		Number of items	
		1040/A/2	1040/C/3
Weed seeds			
Lathyrus nissolia L.	grass vetchling	0	1
cf. *Vicia* or *Lathyrus* sp.	vetch, tare	0	1
Polygonum persicaria L.	red shank	0	1
Rumex sp.	dock	0	4
Total weed seeds		0	7
Grain			
Triticum sp.	wheat	0	6
Avena sp.	oats	0	5
cf. *Avena* sp.	oats	0	2
cereal indet.		3	36
Total grain		3	49
Chaff			
Triticum dicoccum Shüb	emmer wheat - glume bases	0	2
T. spelta L.	spelt wheat - glume bases	2	94
T. dicoccum Shüb or *spelta* L.	wheat - glume bases	12	151
T. dicoccum Shüb or *spelta* L.	wheat - rachis nodes	1	4
Avena sp.	oats - awn fragments	4	32
Total chaff items		23	283
Volume of soil processed (litres)		5	5

Table 7: charcoal

	Charcoal type			
context	*Alnus/Corylus* Alder/hazel	*Fraxinus* Ash	cf. Pomoideae Hawthorn etc	*Quercus* Oak
1004/A/3	++	-	++	-
1027/B/3	-	-	-	++
1040/C/3	-	-	+	++
1048/A/4	++	-	-	++
1053/A/2	-	-	-	++
1053/ /2	-	-	-	+
1054/A/2	-	-	-	++
1055/A/2	-	-	-	+
1116/A/1	++	+	-	++
1119/1	++	-	-	++
1260	-	-	-	++

Table 8: Pieces of struck flint per 5 m² collection unit by method of recovery

	Area B			Area A/M			
No. of pieces per collection unit	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 1.0 m x 0.5 m	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 2.0 m x 2.0 m (sieved)	Test pits 2.0 m x 2.0 m (unsieved)
0	122	160	5	114	110		
1	49	26	40	52	63	1	5
2	14	6	4	26	11	4	5
3	8	3	-	19	7	5	2
4	1	-	-	13	2	2	3
5	1	-	-	12	-	1	-
6	-	1	-	4	-	1	1
7	-	-	-	4	-	1	1
8	-	-	-	-	-	3	-
9	1	-	-	1	-	-	-
10	-	-	-	-	-	4	-
11	-	-	-	1	-	4	-
12	-	-	-	1	-	1	-
13	-	-	-	-	-	4	-
18	-	-	-	-	-	1	-

Table 9: Sites used for compositional analysis. Data from Ford (1991)

Site	Scrapers	Microliths	Burins	Tranchet axes & axe-sharpening flakes	Micro-denticulates	Cores	Total retouched	Totals	Density per m^2 of denser areas
Binfield A/M	6	3		1	6	24	49	357	6.2
EB 340	8	4	-	-	-	35	28	615	4
EB 250	15	1	-	2	-	26	23	266	4.5
EB 480	18	9	1	1	-	90	73	899	9.7
North Stoke ST 150	33	9	6	1	-	68	147	1209	15
North Stoke ST 56	99	17	8	4	8	164	230	2557	20
Wawcott I	4	112	4	8	1	77	247	4662	141
Wawcott III	116	526	30	12	38	195	1279	51455	990
Wawcott IV	16	19	7	5	1	60	55	1915	145
Fulmer, Bucks	15	6	1	4	-	16	29	589	3.4
Holyport, Berks	85	117	?	4	?	235	206	15941	Large
Thatcham	132	285	61	33	??	283	634	19282	166
Sandstone, Bucks	8	15	1	1	-	14	26	290	41
Gerrards Cross, Bucks	20	3	1	5	-	27	47	1931	193
Paddington Farm, Surrey	15	25	1	5	-	267	219	3830	29

Table 10: Retouched pieces (including possibles but excluding flakes/blades with irregular retouch etc. as in text)

	Area B			Area A/M			
	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 1.0 m x 0.5 m	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 2.0 m x 2.0 m (sieved)	Test pits 2.0 m x 2.0 m (unsieved)
Scrapers	5			3	1	2	
Awl/scraper	1						
Notch/scraper				1			
Awl		1		2	1	1	
Knife				1			
Notched flakes				1		2	
Microliths				2			1
Microlith tip			1				
Retouched fragment					1		
Denticulate scraper				1			
Drill bits (aré cou)				2			

Table 11: Flint summary

	Area B			Area A/M				
	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 1.0 m x 0.5 m	Fieldwalking	Test pits 0.3 m x 0.3 m	Test pits 2.0 m x 2.0 m (sieved)	Test pits 2.0 m x 2.0 m (unsieved)	Unstratified
Intact flakes	30	14	10	87	17	52	2	5
Intact blades	6	2	-	11	1	10	4	-
Broken blades	49	26	17	135	39	92	19	5
Broken blades/broken possible blades	17	12	12	87	34	63	11	-
Spalls	14	17	7	35	27	25	4	4
Cores	5	4	1	4	3	2	1	1
Blade cores (& possibles)	8	1	1	20	1	5	2	-
Core fragments/bashed lumps	6	1	-	11	3	8	2	-

Material to be published in microfiche

Ware	Common Name	Description	Source
S	Samian ware	See e.g. Webster 1984, 7	South and Central Gaul
F43	Rhenish ware	Greene 1978, 18	?Lezoux
M21	Verulamium	c.f. Saunders and Havercroft 1977, 119	Verulamium region
M22	Oxford white ware	Young 1977, 56	Oxfordshire
W21	Verulamium	as M21 above	Verulamium region
W25		White external surface, grey core and interior. Moderate fine quartz and sparse organic inclusions	
W31		Cream-white. Fine smooth fracture. Very sparse fine quartz and organic inclusions	
Q25		Orange brown fabric with white slip. Fairly smooth fracture, with common fine quartz, occcasional iron oxide and clay pellet inclusions	
Q26		Red brown fabric with off-white slip. Smooth fracture. Sparse fine quartz sand, sparse clay pellet and iron oxide inclusions, moderate fine mica. Cf O51	
Q27		Orange-buff surfaces, grey core with white slip? Sparse-moderate fine quartz sand, sparse organic and iron oxide inclusions	
Q31		Grey fabric with cream/off-white slip. Smooth fracture. Sparse, ill-sorted quartz sand grains. sparse iron oxides and rounded white ?calcareous inclusions	
E21		Black brown. Smooth, soapy feel. Sparse-moderate fine quartz sand. Sparse (occasionally moderate) subrounded-angular buff ?grog. Sparse-moderate organic and rare flint inclusions	
E22		Black brown. Smooth fracture. Sparse-moderate fairly fine quartz sand, sparse iron oxide and flint inclusions and organic voids	
E23		Dark brown-black. Smooth-laminar fracture. Common rounded quartz sand. Sparse iron oxide and flint inclusions	
E61		Buff brown, sometimes with grey core. Hackly fracture. Common angular grey-white calcined flint inclusions up to 3.5mm. Sparse quartz sand, clay pellet and organic inclusions	

E62		Grey-brown to black. Hackly fracture. Moderate-common angular grey-white calcined flint inclusions up to c 4mm. Sparse fine quartz sand and mica	
E63		Black-brown. Hackly fracture. Moderate angular-rounded ?grog, sparse flint, quartz sand and organic inclusions	
E64		Buff-brown. Hackly fracture. Moderate angular grey calcined flint up to 4mm. Common quartz sand and moderate fine mica inclusions	
E65		Buff-brown. Hackly fracture. Moderate angular grey calcined flint inclusions up to 3.5mm. Moderate sub rounded quartz inclusions up to 1.5-2mm. Occasional clay pellet	
E66	?Silchester ware	Buff-red. Hackly-laminar fracture. Common angular grey-white calcined flint inclusions up to 4.5mm	
E81		Brown black. Hackly-smooth fracture. Moderate subrounded ?grog, sparse-moderate quartz sand and sparse subrounded clay pellet inclusions	
E82		Grey to grey-black. Soapy feel. Hackly fracture. Moderate-common subrounded ?grog, moderate organic inclusions/voids. Sparse-moderate quartz sand	
E83		Buff-brown exterior, grey core and interior. Moderate subangular ?grog, sparse-moderate quartz sand, sparse angular white-grey calcined flint inclusions	
O25		Buff. Smooth-hackly fracture . Moderate-common fine rounded quartz sand, sparse rounded clay pellets and iron oxide inclusions	
O26		Orange-buff to grey-buff. Smooth fracture. Moderate-common subrounded quartz sand, ill-sorted. Sparse iron oxides and fine mica	
O27		Buff brown. Rough surfaces and hackly fracture. Common-abundant subrounded quartz sand. Sparse organic, iron oxide and white ?calcareous inclusions	
O31		Red-buff. Smooth fracture. Moderate-common fine quartz sand. Sparse clay pellets, iron oxide and white ?calcareous inclusions	North Wiltshire?
O33		Red-buff. Smooth fracture. Smooth fracture. Moderate fairly fine quartz sand. Sparse iron oxides	North Wiltshire?

O43	Severn Valley ware	Orange buff. Smooth fracture. Sparse-moderate fine quartz sand. Sparse ?clay pellet and organic inclusions. Sparse-moderate mica.	
O50		Orange-brown. Smooth fracture. Sparse-moderate quartz sand and sparse iron oxide inclusions	
O51		Red-buff. Smooth fracture. Sparse fine quartz sand, iron oxide and ?organic voids. Sparse-moderate mica	
O52		Red-brown exterior surface and margin, grey interior and core. Sparse quartz sand, iron oxide and organic inclusions. Sparse-moderate fine mica	
O71		Buff to buff-brown, usually fairly soft. Hackly fracture. Moderate subrounded grog/clay pellets up to c 2mm. Sparse quartz sand, iron oxide and organic inclusions	
O72		Buff-brown. Hackly fracture. Moderate subrounded grog/clay pellets. Sparse angular calcined flint, iron oxide and organic inclusions	
O73	?Alice Holt fabric D	Orange buff. Hard, harsh feel. Hackly fracture. Common-abundant subrounded quartz sand up to 2mm, ill-sorted. Sparse mica. (cf Lyne and Jefferies 1979, 18)	
O74		Buff-brown, grey-brown core and interior in places. Hackly fracture. Moderate organic, sparse or sparse-moderate subrounded ?grog and clay pellet inclusions. Sparse quartz sand	
O81	Pink grogged ware	cf Booth and Green 1989, 77.	?Milton Keynes area
R11		Grey to brown grey. Smooth fracture. Very sparse fine quartz sand, sparse-moderate fine mica	
R21		Medium-dark grey. Fairly smooth-hackly fracture. Moderate-common fine quartz sand, sparse iron oxide and clay pellets, occasional fint, organic and mica inclusions	
R22		Grey to black-brown. Moderate-common quartz sand, sparse small angular flint and occasional iron oxide and organic inclusions	
R23	?Alice Holt fabric D	Buff-grey to dark grey. Otherwise as O73.	

R24		Mid grey. Smooth or slightly hackly fracture. Moderate-common, mainly fine quartz sand, sparse-moderate organic and mica, occasional iron oxide inclusions	
R31		Mid grey. Smooth fracture. Sparse fine quartz sand and organic inclusions, occasional iron oxide	
R32		Grey, sometimes with red-brown core or margins. Laminar fracture. Sparse quartz sand, iron oxide, clay pellet and organic inclusions	
R33		Grey surfaces, red-brown core. Sometimes very hard. Sparse-moderate fine quartz sand and very sparse iron oxide inclusions	
R81		Dark grey-black surfaces, brown to brown-black core. As O71	
R82		Light grey, core sometimes darker. Hackly fracture. Moderate subangular grog/clay pellet inclusions up to 5mm, poorly sorted. Sparse-moderate subrounded quartz up to 2mm, poorly sorted. Sparse organic and iron inclusions	
B11	Black-burnished ware category 1	As Farrar 1973	Dorset
P11		Buff-brown to black (variable firing). Moderate subrounded quartz sand, poorly sorted. Sparse iron oxide and very sparse organic inclusions	
P12		Brown-black to black (variable firing). Sparse-moderate fine quartz sand and fine mica, sparse (occasionally moderate) organic inclusions, sparse iron oxide and clay pellets	
P13		Buff-brown to black (variable firing). Sparse-moderate rounded ?clay pellets, sparse subrounded quartz, iron oxide, mica and organic inclusions/voids	
P14		Grey-brown to black (variable firing). Sparse-moderate quartz sand and grey calcined flint, sparse mica and organic inclusions	
P15		Grey-brown to black (variable firing). Moderate organic inclusions/voids, sparse-moderate fine quartz sand, sparse mica	

Table 2. Fabric x Ware: Number of Sherds

	FINE			SAND															GROG/CLAY PELLETS											
FABRIC → WARE ↓	NN1	NM1		AN1	AN2	AN3	AN4	AI2	AI3	AG2	AG3	AG4	AV1	AV2	AV3	AZ1	AF2	AF3		GA1	GA3	GA4	GI3	GI5	GV2	GV3	GV4	GZ4	GF4	GF5	
S	14																														
F43	1																														
M21							5																								
M22								4																							
W21						28																									
W25														6																	
W31				6																											
Q25								9																							
Q26								5												1											
Q27														2																	
Q31								3																							
E21												1		28	2						1					1					
E22								5									1	1													
E23						4			4									2													
E61																															
E62																															
E63																															
E64																															
E65																															
E66																															

Table 2. Fabric x Ware: Number of Sherds

	FINE			SAND															GROG/CLAY PELLETS											
FABRIC → **WARE ↓**	NN1	NM1		AN1	AN2	AN3	AN4	AI2	AI3	AG2	AG3	AG4	AV1	AV2	AV3	AZ1	AF2	AF3		GA1	GA3	GA4	GI3	GI5	GV2	GV3	GV4	GZ4	GF4	GF5	
E81																					6	1									
E82											2										1					94	1				
E83																						20									
025						1				2													1								
026									26																						
027						1	2								4																
031										6																					
033								5																							
043																									1						
050									1																						
051				40				2								2															
052													1																		
071											13											1	1	1			263	1			
072																													5	1	
073							26																								
074																															
081																											1				
R11		3																													
R21								1	223		16																				
R22					1			2							2			73													
R23							22																								
R24											2			120	8																

Table 2. Fabric x Ware: Number of Sherds

	FINE			SAND															GROG/CLAY PELLETS										
FABRIC → WARE ↓	NN1	NM1		AN1	AN2	AN3	AN4	AI2	AI3	AG2	AG3	AG4	AV1	AV2	AV3	AZ1	AF2	AF3		GA1	GA3	GA4	GI3	GI5	GV2	GV3	GV4	GZ4	GF4	GF5	
R31														89																	
R32								1																							
R33								6																							
R81																											28				
R82																						3									
B11						10																									
SUB TOTAL	15	3	18	46	1	44	55	43	254	8	33	1	1	245	16	2	1	76	826	1	8	25	2	1	1	95	293	1	5	1	433
%			1.2																56.1												29.4 %
P11						42			6																						
P12								29	1	2	1			109	2																
P13											2																				
P14																	6	26													
P15																															
SUB TOTAL						42		29	7	2	3			109	2		6	26	226												
TOTAL %	15	3	18 1.1	46	1	86	55	72	261	10	36	1	1	354	18	2	7	102	1052 61.4	1	8	25	2	1	1	95	293	1	5	1	433 25.3

Table 2. Fabric x Ware: Number of Sherds

	'IRON'					ORGANIC					FLINT											TOTAL	
FABRIC → **WARE ↓**	IA3	IA4	IG2	IM1		VA3	VA4	VG3	VG4		FN4	FN5	FA3	FA4	FA5	FG3	FG4	FG5	FV4	FV5			
S																						14	0.8%
F43																						1	0.1%
M21																						5	0.3%
M22																						4	0.2%
																						9	0.5%
W21																						28	1.6%
W25																						6	0.4%
W31																						6	0.4%
																						40	2.3%
Q25																						9	0.5%
Q26																						6	0.4%
Q27																						2	0.1%
Q31																						3	0.2%
																						20	1.0%
E21																						33	1.9%
E22																						7	0.4%
E23																						10	0.6%
E61														2			2	1	4	43		52	3.0%
E62													1	8	61				1			71	4.1%
E63								3								8						11	0.6%
E64															12							12	0.7%
E65															9							9	0.5%
E66											1	23										24	1.4%

Table 2. Fabric x Ware: Number of Sherds

	'IRON'					ORGANIC					FLINT											TOTAL	
FABRIC → **WARE ↓**	IA3	IA4	IG2	IM1		VA3	VA4	VG3	VG4		FN4	FN5	FA3	FA4	FA5	FG3	FG4	FG5	FV4	FV5			
E81																						7	0.4%
E82																						98	5.7%
E83																						20	1.1%
																						354	20.7%
025																						4	0.2%
026																						26	1.5%
027																						7	0.4%
031																						6	0.4%
033																						5	0.3%
043																						1	0.1%
050																						1	0.1%
051				4																		48	2.8%
052																						1	0.1%
071																						280	16.4%
072																						6	0.4%
073																						26	1.5%
074									5													5	0.3%
081																						1	0.1%
																						417	24.3%
R11																						3	0.2%
R21																						240	14.1%
R22																						78	4.6%
R23																						22	1.3%
R24																						130	7.6%

Table 2. Fabric x Ware: Number of Sherds

	'IRON'					ORGANIC					FLINT											TOTAL	
FABRIC → WARE ↓	IA3	IA4	IG2	IM1		VA3	VA4	VG3	VG4		FN4	FN5	FA3	FA4	FA5	FG3	FG4	FG5	FV4	FV5			
R31																						89	5.2%
R32			6																			7	0.4%
R33																						6	0.4%
R81							1		1													30	1.8%
R82																						3	0.2%
																						608	35.5%
B11																						10	0.6%
SUB TOTAL			6	4	10		1	3	6	10	1	23	1	10	82	8	2	1	5	43	176	1473	86.0%
%					0.7					0.7											11.9		
P11																						48	2.8%
P12						2																146	8.5%
P13	1	1							2													6	0.4%
P14													2									34	2.0%
P15							5															5	0.3%
SUB TOTAL	1	1			2	2	5		2	9			2								2	239	14.0%
TOTAL	1	1	6	4	12	2	6	3	8	19	1	23	3	10	82	8	2	1	5	43	178	1712	
%					0.7					1.1											10.4		

Table 3. Ware x type: quantification by EVEs

	FLAGONS			JARS												
	BA	BB	B	CA	CB	CC	CD	CE	CF	CG	CH	CI	CK	CL	CN	C
S																
M21																
M22																
M																
W31																
Q25	28		28													10
Q31																13
Q	28		28													23
E21							14				9					54
E22											7					17
E23							7									16
E61											13					13
E62				12						8	60				9	103
E63										26						33
E64											8					8
E65											14					14
E81							19									19
E82						4		8		14						105
E83											7				9	22
E				12		4	40	8		48	118				18	404
033		10	10													
051																3
071															38	38
073											27					27
0		10	10								27				38	68
R21						43	101		21		21		12			349
R22							44							8		162
R24						43	30					21				179
R31							22					13				111
R32							20									20
R33																9
R81															20	20
R						86	217		21		21	34	12	8	20	850
B11													15			15
P11					53											58
P12					17						21					43
P13					8											8
P15					12											12
P					90						21					121
TOTAL	28	10	38	12	90	90	257	8	21	48	187	34	27	8	76	1481
%	1.5	0.5	2.1	0.7	4.9	4.9	13.9	0.4	1.2	2.6	10.1	1.9	1.5	0.4	4.1	80.2

Table 3. Ware x type: quantification by EVEs

	JARS/ BOWLS	BEAKERS	CUPS		BOWLS	
	D	E	FC	F	HC	H
S			30	30	103	103
M21						
M22						
M						
W31						7
Q25						
Q31						
Q						
E21	5					
E22						
E23						
E61						
E62						
E63						
E64						
E65						
E81						
E82	5					
E83						
E	10					
033						
051						
071						
073						
0						
R21					13	21
R22						11
R24						
R31	22	12				
R32						
R33						
R81						
R	22	12			13	32
B11						
P11						
P12	3					
P13						

Table 3. Ware x type: quantification by EVEs

	JARS/ BOWLS	BEAKERS	CUPS		BOWLS	
	D	E	FC	F	HC	H
P15						
P	3					
TOTAL	35	12	30	30	116	142
%	1.9	0.7	1.6	1.6	6.3	8.0

Table 3. Ware x type: quantification by EVEs

	BOWL/DISH			DISHES				MORTARIA		LIDS	UNKNOW		
	1A	1B	1	1A	1B	1C	1	KA	K	L	Z	TOTAL	
S				4	28		32					1.65	8.9%
M21								11	11			0.11	0.6%
M22								13	13			0.13	0.7%
M								24	24			0.24	1.3%
W31												0.07	0.4%
Q25												0.38	2.1%
Q31												0.13	0.7%
Q												0.51	2.8%
E21												0.59	3.2%
E22												0.17	0.9%
E23												0.16	0.9%
E61												0.13	0.7%
E62												1.03	5.5%
E63												0.33	1.8%
E64												0.08	0.4%
E65												0.14	0.8%
E81												0.19	1.0%
E82												1.10	5.9%
E83												0.22	1.2%
E												4.14	22.3%
333												0.10	0.5%
351											1	0.10	0.5%
371												0.38	2.1%
373												0.27	1.5%
0											7	0.85	4.6%
R21										10		3.80	20.5%
R22							4					1.77	9.5%
R24	4		4								5	1.88	10.1%
R31	11		11	8			8					1.64	8.8%
R32												0.20	1.1%
R33												0.09	0.5%
R81												0.20	1.1%
R	15	8					12			10	5	9.58	51.6%
B11		6	6									0.21	1.1%
P11												0.58	3.1%
P12											3	0.49	2.7%
P13												0.08	0.4%
P15												0.12	0.7%
P											3	1.27	6.9%
TOTAL	11	6	21	12	28		44	24	24	10	15	18.52	
%	1.1%	0.3%	1.1%	0.6%	1.5%		1.7%	1.3%	1.3%	0.5%	0.8%		

Note: The total figures for major vessel classes include vessels which could not be assigned to subtypes and were only recorded at the level of major class. These totals will therefore be greater than the sum of the subtypes

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