EXCAVATION AT WILLINGTON, DERBYSHIRE, 1970–1972

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SUMMARY

Excavations in advance of gravel quarrying were carried out on a site revealed by cropmarks photographed from the air. The site proved to have been occupied intermittently from Neolithic to Saxon times. The main features were two late Neolithic settlements, an Iron Age settlement and field system with at least three separate foci, three prehistoric or ritual monuments, two Romano-British farmsteads, and a small Saxon settlement of three huts.

ACKNOWLEDGEMENTS

The first and greatest debt is to Blue Circle Aggregates Ltd., both the Company, and the staff of their Repton pit. Not only did they give permission for excavation but much of the plough soil was removed by them in advance of their own requirements, alterations were made in weekly digging schedules in 1970, and the machine drivers became skilled in recognising archaeological features. They also gave permission to open the site to the public during August Bank Holiday 1971, and for the digging team to camp on their land each season. In all these matters they were unfailingly helpful and sympathetic. They have generously given the finds from the excavation to Derby Museum.

Excavations were financed mainly by three substantial grants from the Department of the Environment, and other grants from Derbyshire County Council. Equipment for the 1971 season was loaned by Nottinghamshire County Council Education Committee, through the good offices of Mr. D. G. Bilton, and a dark room was made available in 1971 and 1972 by Repton School. To all these thanks are expressed.

Aerial photographs of this site, as of thousands of others, were provided gratis by Mr. James Pickering, on whose continuing and thorough aerial survey of the region much of our archaeological knowledge is based.

The author's personal thanks go to the writers of the specialist reports: Sheila Elsdon, Mary Harman, Terence Manby, Alan Saville Camilla Dickson and Malcolm Todd, and most especially to the patient and painstaking draftsman Richard Sheppard. Helpful advice was given by Jeffrey May and Derek Simpson.

Lastly, and perhaps most importantly, thanks are due to those who carried out the work of excavation, particularly the supervisors: Christopher Smith, assistant director 1970; John Curtis, supervisor 1970; Stuart Losco-Bradley, supervisor 1970–72; Patricia Losco-Bradley (née Downham) and John Gledhill, supervisors 1971–2; Colm O'Brien and Christopher Drage, supervisors 1972. Mrs. Betty Cockayne not only supervised the cleaning and recording of the finds throughout the excavation, but with cheerful efficiency maintained the smooth day-to-day running of the administration, and provided the author with moral support in the face of all disasters. Thanks are due too, to the Governor, staff and men of H.M. Prison Sudbury, and to all the volunteers, too numerous to mention individually, including sixth-form schoolchildren from Derby schools, students from Sheffield University, and many others.

THE SITE

The site of Willington (SK 285 278) was spread over three fields on the edge of the flood-plain terrace some 600 m north of the River Trent, and a similar distance west of the modern village (Fig. 1). To the north the site was flat, and a gentle slope led to

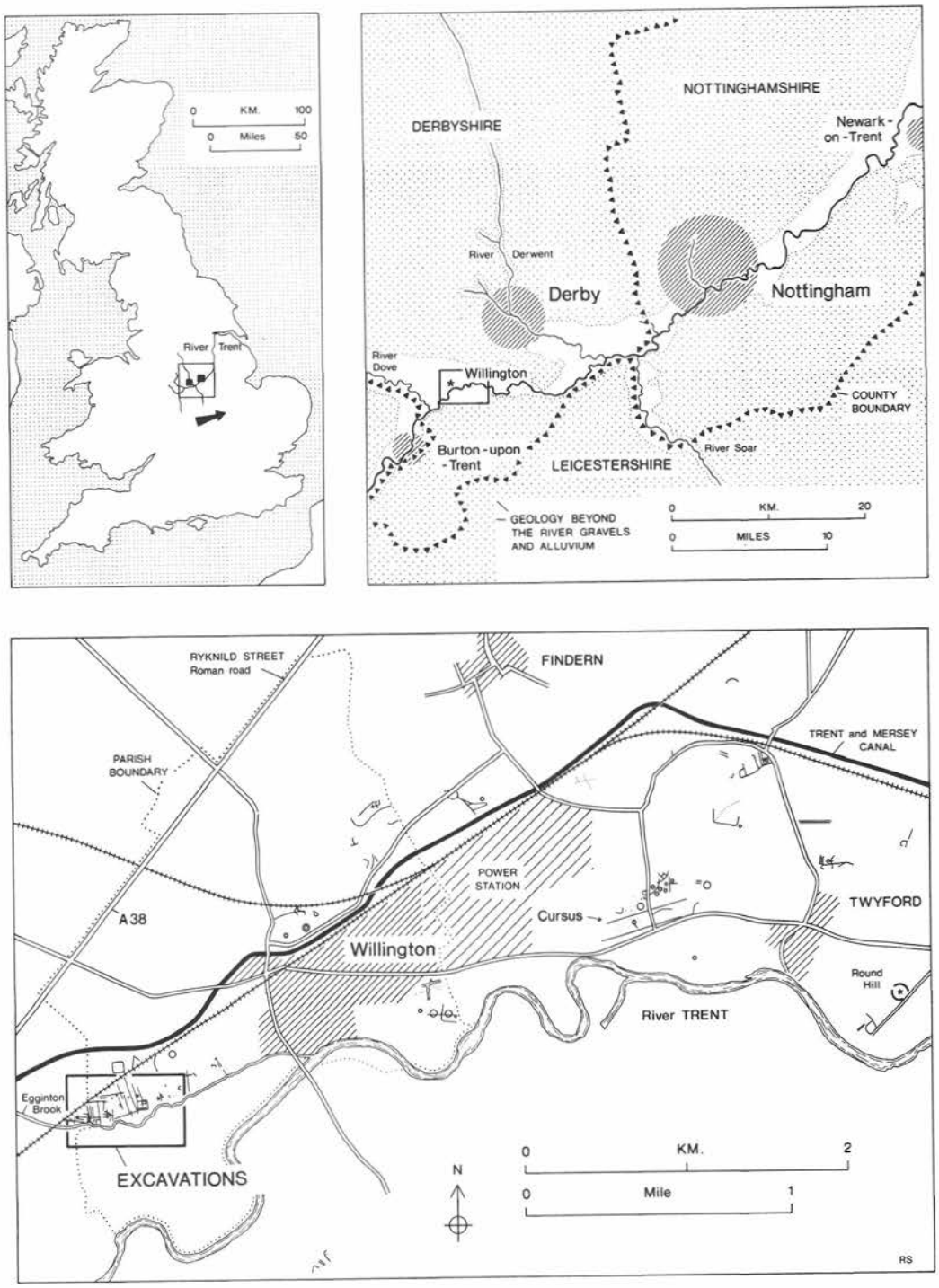


Fig. 1 Willington in its region, showing neighbouring crop-mark sites.

Egginton Brook which formed its southern boundary. Beyond the brook was the flood-plain of the river. To the north and west excavations were limited by the main line railway from Exeter to Newcastle upon Tyne, and 750 m to the west was the Roman Ryknield Street, linking Wall and Little Chester, Derby. The parish boundary between Willington and Egginton crossed the site close to its western end. Aerial photographs and excavations showed an ancient water course some 30 m wide, presumably a former channel of the Trent, crossing the site from west to east.

The subsoil was mainly sand, with varying degrees of coarseness, and some gravel. As with most fluvio-glacial gravels it contained anomalous deposits of ice-rafted material, similar in surface appearance to archaeological features. They were usually composed of finer grained, stickier material than the surrounding sand, and tended to the light in colour. When excavated, they could frequently be seen spreading horizontally beneath the upper gravel, but there remained a number of features of uncertain origin. Leaching of all soils had taken place over the millennia, with the result that, in broad terms, features of different periods could be distinguished by the colour of their filling. Hence the Neolithic features were usually light brown or buff, Iron Age features a rich mid-brown, Saxon features dark and humic. This was by no means invariable; an early Iron Age ditch F1200, for example, contained a very dark humic filling. The soil, like all the Trent gravels, was acidic, and little bone earlier than the Saxon period survived, and even that was in poor condition. Exceptions were burnt bone and material from the humic filling of F1200.

The site was above modern flood level, and no signs of flooding in antiquity were found except on the lowest slopes, by the brook. Here flood silts contained artifacts of Bronze Age to Roman date, and excavation showed seasonal flooding at least in Roman times. Most of the site had been ploughed in the Mediaeval period, and ridge and furrow cut into the sand except on the west, close to the parish boundary. The other important disturbance of archaeological material was rabbit burrows, especially in the firmer soils. There was no vertical superimposition of strata on the site, features of all periods showing in the surface of the sand.

CROPMARKS

Aerial photographs taken by J. Pickering Esq. in 1968 showed at least three ring ditches and a faint complex of linear features. During the period of excavations 1970–71, more and clearer cropmarks appeared in the two western fields (Fig. 2). In all three fields could be seen the ancient course of the River Trent, masking those archaeological features which were dug into it.

In the south-east corner of the middle field was a rectangular enclosure, subdivided internally, Romano-British Farmstead I. In the south-west corner of this field, two sides of another rectangular enclosure appeared on a similar alignment, though this may be fortuitous. On a different alignment, three approximately north-south ditches, some 100 m apart crossed the whole field. The rig and furrow followed their alignment, but excavation showed one ditch at least to be earlier than the 6th century A.D. The south-west enclosure intersected with one of roughly oval shape, but neither appeared in the western field. Also in the middle field were three ring-ditches, one of which dated to the Iron Age, and two or more small rectangular enclosures in the north which were not investigated.

In the western field three different alignments of ditches and enclosures could be seen. In the south a rectangular enclosure, Romano-British Farmstead II, appeared to have been extended at some time. Excavation however, showed this to be a whole series of successive enclosures of Roman date. On another alignment was a prominent double linear feature, which intersected with the enclosures of Farmstead II, and with part of another enclosure to the west, almost on the same axis as Farmstead II. Two ring-ditches, one semi-circular feature, and one other rounded enclosure were visible as cropmarks, but were not further investigated. Both Romano-British and Iron Age

occupation was attested in this field, but excavations here were more limited than on the rest of the site, and occupation of other periods may well have been present. Bronze Age pottery was found in the flood silts at the south of this field.

THE EXCAVATION (Fig. 2)

Excavations began in 1970 on land already being quarried by Blue Circle Aggregates Ltd. The initial objective was to excavate a large ring-ditch, Barrow 1, and to investigate the nature of the other features. During the summer of 1970 further cropmarks were photographed in the two western fields, leading to two further seasons of excavation in 1971 and 1972. This was the first large scale excavation conducted for the Trent Valley Archaeological Research Committee, and provided evidence of almost every period of prehistory and early history.

The work was begun with a team from Sudbury prison, later joined by volunteers, many of whom were local schoolchildren. The 1971 and 1972 seasons were carried out by volunteers, mostly students and schoolchildren. When excavations began half of Barrow 1 had already been removed. In this first season excavations were never far from the quarry face, and the consequent haste meant that records were less detailed than in later years. Blue Circle Aggregates Ltd. removed most of the overburden using a grader box, pulled by a bulldozer. While some damage may have resulted from the use of these machines, the excavations must perforce have been much less extensive, had the Committee had to bear the cost of hiring earth-moving machinery. In 1972 areas of soil were stripped in advance of the quarry's requirements for the convenience of the Committee. In 1970 excavations took place on ground which had already been stripped by the Company. Many of the areas examined in 1970 would otherwise have passed unknown, since only the larger, deeper features had appeared on aerial photographs. With these lessons in mind, the policy of later seasons was to clean and plan as large an area as possible, and to excavate selected features.

When the plough soil had been removed the sand was cleaned by scraping with shovels and trowels. In hot weather the sand dried and blew across the site leaving some features standing proud, and obscuring others. Towards the end of the first season a complete water sprinkling system, consisting of a high head petrol pump and pipes with attached sprinklers on spherical castors, designed for use on bowling greens and cricket pitches, was purchased. The ground could then be sprayed regularly, usually in the evening. The wooden castors did no damage to the site, and the dampness of the soil could be regulated at will. Water was obtained either from the quarry or from Eggington Brook. The cost of this equipment was amply repaid by speed of excavation and the recovery of detailed information. The sprinkling system has become standard equipment for all summer excavations on sand or gravel, undertaken by the Committee.

Other techniques were more conventional. Beneath the plough soil finds rarely occurred outside features, except in the flood silts of Egginton Brook, and the upper silts of the ancient river course. The former was excavated stratigraphically, and finds from each layer planned; no strata were visible in the latter, which was excavated in spits and finds planned within each level.

All excavated features were sectioned vertically, except complex ones such as hearths, which were usually excavated stratigraphically. As many features as possible were examined, but in 1971 particularly, many were only partially excavated.

Late Neolithic Settlement 1 (Fig 3)

Pottery from the mound of Barrow 1 suggested nearby occupation in late Neolithic times. The ground to the east and south had been quarried, but that to the west was already stripped of its overburden, prior to gravel extraction, revealing numbers of post-holes and other features in the sand surface. At this time, in June 1970, excavations were never more than two weeks in advance of quarrying, and often less. Sections and details were consequently recorded by photography, and not drawn.

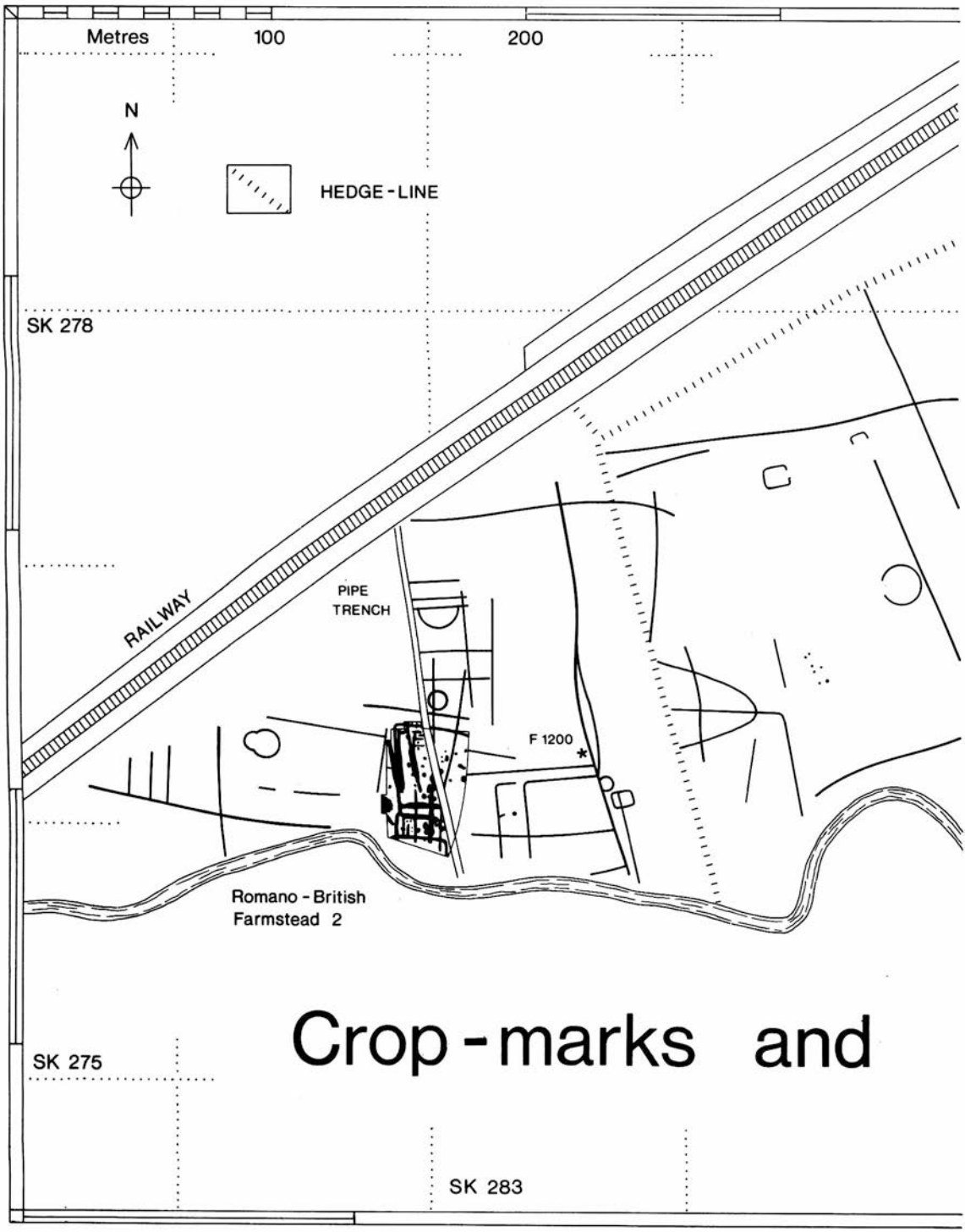
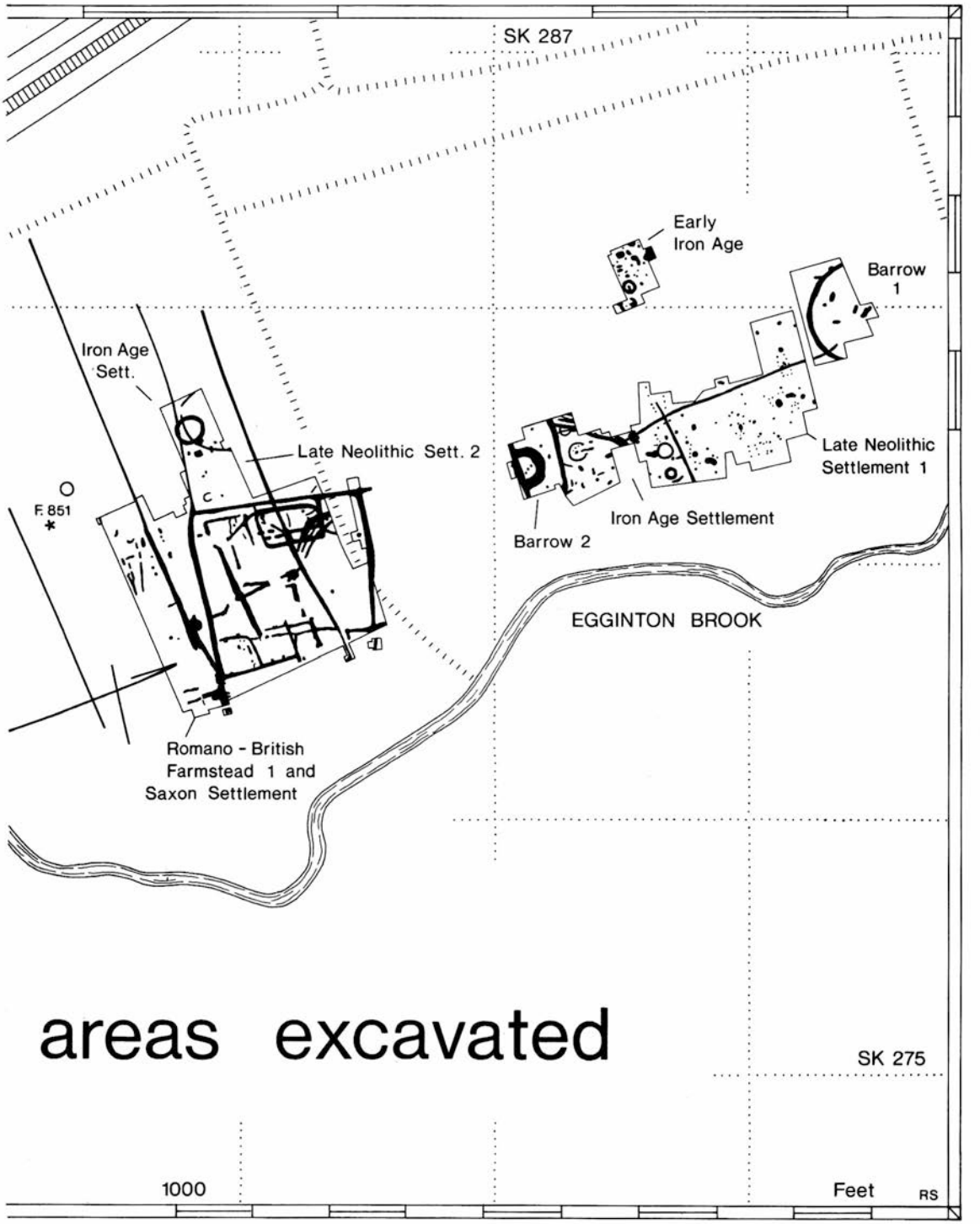


Fig. 2 Willington:



cropmarks and excavations

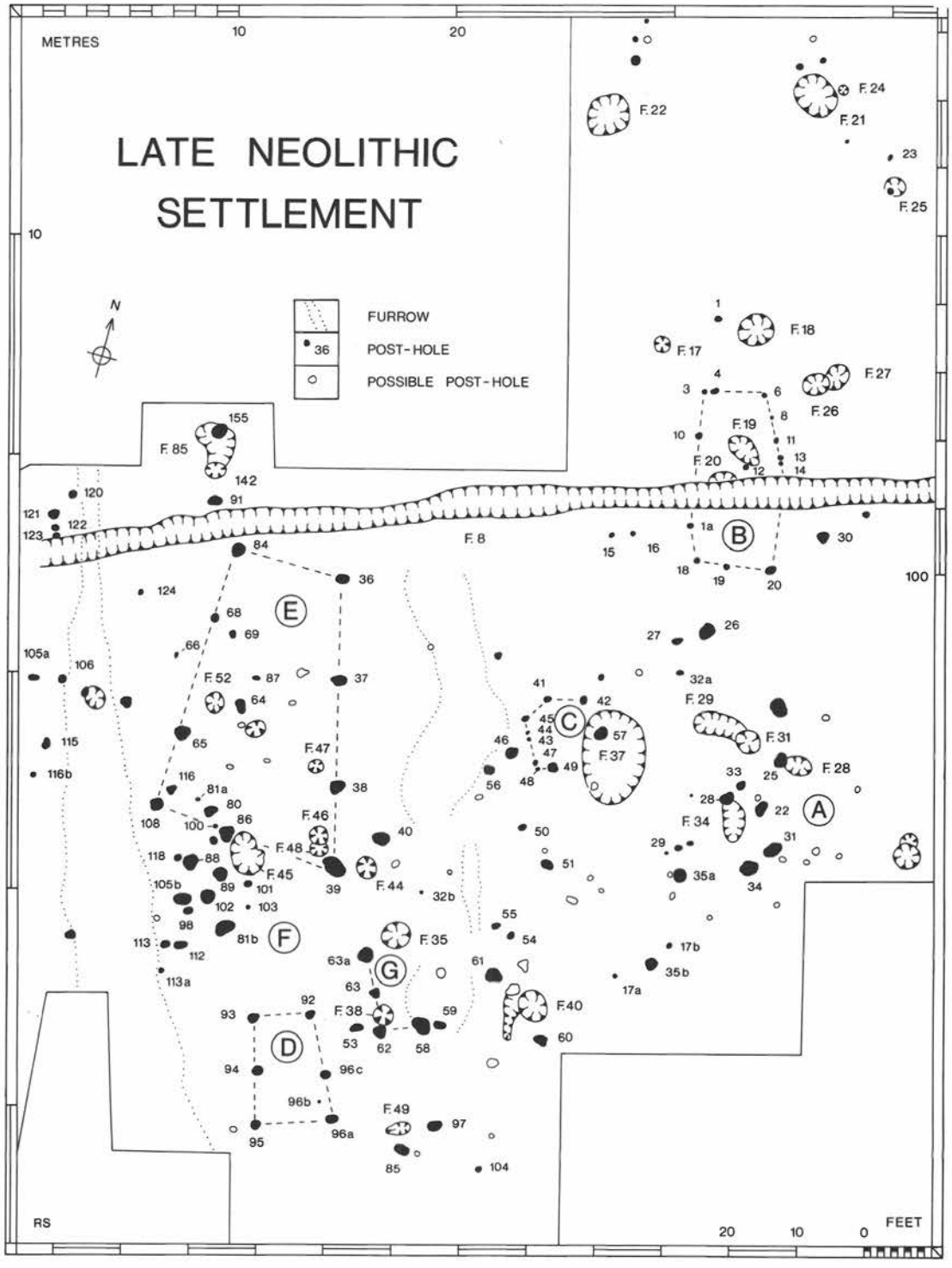


Fig. 3 Willington: late Neolithic Settlement 1: plan

Unfortunately an undetected camera fault spoiled most of the photographs. Where profiles are not available, features are therefore described in more detail than would otherwise be necessary. Mediaeval plough furrows had been cut into the surface of the sand, destroying and damaging earlier features, and rabbit burrows were plentiful. A small adjacent area was excavated by hand, from turf level but no archaeological features were detectable above the sand surface.

Seven distinct groups of post-holes were recognised (Fig. 3). Of these, three groups, B, D and E, formed trapezoid patterns, while a fourth, C, may have formed part of another. The other three groups A, F and G, while distinguishable by the proximity of their post-holes to each other, and to some extent by their common shape size and filling, could not be interpreted convincingly as structures. Groups B, C and F were associated with late Neolithic pottery; groups D and E with no datable material, group A with earlier Neolithic pottery. The post-holes of group G contained no finds, but in the plough furrow cut through the centre of the group were found sherds of Saxon pottery. The post-holes were bigger and darker than all the others in this area and their interpretation is discussed with the other Saxon features. In addition to the seven groups, there were many single post-holes, and pairs of post-holes some 0·8 to 1·2 m apart. There was also a number of small pits and an Iron Age ditch, F8, which was dug through the ditch of Barrow 1, and presumably also post-dated group B.

GROUP A POST-HOLES AND PITS

Though the post-holes of group A formed no coherent plan, they did seem to belong to a single phase of occupation within the earlier Neolithic period. They shared a distinctive shape, being mainly straight-sided with a flat bottom. Though they were clearly post-pits rather than post-holes no trace of a post was observed in any of them. Their filling was greyish brown loamy soil, hard in texture and stony. Their depth was less consistent, varying from 12 to 35 cm but they were similar in size, with diameters of c. 50 cm. In the same area there was a patch of scorching, which partly overlay PH28 and was contained within a slight hollow F34, 2–3 cm deep. There were also three shallow pits.

F31 with a diameter of 1·03 m and a depth of 35 cm may possibly have been a large post-hole, though its gently sloping sides were unlike the other post-holes of this group. It was dug through a long narrow pit F29, which was 50 cm deep. F31 contained a sherd of pottery, F29 a flint flake.

F28 a smaller shallower pit than F29 contained a post-hole, 25. This may have been a ramped post-hole rather than two individual features, though it would be unique on the site. The post-hole was 31 cm deep and contained two sherds of pottery.

PH22 was 18 cm deep with dark grey pebbly filling and slightly convex sides. It contained sherds of one or more vessels of earlier Neolithic type, and one flint flake.

PH24 was 26 cm deep, with straight sides and flat bottom. It contained fragments of pottery.

PH26 had steeply sloping sides with a browner, less stony filling than most post-holes in this group. It was 20 cm deep and contained no finds.

PH28 had been badly disturbed by rabbits. The upper surface of the post-hole was scorched, being on the edge of the possible hearth F34. Whatever post it contained was probably removed before the scorching. It was 12 cm deep, and similar in shape and filling to the other post-holes of this group.

PH31 while similar in shape, size and filling contained a sherd of Romano-British pottery on its surface.

PH34, of the same straight-sided flat bottomed shape, with a depth of 15 cm contained a flint flake.

PH35A again straight-sided and flat bottomed was 17 cm deep.

PH35B lay somewhat outside the main group, but being similar in size, shape and filling may be contemporary with it.

GROUP B POST-HOLES AND OTHER FEATURES

Group B consisted of 12 post-holes forming a roughly trapezoidal shape. An Iron Age ditch F8, ran through this group and may well have removed traces of other posts. The diameter of most of the post-holes was between 17 and 22 cm and two showed signs of post replacement.

PH1A was a circular patch of greyish brown loam approximately 20 cm in diameter. It was 4 cm deep and could only represent the very bottom of a post-hole, but contained Grooved Ware pottery.

PH3 like 1A was very shallow, but regular in shape, with a diameter of 18 cm. Its filling was similar to 1A but it contained no finds.

PH4 was 21 cm deep, circular in shape with a diameter of 20 cm. It was flat bottomed and contained one sherd of Neolithic pottery.

PH6 was 8 cm deep. Like many at Willington it was sand-filled, but was discernable by the layer of humus at the bottom and round the edges. It was 20 cm in diameter and contained no finds.

PH8 was shallow, 3·5 cm deep and 18 cm in diameter. It was regular in shape with a flat bottom. The filling was greyish-brown loam, and contained no finds.

PH10 was similar in filling, but was 5 cm deep. Its appearance in plan was oval, measuring 17 by 30 cm. The post may possibly have been replaced, leaving a double post-hole, but with so little depth, this could not be ascertained. It contained no finds.

PH11, circular in shape, with a diameter of 20 cm and a depth of 14 cm had a sandy fill with some humus in the bottom and no finds.

PHs 13 and 14 were again very shallow, but of regular circular shape, with diameters of 25 and 19 cm respectively. Both had been disturbed by rabbit burrows, and neither contained any finds.

PH18 had a distinctive black filling, containing much powdery charcoal. It was pointed at the bottom, 27 cm deep and 20 cm in diameter. It contained four joining sherds of Grooved Ware pottery.

PH19 was very shallow, but regular in shape, 22 cm in diameter. Its filling was of greyish brown loam, and it contained no finds.

PH20 filled with lignite and sand, was larger than the other post-holes in this group, and rectangular, rather than circular in shape, with dimensions of 17 by 30 cm. Its depth was 10 cm and the unevenness of the bottom suggested post-replacement. It contained no finds.

Within the area defined by the post-holes of group B was PH12. This was similar in shape and filling, but very shallow. It may very well be contemporary with this group, as may the many apparently random post-holes in the vicinity. Also within the group B post-holes were two shallow pits F19 and 20, both filled with brown loam and devoid of finds. F20 was partly destroyed by the ditch F8.

GROUP C POST-HOLES AND OTHER FEATURES

In group C were four large post-holes 41, 42, 49 and 57 and five smaller ones, 43, 44, 45, 47 and 48. If this represented a structure its southern end might have been lost in ploughing on the slope, an assumption made more probable by the shallowness of the surviving post-holes.

PH41 had been disturbed by rabbit burrows so that its profile was not entirely clear. It was 20 cm wide and 6 cm deep.

PH42, another straight-sided post-hole with a flat bottom was 8 cm deep and 25 cm wide.

PH49, 26 cm wide and 10 cm deep, straight sided and flat-bottomed contained a pebbly filling with darker soil at the top.

PH57 was more substantial, being 56 cm wide and 15 cm deep, similar in shape to 49 and 42, with a dark pebbly filling. It was dug through F37, which at the time of excavation was interpreted as a large irregular pit. With hind-sight this seems more likely to have been a periglacial feature. One sherd of Beaker pottery was found in the post-hole.

The smaller post-holes varied between 18 and 22 cm in diameter, with depths ranging from 3 to 15 cm. PH48 may have been deeper, but was disturbed by animals. Their profiles were more rounded than those of the larger posts.

GROUP D POST-HOLES AND OTHER FEATURES (Plate 1a)

Of all the post-hole groups, D formed the clearest structure, with six regularly spaced post-holes, forming a trapezoidal plan, similar to structure B. The profiles of the post-holes (Fig. 4) were of similar size and shape with fairly straight sides and flat bottoms, 10 to 14 cm deep. Their filling was in each case a grey brown sandy soil with a number of pebbles. None of the post-holes contained any finds.

GROUP E POST-HOLES AND OTHER FEATURES

Nine post-holes, 36, 37, 38, 39, 84, 68, 65, 108 and 86 formed a trapezoidal plan similar to, though larger than structures B and D. To the south this group overlapped with group F and it was not clear to which PH108 and 86 should belong. PH68 was only 4 cm deep, and disturbed by rabbits, putting its identification as a post-hole in question. PH108 was 10 cm deep. The others, 17 to 24 cm deep, were of similar shape and size being again fairly straight sided and flat bottomed. Their diameters were all over 50 cm and they must have held more substantial posts than groups B, C and D. PH36 and 38 each contained scraps of hand-made pottery.

GROUP F POST-HOLES AND OTHER FEATURES

Group F consisted of 12 post-holes to the south of group E. They vary somewhat in size, shape and filling, and are designated a group mainly on the grounds of their proximity. Many of them were comparatively substantial, 15 to 25 cm deep, but others were very slight. They seemed to form no coherent plan, though some post-holes may have been lost in the adjacent furrow. Only one of them, PH105b contained any dating evidence, a sherd of Beaker pottery.

DISCUSSION

While the post-holes of group A are in some ways the most consistent group, they formed no coherent structural plan. The pottery associated with them indicated that they belonged to an earlier phase of occupation than the other groups. Evidence for

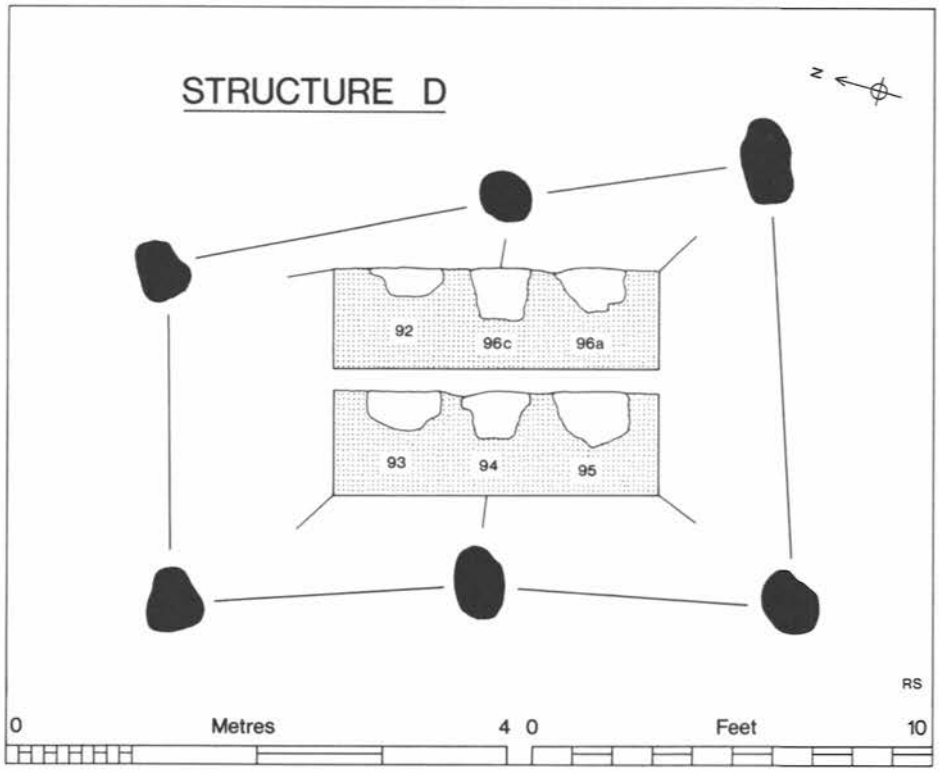


Fig. 4 Willington, structure D: plan and sections

earlier Neolithic settlement in the middle Trent Valley has already come from Swarkeston (Greenfield 1960, 18) and Aston on Trent (May 1970), Derbyshire, but no structures have yet been identified.

While the dating evidence for the other groups is slight it all points to the late Neolithic. B, C, D and E need to be considered as possible structures. All four exhibit a trapezoidal plan with the narrow end in each case to the north. B, 8 m long by 3 m and 3·8 m wide and D, 5 m long by 3 m and 4 m wide seem to provide complete structure plans. C, 3? m long by 3 m and 3·5 m wide may be part of a similar building, though the single post-hole at its northern end suggested a pointed shape. Alternatively C may represent a small complete structure. E, 13 m long by 5 m and 9 m wide was much larger than the other three, though the similarity of its plan to D is striking. Internal post-holes, irregularly set were found within it, and it is possible that other posts have left no trace.

The evidence for later Neolithic houses in Britain has been conveniently summarised by D. D. A. Simpson (1971) and McInnes (1971) and includes circular, rectangular and oval, or more often egg-shaped forms, that is an approximate oval with one narrow and one broader end. The house at Northton, Isle of Harris, North West Scotland (Simpson, D. D. A. 1966) was of this last type; a dry-stone wall revetting an egg-shaped hollow, dug into the side of a sand dune, with small irregularly set internal post-holes, presumably supporting a light roof. At Lough Gur, Co. Limerick, Eire (Ó Ríordáin 1954) were Neolithic houses of rectangular, circular and oval shapes, using a mixture of stone and timber in their construction. The only ones with clear Beaker associations

were two structures on site D. House II, egg-shaped in plan, was built entirely of timber. House III, described by the excavator as D-shaped could also be called a shortened egg-shape, constructed of stone and timber. Both buildings contained irregular settings of internal posts. The site at Lough Gur was on a rocky slope and the unevenness of the ground certainly affected the shape of some structures.

Some five miles east of Willington, wooden structures with Beaker associations were found beneath Barrow 4 at Swarkeston, Derbyshire (Greenfield 1960). Group A formed a double row of flimsy posts, perhaps used in connection with domestic animals. Group B formed two contiguous rectangles, but being on the edge of the excavated area the plan of this structure may be incomplete. The most interesting site in relation to Willington is undoubtedly Belle Tout, Sussex (Bradley 1970) where traces of seven structures associated with Beaker material were identified, largely in some cases by the absence of domestic rubbish inside them, a feature noted also at Swarkeston. Structure 5 provided the only clear and complete plan, consisting of a trapezoid arrangement of post-holes 6·6 m long by 2 m and 2·8 m wide, comparable to Willington structures B, C and D. The excavator suggested that the posts were internal supports with low turf walls outside them, a possibility strengthened by the comparative lack of finds from their immediate vicinity. Structure 1 at Belle Tout might form an oval or egg-shaped plan, divided into two rooms, but too irregular for certainty.

Large trapezoidal structures are well known on the continent within the Linear Pottery Culture and its various developed forms. Ashbee (1970, 98–102) discussed these and illustrated long trapezoidal timber houses from Brześć Kujawski, Poland, the largest being 32 m long by 5·2 and 10·5 m wide. They consisted of a continuous post-trench with irregularly set internal posts, in contrast to the regular internal arrangements of other trapezoidal longhouses at for example, Bochum am Hillerberg, Germany (Brandt and Beck 1954, Beilage 5), Postoloprty, Czechoslovakia (Ashbee 1970 Fig. 54) and Marolles, Seine et Marne, France (Mordant 1970). At Zwenkau near Leipzig, Germany (Radig 1958, Abb. 6) a trapezoidal building with post-trenches for the long walls lay with rectangular longhouses and one oval building, but its internal arrangements were unclear.

Less frequently small trapezoidal buildings occur. At Trebus, Germany (Radig 1958, 36 Abb. 14) was a trapezoidal building 10 m long, constructed of individual posts, with one internal row of posts. At Pontavert, Aisne, France (Whittle 1977, 160–1 Fig. 39) were two trapezoidal buildings, each just over 10 m in length, constructed of individual posts with three internal rows of posts. At Sainte Pallaye, Yonne, France (Carré, Dousson & Poulain 1958) was a trapezoidal building 12 m long, again of individual posts, divided into two rooms by a row of internal posts similar to the house at Trebus. In the broader room were centrally placed posts, perhaps supporting the roof. At Deiringsen Ruploh, Germany (Radig 1958, 40 Abb. 24) was a trapezoidal building with three internal rows of posts and a presumed length of nearly 16 m, but lying on the edge of the excavated area, it may have been longer. Its walls were represented by a post-trench with small external post-slots, recalling among others the longhouse at Bochum (Brandt and Beck 1954).

All the continental examples of small trapezoidal structures contained internal supports, but all of them were larger than Belle Tout 5 and Willington B, C, and D. If the post-holes of the four English structures are taken as their outer walls, it is difficult to see how the roof could have been supported without internal posts, for which there is little space. It is possible, as Bradley suggested for Belle Tout that walls of turf or other perishable material were set outside the posts. The sizes of the English and the continental buildings would then be much closer. Examples of such aisled construction, though rectangular in shape are known in the British Neolithic e.g. Lough Gur, site A (Ó Ríordáin 1954) and Ronaldsway, Isle of Man (Piggott 1954, Fig. 59). The question remains of the shape of the outer walls. Were they egg-shaped as in the west of Britain, or trapezoidal? There is no reason why both shapes should not co-exist, since the egg

shape is merely a rounding of the trapezoid's angles. The egg-shaped plan would be particularly useful in dry-stone constructions since it avoids the weakness of a corner, and may facilitate corbelling if the stone walls are carried high enough. In timber there is no particular advantage to be gained and the trapezoidal shape would seem more appropriate.

Willington structure E is more difficult to fit into this pattern. Its length of 13 m is within the range of the continental trapezoidal structures, but its width of 9 m is greater, the closest comparison being the Deiringsen Ruploh house, with a presumed maximum width of 7 m and a length of 16 m. There are indications of irregular internal posts within E, particularly at its broad end, which might be additional roof supports. It is worth remembering in this context that the largest trapezoidal building at Brześć Kujawski was 10·5 m wide with no signs of regular internal supports. The identification of E as a structure remains an open question.

The pottery directly associated with the Willington structures was late Neolithic with rather more Grooved Ware than Beaker, though the whole sample was very small. From the turf make-up of Barrow 1 large quantities of domestic Beaker pottery was recovered with only one sherd of Grooved Ware. The settlement from which this material came was clearly close at hand, and our structures may well belong to it, though others may have been lost in the quarry. In the other area of late Neolithic occupation excavated at Willington most of the pottery was again Grooved Ware, with some Beaker sherds, perhaps suggesting mixed communities.

Late Neolithic Settlement 2 (Fig. 5)

Supervisors: John Gledhill and Christopher Drage.

Some 200 m west of settlement 1, south of the Iron Age ring ditch and north of Romano-British farmstead I, a second area of late Neolithic occupation was excavated in the summer of 1971 and the spring of 1972. It lay partly within the ancient river channel, which appeared on the ground as a band of fine grained sand 30 m wide. Not only did the moisture retaining nature of the silt prevent cropmarks from developing, it also made features extremely difficult to identify during excavation. Indeed, some could be recognised neither in wet nor dry conditions, but only by varying rates of drying. Detailed examination of the southern part of this area was consequently postponed until the early spring of 1972, when damper conditions and low sunlight assisted identification. The firmer texture of the river silt had long been appreciated by rabbits, and disturbance was heavy. The area was stripped of its plough soil by the quarry machinery under archaeological surveillance. Mediaeval plough furrows had cut into the sand surface, and evidence of Iron Age, Roman and Saxon occupation was also present.

The evidence for occupation (Fig. 5) was six pits and six post-holes and numerous sherds of late Neolithic pottery both in the features, and within the upper silts of the ancient water course, which must have formed a slight hollow in Neolithic times. No ancient turf line could be identified, but the quantity of material in the leached silts suggested that it could not have been far above the present top of those silts. This area was consequently excavated by scraping with trowels, removing 2–3 cm at a time, and all finds were plotted. In the southern half of the area the first layer of silt removed, immediately below the plough soil, contained pottery of late Neolithic to mediaeval date. The second layer contained three pieces of daub, one sherd of Romano-British pottery and 13 sherds of late Neolithic pottery including Beaker wares. In the third layer were five pieces of daub, three worked flints and 20 sherds of Grooved Ware pottery. The fourth and lowest level to contain artifacts contained two pieces of daub, worked flint and 13 sherds of late Neolithic pottery including both Beaker and Grooved Ware.

Six pits and six post-holes could be attributed to the late Neolithic period. Other post-holes in the area could not be dated, and yet others belonged to the Saxon period. All these features were sectioned vertically (Fig. 7).

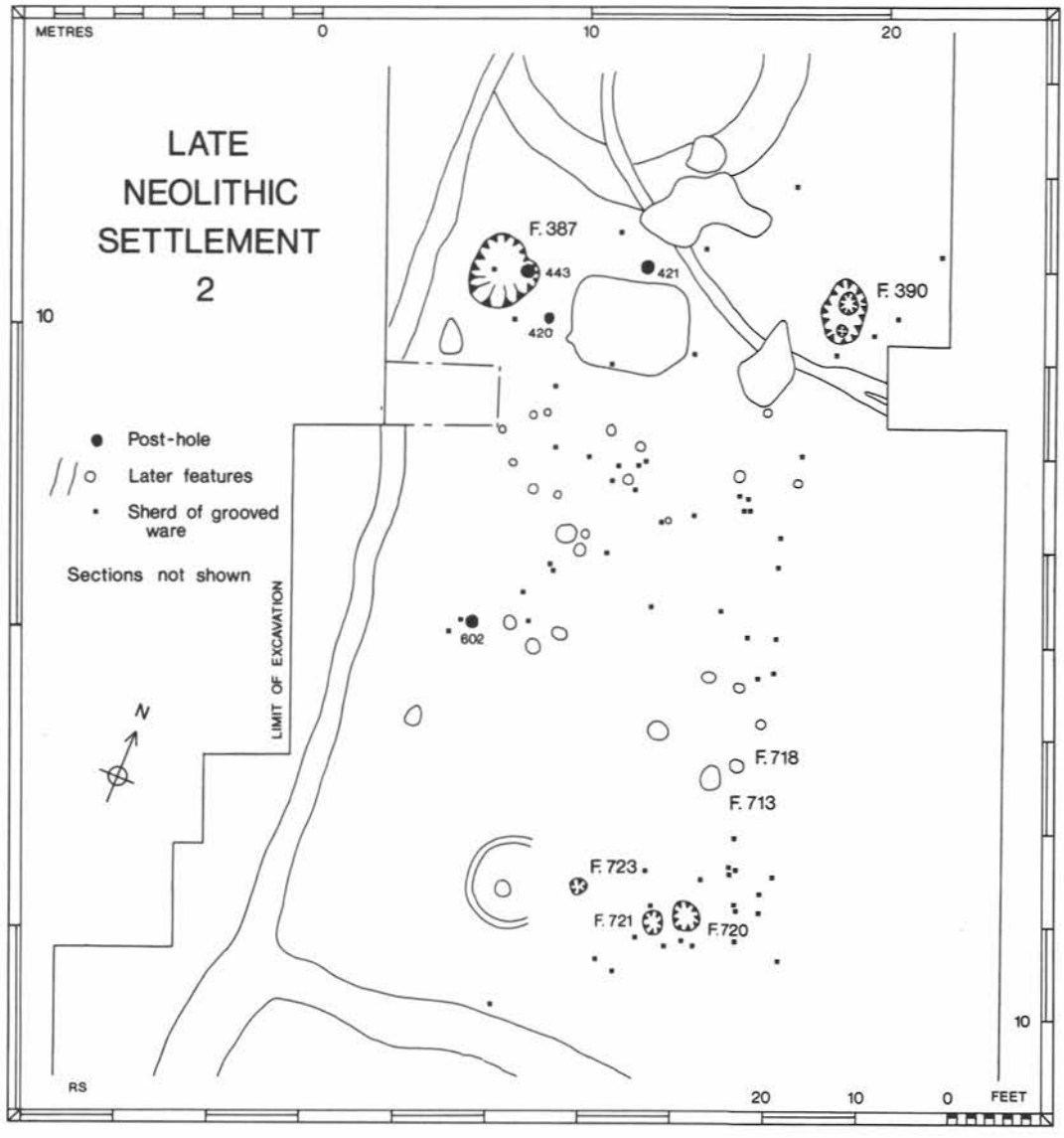


Fig. 5 Willington: late Neolithic Settlement 2: plan

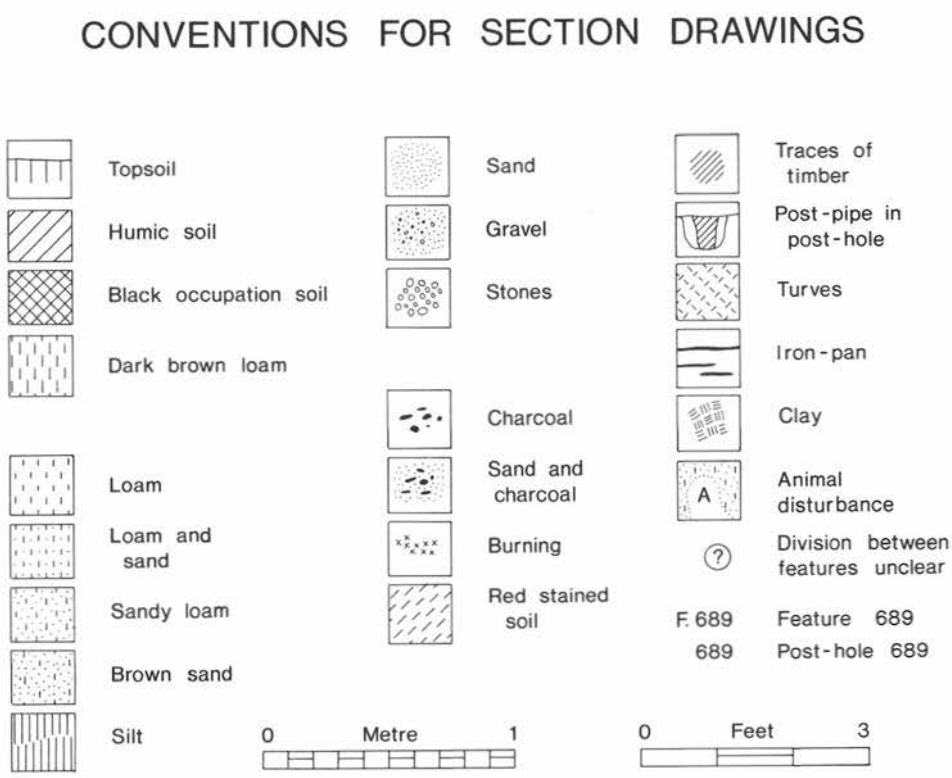


Fig. 6 Conventions for section drawings

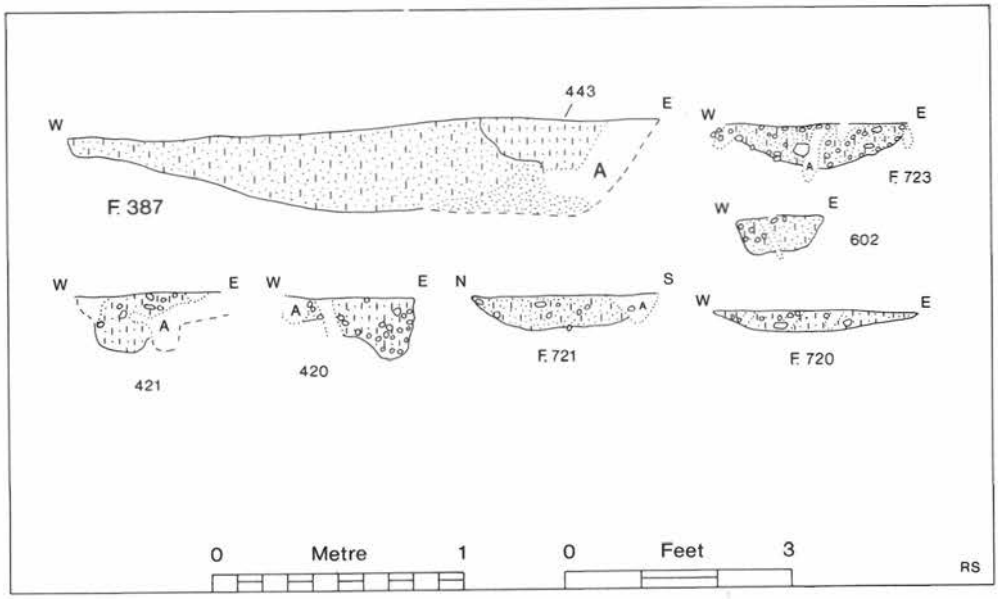


Fig. 7 Willington: late Neolithic Settlement 2: sections. See Fig. 6 for key

Post-hole 421 lay between the Saxon *Grubenhaus* 1 and the Iron Age ring ditch. It had suffered some animal disturbance, but its outline could be discerned. The northern side was steep, almost vertical; the southern side sloped more gently. It was filled with light brown sandy loam, and contained three large decorated sherds of Grooved Ware and other undecorated sherds. There was no trace of the post.

Post-hole 420, 4·5 m south west of 421, though slightly deeper was similar in shape, with a nearly vertical side to the south, and a more gradual slope to the north. Its filling too was similar to 421. It contained two undecorated sherds of pottery, and was slightly disturbed by animals.

The upper part of post-hole 602, south of 420 and 421, had been removed by a plough furrow. Its sides sloped gently to two depressions in its base, perhaps suggesting post replacement. Within it were found many rim and body sherds of a single Grooved Ware vessel. The position of the sherds suggested that a whole pot may have been buried, rim downwards, though not all the rim sherds were present. Certainly later ploughing would have damaged it. In view of the pottery evidence, it is possible that this may have been a small pit rather than a post-hole. Two undoubted post-holes, 604 and 607 contained the same light brown sandy filling as the other late Neolithic features. Their size was similar to 602, but with U-shaped profiles, and though they contained no finds they may well be of the same date, possibly forming part of a single structure.

Post-hole 443 was dug into a late Neolithic pit F387. Since it was seen only in section the finds from the two features were not kept separately, there being no finds in the second half of 443 which was badly disturbed by animals. Its filling and profile were similar to PH420 and 421, but it remains possible that this is a later post-hole. F387 was a shallow pit 2·5 m in diameter, filled with a fine grained sticky sand of the same texture as the river silt but slightly darker. The pit contained two worked flints, 25 sherds of Grooved Ware and four of earlier Neolithic pottery. Another pit F390 with similar shape and filling was found some 9·5 m to the east, below a plough furrow. It contained no finds and may have been a periglacial feature.

The lower parts of four pits were found farther south. F720, only 10 cm deep was filled with a light sticky material and contained two sherds of Beaker pottery. F721, slightly deeper, was filled with a darker red-brown sandy loam. A sherd of Grooved Ware was found on its surface, and it contained one piece of daub and a flint flake. F723 was filled with orange-brown loamy sand and contained more than a dozen sherds of possible Grooved Ware. A small pit, F600, just inside the area of Romano-British Farmstead I, contained Beaker pottery.

While no structures or coherent pattern could be identified on settlement 2, it did provide a useful collection of ceramic material. This was supplemented by the contents of two isolated pits. F16 was a small oval pit lying approximately midway between the two settlements, close to Barrow 2 (Figs. 2, 20 and 8). It contained sherds of several Grooved Ware vessels and one of earlier Neolithic date. F851 was noticed when overburden was being stripped for the quarry. It lay some 60 m west of Romano-British farmstead 1, a round pit with a depth of only 15 cm (Fig. 8). Since Neolithic pottery was

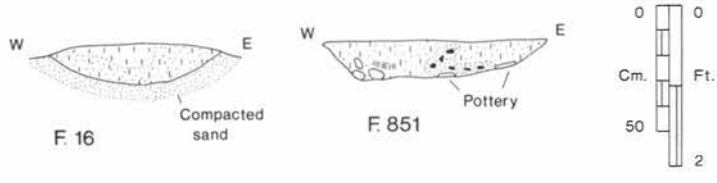


Fig. 8 Willington: two isolated Late Neolithic pits-section.
See Fig. 6 (p. 71) for key

seen within it, it was excavated to recover the group of finds. There was no opportunity to investigate the surrounding area. The pit was filled with a dark brown sandy soil, somewhat disturbed by rabbits, and containing charcoal and bone? flecks, small scraps of clay, flint and a large quantity of Grooved Ware pottery.

Barrow 1 (Figs. 9 and 10)

The first season at Willington in 1970 began with the examination of Barrow 1. The mound of the barrow was visible as a slight rise in the ground, when the site was visited prior to excavation. When work began, over half the mound on the east side had been removed to the level of the natural sand, and part of the eastern edge of the barrow ditch had been destroyed by quarrying. Early in the excavation the other edges of the barrow were removed in advance of mineral extraction. Consequently it was not possible to expose a section from the centre of the mound to the edge of the ditch, though two sections through the remaining third of the barrow mound were drawn (Fig. 10).

The barrow (Fig. 9) was enclosed by a circular ditch, F4 36 m in diameter with an average width of 1·3 m and depth of 1·4 m. Approximately one third of the barrow ditch was excavated. Its profile was quite regular (Fig. 10), and it was filled with a homogeneous brown loam. The only find from it was a flint flake.

To the north the barrow ditch was dug through a small pit F10 filled with brown soil which contained no finds. Two later features had been dug through the barrow ditch: a possible Romano-British corn-drier, F3 and an Iron Age ditch, F8.

The original edge of the mound was difficult to define as it was much eroded and spread by later ploughing. Nevertheless, an area some 8–9 m wide, between the inner edge of the barrow ditch and the outer edge of the extant mound suggested a berm. Four small pits F6, 7, 9, 11, and the butt end of a ditch F5 were identified in this area. Of these F6, a small pit close to the barrow ditch, and partly cut away by F5 contained three body sherds of handmade pottery.

The mound of the barrow had suffered some animal disturbance, but enough of the original material survived to show the form of its construction. It consisted of piled turves, which appeared as a loose grey soil of smooth texture. The whole of this was speckled with iron staining, and thick, hard deposits of iron pan had formed on the edge of some turves (Fig. 10). Beneath the turf mound was fine grained sand with a slightly sticky texture, similar to that found on Neolithic settlement 2, which seemed to represent the old ground surface. Below this was a layer of pebbles above coarse orange natural sand. The pottery from the barrow mound and from the presumed old ground surface beneath it was late Neolithic, mainly domestic Beaker Wares with one sherd of Grooved Ware, and the flint assemblage fitted well into this context.

A careful search was made for traces of structures beneath the mound, such as those beneath Barrow 4 at Swarkeston (Greenfield 1960), five miles east of Willington, but there were no traces of post-holes or slots. Only one small pit F13 containing three flint flakes was found beneath the extant barrow mound.

Slightly more than half of the eastern side of the mound had been removed to the level of the sand by the Company, and where the centre of the mound would have been, were two pits. F14 3·1 m east-west, 1·1 m north-south and 4·7 m deep was possibly a burial pit. Nothing was found in it, but bone preservation at Willington was extremely poor, and the area of Barrow 1 gave particularly high acidity readings. F14 is similar in shape and size to the primary burial pit in Barrow 4, Swarkeston. There too domestic Beaker material was found in and beneath the primary barrow mound though no skeletal remains had survived. F14 was dug through a second pit, F15 which contained no finds.

Barrow 1 should then be considered as a funerary monument of the Beaker period or later, probably containing a central inhumation.

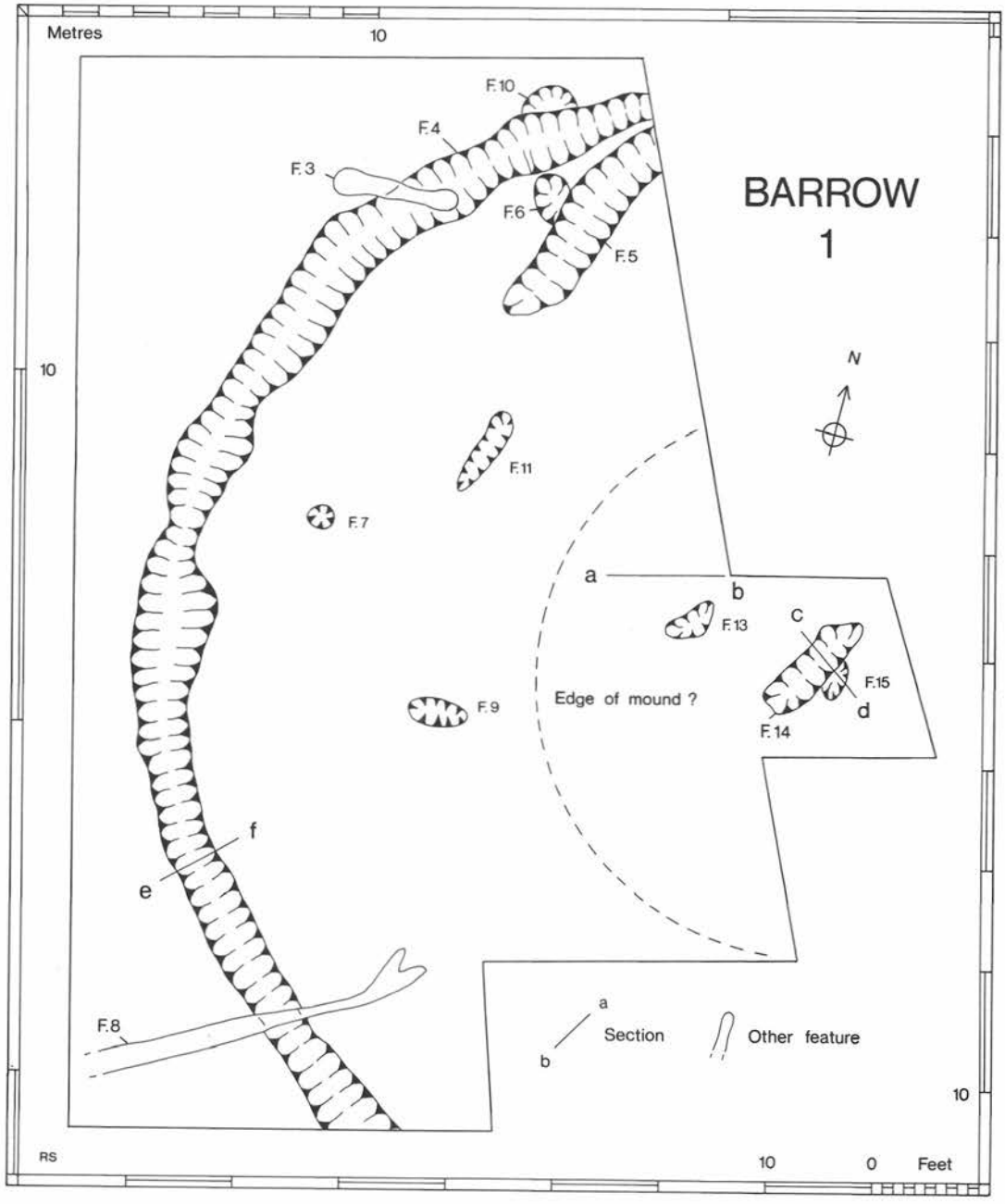


Fig. 9 Willington: Barrow 1: plan

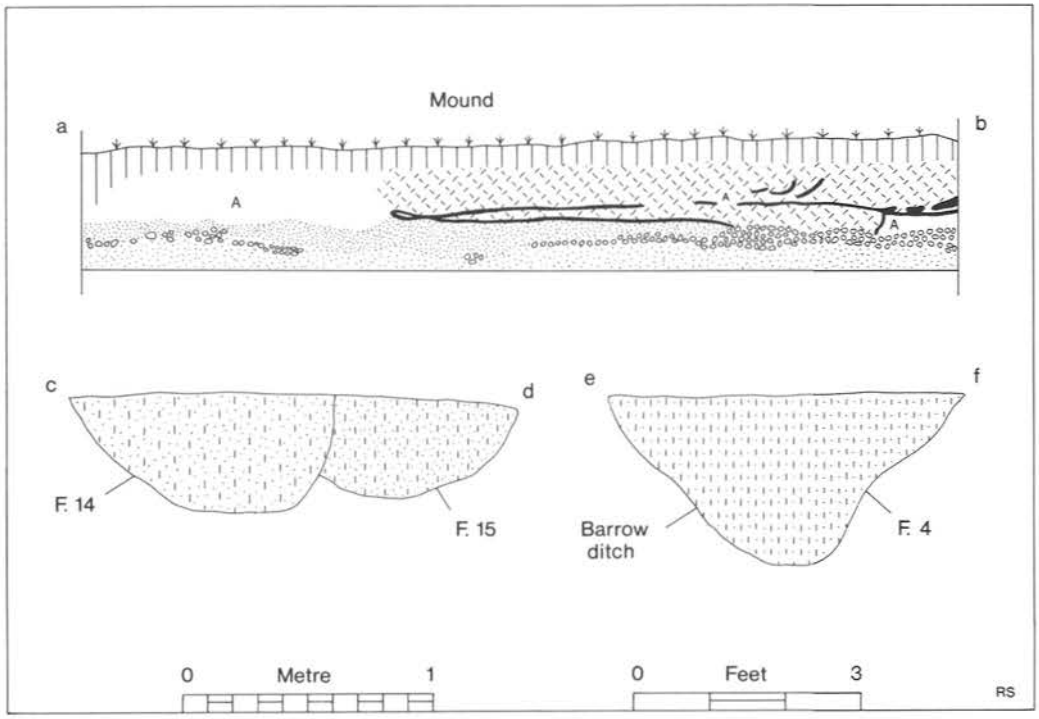


Fig. 10 Willington: Barrow 1: sections. See Fig. 6 (p. 71) for key

Barrow 2 (Figs. 11, 12)
Supervisor: S. Losco-Bradley.

Some 140 m west of Barrow 1 was a ring-ditch, Barrow 2 (Fig. 11) 18 m in diameter, first seen as a cropmark. Slightly more than half of it was examined in 1971. Whether a mound had been constructed within it is uncertain; none survived at the time of excavation. North-south through the centre of the ring-ditch ran a Romano-British ditch F426 sloping steadily downwards to the south (Fig. 12 a and b). 2·6 m inside the ring-ditch it deepened abruptly by 30 cm, and continued with a more gradual slope to a maximum depth of 1·8 m below present ground surface. On the southern edge of the ring-ditch, F426 was only 70 cm below present ground level, which did not vary more than 10 cm within this area. The ditch F426 had been redug, but not nearly as deeply as in the original cutting. It seemed clear then that Barrow 2 was recognisable in Roman times, and that the ditch F426 had been deliberately deepened, perhaps an early example of barrow robbing. On the other hand there were features within the ring-ditch of Iron Age and Roman date. A pit F440 (Fig. 12) contained one pottery sherd of Iron Age fabric. Although the pit had a diameter of 2·2 m measured at the gravel surface, its original diameter was probably c. 1·5 m, surface erosion having spread a thin layer of its filling to east and west, suggesting that its top was close to the Iron Age ground surface. F437 a small heavily disturbed pit (Fig. 12) could not be dated. On the southern part of the area within the ring-ditch was a thin layer of dirty sand containing both Iron Age and Roman pottery. The stone packing of a square post-hole 326 projected above this layer, which may perhaps have been the bottom of a humus level. If any mound existed it must have been small. No central burial pit would have survived the Roman ditch diggers, and nothing demonstrably earlier than the Iron Age was found inside the ring-ditch.

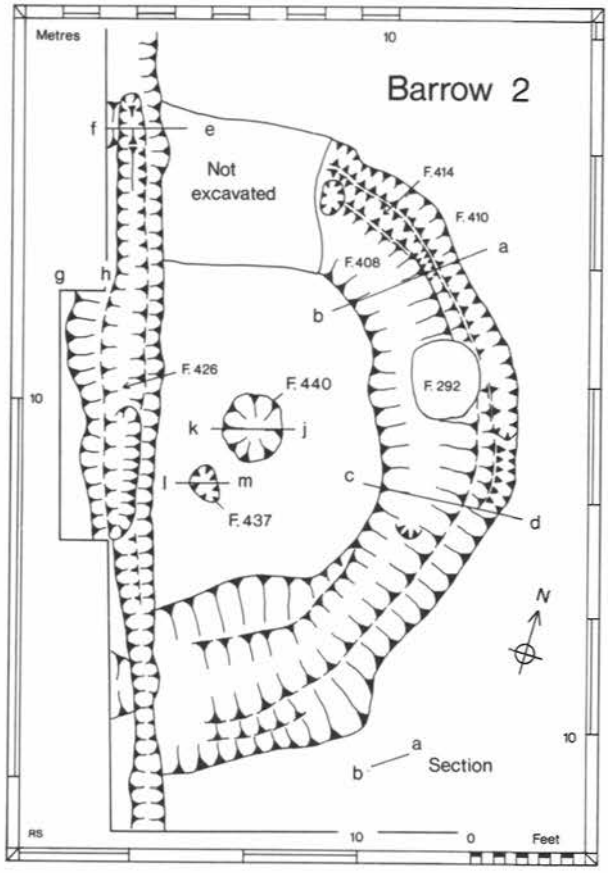


Fig. 11 Willington: Barrow 2: plan

The ring-ditch itself showed evidence of at least two and possibly three or more phases of construction, with three distinct ditch profiles side by side (Fig. 12). The middle ditch, F414 was the earliest with both the inner and outer ditches F408 and 410 dug through it. These may have been contemporary, forming a double ring-ditch in the second phase, or they may have been successive. On the eastern side both the middle and outer ditches, 414 and 410 were extremely shallow, not more than 10 and 12 cm deep, whereas the inner ditch F408, the largest of the three maintained a consistent depth throughout its excavated length. It appeared in some places to have been redug but the filling of all three ditches were very similar and their relationships could not be distinguished in every section. They all presented the appearance of having silted from the east, suggesting that any mound was sufficiently stable to prevent immediate erosion, and perhaps it sheltered the western part of the ring-ditch. Ditch profiles were in general steeper on the inside of the ring. Iron Age pottery was found on the surface of the ring-ditches, but they were adjacent to an area of Iron Age occupation, and a Romano-British hearth had been dug through the top of them.

The simplest interpretation of Barrow 2 is as a Bronze Age funerary monument originally with a central mound which, while much eroded, was still visible in Roman times, but in the light of the evidence for one Iron Age ring-ditch at Willington, the date of Barrow 2 cannot be considered certain.

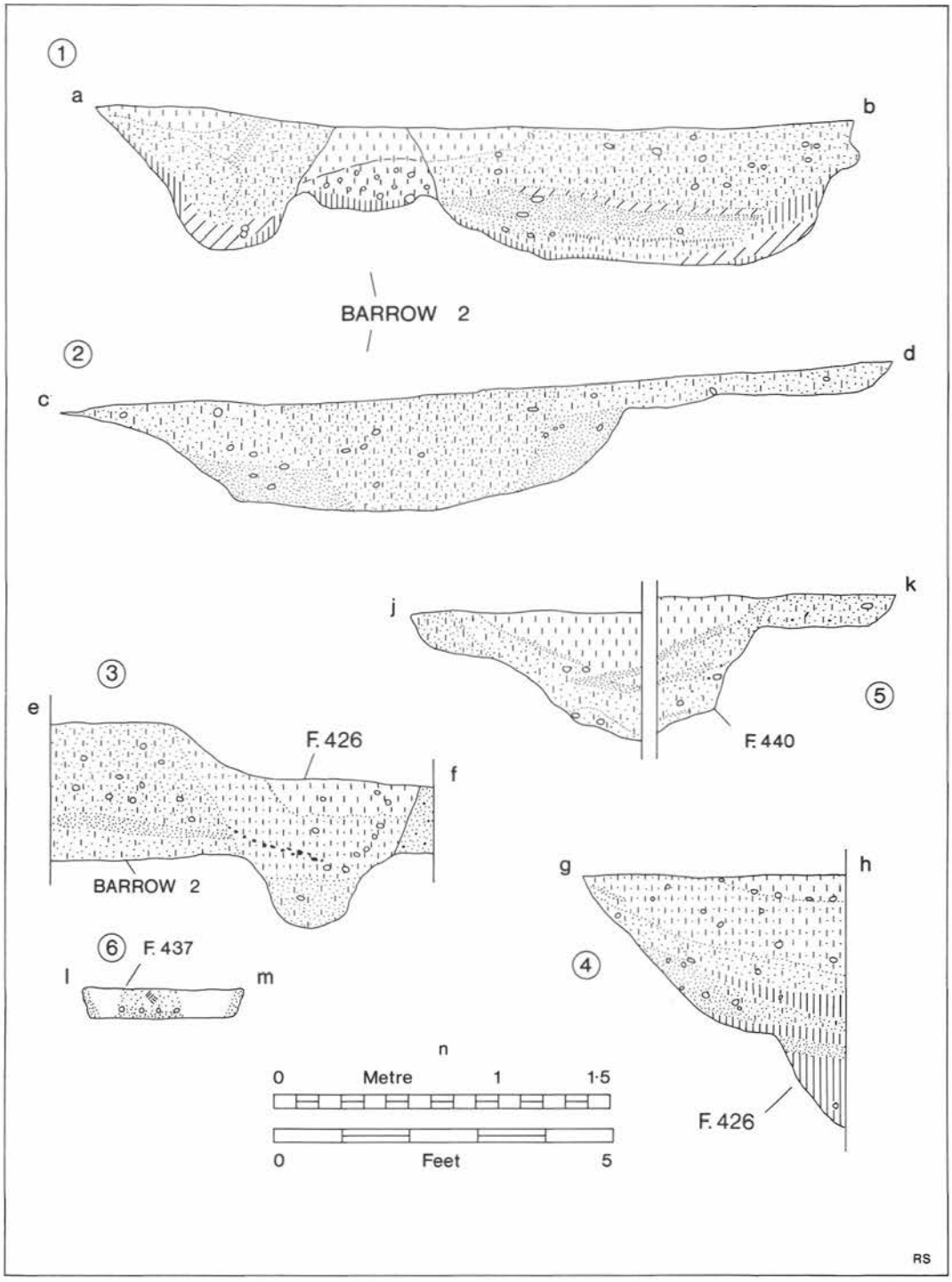


Fig. 12 Willington: Barrow 2: sections. See Fig. 6 (p. 71) for key

Bronze Age occupation

Other evidence of Bronze Age material was found in isolated situations at Willington. A small pit, originally mistaken for a post-hole, PH142, contained more than half a Bronze Age urn (Plate 1b), and one sherd of a second Bronze Age vessel. The pit on the edge of excavated area, just to the north of the Group E post-holes of Neolithic settlement 1, was 30 cm deep, filled with brown sandy loam. It had been dug through an earlier pit which contained no finds. The urn which had clearly been broken before it was buried was laid carefully in the bottom of the pit. No cremation was found.

Pieces of a collared urn were found in the upper silts of the ancient river course in the vicinity of Neolithic Settlement 2, and a rim sherd of another Bronze Age vessel occurred in the Saxon *Grubenhaus* 1, just to the north. Eleven sherds of Bronze Age pottery were found in a Romano-British ditch dug into the flood silts of Egginton Brook in the southern part of Romano-British Farmstead II.

Neolithic and Bronze Age: Discussion

The ten miles of the middle Trent Valley between Willington and Shardlow was an important focus of Neolithic and Bronze Age activity. At Aston-on-Trent a cursus, barrows and later burial or ritual features are well known (St. Joseph 1966; May 1970). A second cursus associated with probable barrows lies across the Findern-Twyford parish boundary (St. Joseph 1966; Wheeler 1970). Reference has already been made to the barrow cemetery at Swarkeston (Greenfield 1956 and 1960; Posnansky 1956). In the parish of Willington itself there are at least three groups of probable barrows apart from those excavated. Two cremations, one a complete collared urn, the other fragments of an urn, were found in 1938 in an earlier gravel pit (Hanbury 1938) and presumably came from a ploughed-out barrow. Aerial photographs show a linear cemetery of one double and two single ring-ditches, south of the modern village, and one double and one single ring-ditch are known to the north of Dale Farm (O'Brien 1979). In Twyford a large barrow, Round Hill, stands some 3–4 m high and aerial photographs show it to be surrounded by a substantial ditch with at least one entrance, which may represent an earlier henge monument. At Shardlow just beyond the north-eastern end of the Aston cursus is another possible henge, a large triple ring-ditch, of which the middle ring is formed of a series of pits. In addition to the ritual and burial monuments, late Neolithic settlement is attested at Stenson (Fowler 1953) where hearths associated with Beaker wares were found, at Swarkeston (Greenfield 1960) as noted above, and south of the river at Melbourne, where two pits containing Ebbsfleet related pottery were found (Courtney 1976).

Willington has produced the largest assemblage of material for late Neolithic settlement and the first Grooved Ware occupation in the Trent Valley, with the exception of the material from North Lincolnshire close to the mouth of the river (Riley 1957). The three major kinds of late Neolithic pottery are now known to be present in the middle Trent Valley, and the mixture of Grooved Ware and Beaker sherds from the Willington settlements suggested some local integration of the users of these wares.

All the evidence for habitation sites, as opposed to ritual monuments has been found by accident, either by total chance as at Stenson, or during archaeological excavation of later features as at Willington, Swarkeston and Melbourne. There is good reason to hope that excavations of any period in this part of the valley, may produce more Neolithic material, and excavations are planned on the site of the Findern-Twyford cursus. Aerial photography is less likely to be helpful, since the settlements appear to be unenclosed and consist of small pits and post-holes, not readily identifiable from the air.

The Iron Age

The Iron Age occupation on the site falls into two phases, on the evidence of the ceramics. One in the late Bronze or very early Iron Age, dating to the 8th or 7th centuries B.C., and the second belonging somewhere between the 4th and 1st century

B.C. Whether the site was occupied throughout that time is uncertain. In both phases round huts, constructed with a continuous post-trench, pits, hearths, and boundary ditches occurred. In neither phase was the classic arrangement used of one or two huts inside a small farmyard enclosure, as at e.g. Little Woodbury (Bersu 1940) or more locally Fisherwick (Smith 1979). Belonging to the earlier phase of Iron Age occupation were Hut Circle 1, and adjacent pits and hearths; a large ditch, F1200, in the western field, hastily excavated at the end of the 1972 season, with no opportunity to investigate the surrounding area; an isolated pit within the area of Neolithic Settlement 2; a pit and the earliest phases of the ditch complex F1, which continued in use through the later Iron Age phase. The later phase was represented by four to six hut circles, and associated pits, hearths and extensive ditch system, including the ditch complex F1; a large palisaded enclosure F376, perhaps a cattle-pound; a curving ditch system, the first phase of occupation on the site of Romano-British Farmstead I; a ring-ditch F370 of uncertain purpose, and one or two granaries.

EARLIER IRON AGE

Hut Circle 1, some 54 m north of Neolithic Settlement 1, was first observed while overburden was being stripped before quarrying in 1970. Beside it clay objects and the dark stain of the hearth F56 was apparent. An area (Fig. 13) 24 m by 14 m was therefore cleaned by trowels, and investigated. It was almost entirely filled with pits, all but two of which respected the position of Hut Circle 1. Time did not allow the proper excavation and recording of all these pits, though 15 were at least partly excavated (Fig. 14). Many had been cleaned out more than once in antiquity, and some were dug through earlier pits. Their total number within the area is not known. They were in general round-bottomed, 25–75 cm deep. Many contained no artifacts, though Iron Age pottery was found in six, and worked flint in another four. Two at least belonged to the Roman period, but most were presumably associated with the earlier Iron Age occupation. Two intersecting pits were disturbed in the construction of Hut Circle 1. They contained no finds, but their light sandy filling, as well as their position suggested that they might be early features. A large shallow pit, F57, north of Hut Circle 1, was among the largest pits in this area. It was sub-rectangular in contrast to the round or oval shapes of the others, with a maximum depth of 26 cm. The filling, greyish brown loam with some pebbles, contained several sherds of both Iron Age and Romano-British pottery. A small circular pit F54, dug through its eastern edge, contained no finds.

Hut Circle 1 (Figs. 13, 15, 17 and Pl. 3a) consisted of a circular trench of 5·6 m external diameter, and three post-holes, one centrally placed, one within the area of the circle, and one dug through the bottom of the wall trench. The sides of the trench sloped more steeply on the outside than the inside, to a narrow slot, suggesting a post-setting, though no individual post-holes were observed. The depth of the wall trench throughout most of its length was 45–50 cm, but on the south-east a length of 1·4 m was much shallower, only 26 cm deep. The wall-trench was both wider and deeper on either side of it. Immediately to the north of this section, a post-hole was dug 11 cm through the bottom of the wall trench. These arrangements suggested a wooden threshold sill, the pivot-post for the door being more deeply set. The lower part of the wall-trench was filled with brown sandy soil with some pebbles containing six sherds of Iron Age pottery. The upper 5 cm was a fine grey silty material, with two more sherds, one of which was badly overfired, similar to pottery from F56. The central post-hole 119, 78 cm wide and 48 cm deep, was filled with a mixture of sandy soil and pebbles, with a lens of clean sand 18 cm below the gravel surface. It contained seven flints including two thumb-nail scrapers and a blade, in addition to crumbs of pottery and charcoal. The post-hole 128 within the area of the hut, 28 cm wide and 22 cm deep, was similar in filling to PH119, with the same lens of clean sand, suggesting that they were contemporary. Being the only other internal post-hole it is difficult to envisage a structural function, and it perhaps is related to internal furnishings.

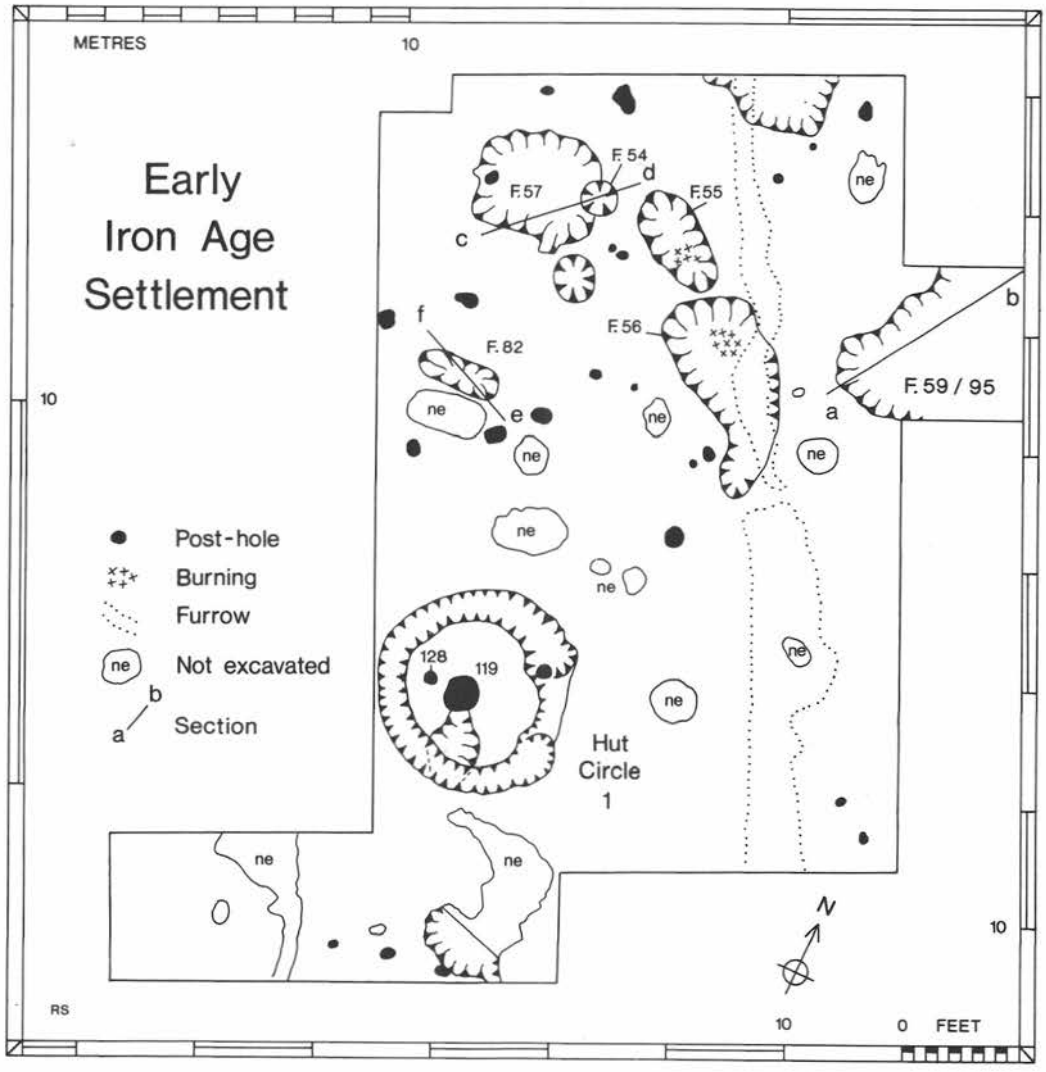


Fig. 13 Willington: Early Iron Age Settlement: plan

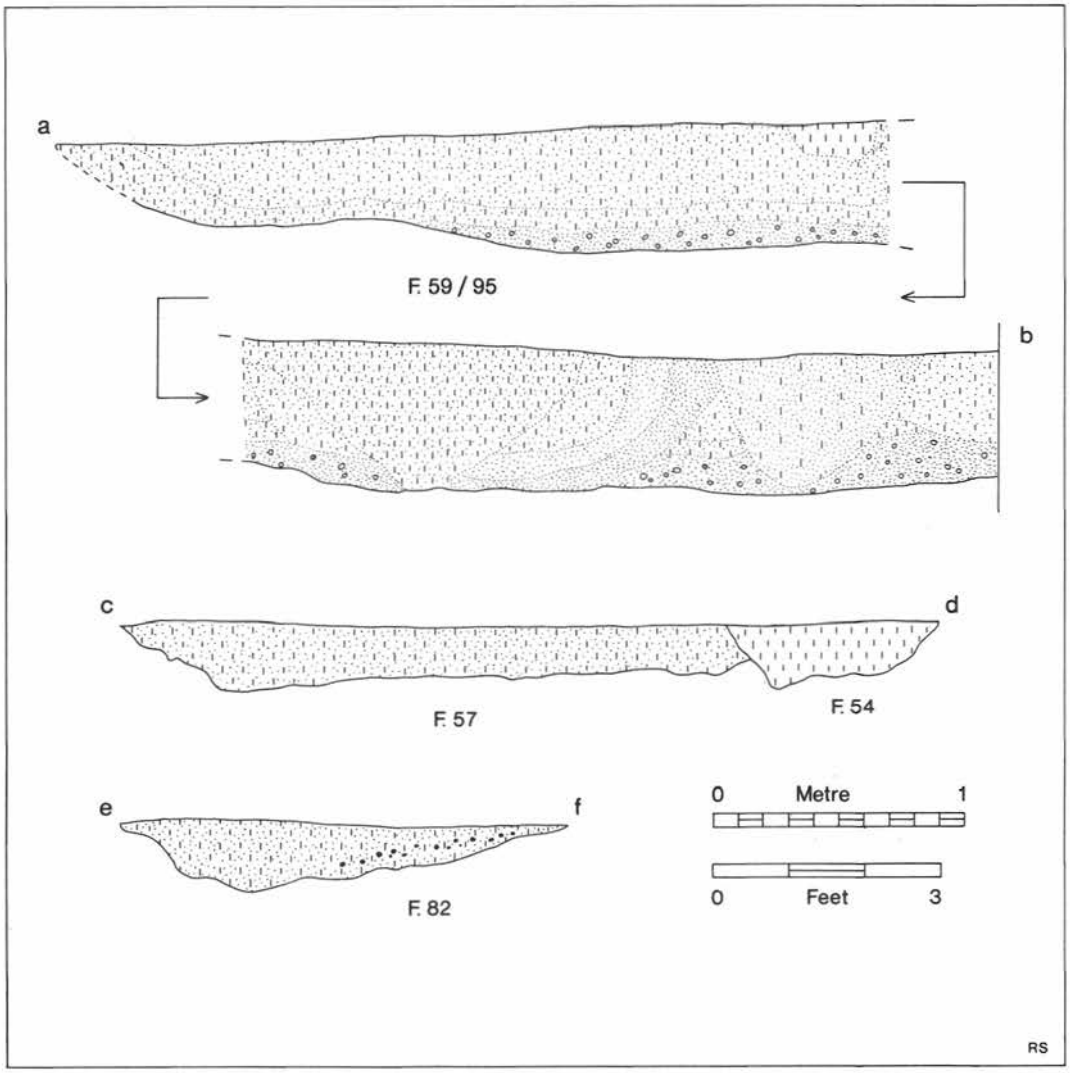


Fig. 14 Willington: Early Iron Age Settlement: sections. See Fig. 6 (p. 71) for key.

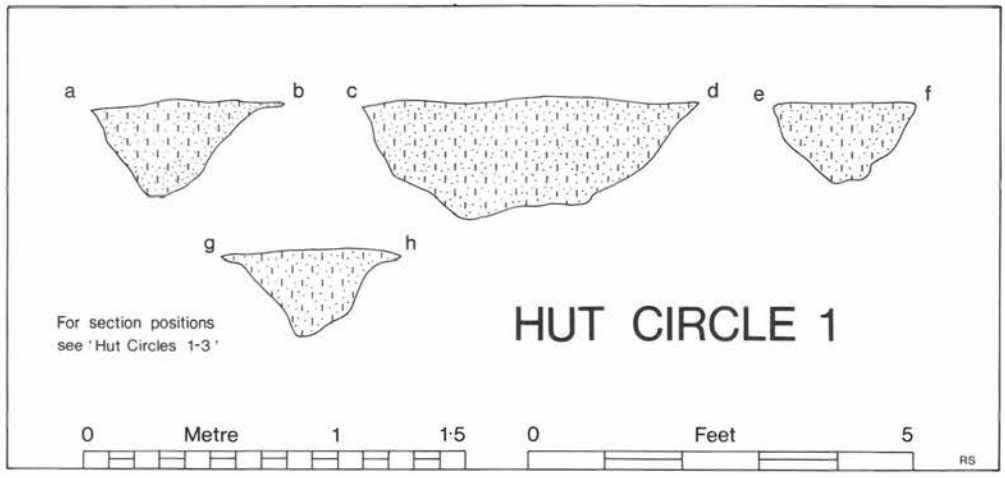


Fig. 15 Willington: Hut Circle 1-sections. See Fig. 6 (p. 71) for key

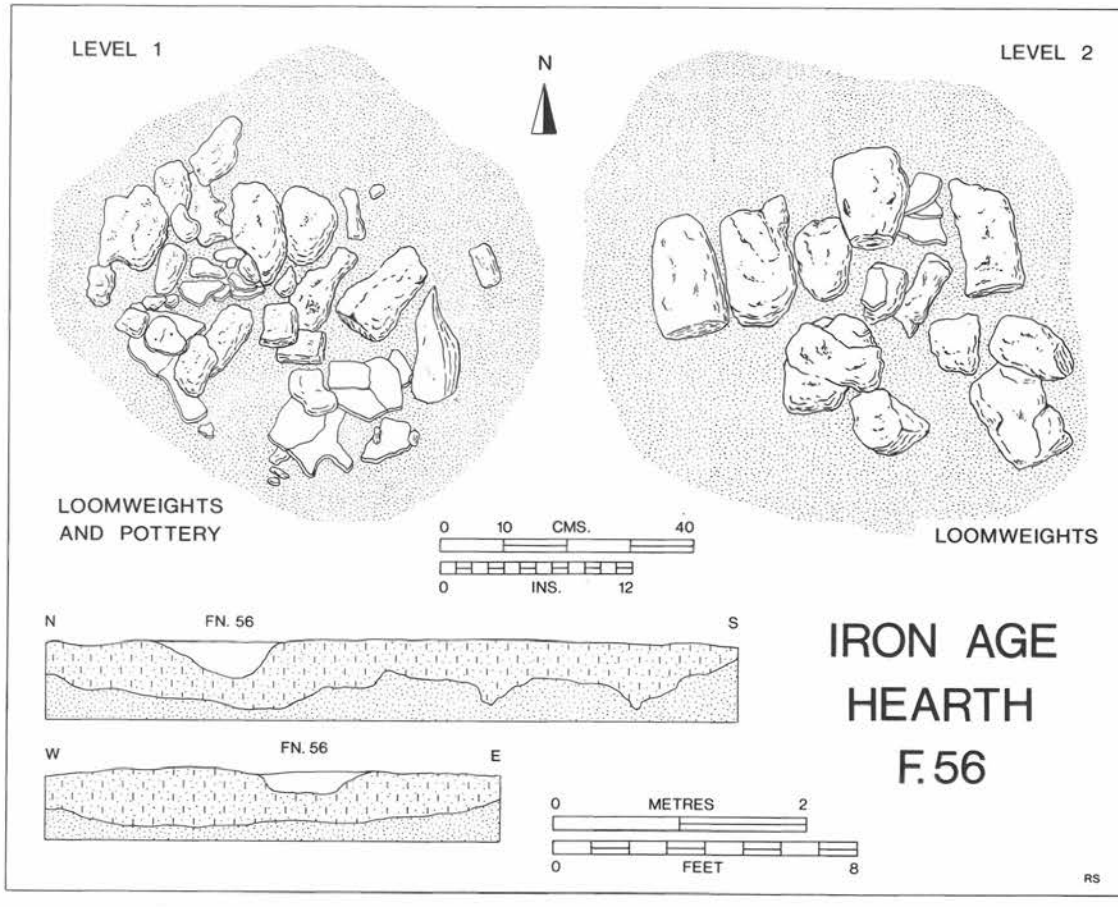


Fig. 16 Willington: Early Iron Age Hearth F56—plan and sections

North-east of Hut Circle 1, two hearths F55 and F56 were constructed in the top of partially silted pits. The pit beneath F56 (Fig. 16) was roughly oval, intersecting with small pits to the south, and partly damaged by a plough furrow. No artifacts were found in its lower filling, nor in the smaller pits. The hearth itself lay 28 cm above the bottom of the pit. Large cone-shaped clay blocks and one long stone, had been set side by side in the scorched hollow, surrounded by charcoal, ash and burnt bone. On these blocks had been placed three or four pottery vessels, broken *in situ,* and spread over the hearth (Pl. 2a). Parts of these vessels had been grossly over-fired, to the point of vitrification, presenting the appearance of a petrified sponge, but other sherds from the same vessel were in good condition. Heat must therefore have been considerably greater at some points than others, and it is unlikely that the necessary degree of heat could have been obtained without the use of bellows. (I am indebted to Mr Peter Reynolds for discussion of this point). Partly overlying the broken pots and scattered around the edge of the hollow were smaller daub blocks, presumably loom weights, most rectangular, but some cylindrical, each with a hole through its long axis. All the clay objects are described at the end of this report. The presence of the loom-weights, the distortion in both shape and fabric of the pottery vessels and the care taken in the placing of the large clay-blocks all suggested something more than a cooking hearth. Bellows would not be needed except for metalworking, of which there is no evidence. Perhaps F56 was a failed firing of pots and loom-weights. The surface of the hearth had been disturbed by bulldozer, and no traces of any oven structure might be expected to survive. The firing could easily have taken place on an open hearth. Just to the north of this hearth a slightly smaller pit

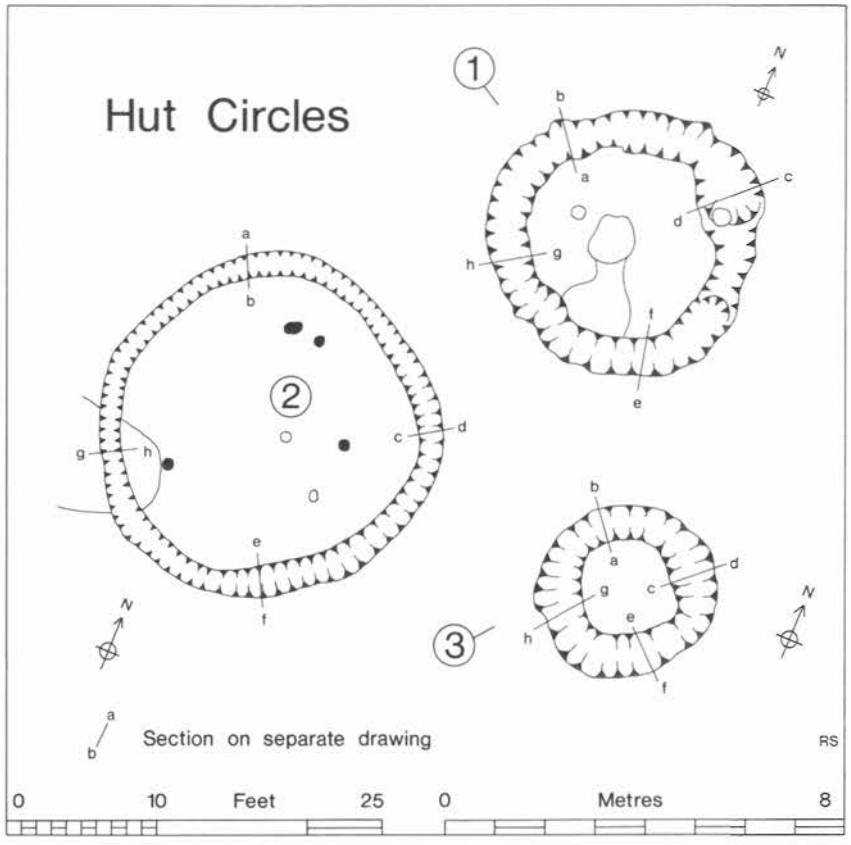


Fig. 17 Willington: hut Circles 1, 2 and 3: plans

F55 had been used in a similar manner. Scorching and a large amount of charcoal showed that the upper hollow was used as a hearth, after the pit was partially filled. No artifacts were found in this pit, but a radio-carbon determination of the age of the charcoal was 4160 bc ± 130 (HAR – 956). This hearth, adjacent to F56, was so similar in construction that it is difficult to believe that they are not contemporary. The objects from F56 belong to the early Iron Age, not earlier than c. 800 B.C. The radio-carbon date for F55 would therefore seem to be misleading.

A number of post-holes were seen in this area, and if time had permitted the excavation of a larger area it is possible that other buildings might have been found. The mechanical stripping of the surrounding area was observed, and any hut circles constructed with a post-trench or eaves gully, or substantial ditches would certainly have been seen. Hut Circle 1 then was quite certainly not enclosed within any sort of ditched yard. There was no sign of a sudden or violent end to this occupation, the abandonment of the hearth F56 being presumably due to the failure of the pots, rather than to a sudden removal of the potter.

Within the area of Neolithic Settlement 2 (Fig. 18) a roughly circular feature, F713 was apparent after the first cleaning as a dark patch with two baked clay objects sticking out of it. It proved to be a flat-bottomed pit, with a wide lip, and sides sloping steeply on the east, more gently on the west. It contained a mixed filling, mainly a mottled brownish grey sticky soil, with orangey brown sand against the edges (Fig. 19). This was interpreted as a single filling with no evidence of internal strata.

Most of the space within the pit was taken up by eight to nine clay blocks (Plate 2b) similar to those found in F56, the hearth by Hut Circle 1. They lay not in any orderly fashion within the pit, like the neat arrangement in F56, but in a jumbled heap. Also unlike F56, F713 contained no charcoal, or other sign of burning save for the presence of two pebbles, possibly cracked by fire. About 20 sherds of Iron Age pottery were found, a few on the surface of the pit, the rest within the filling in association with the clay blocks. There seemed no reason to doubt that the clay blocks, pottery and cracked pebbles were deposited at the same time. The reason for the deposition was less certain. The whole contents may have been discarded rubbish, or the pit may have been a convenient storage place for the clay blocks.

Almost adjacent to F713, was F718 (Fig. 19), a small round pit, 45 cm wide at the top, 25 cm at the bottom with a depth of 15–20 cm. In shape it looked like a post-hole but it contained a large number of burnt, cracked pebbles, presumably cleared from a hearth and dumped there, since no scorching was found. The rabbit-disturbed pit also contained body sherds of Iron Age pottery.

Four other pits in the vicinity contained no datable objects. F710 and 712 were two intersecting pits, slightly to the north, with a post-hole F616 dug through them. The pits were considerably disturbed by rabbits and neither they nor the post-hole can be dated. F711 was a small pit with a sandy filling, partly removed by the boundary ditch of Romano-British Farmstead I, and not therefore later than the early Roman period. F719 was filled with dark brown humus, disturbed by rabbits and a mediaeval plough furrow with no other indication of its date.

A group of three post-holes, 602, 604, and 607, have been described in the context of the Neolithic occupation of this area. Of the others shown on the plan (Fig. 18) PH609 and 615, might be contemporary, both being round in plan, with U-shaped profiles, diameters of 20 cm and depths of 23 and 25 cm respectively. The colour of their dark brown loamy fillings suggested a later date, but neither contained any finds.

Other post-holes in this area, which might appear in plan to fall into groups, e.g. PH's 605, 601, 611, 603, 610, 621, 608 and 606, just south of *Grubenhaus* 1, or PH624, 625 and 626 north-east of Hut Circle 6, were in fact so various in depth, profile and filling that they were unlikely to be contemporary. PH623 was certainly fairly recent since the wood of the post survived, with little sign of decay within it.

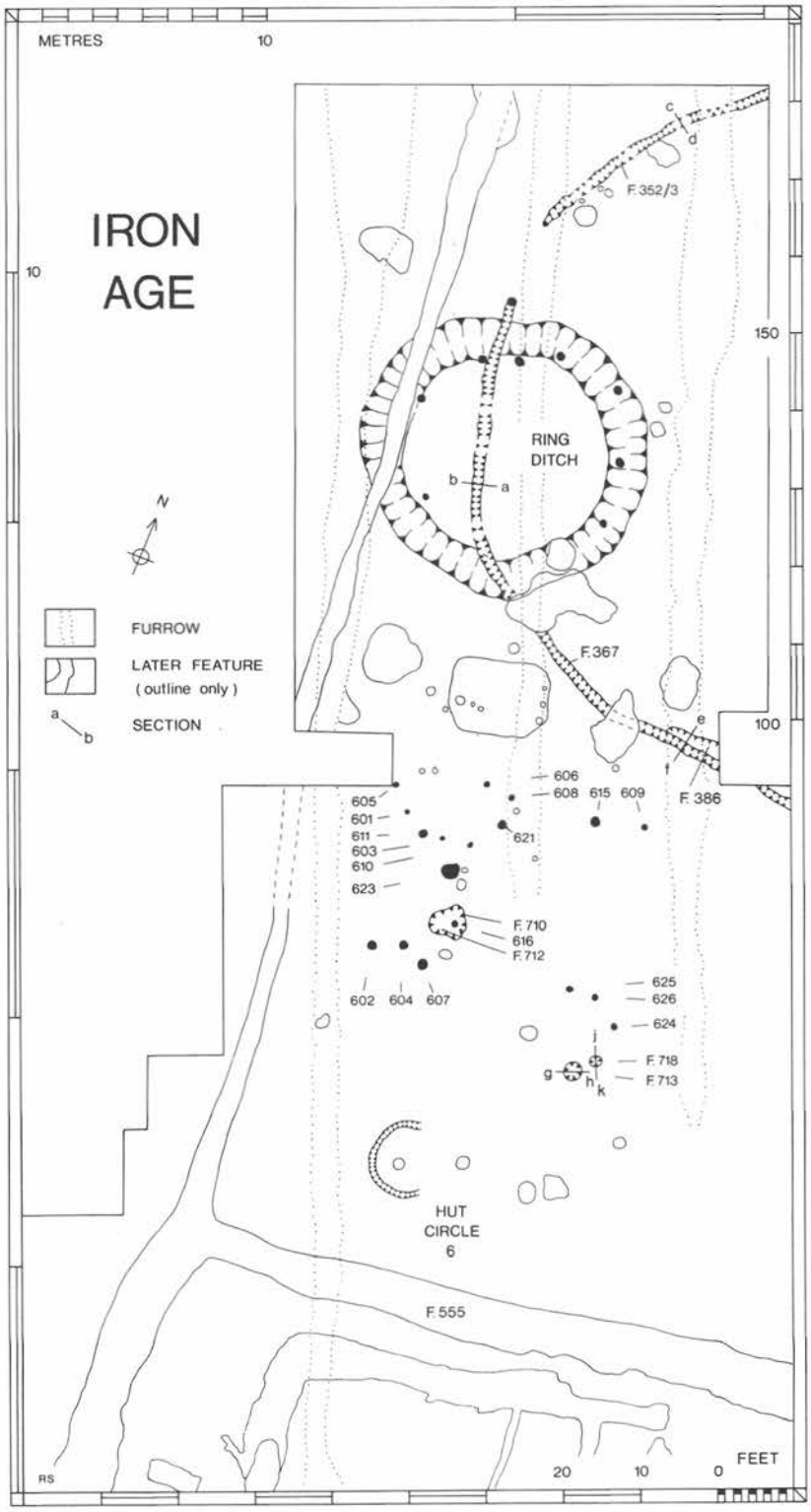


Fig. 18 Willington: Iron Age Settlement: plan

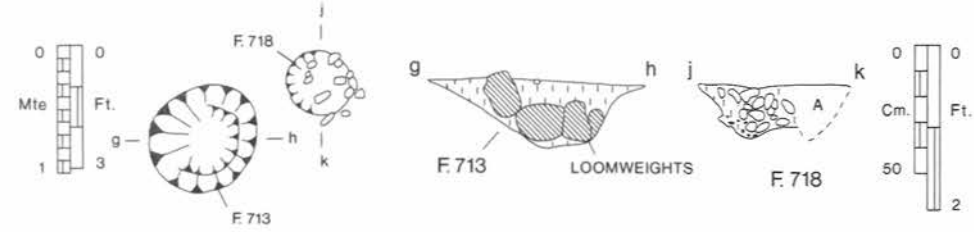


Fig. 19 Willington: Early Iron Age pits: plans and sections. See Fig. 6 (p. 71) for key

At the end of the last season's excavations, a small area in the western field to the east of Romano-British Farmstead II, was examined in conditions of extreme haste. A length of some 5 m of a large ditch F1200 filled with dark humic material with many large pebbles was excavated (Plate 3b). It contained fragments of at least 15 early Iron Age vessels, and many more were found in the plough soil. Bone of cattle and pig had also survived within it. There was no opportunity to make accurate plans, and the feature was much disturbed by animal burrows. Its value lies in the group of pottery which it contained.

There was evidence of early Iron Age occupation east of Barrow 2, but as most of the features there belonged to the later occupation they are described with them.

LATER IRON AGE

Hut Circles 2 and 3 (Fig. 20 and Pl. 4a) lay to the west of Neolithic Settlement 1 and south of the ditch F8. They are included here though evidence of date is scanty, and they may possibly belong to the earlier Iron Age or Romano-British occupation. Hut Circle 2 was very shallow, but Hut Circle 3, 3 m down the slope to the south, was more substantial, the difference possibly being due in part to plough erosion. Both huts were damaged by a later furrow. East of them was a post-mediaeval field boundary, a large dark north-south ditch with post-holes set on either side of it.

This area contained many large shallow pits filled with sandy loams. The complications of fluvio-glacial deposits and heavy rabbit disturbance, combined with the sandy nature of the pit fillings and the limited time available for excavation, prevented total excavation of the pits, but the least disturbed of them were examined. Most of them respected the positions of the two huts, but few contained any artifacts. Flints were found in three, F128, 129 and 154; post mediaeval material in four; and one, F106 was of Saxon date. Some pits were certainly earlier in date since they were disturbed by other prehistoric features: F104 was partly dug away by the Iron Age ditch F8 and F154 had been disturbed by the construction of Hut Circle 2. Many pits intersected and while it was frequently impossible to ascertain the order of digging, since their fillings were so similar, their number could to some extent be determined by their profile. They ranged in depth from 11 to 80 cm and some typical profiles are shown in Fig. 21. The lack of Roman or later pottery within most of them, and the light colouring of their fillings suggested a prehistoric date.

The two hut circles are likewise difficult to date. Hut Circle 3 contained only flint flakes, but Hut Circle 2 contained two sherds of hand-made pottery, probably Iron Age, in addition to flint, daub, small amounts of charcoal and calcined bone. Hut Circle 2 (Figs. 17 and 22) consisted of a circular trench, external diameter 6·9 m, with a shallower narrower section on the north-east which may have marked the entrance. Its central area was badly damaged by a later plough furrow, but traces of an internal ring of post-holes survived on the east and west sides. These were only 1–2 cm deep but quite clear on the gravel surface. Any traces of a central post-hole would certainly have been obliterated by the furrow. The outer trench varied in depth from 35 to 12 cm at the presumed entrance. It may have been a wall setting, though no signs of posts were observed. It was dug through the upper filling of a large pit F154, the only pit to obtrude

on to either hut. The small size of Hut Circle 3, (Figs. 17 and 22) maximum external diameter 3·9 m internal diameter 1·8 m suggested that it was an auxiliary building to Hut Circle 2. It was certainly too small for a dwelling. It consisted of a broad circular trench up to 50 cm deep with two post settings showing clearly in the bottom. This may have indicated a resetting of wall posts, though this could not be seen in the sections. The only variety in the brown sandy loam filling was an upper layer up to 7 cm thick, of much cleaner sand, perhaps a late silting after subsidence of the filled wall trench. Alternatively, the structure may have had a raised floor, for the storage of grain or other material, though the number of pits would seem to obviate the necessity for further containers. No internal features were found nor was there any sign of an entrance. If flexible posts were used for this structure they might have been tied, tepee-like, at the top.

Supervisor: S. Losco-Bradley

Hut Circles 4, 5 and 7 (Fig. 20) some 30 m west and slightly north of Hut Circle 2, beyond ditch complex F295/431, lay in a corner of the Iron Age ditch system. Hut Circle 7 was dug through part of one ditch complex, F1, and Hut Circle 5 was partly dug through, and partly destroyed by F295/431. The huts and ditch system were certainly contemporary, but the ditch system was in use much longer than the huts.

Hut Circle 4 (Figs. 23, 24 and Pl. 4b) was the most complex and informative hut excavated at Willington. It consisted of a penannular trench, of external diameter 7 m, with a post-hole at each end, and a drainage channel through the entrance. A clay-lined hearth occupied the centre of the hut, with three smaller clay-lined pits in the northern half. Two, or possibly three stake holes were identified, dug through the bottom of the penannular wall trench, which was deeper on the west, 32 cm, compared with only 2 cm by the entrance. It was filled with dark brown sandy loam, with light grey silty material in the upper 2–3 cm. Little evidence of post resetting was observed, but it may have been obscured by the rabbit disturbance. A small pit or post-hole F470, 50 cm wide and 28 cm deep was dug through the wall trench on the western side, and this, together with three exterior post-holes 302, 303 and 308 may have been a later repair of the wall. Two post-holes contained hand-made pottery.

The wall trench intersected with three small pits, F223, 207 and 215, but in each case animal disturbance had obscured the sequence. The wall trench contained only fragments of daub and charcoal.

Two post-holes 309, and 311 were found in the southern half of the hut. They were respectively 31 and 17 cm deep, and may have been internal supports. Possible stake holes were observed just inside the wall trench, but it proved impossible to distinguish stake holes from field-mouse holes with any certainty, and they are not shown on Fig. 20.

The entrance was 2·5 m wide. The post-hole on its southern side was much disturbed by rabbit burrows, but the northern one F216, was 20 cm deep, filled with a light grey sandy loam containing flint and charcoal. The entrance posts formed main supports for the roof, the wall trench at this point being very shallow, sufficient only for wall cladding.

Through the entrance ran a gully F209, 4 m long, 50 cm wide and 25 cm deep. The lower 5 cm contained a buff-coloured fine sand, above which was a brown sandy loam, and light grey silty material filled the upper 5 cm. Iron Age pottery and fragments of daub, charcoal and bone were found in this gully.

South of the centre of Hut Circle 4 lay a small pit, F201 (Fig. 25) 1·2 m wide, 25 cm deep lined, with clay up to 10 cm thick with irregular small scoops in its surface; it was scorched and flecked with charcoal. Its upper filling was sand with small lumps of clay. It contained only baked daub, but Iron Age pottery was found beneath the clay lining. Hut Circle 4 was the only hut with evidence of an internal hearth. In the northern half of the hut were three more clay-lined pits (F212, 228, (Pl. 5) 232) also exhibiting small

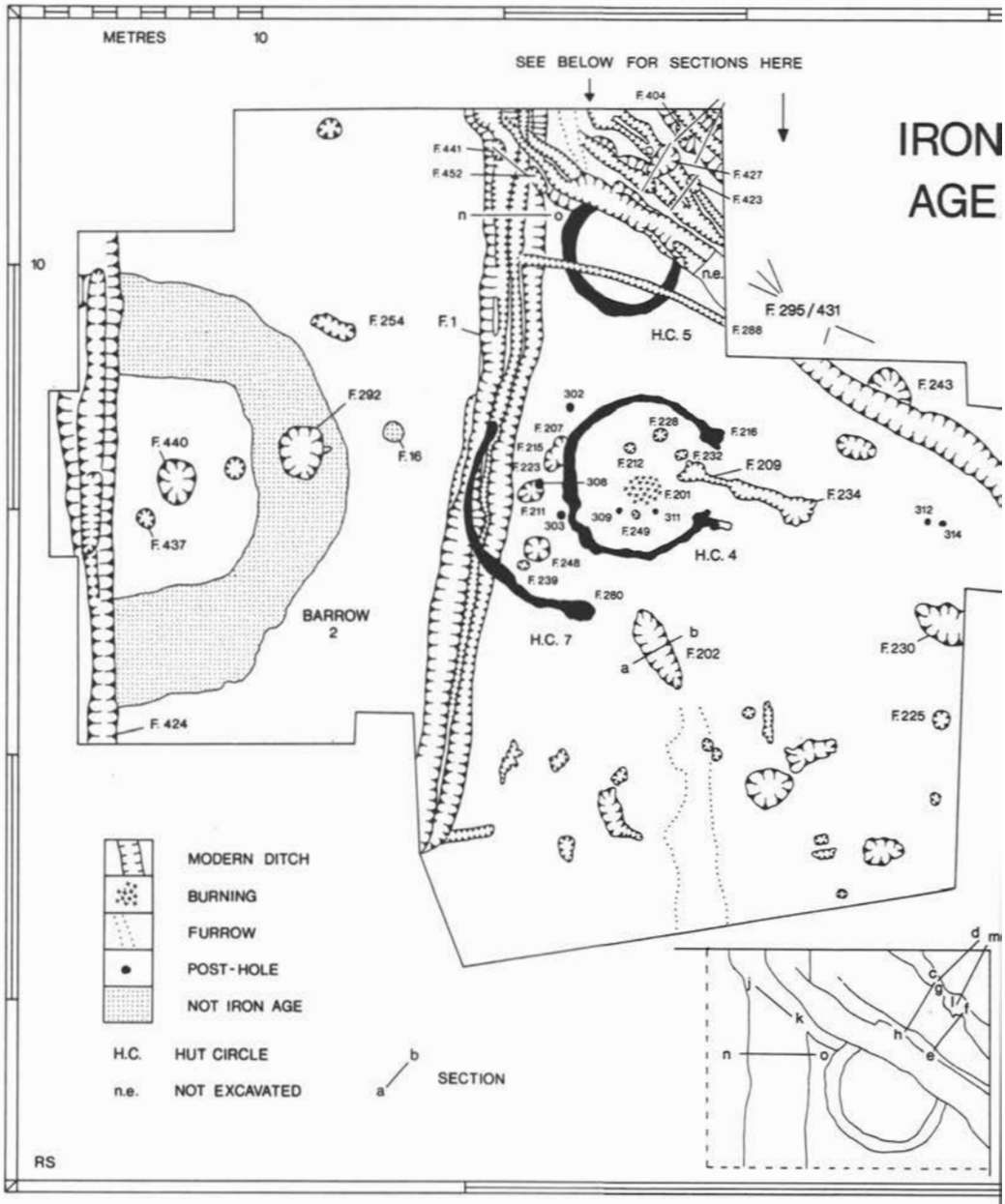


Fig. 20 Willingto

ron Age Settlement: plan

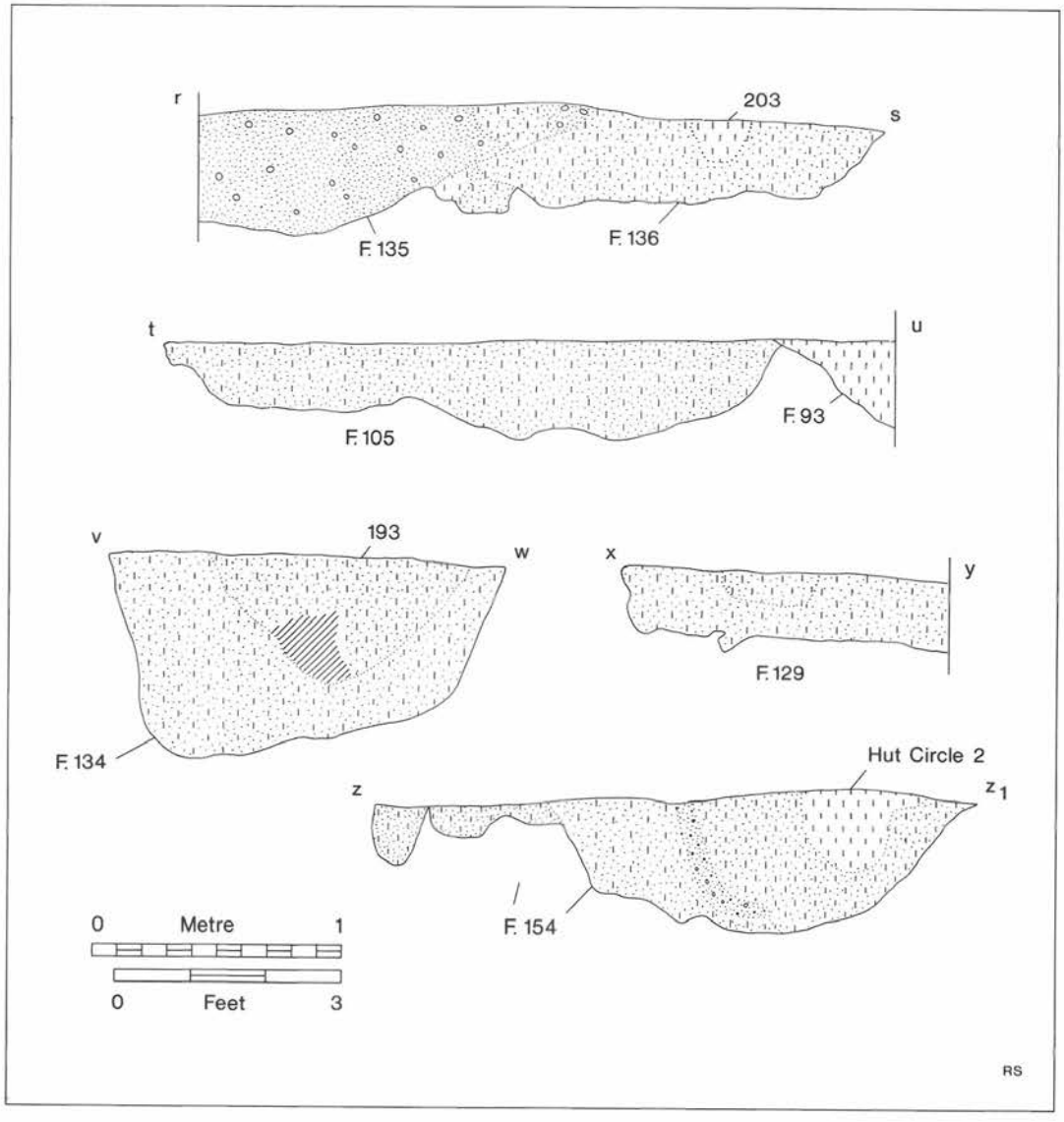


Fig. 21 Willington: Iron Age Settlement: sections. See Fig. 6 (p. 71) for key

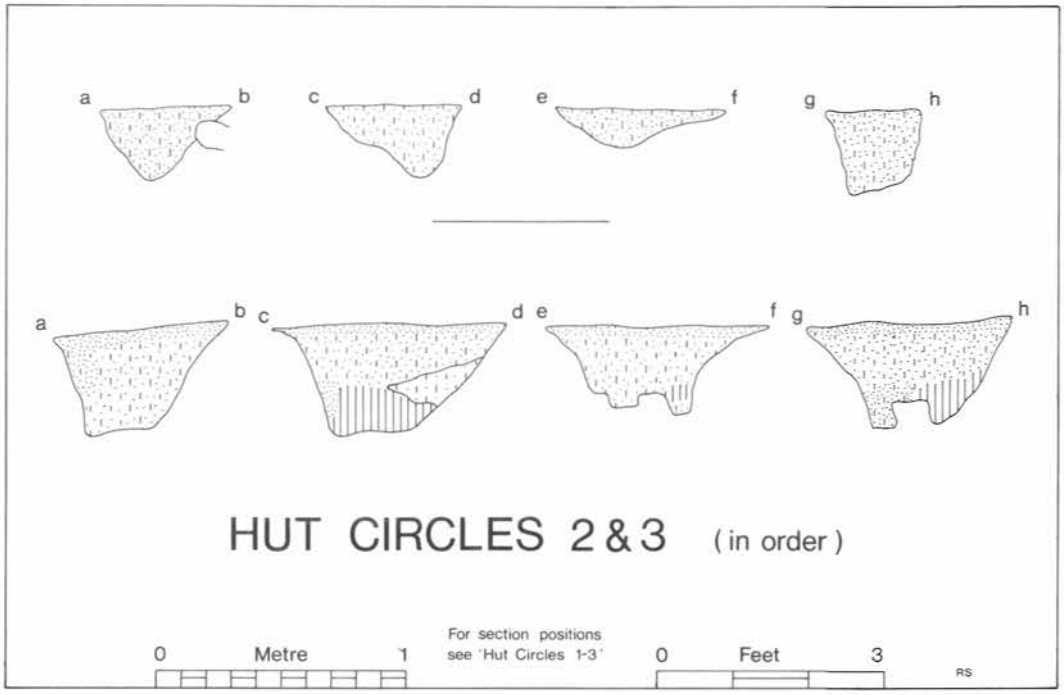


Fig. 22 Willington: Hut Circles 2 and 3: sections. See Fig. 6 (p. 71) for key

irregular scoops in the bottom. None of these showed any evidence of burning, or contained any artifacts except for some charcoal in 232. They were smaller than the hearth, from 50–70 cm in diameter and 35–45 cm deep. The spatial arrangement suggested that they were contemporary with the hut. If all three were in use at the same time together with the hearth and the entrance gully, little space would remain inside the hut. They may have had strong covers when not in use, or they may have succeeded each other. Their function is uncertain; they were too small for grain storage, and their contents provided no information. One suggested use was for storing shellfish in water.

To the west of Hut Circle 4, a curving trench some 9 m long was initially interpreted as an eaves-drip gully. It was not quite concentric with Hut Circle 4, and the distance of 3 m between the two trenches suggested that it might have been another hut circle 7 (Figs. 23 and 24). If this was so, the two huts could not have been contemporary as they would have overlapped, and the better preserved, Hut Circle 4 was probably the later. Hut Circles 1, 2, 4 and 5 were all much shallower on their eastern sides. If the same were true of 7, the absence of any trace of its eastern side would not be surprising. 15–20 cm deep, it was filled with a brown sandy loam and contained hand-made and Romano-British pottery. Dug through it was a small pit or post-hole F222, which contained fragments of a bee-hive rotary quern. At its southern end it intersected with a pit F250, but Hut Circle 7 was here so shallow that the sequence could not be determined. The pit was 1·1 m wide, 32 cm deep, filled with sand and pebbles below a grey silty surface, and contained no artifacts.

Hut Circle 5 (Figs. 23, 24) lay 3 m north of Hut Circles 4 and 7, at the junction of the two Iron Age ditch complexes. An early phase of the F295/431 ditch was disturbed by Hut Circle 5 but the north eastern third of the hut circle was removed by later phases of the same ditch. Hut Circle 5 was also disturbed by a narrow gully F288 which may itself have been a later phase of the F295/431 boundary. The depth of the circular trench,

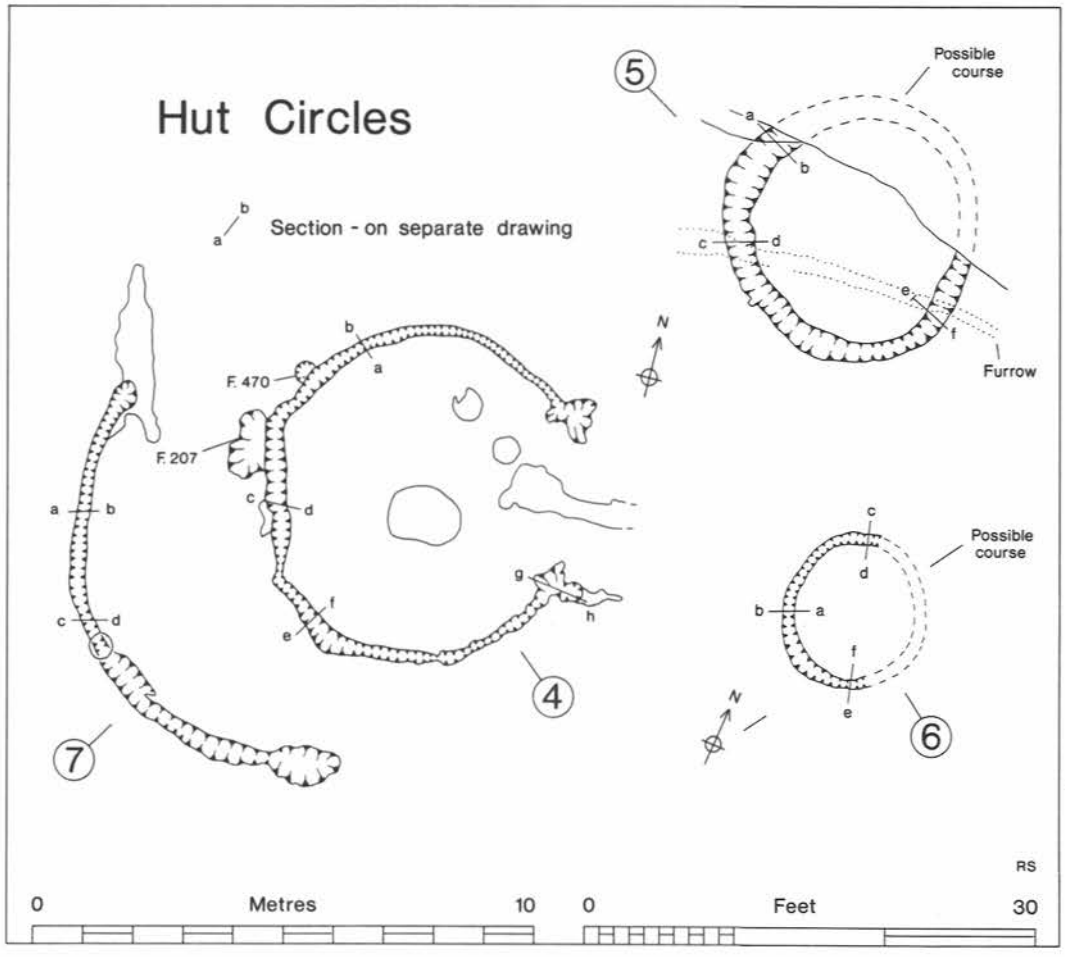


Fig. 23 Willington: Hut Circles 4, 5 and 7: plans

external diameter 2·5 m varied from 30 cm on the west to as little as 10 cm on the east, a feature that it shared with Hut Circles 2, 4 and 7. There were traces of four post-holes in the outer edge of the wall trench, on its western side. Two had been partly dug away by the trench, and two were dug into it. The trench through most of its length contained two layers of filling, a thin light sandy deposit in the bottom, with brown loam and pebbles above. A few sections showed evidence of redigging indicating a number of casual repairs, perhaps at different times, rather than a systematic rebuilding. Only one scrap of hand-made pottery was found in the wall trench, although baked daub and flint implements were present. In the upper filling, some charcoal was also found, but there was no sign of burning.

A large number of pits were excavated in the vicinity of Hut Circles 4, 5 and 7. They ranged in date from the late Neolithic, F16, to Roman and perhaps modern times. Those in the southern part of the excavation were very badly disturbed by rabbits, and the scraps of pottery etc, from them cannot be used for dating. Few obtruded on to the position of the huts. Of the pits that were certainly of later prehistoric date, F202, 3·5 m long and 1·2 m wide, produced the largest quantity of material. It contained scored

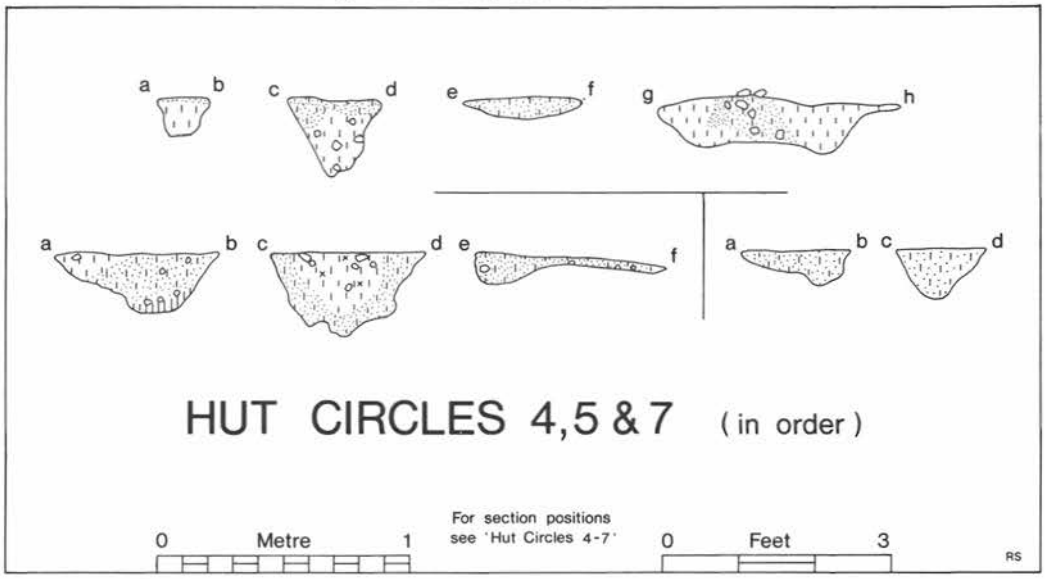


Fig. 24 Willington: Hut Circles 4, 5 and 7: sections. See Fig. 6 (p. 71) for key

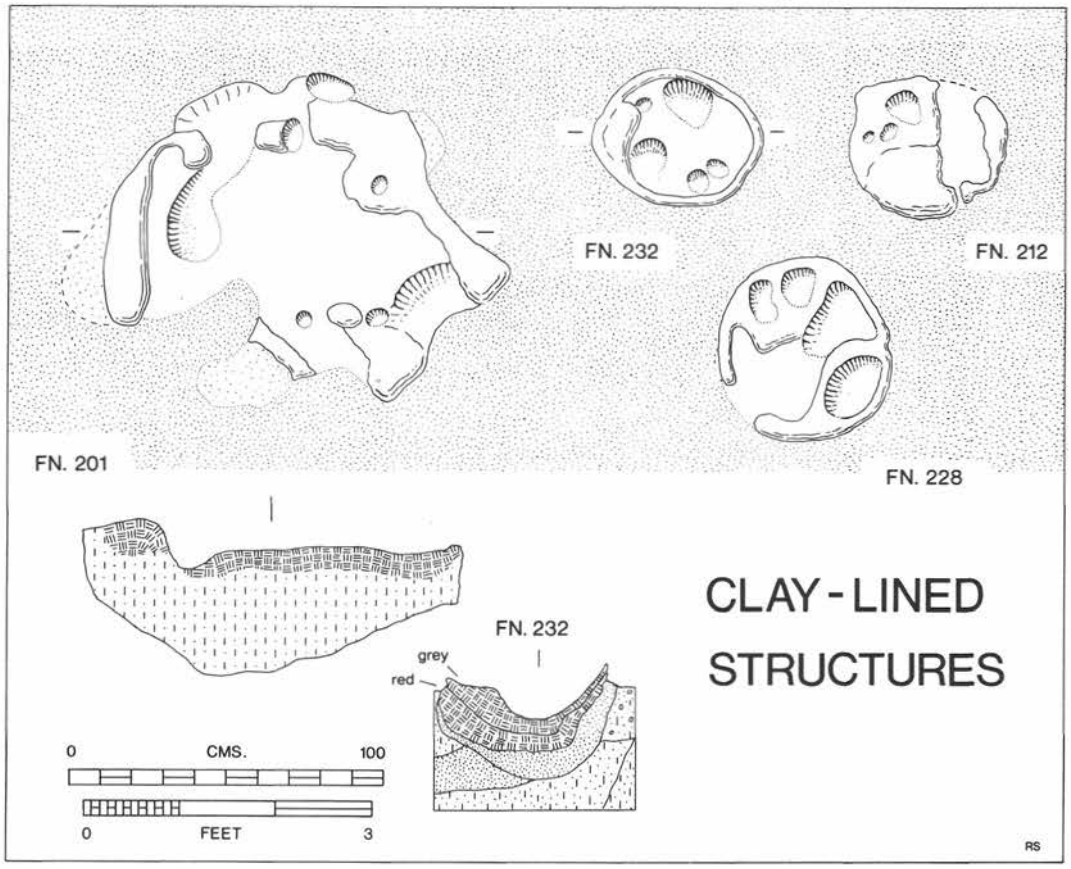


Fig. 25 Willington: Hut Circle 4: internal features

pottery, triangular loomweights and the base of a pedestal urn. The pit had been redug at least twice (Fig. 26) so the finds cannot be treated as a closed group, and may spread over a period of time. The filling of the pit was a dark loam, darker than most of the pits in this area. It was close to Hut Circles 4 and 7 and may have been an adjunct to one of them, presumably used for storage.

Six pits lying between Hut Circles 4 and 7 were excavated, of which F223, into which Hut Circle 4 was dug, contained Iron age pottery, flint and some charcoal. F211, only a few cm deep may have been merely the bottom of a small pit containing burnt daub, and PH308 was dug through it. F248, 56 cm deep contained no finds and could not be dated. F239, lined with clay was similar to the three pits in Hut Circle 4. It contained only charcoal.

More pits were found north of the three hut circles, some dug through the silted ditches, some disturbed themselves by resettings of the ditches. F404 was dug through one channel of the F295/431 complex, but was also partly dug away by a later channel (Fig. 26). It contained only charcoal and daub, and was 10 cm deep. F421 was so disturbed by two channels of the same ditch complex that its shape was irrecoverable. It was only 10 cm deep but contained a fragmented pottery vessel of early Iron age type. F423 a pit 28 cm deep was dug through two channels of the F295/431 complex. It contained no finds. Just to the west a pit F427 1·8 m long and 37 cm deep, was dug through three silted ditch channels. Its filling appeared to have accumulated gradually and it contained no finds. F243, dug through the same ditch complex, was an irregularly shaped pit filled with a compacted gravel, probably by natural agencies. It contained no artifacts. At the junction of the F295/431 and F1 ditch complex three pits had been dug. They were all sub-rectangular. F441 was 1 m by 38 cm and 64 cm deep. F452 was itself partly destroyed by the F295/431 complex. It was c. 1·3 m by 60 cm with a depth of 1·3 m. F450, dug through both complexes, also disturbed an earlier pit F454. The exact plan of F450 was not recovered owing to the difficulty of distinguishing between the various fillings of these features, but it was c. 2 m long with a depth of 52 cm and contained hand-made pottery. Only the lower layers of F454 remained, of a depth of 1·25 m. Within it were found Iron age pottery, baked daub, charcoal and ash.

No less than 18 pits were found to the south of Hut Circles 4 and 7, of which 10 contained either bone or artifacts. But so heavy was the animal disturbance that each of these assemblages contained either rabbit bone or modern pottery. It was moreover impossible to record with any certainty the dimensions of the pits, and while the finds from them are recorded in the pottery and flint reports, no further details can usefully be given here. There is no reason to believe that the pits are of one date, and some at least may be modern disturbances.

The ditch system associated with the hut circles must have formed extensive enclosures over at least 115 m and possibly as much as 215 m east to west. No small yard or enclosure served the hut circles. One of the boundaries of the ditch system, the F295/431 complex, was reset at least twelve times, in addition to sporadic cleaning out of individual channels and the F1 complex was redug at least four times and probably many more. The earliest ditches of both complexes contained early Iron Age pottery as did a pit, F421, which was disturbed by two ditches of the F295/431 complex, but the later ditches contained later Iron Age pottery. These ditches would seem then to represent a stable boundary, in use throughout most of the Iron age, while the huts which showed comparatively little sign of resetting were surely not longer lived than a single generation, and may well have been of much shorter duration. Hut Circle 5 was dug through the southern side of the F295/431 complex, but was itself destroyed by later ditches of that boundary. Similarly the pits described above were both dug into the ditch complex and destroyed by it. When the hut was in use the boundary presumably lay along the line of one of the more northerly channels. Within these two complexes were both large open ditches and narrow palisade trenches, so that the boundary may have been differently marked at different times. Although the direction of the boundary was reasonably consistent, the position of the actual line could vary within at least 6 m.

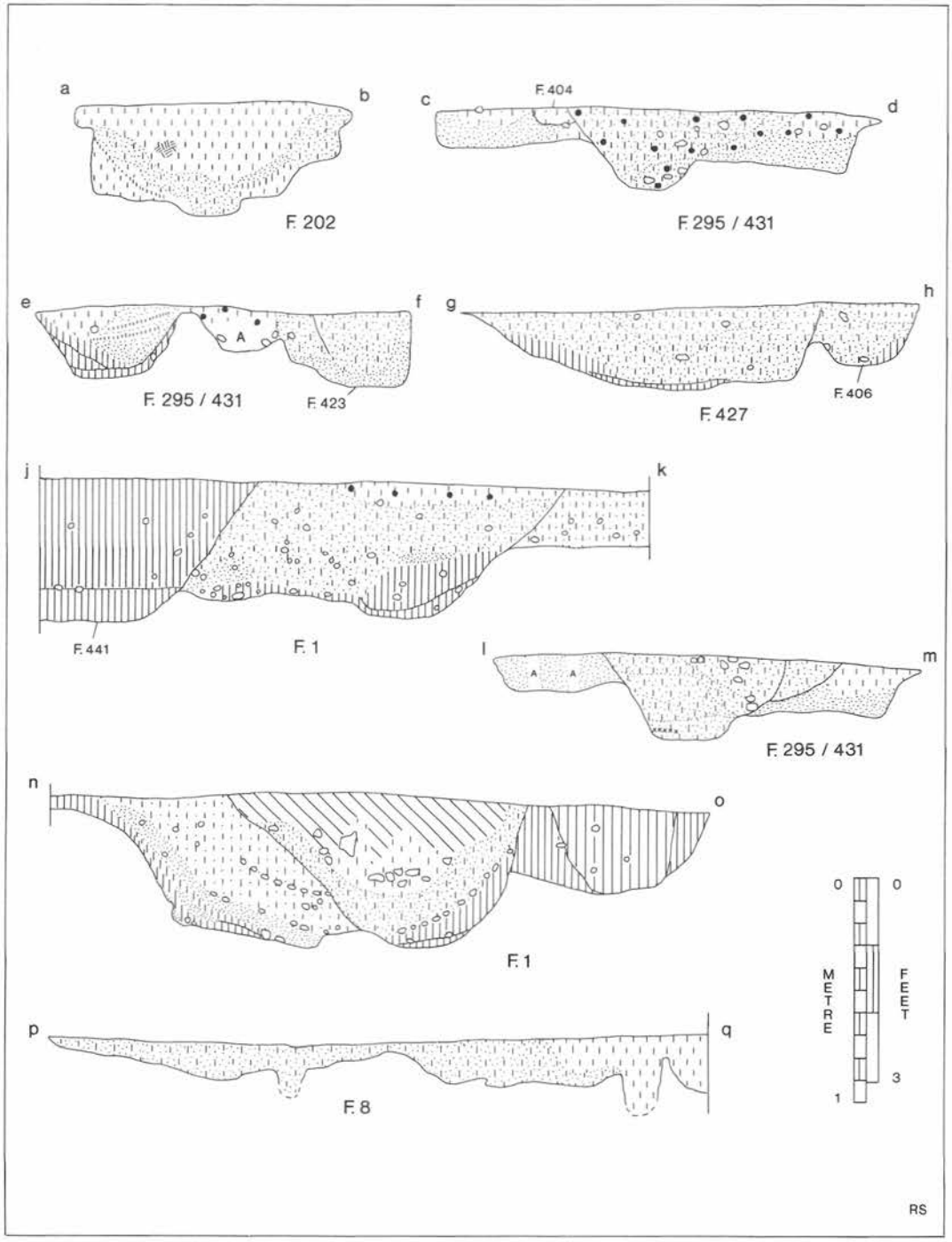


Fig. 26 Willington: Iron Age Settlement: sections

A length of 30 m of the F1 complex, to the west of the hut circles was excavated. At its southern end it turned westwards, perhaps to link eventually with a similar Iron Age ditch complex on the area of Romano-British Farmstead I some 100 m to the west. Sections through both ditch complexes are shown in Fig. 26.

The deeper and larger ditches of the F1 complex were mostly on its western side, and most of them silted from the west, owing no doubt to wind direction. The latest channel, in contrast had silted from the east, suggesting an earthern bank on that side.

F295/431 lay north-west – south-east, meeting the contemporary F1 complex at an acute angle. It was also dug through the end of F8, the Iron Age ditch whose other end was dug into Barrow 1. No less than 12 distinct ditches were identified in the complex, and more may have lain to the north of the excavated area. The precise position and size of the ditches varied considerably, but as they met the F1 complex they all turned to the north to join its line. North of Hut Circle 5, F295/431 could be divided into three groups of ditches with undisturbed sand between them, but at the junction with F8 they had all merged together. At the southern edge of F295/431 a narrow palisade trench F288 was dug through Hut Circle 5, and through the edge of the F1 complex, where it ended. This might be regarded as part of the F295/431 complex with which it merged in the east. It was somewhat disturbed by both rabbit and plough and contained only some burnt daub. The F295/431 complex contained fewer artifacts than F1, but neither was rich in finds. The multiple rediggings prohibit the use of these finds as a single group for dating purposes. Nevertheless the presence of both earlier and later Iron Age pottery implied a long duration.

F8 in contrast would seem to belong to only one phase. The ditch was fairly shallow, with some indications of posts in its base (Fig. 26), but little sign of resetting. The depth varied being shallower at its ends. The total length of 90 m was excavated. Its consistent brown loamy sand filling contained few artifacts, but these included Iron Age pottery.

A third complex of curving ditches F608/689 (Fig. 33) in the north-east corner of the area of the later Romano-British Farmstead I, excavated in 1971, may have been part of the same system. Some of the ditches intersected; others clearly followed the same alignments, forming at least 11 settings of a boundary. None of these ditches could be traced farther south or west than the later north-south ditches F649. Nor had aerial photography indicated their eastward extension. Some of these ditches had been dug through a pit F683, which was partly excavated and appeared to have filled naturally. It contained no artifacts and could have been much earlier than these ditches. All other features which intersected with this ditch complex had been dug through it, and were thus clearly later in date. The ditches were generally shallow, some being little more than a stain, but some as deep as 35 cm. They contained a little pottery including both Iron Age and two sherds of second century Romano-British wares, perhaps the result of animal disturbance, since the ditch plan was totally unrelated to the later Romano-British enclosures. The apparent curve of the ditches may indicate the corner of a sub-rectangular enclosure rather than a circular or oval one.

Supervisor: C. J. Drage

Hut Circle 6 (Fig. 18) lay in the area of Neolithic Settlement 2, north of Romano-British Farmstead I. It consisted (Figs. 23 and 27) of a circular trench 2·7 m in diameter and 25 cm wide, and an almost centrally placed post-hole 600. The eastern side where an entrance would be expected was removed during the stripping of topsoil by the quarry machinery, and no part of the hut circle exceeded 10 cm in depth. No traces of posts could be seen in the trench, the filling of which was a mixture of brown loam with patches of lighter orange sand, containing one sherd each of Iron Age and Romano-British pottery. The context of the Roman sherd was carefully observed; there was no trace of animal or root disturbance at this point. PH600 was set slightly south-west of centre, with a depth of just under 5 cm. The post-hole was round with a diameter of 40 cm and contained several large pebbles. The hut circle had clearly been eroded by

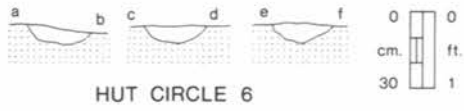


Fig. 27 Willington: Hut Circle 6: sections

ploughing, and further damaged during the removal of the ploughsoil. Its shallowness and few finds preclude any certain dating. No structures were found within Romano-British Farmstead I, and this hut may have been part of that occupation.

North-west of Romano-British Farmstead I several features were excavated which appeared not to be of Roman date (Fig. 28). The area had been deeply stripped, and all features tended to be very shallow, in some cases little more than a stain. Excavation was complicated by fluvio-glacial deposits and by flooding in a heavy rainstorm while excavations were in progress. Features 843, 834, 836, 848, 835, 832, 837, might have been small pits, or natural deposits. Their filling was similar to the natural subsoil, their edges difficult to trace, and frequently disturbed by rabbits. None contained any artifact, so if they were archaeological features they might have been of any date.

Of the linear features little more definite can be said. F800 is discussed in connection with Romano-British Farmstead I. Other gullies running north-south, F825, 842, or 833, apparently joining F800, might be connected with the farmstead. None contained datable material; their depths were irregular, but generally shallow, and they had suffered heavy rabbit disturbance.

F820 and 823 might have been part of a penannular feature with an entrance to the north. F820 certainly stopped with a butt end to the north but its southern end was lost in heavy rabbit disturbance. It was 46 cm wide with a depth of 23 cm and was filled with dark brown fine soil, a few pebbles and some traces of iron panning. F823 likewise formed a butt end to the east, but it lay on the edge of the excavated area and its western end was not located. It had a depth of 24 cm with a similar filling to F820. Both features would have been post-settings or maybe small gullies. No traces of individual posts were found, nor was there any dating evidence. It might be noted that where an entrance to the Iron Age hut circles at Willington was located, it invariably lay to the east and not to the north.

F815 was certainly a post-setting, and the traces of not less than four individual posts were found within its western half. This part of the feature was deeper, 25 cm, than its eastern end, 4 cm. At its west end the trench turned nothwards for 80 cm before terminating in a butt end; at its east end it appeared to turn southwards, but its shallowness here made it difficult to be certain that it was the same feature, and not the northern end of F832. F832 was of irregular depth, and produced no evidence of post-settings, though it did partly remove an earlier isolated and otherwise undated post-hole, 715. F842 was little more than a linear stain for much of its length, and nowhere more than 7 cm deep. F832, 815 and 842 might perhaps belong to a single enclosure, but in the absence of any firmer evidence it is impossible to be sure. Two pits intersecting with F842, 841 which was partly dug away by 842, and 844 where the sequence was unsure, contained no evidence of date.

Of more interest are two groups of post-holes groups H and J. Group H (Fig. 29) comprised PH700, 706, 707, 708, 709 set in an apparent rectangle, 3 m and 2·7 m by 2·6 m. In all five the position of the post was marked by dark grey-brown sand, set in a post-pit filled with orange-grey sand. The width of the post-pits ranged from 42 to 65 cm and their depths from 26 to 32 cm; the width of the posts from 25 to 32 cm and their depths from 26 to 35 cm. The post of one, 708, midway between 707 and 700, sloped to the east; the others were vertical. The arrangement is exactly similar to the structure identified as a granary at Staple Howe (Brewster 1963, 47–55) and the dimensions too are the same. Pottery from PH700, 706 and 707 confirmed the Iron Age date.

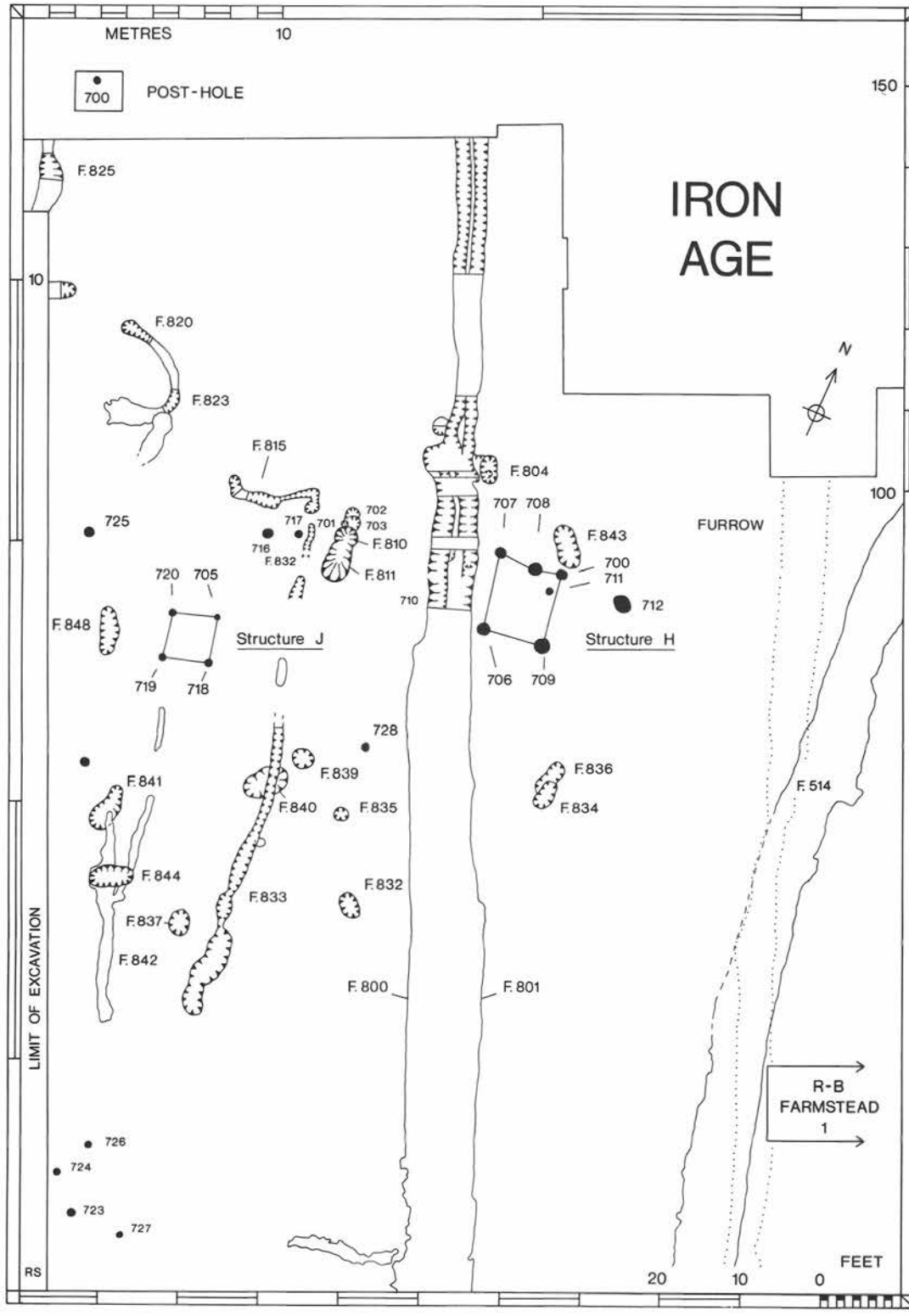


Fig. 28 Willington: Iron Age Settlement: plan

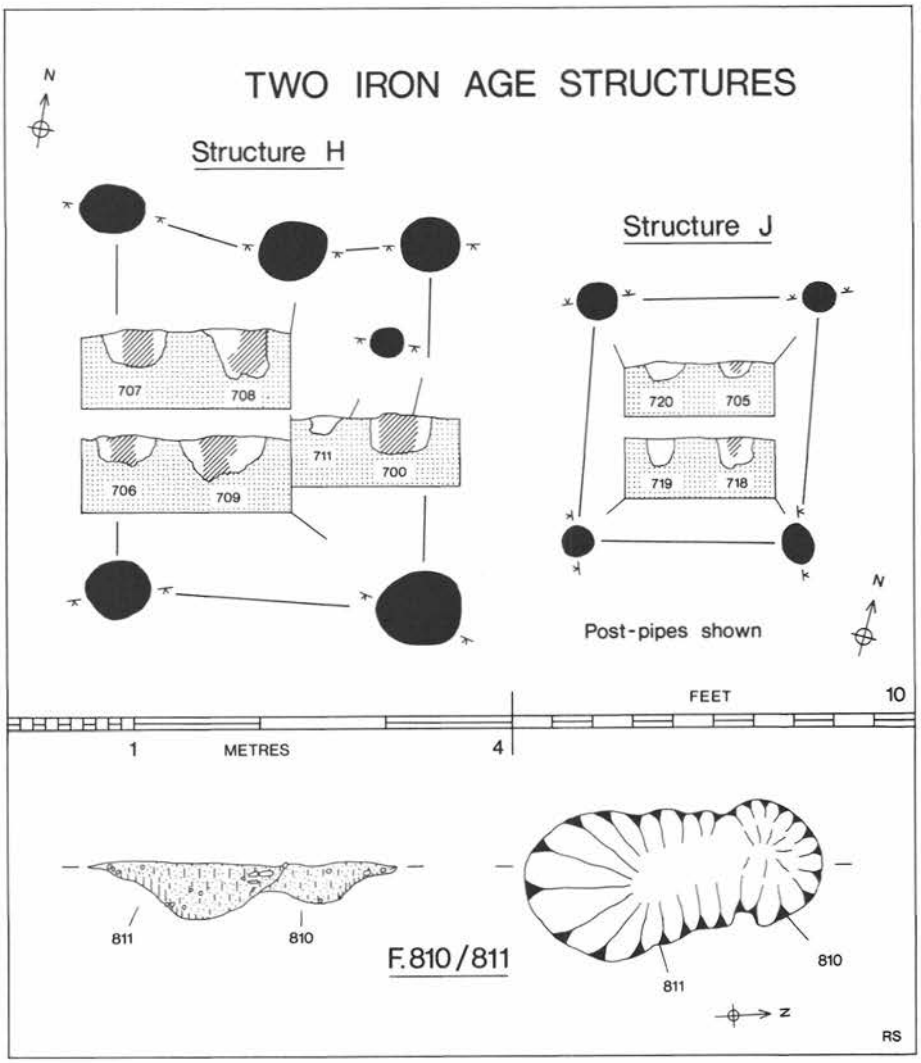


Fig. 29 Willington: Structures H and J: plans and sections

The second group of post-holes, J, might be interpreted as a similar structure, using only four posts. PH705 and 718 (Fig. 29) were similar to the post-holes of structure H, showing the position of their posts in darker brown compact sand, within post-pits filled with lighter brown sandy material. The posts were pointed, and had not reached to the bottom of the post-pits. The post-pits, 34 and 30 cm wide, and 14 and 26 cm deep respectively, both contained Iron Age pottery. The other two post-holes, 719 and 720 were narrower, 22 and 30 cm wide and 23 and 17 cm deep, and showed no signs of their posts. They contained a dark brown sandy filling with no artifacts. The four post-holes form an approximate rectangle (1·8 m by 1·9 m) smaller than structure H. They may have been a second granary, but perhaps they may more easily be seen as two pairs of posts, such as have commonly been found in Iron Age contexts.

A number of other single post-holes were excavated in this area. PH710, west of structure H, was in some ways similar, though less regular than those post-holes. It was partly removed by the gully F800, but contained Iron Age pottery. PH711 lay within structure H, but was much smaller, with no evidence of its post, and a quite different filling of dark loam above loose pebbles and sand. PH712 east of structure H was larger, but contained no indication of its post. It was filled with dark brown sandy soil and some stones. Another post-pit, F804 was of Saxon date, and other undated features in this area could belong to that period. PH716, 37 cm wide and 34 cm deep had contained a post 14 cm wide and 34 cm deep marked by dark brown sandy soil within a post-pit filled with lighter brown sandy soil, containing Iron Age pottery. The adjacent post-hole 717, though similar in plan, 30 cm wide, was only 11 cm deep, with no sign of a post, and was filled with light brown sand.

Another apparent grouping of post-holes proved deceptive upon excavation. PH727, 723, 724 and 726 formed a convincing curve, and were of similar size with widths ranging from 22 cm to 31 cm and depths from 6 to 12 cm. 723 and 724 were both filled with brown sandy soil, and may have been a contemporary pair. The other two contained quite different fillings, one of light brown soil with some pebbles, the other a dark brown silty sand, with again a few pebbles. None could be dated.

Three other isolated and undated post-holes were excavated. PH725 was 35 cm wide by 12 cm deep, with vertical sides and a flat bottom, slightly disturbed on one side. It was filled with a dark sandy loam, with some pebbles. PH728 was 20 cm wide and 10 cm deep with a similar profile, but filled with tightly packed pebbles and light brown fine sand. PH727 lay close to F838, a small pit probably of Saxon date, to the west of *Grubenhaus* 2. The post-hole 22 cm wide by 10 cm deep was filled with a brown sandy loam with some pebbles.

One other group of intersecting features remains to be discussed, F810, 811 and PH701, 702 and 703. The earliest of these is PH703, some 26 cm wide, 12 cm deep, filled with reddish brown sand. This appeared to be cut by a second post-hole, 702 30 cm wide, 14 cm deep, with a similar filling of reddish brown sand. The intersection was marked in section by a line of pebbles. PH702 was disturbed by F810, 1 m wide and 35 cm deep, with a similar reddish brown filling slightly darker than the two post-holes, containing Iron Age pottery.

Both F810 and PH702 were partly dug away by PH701, 21 cm wide, 17 cm deep with a dark humic filling. F810 (Fig. 29) was also disturbed by F811, 1·43 m wide by 43 cm deep, a slightly larger pit, again with a reddish brown sandy filling, lighter at the bottom than the top.

Supervisor: J. Gledhill.

North of Neolithic Settlement 2 an apparently penannular cropmark appeared. Although it was in fact a complete ring, the southern part, being dug through the silts of the ancient river course proved extremely difficult to identify, both from the air and during excavation in 1970. The ring ditch (Fig. 30) enclosed a circular area of 8 m diameter, its own width varying between 1·3 and 2 m. It appeared to have filled gradually with sand and a few pebbles, though its upper layers contained more loam. In

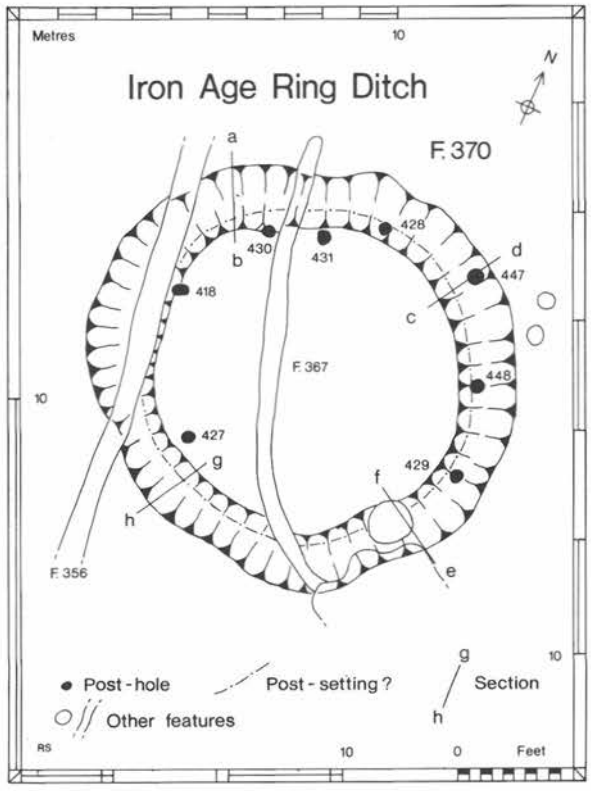


Fig. 30 Willington: Iron Age Ring Ditch: plan

the north-west (Fig. 31) a mixture of loamy sand lay in the bottom, and the silts above this may have formed after a cleaning of the ditch, though the evidence for this is not consistent throughout its length. In its lower filling two very small sherds of Iron Age pottery were found, but in the upper position five sherds, including one rim were found, all of Iron Age type, and quite certainly not associated with rabbit disturbance. After the upper filling had accumulated a narrow trench was dug along the whole of its inner edge. This had filled with fine sand and was visible in numerous sections through the ring ditch. It showed most clearly on section C–D (Fig. 31). Although no traces of individual posts were found, it had the appearance of a palisade trench. At a later date post-holes were dug in an approximate circle along the inner edge of the ditch, some in the ditch silts, and some within the central enclosure PH418, 427, 429, 448, 428, 431, 430 and possibly 447. They were filled with a mixture of sand and loam, and two contained sherds of Iron Age pottery. In depth most of them were between 15 and 20 cm though a few were shallower.

The area encircled by the ring-ditch was trowelled many times and closely observed. It had a pebbly surface, quite distinct from the surface outside the ditch. No trace could be seen of any pit within the ring-ditch, and when excavation was complete the central area was deeply trenched, but nothing was found. If a burial had been laid on the old ground surface, it would certainly have been removed by later ploughing.

There is no evidence of any mound within the ring-ditch, and some evidence that no mound was constructed. An Iron Age palisade trench F367 (Fig. 32) was dug through the centre of the ring, with no sign of the variation of depth which might have been expected if any mound existed at that time. The pottery from F367, was considered to be a slightly later assemblage than that from the ring-ditch and associated post-holes. In

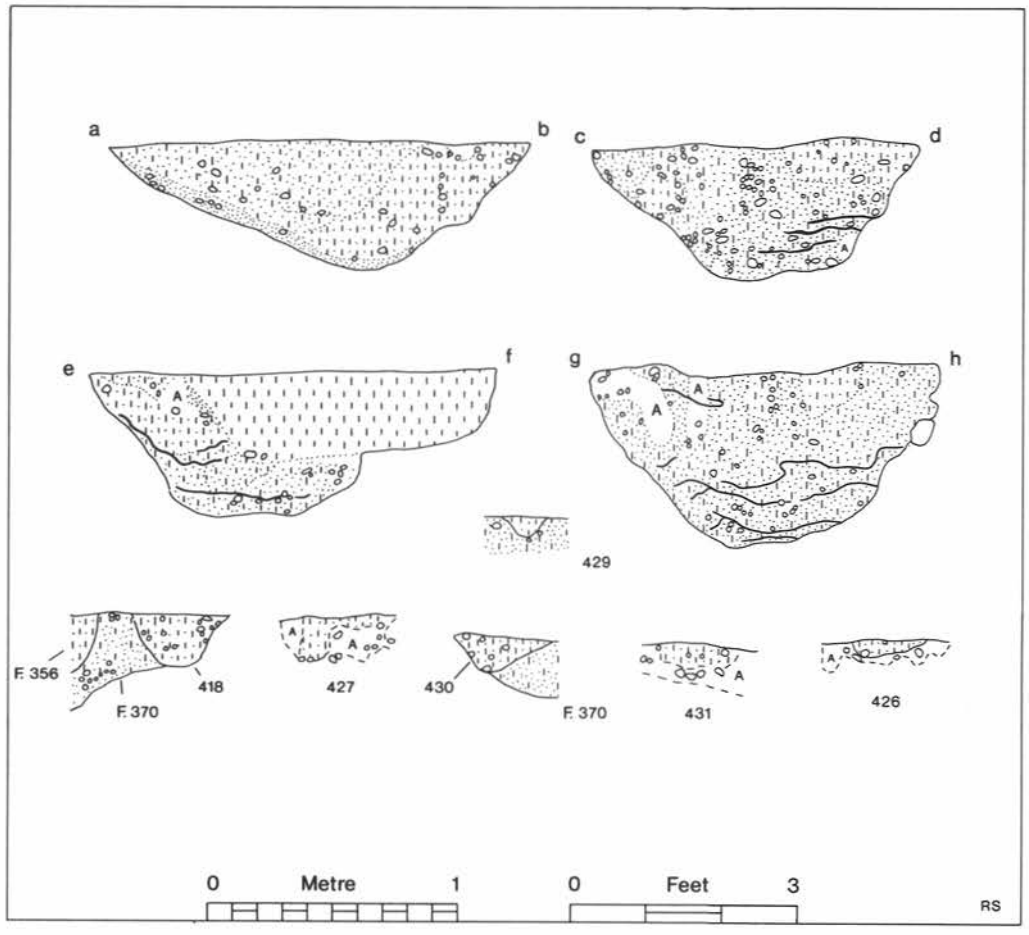


Fig. 31 Willington: Iron Age Ring Ditch: sections

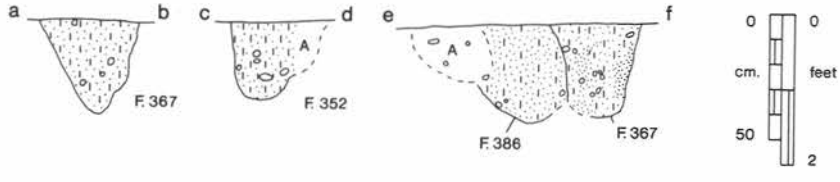


Fig. 32 Willington: F367, Palisade Trench: sections

view of the pottery evidence the ring-ditch should be seen as an Iron Age feature, not necessarily associated with burial. The ditch itself was substantial, up to 70 cm deep and 1·40 m wide and not until this was silted were the possible continuous palisade, and then the ring of posts set up. The circle itself seems to have been the important feature. Much larger Iron Age ring-ditches of 90 and 70 ft in diameter were excavated on Woolley Down, Berkshire in 1933 (Peake and Padel, 1934) with circular banks of chalk rubble inside them. Their primary function did not seem to be funerary. If such a bank had existed at Willington, it might well have been replaced by stake circles. Certainly it would have left little trace. Or the ring-ditch may be distantly related to circular Iron Age shrines such as that excavated at Frilford, Berkshire (Harding 1972, 61–5). The ring-ditch is only some 35 m from the five-post structure. Harding has suggested that these structures might be interpreted as ritual features, though at Willington the conventional description as a granary would seem equally valid, and perhaps more likely.

The palisade trench of a large enclosure, F367 (Fig. 18) has already been mentioned. The full extent of this enclosure, of which only a small portion was excavated was seen briefly during quarrying operations, but there was no opportunity to record it. Certainly less than a quarter lay within the excavated area. The western end of F367 was dug through the ring-ditch, which was also disturbed by a Romano-British ditch and Saxon pits. F367 was also removed in two places by Saxon pits. Just to the north of the ring-ditch a gap in the palisade trench with a post-hole in each terminal, marked an entrance. A group of post-holes and a shallow pit inside the enclosure entrance may have been associated with it, no other evidence of occupation was seen within the enclosure. The palisade trench itself had suffered little from erosion (Fig. 32), its inner edge being almost vertical and its outer one only slightly sloping. Traces of posts could be discerned within the trench, near the entrance, and their position is marked on Fig. 18. The similarity of its filling to the surrounding soil suggested that it had been quickly refilled. In the south of the excavated area it had been replaced, and two lines of palisade trench could be seen. The most probable function of this enclosure was as a cattle pound, though it may have contained more evidence of occupation in its unexcavated part.

DISCUSSION

The Iron Age at Willington was represented by a variety of features over a wide area of which only a part was excavated. The principal ditch system excavated stretched from Barrow 1 perhaps to the area of Romano-British Farmstead I. Pottery finds indicated that it was first laid out in the early Iron Age, and probably continued in use throughout the Iron Age occupation of the site. The many resettings of the three ditch complexes indicated the importance attached to their line in antiquity, though clearly other parts of the system e.g. F8, perhaps a minor or temporary division, were less vital. The two barrows each lay on or close to ditches of the system, and they may have been used as landmarks in its laying out. The ditches are unlikely to have been dug primarily for drainage. The shape of some of them is quite unsuitable for that purpose, and some of them run along the contour instead of down the slope. They could have formed part of a stable and long-lived division of land, a field system organised and maintained over many generations.

The huts in contrast were short-lived and few in number, though more may well have existed beyond the areas excavated. All the huts were built with a continuous post-trench for the walls, the commonest type in the Trent Valley, and indeed in the Midlands, though one hut constructed of individual posts has been found at Catholme, Barton-under-Needwood, Staffordshire, in excavations for the Trent Valley Archaeological Research Committee (S. Losco-Bradley *pers. comm.),* and at Holme Pierrepont, Nottinghamshire, another of the Committee's excavations, one hut was constructed partly with a wall trench, and partly with individual posts (C. O'Brien *pers. comm.).* It is probable that no more than one or two were in use at any one time. They

are not served by their own enclosures, but lie close to elements of the ditch system, sometimes tucked into the corner of a large enclosure. This is a pattern of settlement more familiar on the uplands of the south-west (Cunliffe 1978, 193–204) or in the Pennines (Challis and Harding 1975, 138–40) though it has also been found in river valleys at Tallington, Lincolnshire (Simpson, W. G. 1966 Fig. 2), where a circular hut was located in the corner of a large enclosure, and at Catholme, where one or two huts of Iron Age date have been found in an unenclosed settlement, close to a large ditch possibly some sort of estate boundary.

The apparent rarity of this settlement type in the lowland zone of Britain may well reflect the bias of excavation. The neat enclosure with or without one or more hut circles inside it, easily recognised from cropmarks and readily classifiable, is more likely to be selected for excavation than apparently straggling ditches, no matter how extensive. Neither at Willington nor at Catholme were the hut circles identified from the air, and both sites were initially chosen for excavation for other reasons than the study of Iron Age settlement.

What was the relationship of these open settlements to the more familiar enclosed farmsteads of the Trent Valley (Smith 1977) or to the large unenclosed clusters of huts known from aerial photography at e.g. Lockington, Leicestershire or Stretton, Staffordshire, excavated by the author (T.V.A.R.C. Report 1969)? The small size of the huts in question should be noted. The two largest at Willington were under 7 m in diameter, three were closer to 5 m and one was under 4 m. The Tallington and Catholme huts were about 6 m in diameter. These are certainly among the smaller prehistoric round huts. Perhaps they were workshops and/or dwellings used by a lower order of society than the peasant farmer in his stockaded enclosure. Perhaps they were the huts used by labourers or slaves within a larger social unit, or they might have been occupied seasonally or temporarily by shepherds or cowherds. Aerial photography at Willington did not indicate the location of any Iron Age settlement nucleus, though one of the enclosures in the west of the site would certainly have been a possible candidate. Such a farm centre need not necessarily have been within the three fields of the excavation site. It remains possible that this is simply a different kind of settlement, where the living quarters have been moved from time to time, within a stable land-holding. If the large ring-ditch has been correctly interpreted as Iron Age, then that too would seem to have formed a fairly long lasting component of the Iron Age occupation, with its three phases of construction, though not so permanent a feature as the ditch system.

The Iron Age occupation has already been referred to as a farming economy, which no doubt it was. In addition to the field system, the large palisaded enclosure F367, and the five-post structure J, if correctly interpreted as cattle pound and granary, imply both stock breeding and arable farming. More direct evidence was scanty. Little bone survived, though fragments, mainly teeth, of cow, sheep/goat, horse, and pig were associated with Iron Age features. Part of a rotary beehive-shaped quern, top and bottom stones, was later found by the quarry within the area of the Iron Age settlement. Adhering to the grinding surfaces of this quern were carbonised seeds which are described separately at the end of this report. With the quern, though how closely it was associated is not known, was found the blade of an Iron Age sword, indicating perhaps that despite the lack of defences, life was not always peaceful in the Iron Age at Willington.

Romano-British Agricultural Settlements

Isolated Romano-British artifacts and features were found over the whole excavated area at Willington. In two instances however, enclosures were excavated where the density of Romano-British finds and features suggested a centre of farming activities, though the evidence for dwellings was in both cases poor. Both dated to the 2nd

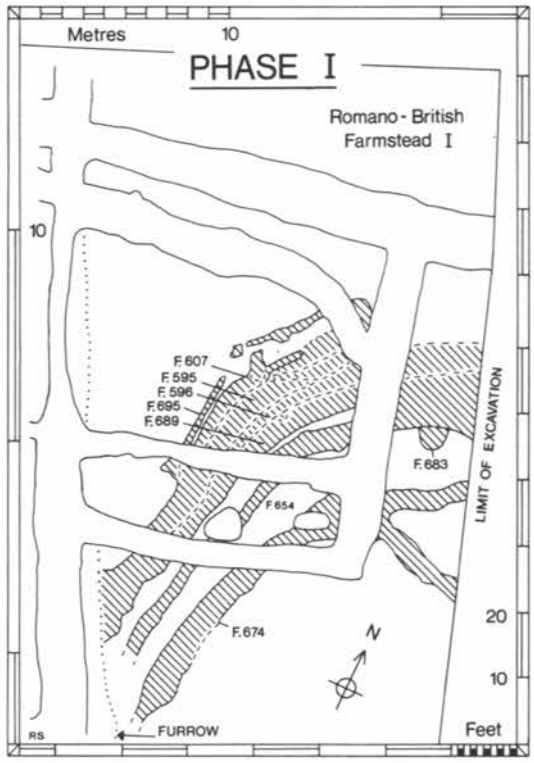


Fig. 33 Willington: Romano-British Farmstead I, phase I: plan

century: Farmstead I perhaps began in the late 1st century, with Farmstead II continuing into the 3rd century. Farmstead I was in the south-east corner of the middle field south of Neolithic Settlement 2, and Farmstead II was in the western field.

ROMANO-BRITISH FARMSTEAD I (Fig. 34)

Supervisor: S. Losco-Bradley

Since time did not allow total excavation of this area, the following policy was adopted. The whole area excavated in 1971 and 1972 was trowelled and planned. All post-holes and most features in the small north-east enclosure, 2, were partly excavated in the hope of locating the dwelling area. Elsewhere, as many intersecting features as possible were excavated in order to determine the sequence (Fig. 35). All three Saxon buildings were totally excavated. The area was considerably disturbed by rabbit burrows and by mediaeval plough furrows.

There were five stratigraphically distinguishable phases in the area of Farmstead I, beginning with the Iron Age ditch system, described above. The artifact assemblages from the three Roman phases were similar, suggesting a fairly short life for the enclosures, though the land may have remained in agricultural use much longer. After the Farmstead had been out of use for some three centuries, three Saxon *grubenhäuser,* or sunken featured buildings, were constructed, two within the large Romano-British enclosure, and one to the north of it.

The northern and earliest enclosures of the Roman period lay on a level surface, but from there the ground fell away noticeably, so that the southern boundaries of the large

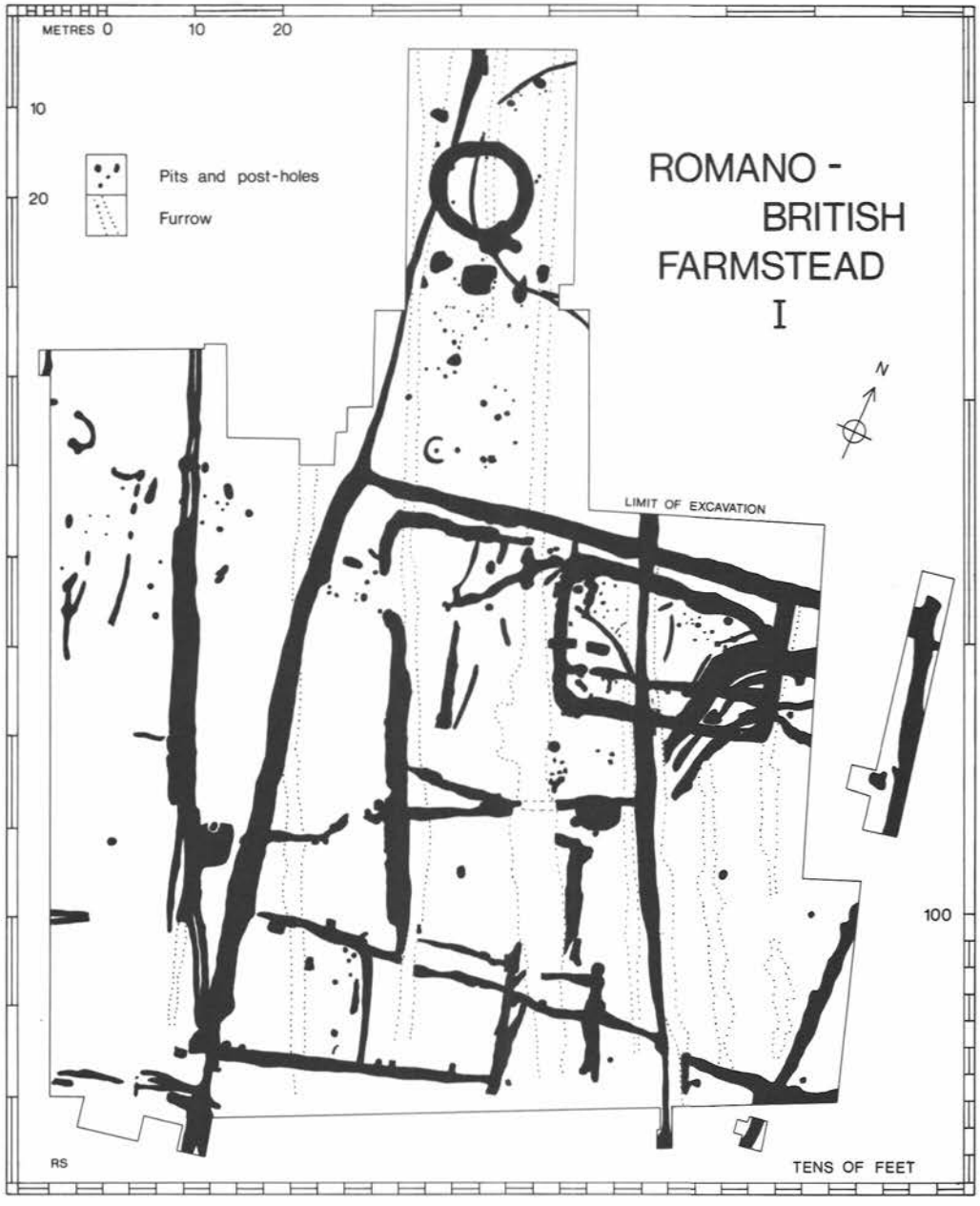


Fig. 34 Willington: Romano-British Farmstead I, all periods: plan

enclosure lay in the flood silts of Egginton Brook. A number of ancient flood silts were excavated and it was clear that the southern compounds flooded during Roman times.

The Iron Age ditches of phase 1 were disturbed by ditches, or more probably fence-settings of the rectangular Enclosure 2 (Fig. 36) in the north-east of the excavated area. In phase II this was probably a small, single compound, but in phase III (Fig. 38) it was incorporated into a much larger enclosure, which included a number of other small compounds. Only at the north-eastern corner of the Enclosure 2 was it possible to distinguish phase II and III stratigraphically. Little excavation took place on the western side and it is not clear at which stage Enclosure 2 reached its largest size. In phase III the eastern side of Enclosure 2, which had been dug through the phase I ditches was itself replaced by F573, and its northern edge became F555 (Fig. 37) the main northern boundary of the large enclosure. The intersection of F573 and 555 was excavated, and they could be seen to be contemporary (Fig. 39). The western boundary of Enclosure 2 in phase II is not clear. It may have followed the line of either F649 or F621 which was not excavated. In the north-eastern corner of Enclosure 2, four post-holes, 542, 543, 545 (Fig. 39) and 549 were set in the phase II boundary trench F657. They were between 25 and 30 cm deep, showing that this trench was a palisade setting, perhaps with deeper posts at the corner. It seemed probable that most of the trenches, with the exception of the main enclosure boundary ditches of phase III, were fence-settings. Some of the other small compounds within the phase III enclosure may also have begun in phase II, and been later enclosed, but there is no stratigraphical evidence for this.

Enclosure 2 after its incorporation into the phase II enclosure (Fig. 37), was either subdivided or contracted by the digging of the F631, an east-west trench, the bottom of which sloped up to terminate at F573 on the east. On the west it ended at F621, which presumably formed the western edge of Enclosure 2 at this time. There were numerous minor alterations to Enclosure 2, confusing the picture of its precise plan at any one time. These can be illustrated by the resettings of F649. Excavation of its intersection with F573, the earlier southern boundary of Enclosure 2, suggested that they were contemporary, and the curving plan of the trenches in this corner, supported this interpretation. Two settings of F649 stopped at F631, the later southern boundary, or subdivision of Enclosure 2. North of F631, 649 continued as a single narrow trench, with no sign of resetting, to join the phase III enclosure boundary F555. F649 had probably formed at different times, boundary and subdivision of Enclosure 2. Its line continued in use in phase IV, and finally as a mediaeval plough furrow.

The number of pits and post-holes in Enclosure 2 was greater than anywhere else within the large phase III enclosure. It was also the area least likely to be flooded. It was consequently more thoroughly investigated than any other part of the Roman Farmstead, in the hope of identifying farmbuildings or dwellings. Sixteen post-holes ranging in depth from 17 to 25 cm were excavated but no regularity in shape or size, no coherent plan could be seen. Only one contained any pottery. A late Neolithic pit, F600, within the area of Enclosure 2, is described above (p. 72). F606 and F652, small pits 14 and 54 cm deep respectively, and F660, a larger pit, 75 cm deep, were all dug through the filled phase I ditches. F599 in the north-west corner of the enclosure was only 24 cm deep, containing charcoal and burnt clay. Along the western edge were two, possibly three, elongated pits, F655, 656 and possibly 694, though the last, which was not excavated may have been an extension of the trench F631. F655 (Fig. 39) 75 cm deep, was filled with several layers of fine sand, below a sandy loam, suggesting a gradual silting rather than deliberate back-filling, though it appeared to have been redug at least once. It contained Roman and hand-made pottery, and a small iron hook. F656 was not excavated. It was dug through the sometime western boundary of Enclosure 2, F621, and was similar in appearance to F655. They were presumably used for storage, perhaps of grain, though no evidence of this survived. Most of these pits and post-holes probably belonged to phase II or III.

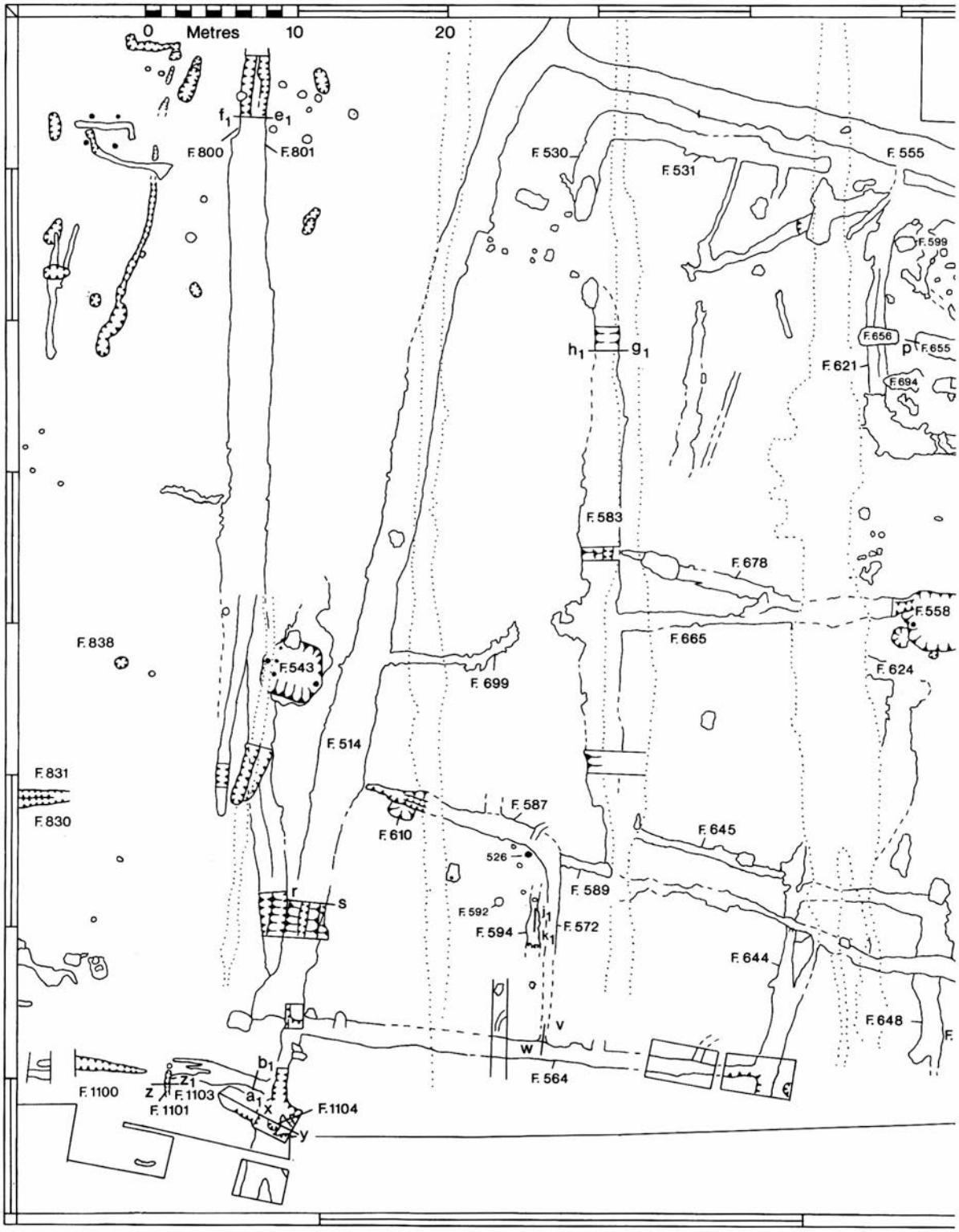
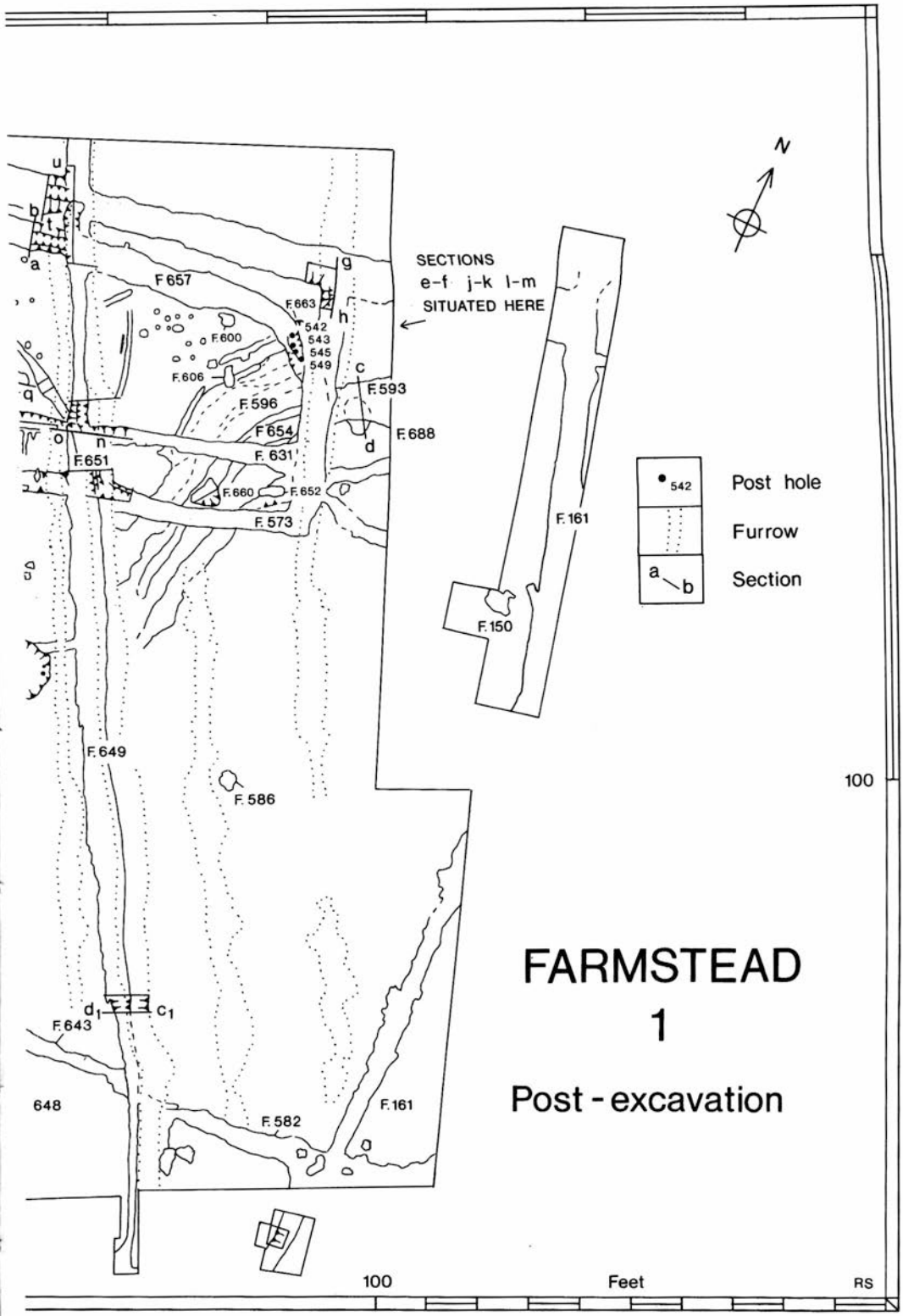


Fig. 35 Willington: Romano-British Farmstead I:



plan showing excavated features

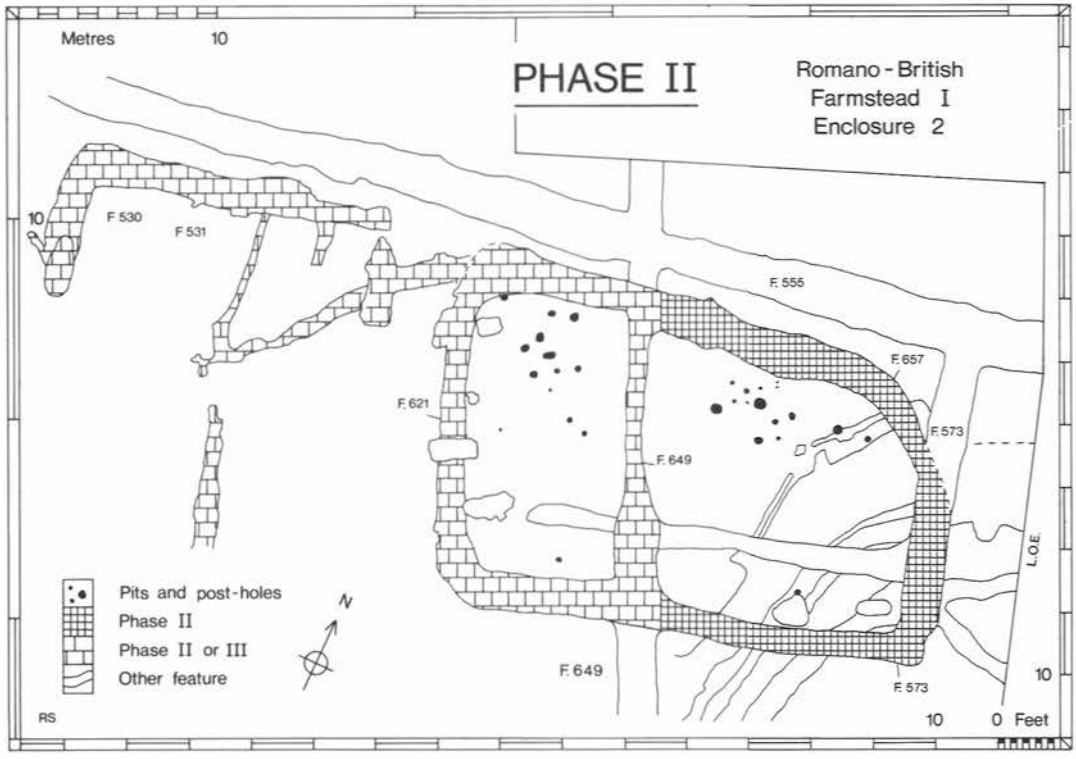


Fig. 36 Willington: Romano-British Farmstead I, Enclosure 2, phase II: plan

The phase III (Fig. 38) enclosure was more than 70 m north-south, and 68 m east-west. At the southern end, small compounds, perhaps paddocks (Fig. 39) continued beyond the excavated area. Their boundary trenches were dug into the brook silts, and they had flooded during Roman and later times. Features in these flood silts were extremely difficult to distinguish, and the full extent of the enclosure complex was not ascertained. It may have continued to the brook itself. The western, northern and eastern boundaries of the phase III enclosure were substantial ditches, larger and deeper than the trenches of phases I and II, and with no evidence for a palisade. The western ditch F514 was continued beyond the enclosure to the north, presumably forming part of a field system (Fig. 34). The boundary ditches (Fig. 41) were 2 m wide at the top with an additional shallow weathering or plough spread of up to 50 cm. They were flat-bottomed, 50–80 cm wide at the bottom and 50 cm–1 m deep. Continuous silting lines in the north-west and north-east corners of the large enclosure, showed the three ditches to be contemporary. None of them showed any signs of being cleaned, redug, or deliberately back-filled. They were deepest at the two corners, and contained 2nd century A.D. pottery.

The small Enclosure 3, (Fig. 39) in the south-west corner of the large enclosure was examined in some detail. Its northern trench F587 had been redug along most of its length, but only one cutting at its western end, approached and abutted against F514, the large enclosure boundary. This presumably indicated an entrance to Enclosure 3 at one time. F587 was dug through an earlier shallow pit, F610. At the south-east corner of Enclosure 3, its eastern trench, F572, was interrupted by a large east-west ditch F564 (Fig. 41), which was initially interpreted as the southern boundary of the phase III

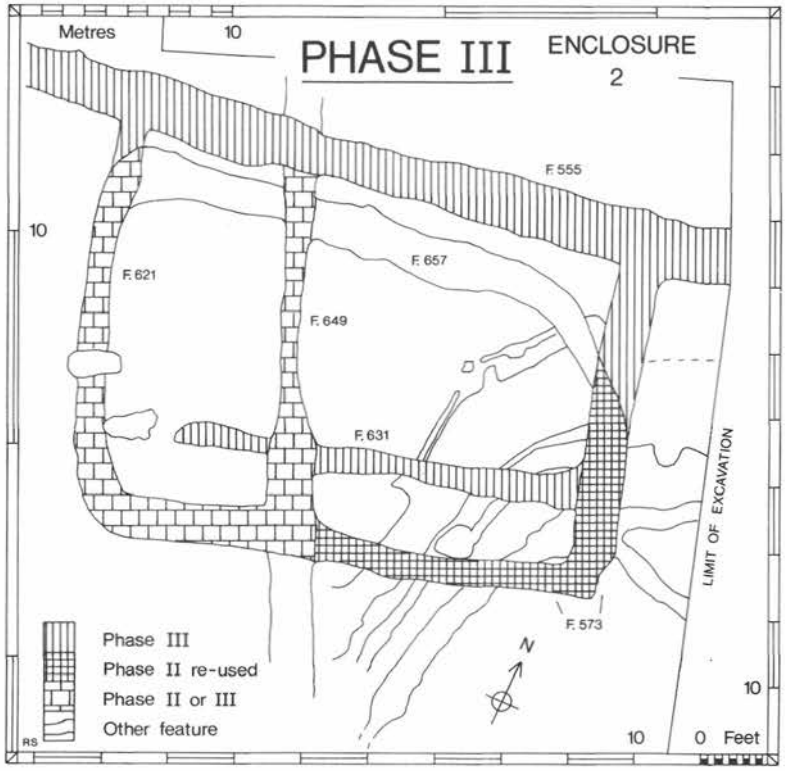


Fig. 37 Willington: Romano-British Farmstead I, Enclosure 2, phase III: plan

enclosure, though further excavation showed that small compounds continued to the south. Just inside the eastern trench of Enclosure 3, F572, a palisade trench F594, though very shallow, contained three post-holes, and two more, PH526 and 552 were on the same line; perhaps an earlier enceinte of Enclosure 3. Of three pits inside Enclosure 3, F592 alone was excavated. It was 19 cm deep and had been disturbed by rabbits.

Two more small compounds, 4 and 5 were identified to the east of Enclosure 3, their northern edge formed by F643, and beyond them a fourth, Enclosure 6, was probably later, since its northern trench F582 was dug into F643. These compounds may have been a series of additions, but their relationship to Enclosure 3 was not clear. F643, the northern boundary of Enclosure 4 and 5, appeared to be turning southward, just east of Enclosure 3, where it was lost in a furrow, but a linear feature, F589, on roughly the same line as F643 was dug into Enclosure 3. This may have blocked an earlier entrance into Enclosure 4. The compounds were probably so frequently repaired that their sequence is unimportant. Likewise their southern boundaries, in the brook silt, were difficult to trace, and may originally have lain to the south of F564, beyond the excavated area. In Enclosure 4, one small pit was partly destroyed by F643, and two pits in Enclosure 6 were not excavated. These compounds may have replaced an earlier series, 7 and 8, which would presumably have belonged to phase II. Only traces of these were recovered, enclosed by F645, 644 and 648. The size of most of these compounds was probably between 150 and 200 sq m, though Enclosure 7 may have been smaller. These sizes are estimated since in no case can their southern boundaries be certainly identified.

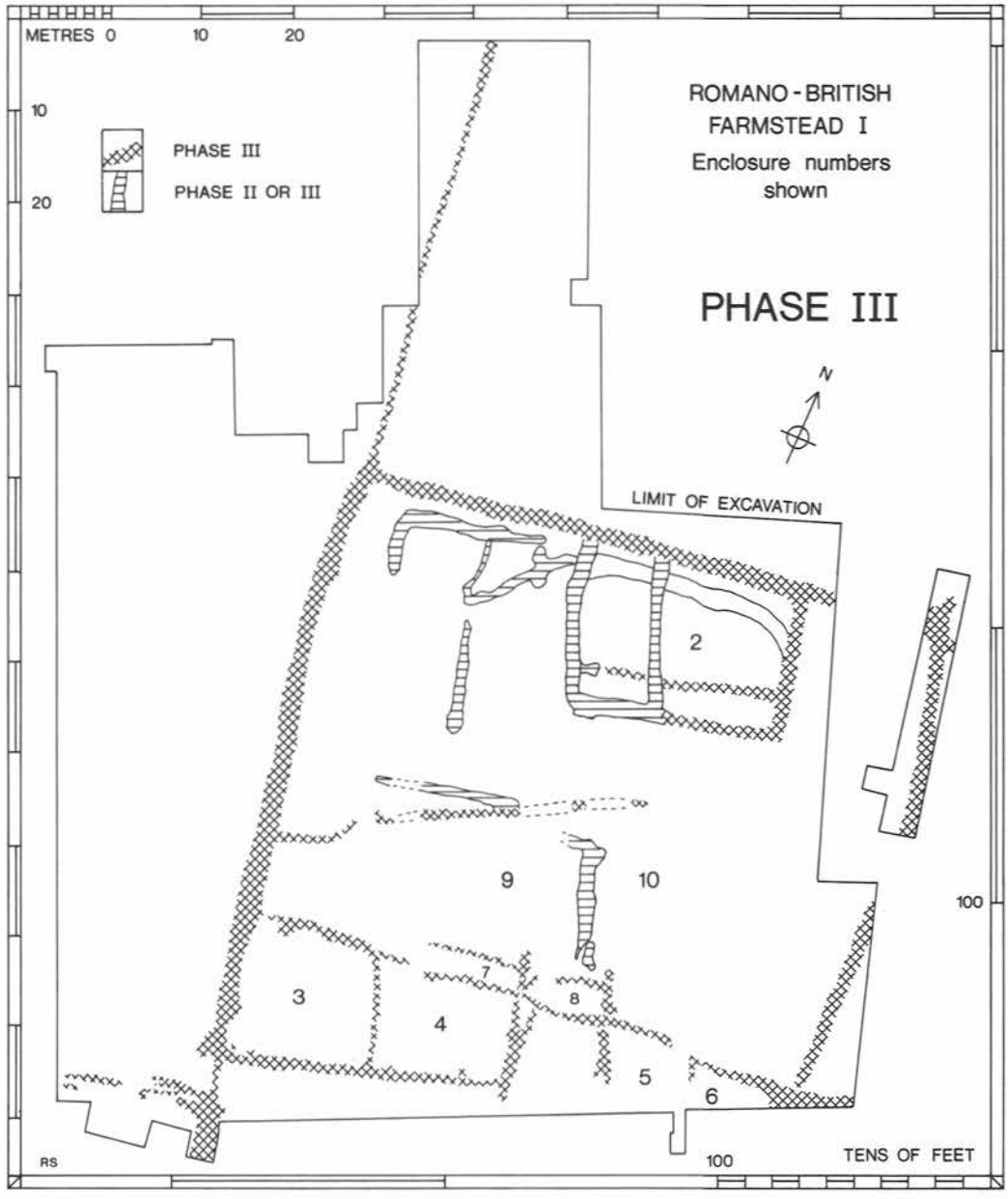


Fig. 38 Willington: Romano-British Farmstead I, phase III: plan

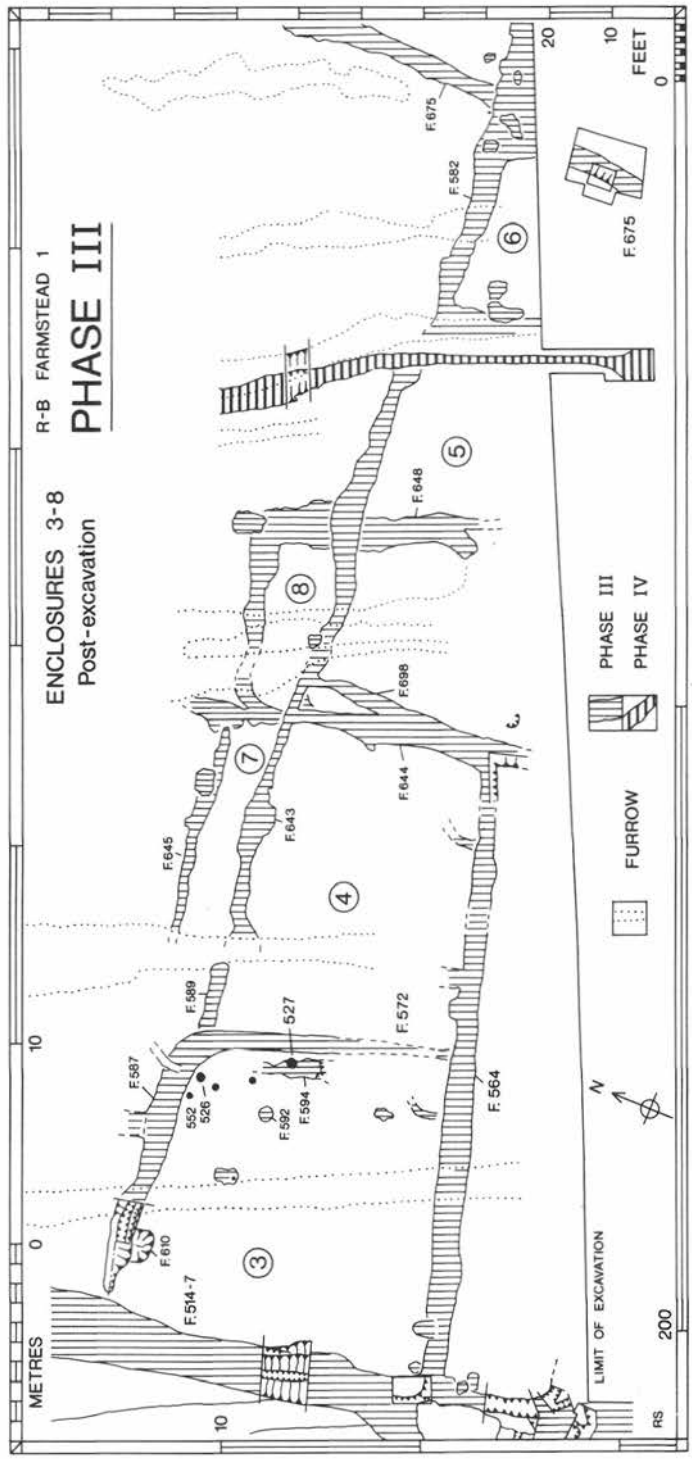


Fig. 39 Willington: Romano-British Farmstead I, Enclosures 3–8: plan

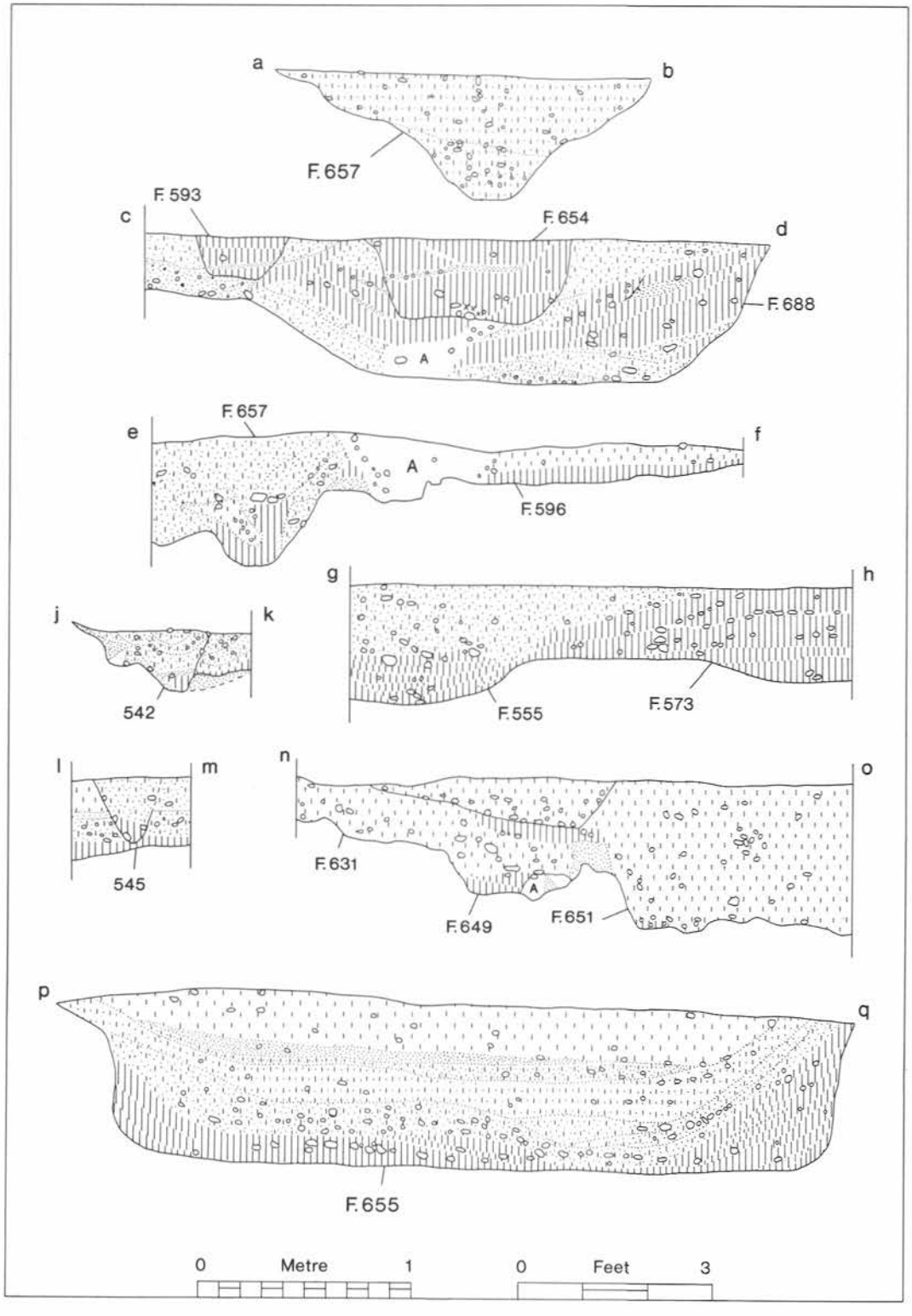


Fig. 40 Willington: Romano-British Farmstead I: sections

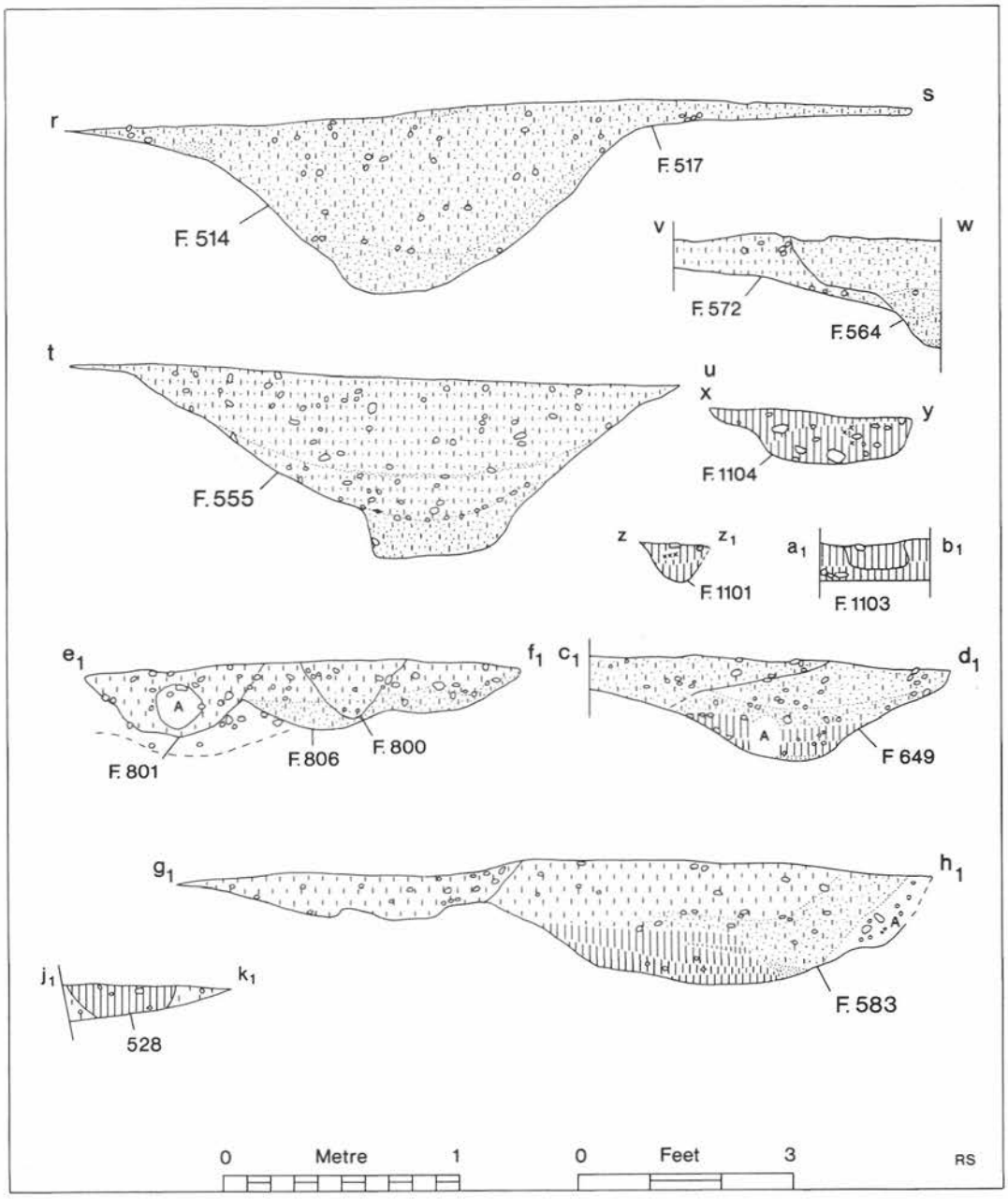


Fig. 41 Willington: Romano-British Farmstead I: sections

There may have been larger sub-enclosures to the north. No. 8 bounded on one side by F699, 665 and 633, probably belonging to phase III, since it is joined to the large enclosure's western boundary, F514, may have replaced an earlier, 9, bounded by 678 and 624. In the north-western part of the phase III enclosure, F530 and 531 may have formed the northern edge of a compound, 10, linked to Enclosure 2, and perhaps beginning in phase II. This complex of small compounds was not confined within the large enclosure, but extended to the south-west where a number of gullies and post-settings, dug into, and filled with flood silts were excavated. Frequent rediggings must have been necessitated by the flooding. Most of the features in this area excavated in 1972, seemed to be open gullies, but at least two, F1101 and 1103 (Fig. 41) were post-settings. Most of these gullies were of Romano-British date, but F830/831, a redug trench, may be later. It was very shallow, its eastern end removed by ploughing, but if continued, it would meet the terminal point of F800, suggesting that it was perhaps a mediaeval field boundary. One sherd of mediaeval pottery was found in F830/831. Two small areas were excavated to the south, in the hope of locating the southern boundary, but without success. It may well have been Egginton Brook.

On the eastern side of the large phase III enclosure, was a roughly circular hearth, F586, 1·6–1·8 m in diameter. It had been reconstructed at least three times, and the four linings of burnt and scorched clay were separated by layers of charcoal, loam and sand, suggesting intermittent use. There was little evidence as to its function, which was probably industrial rather than domestic. It contained sherds of hand-made pottery and some flint, but these might well be residual. Burnt bone was perhaps simply rubbish among the firing.

A large number of artifacts were recovered from the flood silts, some of which were of individual interest. They were chronologically mixed including Neolithic and Iron Age as well as Romano-British and later material. Individual flood-wash layers could be distinguished, and four of these seemed to belong to the Roman period.

Probably the final use of this area in Romano-British times, was in cultivation (Fig. 42). Two north-south ditches F649 and F800 (Fig. 41) within the excavated area and a third, to the west, identified by cropmarks, lay 50 m apart on a different alignment to the large enclosure, and a fourth F583 (Fig. 41) within the enclosure, lay parallel midway between F649 and F800. The first three continued as far as the modern field boundary to the north, where they would be interrupted by the railway line. They do not appear as cropmarks to the north of the railway. F583 did not extend beyond the phase III enclosure. To the south all but F649, and the two earlier cuttings of F800 stopped some 10·5 m north of the flood deposits, and thus north of the southern edge of the phase III boundary. All the excavated ditches showed several rediggings. Thus two strips of an estimated area of two hectares each and a length to width ratio of ?4:1 were formed, one of which was partly sub-divided internally. All three excavated ditches lay beneath mediaeval plough furrows, which followed the same alignment as these ditches. F649, the most easterly of these ditches, had been redug many times, and its relationship with Enclosure 2 has been discussed above. Part of its line would seem to have been in use within phase III. F583 cannot be stratigraphically related to any phase. F800 was much disturbed by a post-mediaeval field boundary. A section of its earlier cuttings was excavated adjacent to its intersection with F514, the western boundary of the large phase III enclosure: the sequence was uncertain, but F800 was thought to be the earlier. It was certainly disturbed by the 6th century *Grubenhaus* 2. From the ditches came a pottery assemblage agreeing in date of manufacture with that of phases II and III, but more abraded, suggesting redeposition after cultivation disturbance. These ditches would seem, on balance, to have been laid out in the later 2nd or early 3rd century, when the enclosures of Farmstead I went out of use, and their line preserved in later mediaeval plough furrows. Strip fields of similar size are known in the Roman period at a number of sites (Applebaum 1972, 88–102), but the poor stratigraphy and heavy disturbance at Willington preclude certainty of interpretation.

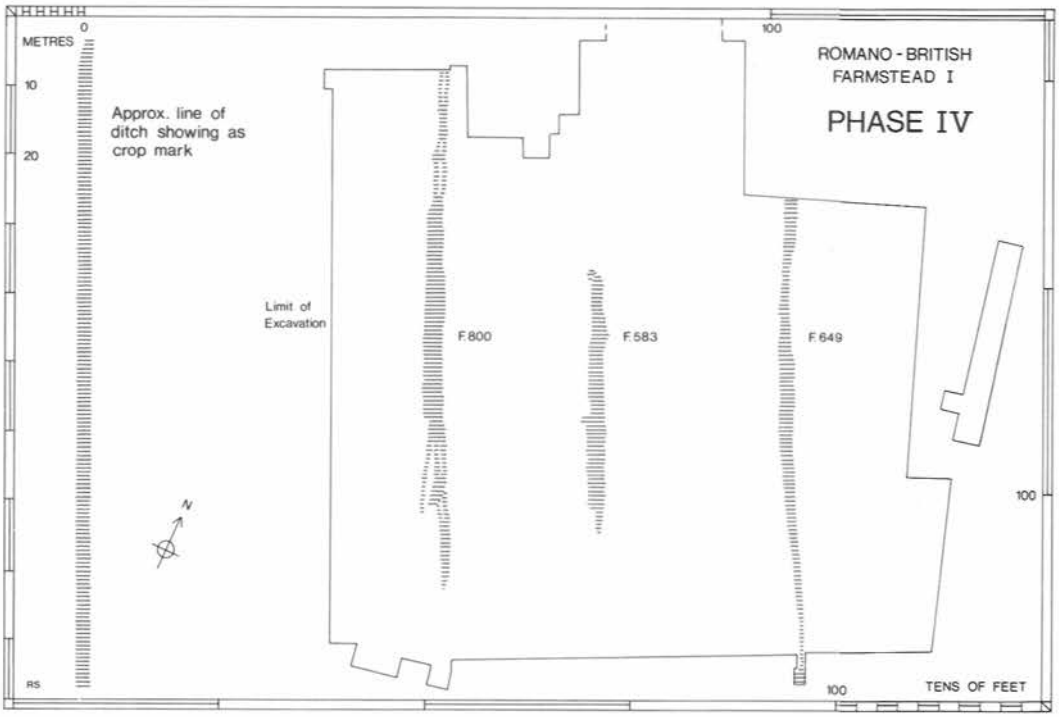


Fig. 42 Willington: Romano-British Farmstead I, phase IV: plan

DISCUSSION

The small enclosures of phase II and III would seem more suitable for stock pounds than for any agrarian use, though the pits and post-holes of the northern enclosures, 2 and 10, might indicate that grain, and perhaps equipment was stored. If there was any dwelling within the large enclosure, it too would probably be in this area. The southern compounds might have had a seasonal use, like the hearth F586, perhaps linked to lambing, calving, shearing, branding, or any other activity demanding the segregation of small numbers of animals. Many of the trenches were small and may have held fairly light hurdles, and seasonal use would make occasional flooding less inconvenient.

In the later 2nd century the southern part of this area apparently went out of use, probably because of the flooding, the rest being used for arable purposes. This might indicate a change in the economy, with less emphasis on stock, but since Roman occupation is attested over the whole of the Willington site, and several enclosure complexes were not excavated at all, it is perhaps more likely that this was simply a reorganisation of land use. The apparent re-use of Roman strip fields in the mediaeval period suggest long continuity of land use.

ROMANO-BRITISH FARMSTEAD II (Fig. 43)

Supervisor: Colm O'Brien

Some 500 m west of Romano-British Farmstead I a group of rectangular enclosures just to the north of Egginton Brook appeared as cropmarks in 1970. What appeared to be a single discrete enclosure within a larger one was selected for excavation in 1972. Unfortunately the cropmarks were misleading, and the area examined probably lay between two enclosures. Romano-British Farmstead II lay close to the parish boundary

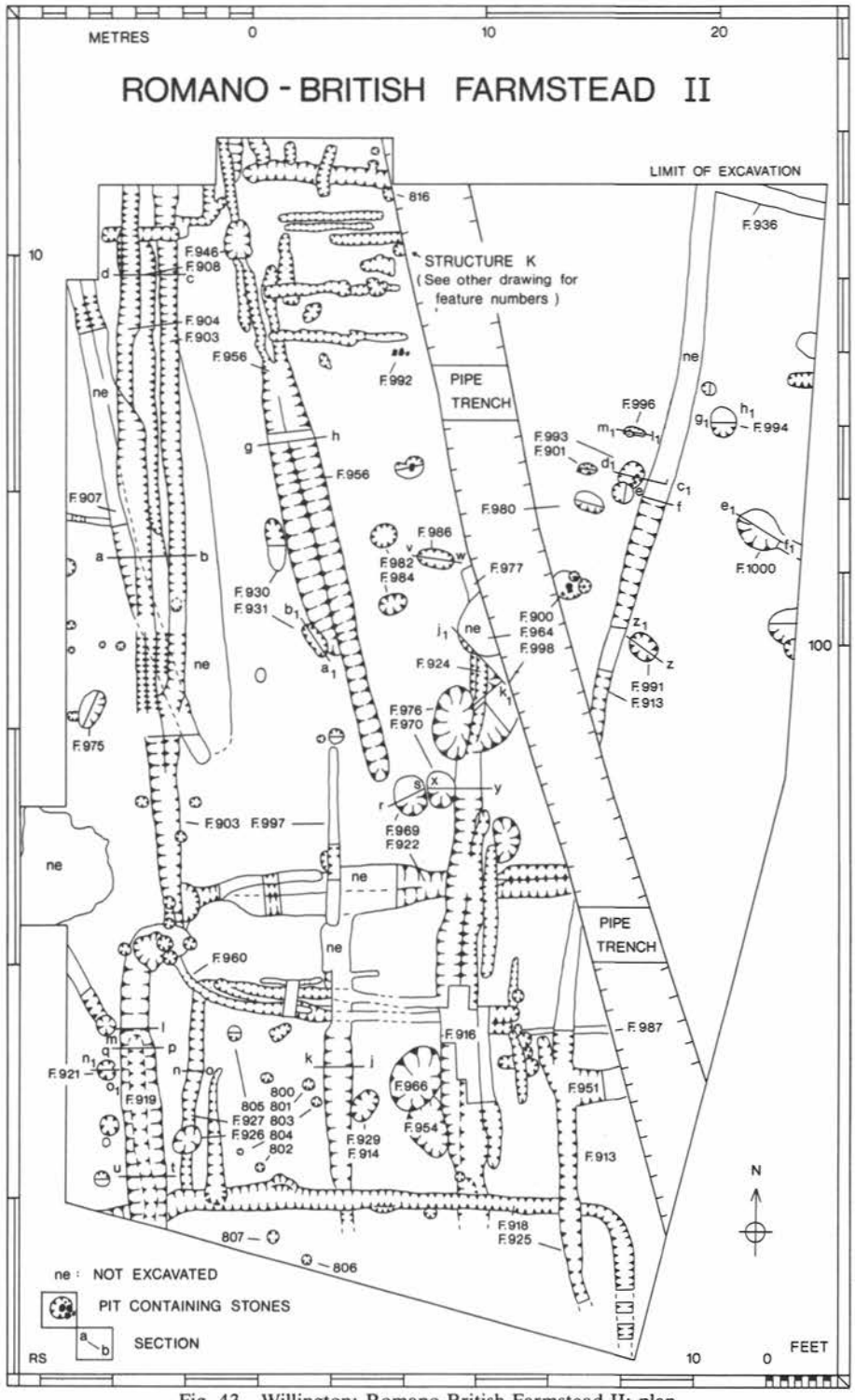


Fig. 43 Willington: Romano-British Farmstead II: plan

between Willington and Egginton, and perhaps for this reason had not been ploughed in mediaeval times. This part of the site was not therefore encumbered with plough furrows. Close to the stream the ploughsoil was 1 m deep, but at the northern edge of the excavation, on flatter ground, only 30–40 cm of ploughsoil remained, and ploughing had clearly damaged the archaeological features. With the exception of a modern pipe trench the features were in general very shallow, rarely exceeding 50 cm in depth, and frequently much less, especially in the north. All the datable features excavated belonged to the 1st and 2nd centuries, or possibly early 3rd century A.D. Bronze Age material was found within the flood silts of Egginton Brook, and residually in features dug through those silts. No Bronze Age features were identified. While no features contained large quantities of pottery or other material, many produced two or three sherds of Romano-British pottery and the date of the site is not in doubt. A number of small compounds by the stream, similar to those of Farmstead I, and one structure, K, possibly a granary were identified.

Along the western edge of the excavated area was a palisade trench F903, which had been reset at least three times (Fig. 44). It terminated in the south at a complex of features including four trenches, two, possibly three pits and five post-holes, all intersecting. Another fence setting F919 continued southwards slightly to the west of 903's line. The mass of features at this junction suggested long use as the corner of an enclosure, and we seem to be dealing here with a succession of small rectangular compounds, with multiple resettings, close to the brook as in Farmstead I. The western fence settings appeared to be among the latest features in this area, both stratigraphically and in terms of pottery content, with a few possibly 3rd century sherds. Perhaps these were the last major repair. The southern trench F919 showed no signs of redigging, though its profile varied considerably. At its northern end it was comparatively shallow, 40 cm, with sloping sides (Fig. 44); farther south it was 70 cm deep with much straighter sides, more like a palisade trench, and at the southern end, in an area of flood-wash it appeared to be an open eroded gully.

F919 was dug through the corner of an east-west trench F918, as the latter turned southwards. F918 also turned to the south at its eastern end, forming another compound. It varied between 20 and 40 cm deep. To the south were flood silts containing Bronze Age pottery, also found in F918 and 925, dug through the silts. F918 was filled with flood silts which also contained Romano-British pottery. In addition to being the northern edge of one compound, F918 seemed to be the southern edge of another, its western side being first F927 and later F919. F927 was a shallow trench some 20 cm or less deep (Fig. 44). It stopped in the south at F918 which was dug through it, and to the north turned eastward into a trench with multiple resettings F960 (Fig. 43). One setting of F960 continued westwards beyond F927 to terminate at the junction of F919 and 903, forming a probably slightly later compound bounded by F918 in the south, 919 on the west and 960 on the north. Another east-west trench with multiple resettings F922 may have formed the northern edge of this compound at an earlier or later date, or may alternatively have bounded another smaller compound to the north, with F960 as its southern edge. F922 was the fourth linear feature involved in the F919/903 junction, where it terminated. Its other end had been destroyed by a modern pipe trench, nearly 2 m deep, but it probably ended at F913, the most easterly of the north-south trenches. The southern end of F913 was obscured by the flood silts, though it appeared to be turning eastwards. At the north it either turned eastwards at right angles, or was joined by an east-west trench F936. This lay on the edge of the excavated area and neither F913 nor 936 were traced further. It seemed likely that F913 (Fig. 44) was the western edge of a large enclosure, later than F918 through which it was dug, and forming at the same time the eastern edge of the series of small compounds. Most of the east-west trenches stopped at or west of F913 with the exceptions of F918, 951, possibly a pit and not a linear feature, whose eastern end was lost in the pipe trench, and 987, perhaps an eastward extension of the 960 line, again with its eastern end lost in the pipe trench. F 987 was only a few centimetres deep.

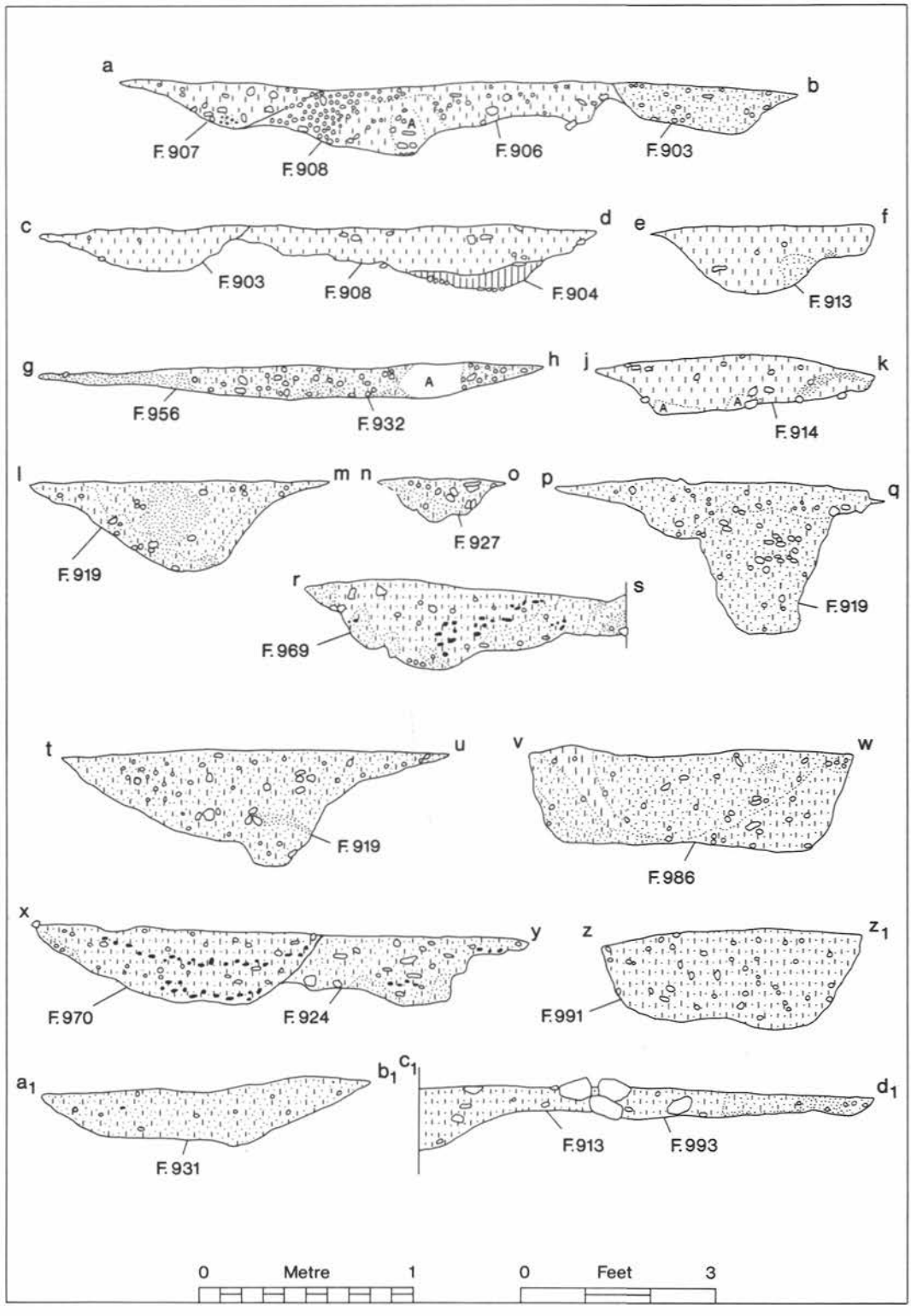


Fig. 44 Willington: Romano-British Farmstead II: sections

This group of compounds was further subdivided by F914 and 916. F914 was a wide shallow trench with no obvious signs of redigging; it seemed to be turning eastward at its northern end, where it met F922 and terminated. To the south it was dug away by F918, but though it continued southwards, it became much smaller and was lost in the flood-wash. A later extension of this line to the north F997 continued some 5 m north of F922. F916 was redug at least twice. Its profile was fairly straight-sided, more suited to a fence setting than a gully. It was stratigraphically earlier than F918, beyond which, like F914 it dwindled. It was later than F922, and either earlier or contemporary with some settings of F960, but later than others. To the north it extended beyond F922, but its northern end was either destroyed by a pit F964, or more probably lost in the pipe trench.

It is not possible to give the exact size or area of any one compound in this group. The maximum size would be 17 m by 12 m, taking F918 as the southern limit. Most of the linear features held fences, frequently reset, perhaps on an annual basis, and stratigraphic analysis provides only the sequence of piecemeal repair and patching. The compounds appeared to be added to the edges of bigger enclosures and their function was presumably similar to that of Enclosures 3–8 in Farmstead I, perhaps connected with stock. The area of these small compounds certainly flooded both before and after Roman times.

In the north-west of the excavated area were two other linear features F907 and 956 on a quite different alignment to those already discussed, both terminating in the middle of the excavation site. They were parallel but not stratigraphically linked, and may be contemporary, or may replace each other. Both had been redug and F907 (Fig. 44) was dug through the F903/904 complex of gullies. They would therefore seem to have post-dated the beginning at least, of the complex of paddocks to the south. F956 was broad and shallow, particularly to the south. Their function is not known.

At the north of the site, dug through one of the settings of F956 was the only building identified in Farmstead II, Structure K (Fig. 45). Six parallel slots, F939, 940, 941, 942, 944, and 945, with shallow rounded profiles, none more than a few centimetres deep lay east-west. Two of the slots were truncated at their eastern end by the pipe trench, but assuming their measurements to be similar to the undamaged ones, a building of approximately 6 m square might be suggested. F945 the most southerly, was 6 m long and 40 cm wide for most of its length, swelling to 60 cm in two places. It was not quite straight, but showed no signs of resetting. It was dug through F956, one of the two parallel ditches described above. The eastern end of F939, the most northerly slot was removed by the pipe trench, leaving a length of 6·3 m. It was wider than the other slots: 80 cm for most of its length, but only 60 cm at its eastern end. Nor was it quite straight, turning slightly northwards at its eastern end. Three other features 947, 948 and 957 had been dug through it, and two post-holes F949 and PH816 were tangential to it. F947 and 948 were similar in profile and depth to the six slots. F957 and 950 were perhaps rediggings of F956. F944 north of 945 was 5·8 m long and 30 to 50 cm wide. Its width was irregular with three round swellings, possibly post settings, no deeper than the slots and it was dug through F950. F942 survived for a length of only 3 m, its western end being some 2·5 m east of the ends of the other slots, and its eastern end destroyed by the pipe trench. The complete lengths of F940 and 941 were identifiable, and they were 4·48 and 3·8 m long respectively. They were regular in width and showed no signs of posts or recutting. The spacing of the slots suggested that four might be the required number for the structure, F939, 944, 945 and one in the vicinity of F940, 941 and 942. These last three were set close together. Either F940 or 941 might well be a replacement, while F942 might be an extension supporting the eastern end of the building. F939 was the largest slot, and the two post-holes and the slot-like feature set across it might be repair or replacement settings. If these slots did in fact represent a structure, their close spacing and the evidence for additional supports suggest a heavy raised floor, suitable for a granary. Very little pottery was found in the shallow slots, but

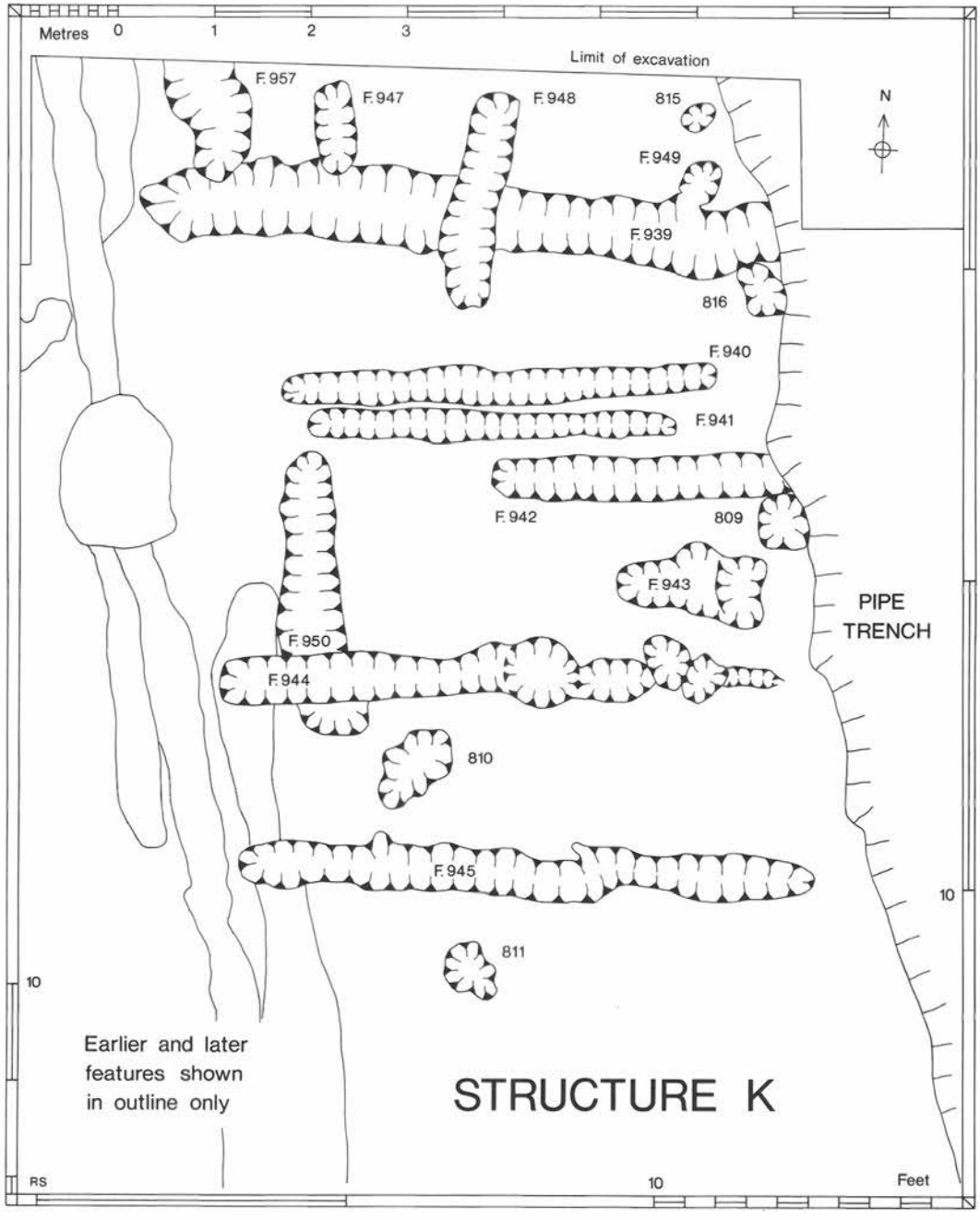


Fig. 45 Willington: structure K: plan

sufficient to indicate a date in the Roman period. It was stratigraphically one of the later, if not the latest feature in this area. Two of the slots were dug into the parallel ditches; F907 was dug through the trench F903 which was certainly one of the later features incorporated into the southern group of compounds. Many of these features may have been extremely short-lived, and the difference in time between them, may not be great.

To the south-east of structure K were five concentrations of large stones, F900, 901, 992, 993, and 996 each in a shallow setting, none more than a few centimetres deep (Fig. 44, 993 and Fig. 46, 996) and F901 and 902 little more than a stain. Two had post-holes dug through them, or perhaps contained posts, more deeply set, packed by the large stones. The others gave the appearance of pad-stones but they formed no coherent pattern, and were quite unlike any other features found at Willington. They were filled with brown sandy loams and three of them contained Romano-British pottery.

There were a number of post-holes within the excavated area, particularly on the western side, and further excavations might have been repaid with the plans of more structures. A number of post-holes were dug through filled fence settings, particularly

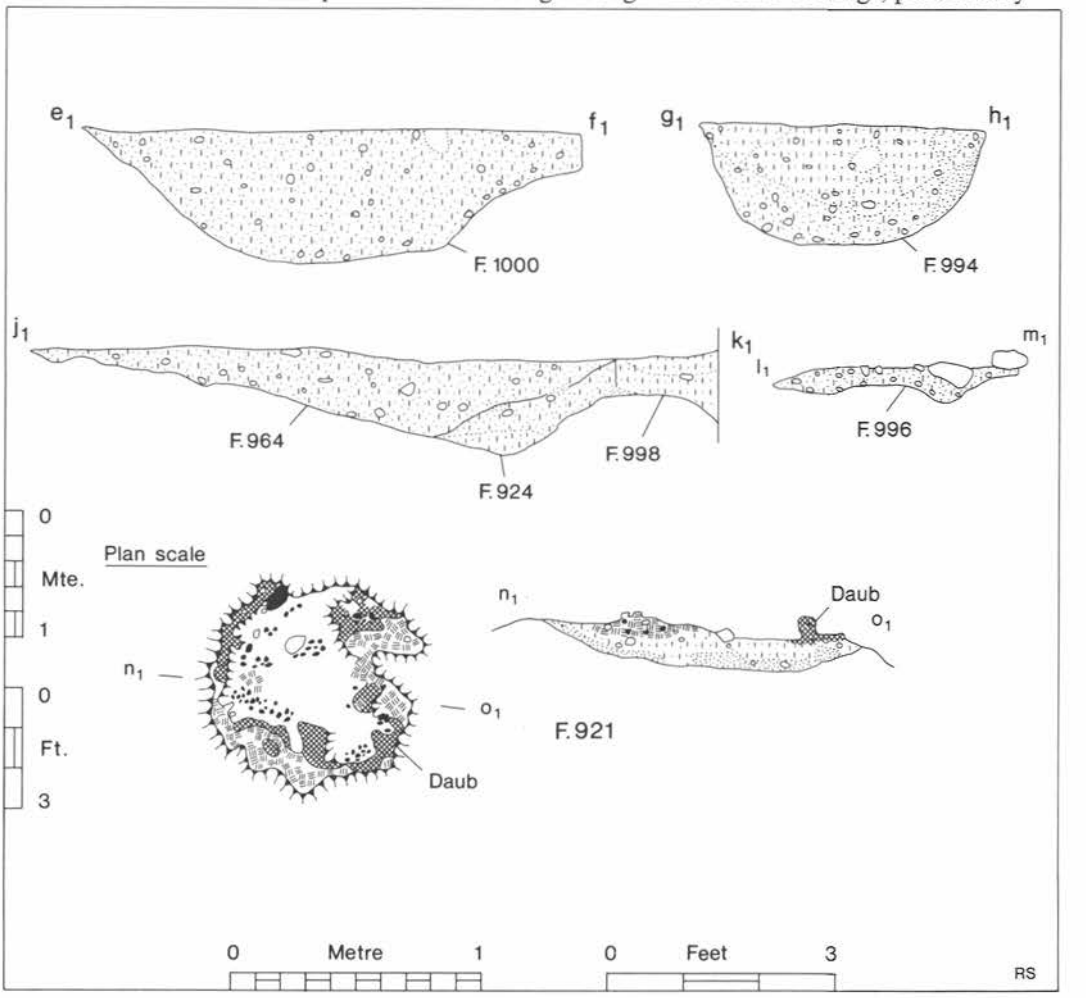


Fig. 46 Willington: Romano-British Farmstead II: plans and sections

on the western side of the paddock complex, and might indicate continued use of these lines. Others lay both within and without these small enclosures. They varied in size, depth and filling and seemed to form no coherent plan. One group however calls for special comment. Eight post-holes, PH800, 801, 802, 803, 804, 805, 806, 807 (Fig. 43) all lay within the south-west area of the group of compounds. All except for 803, which was extremely shallow, were packed with yellow clay, round the sides and bottom. The removal of the posts in some cases damaged the clay at the base, though it usually remained in position at the sides, and the post-sockets themselves were filled with sand and loam. The two post-holes of this group which lay to the south of F918, were dug into brook silt, and were completely filled with clay with no sign of any post-socket. The depth of these post-holes varied considerably, perhaps because of differential erosion caused by flooding. There was no indication of their date, but the use of clay packing, not found elsewhere at Willington suggested contemporaneity. It was perhaps used here to support the posts during flooding. Unfortunately, they form no coherent plan and their function is uncertain.

Pits were found over the whole excavated area. None contained more than a few scraps of Roman pottery, and many were shallow. In no case was there evidence for the precise function of any single pit. They might be conveniently grouped by size and shape into oval pits, large pits, and small round pits. The oval, or sub-rectangular pits, F929, 930, 931, 975, 980, 984, 991 (Fig. 44), were mostly found to the north of the paddock complex and south of Structure K. They were steep-sided, with dark loamy fillings, and proportions of length to breadth of 2:1, or 3:1. F929, south of the main group was exceptional in containing a very pebbly filling. In shape they recall the deep, almost rectangular pit F655 and possibly 666 on Farmstead I (Fig. 39). Two of the oval pits on Farmstead II were 45 cm deep, but most were much shallower. There was no evidence of function though the steep sides suggested careful digging, perhaps for storage.

The other pits were more varied. F954 and 966 (Fig. 43) were intersecting large round-bottomed pits, again not deeper than 45 cm, within the southern compound area. They were adjacent to one of the fence settings F916. Both were filled with sandy loams. Farther north four intersecting pits, F964, 976, 977 and 998 (Fig. 46) with sloping sides and rounded bottoms were dug through the northern end of fence setting F916. All these features were partially removed by the pipe trench. Again the pits were not of any great depth considering their diameters, and indeed the bottom of the fence setting was visible below the pits. F976 may have been of a later date, since it contained an iron key of Mediaeval type, dating to the 11th or 12th centuries A.D.

The smaller pits, F946, 994 (Fig. 46), 969 (Fig. 44), 970, 926 were mostly deeper, from 35 cm to 45 cm. They were mainly straight sided and flat bottomed (Fig. 43). They were filled with sandy loams, though F994 was notable for the number of pebbles in its filling, and F969 and 970, two intersecting pits, adjacent to fence setting F916, for quantities of charcoal and burnt material. Neither showed any signs of scorching. F1000 was not strictly speaking a pit, since an apparently contemporary linear feature ran eastward from it, under the eastern baulk of the excavation. Its filling was rather more sandy than the other pits, and its sides more sloping (Fig. 46). A number of other features, which might be pits, gullies or fence-settings were obscured by the baulk.

Two hearths were found in Farmstead II, F921 in the south west of the excavation, just west of the group of compounds, and 982, roughly in the centre of the excavation (Fig. 46). F921, a shallow clay-lined bowl, was 1·25 m in diameter and 20 cm deep. The clay was hardened and reddened by fire. A dark brown sandy loam lay above the clay, and above that, traces of the raised floors of an oven, three flat stones, and flattened pieces of baked clay. This floor was very fragmentary with pockets of loam mixed with charcoal and flecked with raw and scorched clay. Presumably a dome of clay or turves would have covered the hearth when in use. No pottery or other datable material was found in this feature, but it was doubtless of the Roman period.

The construction of F982 was less clear. It had two depressions in its base and was not lined with clay, though lumps of burnt daub were found in each depression. It also contained a considerable amount of charcoal particularly on the west side, where its bottom was scorched. In the middle of the feature was a deposit of mixed sand and clay, and above that, dark, dirty sand. It had suffered some animal disturbance. On the north side of the hearth were two circular iron bands.

DISCUSSION

Modern ploughing may have removed traces of a later Roman settlement in this area, since 3rd and 4th century pottery occurred in the plough-soil. It is quite possible that the focus of later Romano-British settlement may have moved slightly and that this area was ploughed in later Roman times as was suggested for Farmstead I. Aerial photographs show a dense mass of cropmarks in this western field, of which only a fraction has been excavated. Close to Farmstead II at least three and possibly more, significantly distinguishable alignments of features can be seen. One of these may have belonged to the early Iron Age, incorporating the ditch F1200, east of Farmstead II, but some at least of the others are likely to belong to the Roman period. No later field system was here identified. The late 2nd century reorganisation of land-use on both Farmstead I and II may have been related to the flooding of Egginton brook.

Both Roman enclosure groups have been called farmsteads. Little bone survived the acid soil conditions, but cow, sheep and horse were present in Romano-British contexts, and fragments of three rotary querns were found.

OTHER ROMANO-BRITISH OCCUPATION

Isolated Romano-British features, mostly pits, have been described in various places in this report. Three features call for more detailed description.

Dug through the ring ditch of Barrow 1 was a Romano-British corn-drying oven, F3 (Fig. 47). It was shaped like a dumb-bell, with a heavily scorched flue, and a layer of charcoal and ash in the firing chamber. A large stone blocked the stoke-hole, and other broken stones lay on the edge of the flue. Pottery contained in it dated to the later 3rd or early 4th century, with one residual Beaker sherd.

Dug through the ditches of Barrow 3 was another hearth, F292, (Fig. 47) 2·1 m in diameter. Above a layer of ash and charcoal was an amount of burnt clay, much of it in long strips suggesting permanent oven furniture, though individual fire bars were not recovered. Immediately below this, and above it was sandy loam filling which must have accumulated when the hearth was abandoned. It contained several sherds of Iron Age and some Roman pottery.

To the north of F292, (Fig. 47) an oval pit F254, 2·2 m long, 86 cm wide and 40 cm deep, possessed the straight sides and flat bottom of a grain-storage pit. It appeared to have filled naturally, with loamy sands, and contained mostly Iron Age pottery, with some Roman wares.

Saxon settlement

In the area of Farmstead I, and just to the north of it, was evidence of a small settlement of the 6th century A.D. (Fig. 48). Three sunken featured buildings (Rahtz 1976) or *Grubenhäuser* were found. They were not grouped together, the closest being 45 m apart, and the farthest 65 m apart. Pits and a few post-holes of this date were also found close to the huts. All three were excavated in 1971. Elsewhere, the post-hole group G, close to Neolithic Settlement 1, might well be of Saxon date, and two pits were found, one south of Hut Circles 2 and 3, and one adjacent to the Iron Age granary, structure H.

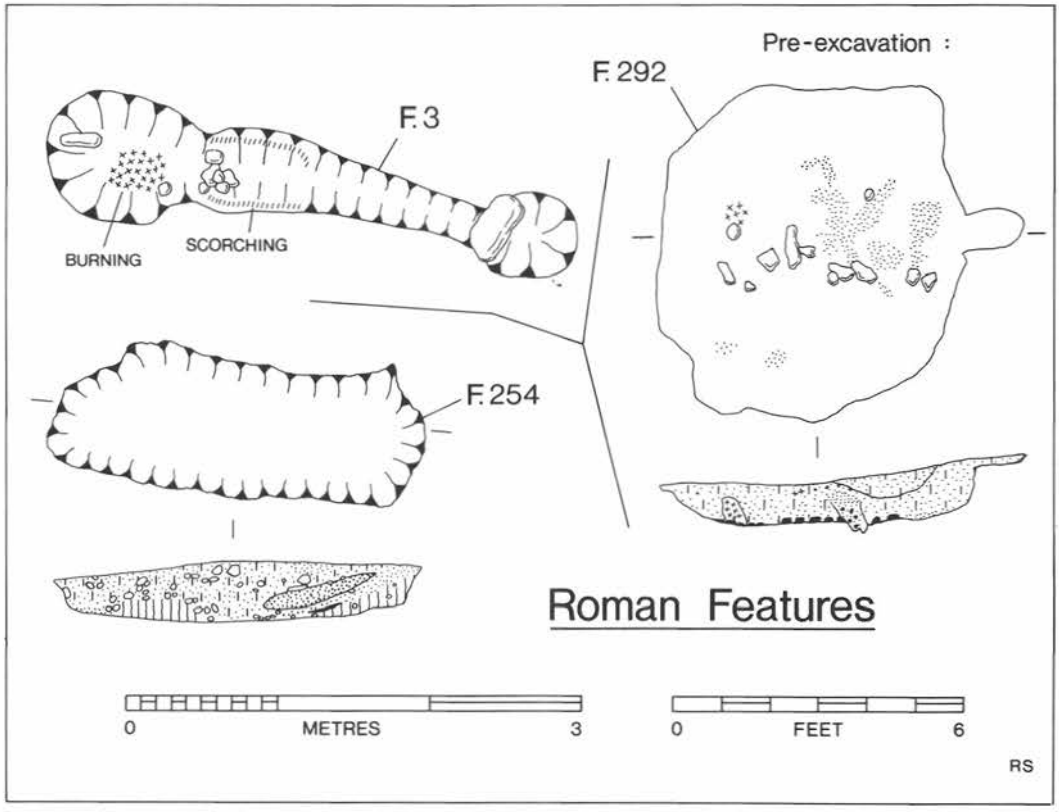


Fig. 47 Willington: Isolated Romano-British features: plans and sections

Supervisor: John Gledhill

Grubenhaus 1 (Fig. 49) was 2 m south of the Iron Age ring ditch F370, in an area where Neolithic, Iron Age and Roman features were also present. A shallow sub-rectangular hollow, 4 m by 3 m, and 20 cm deep was dug into the upper silts of the ancient river course. Two large post-holes, 434 and 442 were set inside it, in the centre of the short sides. Two other post-holes inside its eastern edge, were badly rabbit-disturbed so that the profile of PH434 only could be recorded. The presence of numerous field-mice holes precluded the evidence of any stake-holes being recovered. All four post-holes were identified in plan in the bottom of the *grubenhaus* but could not be seen in the excavation of their upper layers. They were probably removed before the upper layers of filling accumulated. Two other round depressions of similar size, PH445 and 446 which may have indicated post positions, were noted on the bottom of the *grubenhaus,* but the whole surface was very uneven.

The lowest layer of filling (Fig. 49) within the *grubenhaus* was composed of a sticky grey sandy deposit, containing lumps of grey clay, interpreted as an occupation deposit. Resting on this, were a number of ring-shaped clay loomweights in a green unfired state, heaped together, and disintegrating, so that they could not be accurately counted. They were also found sporadically in the upper two layers. The middle layer was a fairly loose light greyish sandy loam, and on top was a darker, more compact loam.

Anglo-Saxon pottery was found throughout the *grubenhaus,* and while the quantity was much less than that in *Grubenhäuser* 2 and 3, the hollow was much shallower,

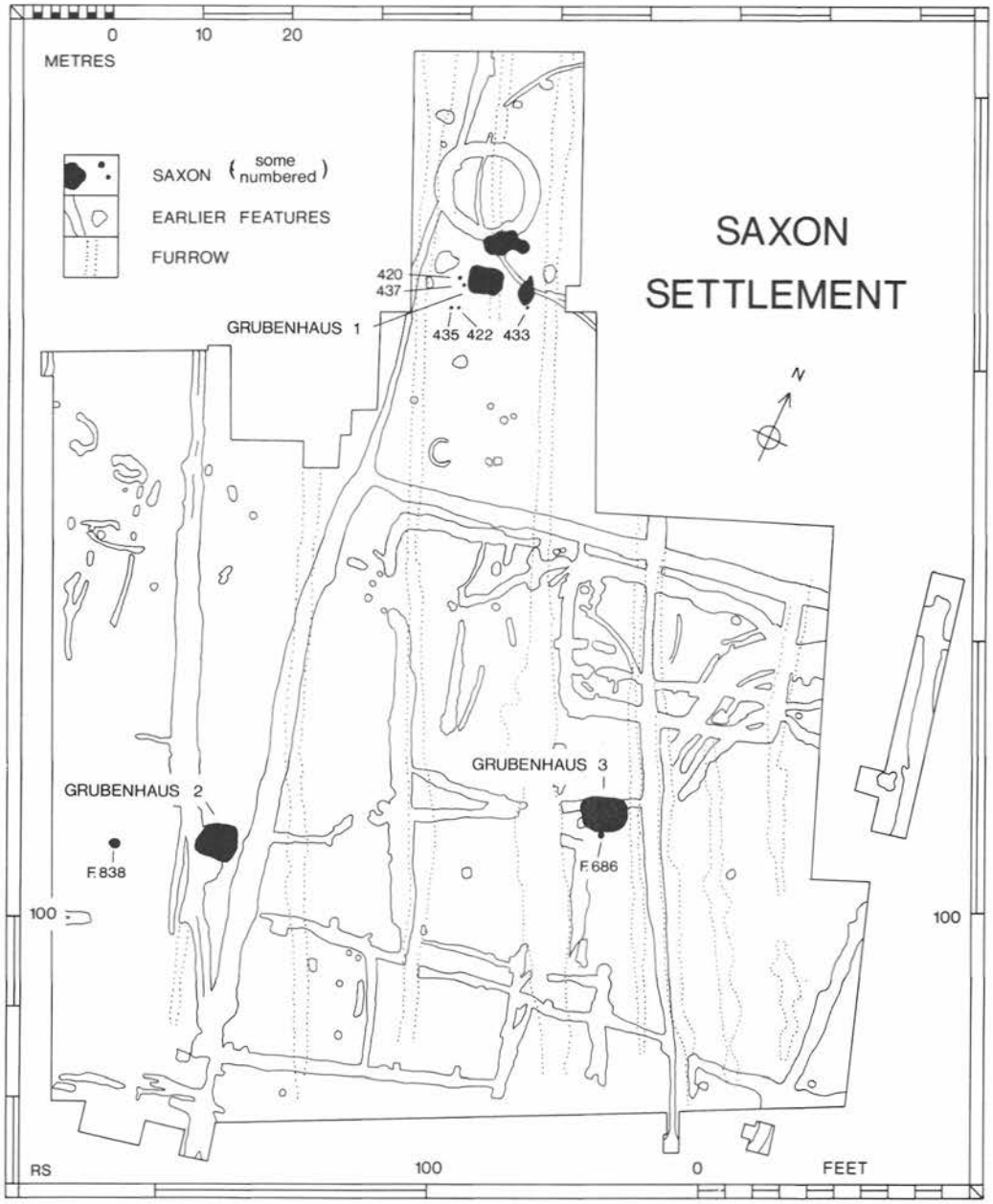


Fig. 48 Willington: Saxon Settlement: plan

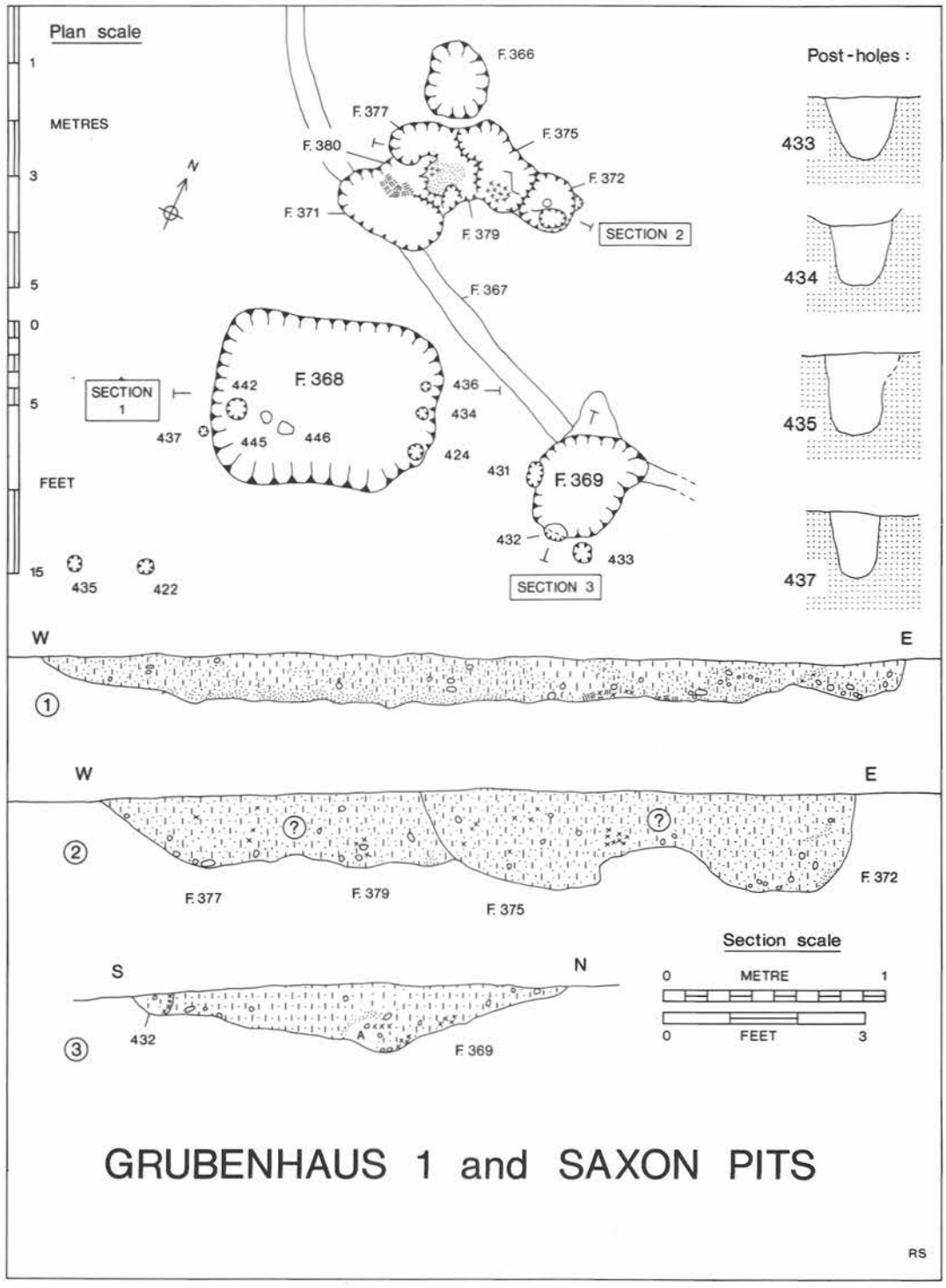


Fig. 49 Willington: *Graubenhaus* 1: plan and section

probably because, being at the top of the slope, plough erosion was greater. A baked clay spindle whorl and a bronze roundel with punched ring and dot ornament were also found.

North and east of *Grubenhaus* 1 were a number of Saxon pits (Fig. 49). F366 dug through the Iron Age ring-ditch, F370, and F369, through the Iron Age palisade trench F367, were discrete features, but a group of six others F371, 372, 375, 377, 379 and 380 were all intersecting. Despite careful sections dug through these pits, their fillings of dark brown humus, flecked with charcoal and baked daub, were so homogeneous that no sequence could be distinguished. Possibly many or all of them were open at the same time. Three of them contained sherds of what was probably one vessel. Several of these pits contained quantities of burnt material, though the lack of any scorching would suggest that they were not hearths. Burnt red daub, mixed with charcoal, was spread over the bottom and northern side of F375, and more charcoal was found beneath it. F369, east of the *grubenhaus*, contained much ash and charcoal, but no signs of any scorching. F380 contained yellow unfired clay, similar to the material of the unfired loomweights. Pottery dated the pits to the Saxon period.

On the edge of the pit F369 were two small post-holes, 431 on the west side, and 432 on the south. Neither contained any pottery, but their dark filling suggested that they were late in date, possibly connected with the pit. Three other post-holes with dark loamy fillings, vertical sides and diameters of 20–30 cm may have belonged to the Saxon occupation.

Supervisor: Pat Losco-Bradley

Grubenhaus 2 (Fig. 50) lay 1 m west of the large Phase III enclosure of Farmstead I. It intersected with F800, one of the phase IV ditches, destroying an early ditch on that line, but itself disturbed by a later, possibly mediaeval ditch on the same line. Overlying the north-west corner of the *grubenhaus*, and the surrounding sand, was an irregular area of charcoal staining, F544, 70 cm by 50 cm. It was very shallow, and appeared to be the bottom of some later feature. Saxon pottery, probably residual was found in it. The *grubenhaus* was also overlain by a mediaeval plough furrow which had disturbed and spread its upper layer. This was a dark brown loam with many pebbles, typical of plough disturbance, and extended beyond the hollow of the Saxon hut, along the furrow, giving a distorted initial picture of the edges and axis of the hut. The western side of the *grubenhaus* suffered particularly heavy rabbit disturbance.

The hollow itself was sub-rectangular with rounded corners, 4·3 m by 4 m, with a maximum depth of 65 cm. Below the plough disturbance (Fig. 50) was a layer of sandy material, uniform in colour and texture, which seemed to be a wind-blown deposit after the collapse of the hut. Below that was mottled soil, brownish grey, sandier at the top, and containing finer stickier soil in its lower part. In the south-east of the hut, a lump of clay intruded from below. Specks of charcoal were also found in this layer which seemed to have accumulated after the hut had gone out of use, perhaps containing material from its superstructure. Below this was a second sandy layer, thicker on the eastern side, light-coloured but containing patches of darker soil. The banking up of the sand suggested a wind-blown origin, after abandonment but before collapse. The lowest layer was heavier, stickier and firmer than the others, though basically similar to the second layer. Red, orange and yellow clay was found within it, and upon it lay three distinct groups of unbaked ring-shaped clay loom-weights (Fig. 50), apparently piled on the floor of the *grubenhaus*. Within this layer at the north end of the hut was a patch of clean orange sand, initially mistaken for the bottom of the hollow, but perhaps caused by a wall collapse at an early stage in the occupation. This lowest layer was interpreted as occupation deposit.

The superstructure was supported by two posts set within the hollow in the middle of the two shorter sides. PH553, at the west was 42 cm wide and 31 cm deep and filled with medium brown loam. On the east side PH554 was 28 cm wide, between 55 and 75 cm deep, its bottom being removed by a rabbit burrow; it contained a medium brown loam.

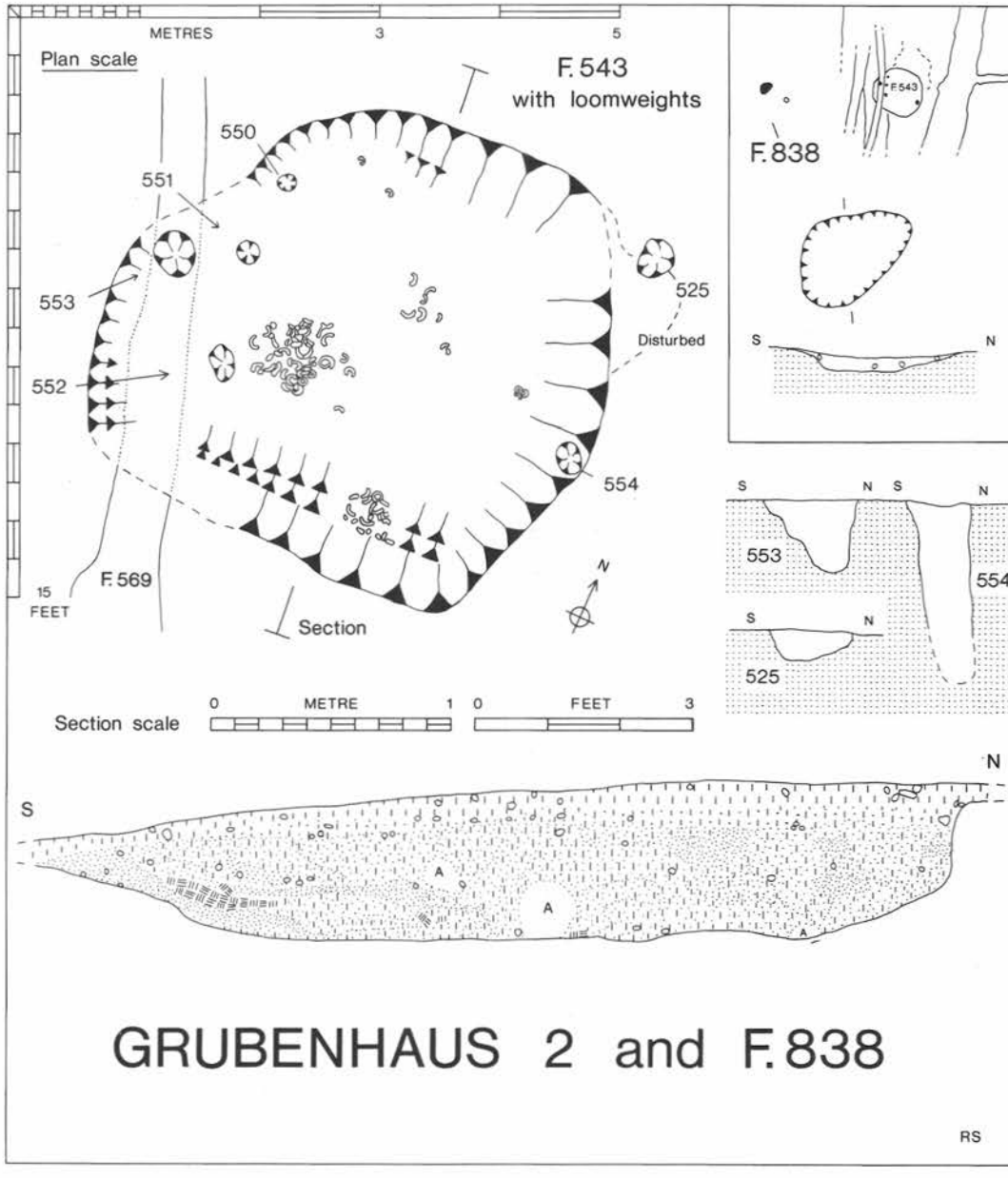


Fig. 50 Willington: *Grubenhaus* 2: plan and section

Both depths are from the bottom of the *grubenhaus* since neither post-hole was visible in the upper layers of the filling. Three other smaller post-holes were found at the west side of the *grubenhaus*, PH550, 13 cm wide, 14 cm deep filled with light brown sand, PH551 20 cm wide and 14 cm deep filled with orange-brown sand, and PH552, 30 cm wide, 16 cm deep filled with medium brown sandy loam and a number of pebbles. These were much slighter than the two main posts. Outside the north-east corner of the *grubenhaus*, was another post-hole 525, 38 cm wide 12 cm deep filled with a uniform dark brown loam. No similar posts were identified on the other corners, though the western side was removed by the ditch F800.

Grubenhaus 2 in addition to the loomweights, contained nearly 450 sherds of Saxon pottery, including a few decorated vessels. They were found in every layer; indeed sherds of the same vessel were found in the top and lowest layers. Nine metres west of *grubenhaus* 2 the bottom of a small shallow pit F838 was excavated in 1972. It was only 5 m deep, though 70 cm wide, and contained three fragments of fired Saxon loomweights.

Grubenhaus 3 (Fig. 51) lay in the middle of Farmstead I, dug through an internal ditch F633, and a Romano-British pit F636. Another, undated, pit F686 was tangential to the *grubenhaus* on the south. The hollow of the hut, again sub-rectangular, was 2·45 m by 1·9 m, with a maximum depth of 55 cm. Its superstructure was supported by two or three posts set inside it, in the middle of the shorter sides PH556 on the west, 35 cm wide and 26 cm deep was filled with dark brown sandy loam. On the east side two posts PH557, 33 cm wide, and 35 cm deep with a mixed filling, and a second post, too disturbed for comment, had been set in a single post pit filled with dirty orange sand (Fig. 51). They may have been contemporary, or evidence of post replacement. This post-pit, unlike 556, could be seen in all the layers of the filling, and was presumably left standing when the hut was abandoned, PH556 was visible only in the bottom of the *grubenhaus*.

Above the dirty sand on the bottom of the hollow was compact loamy material, almost black. It also covered the sides of the hollow, and though patches were missing, was sufficiently continuous to suggest some sort of lining, possibly of mud, or organic material, such as wickerwork, which did not survive. The sand into which *Grubenhäuser* 2 and 3 were dug was very coarse and loose, requiring some sort of retaining structure, though no such evidence was found in *Grubenhaus* 2. Above the dark lining, was a thicker dark layer of firm texture, interpreted as an occupation deposit, and above that, just east of centre, a patch of sandy loam. Covering both this and the whole occupation deposit, was clean orangey-yellow sand. A loose brown sandy loam appeared to have banked up against the west side, reaching nearly to the top of the hollow. These would seem to be wind-blown deposits, accumulating after the hut had gone out of use, but before final collapse. Above this was a sticky grey and brown material, with lumps of a firmer texture within it, perhaps the remains of turves used in the superstructure, though this is not certain. Brown loam had finally filled the top of the sunken hollow. In addition to Saxon pottery, including decorated vessels, *Grubenhaus* 3 contained half a bead, a fragment of folded bronze, an iron pin or needle, and only three unfired loomweights.

In the area of Neolithic Settlement 1, six, possibly seven, post-holes (Group G) with straight sides and flat bases, filled with a dark loam, may have been of Saxon date. Their diameters ranged from 40 to 75 cms; four of them were between 30 and 38 cm deep, the other three, 15 cm deep. Saxon pottery was recovered from a plough furrow at the point where it overlay this group, and the posts may represent a structure of this date, though they are less regular than known Saxon building plans.

Three isolated Saxon pits were excavated. F106, (Fig. 21) south of Hut Circles 2 and 3, 90 cm — 1 m in diameter and 38 cm deep, was filled with a dark loam containing a mass of unarticulated cattle bone in very poor condition, and Saxon pottery. F548, in the north of Farmstead I was dug through a Romano-British ditch F691. Its dimensions

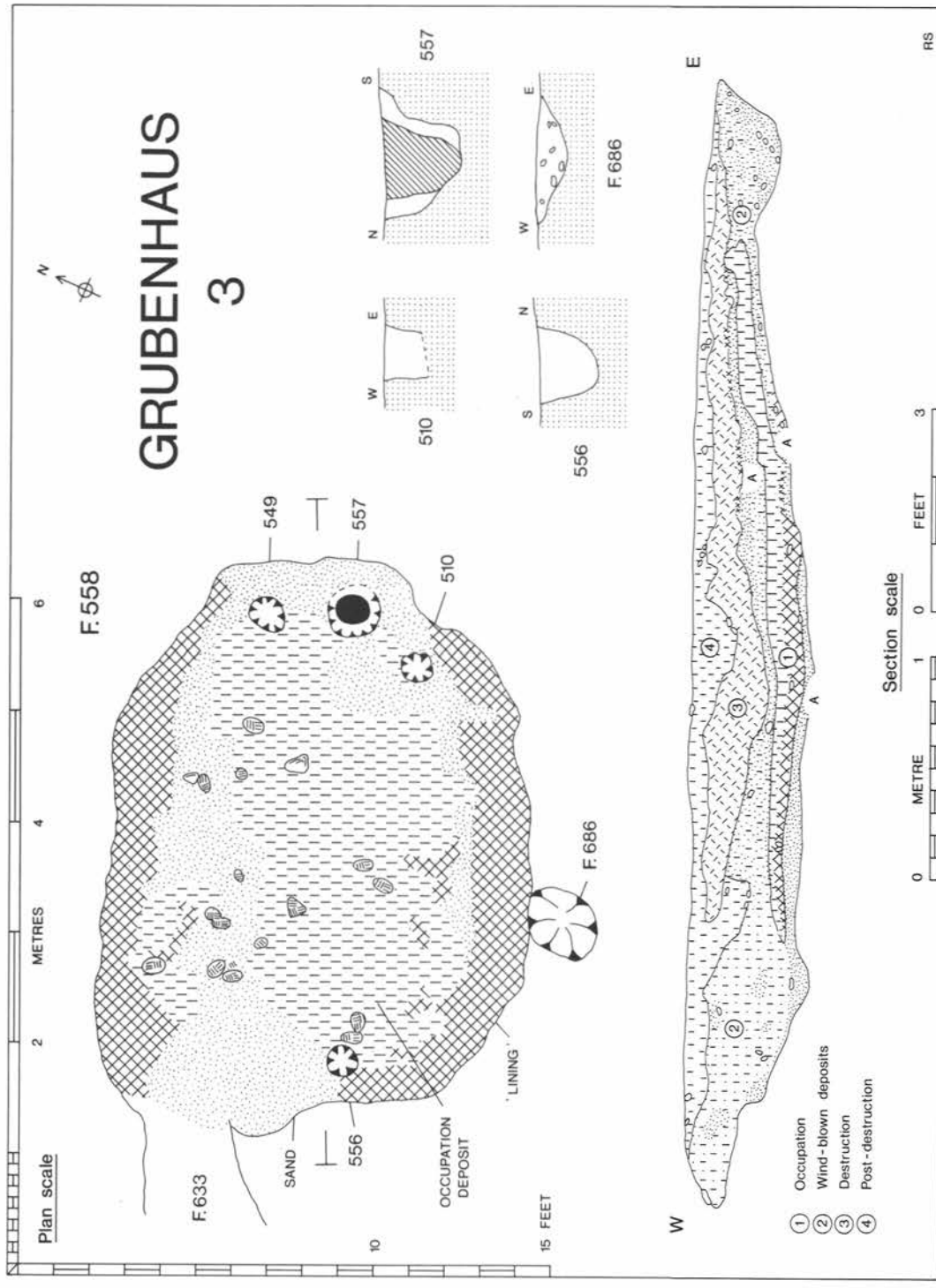


Fig. 51 Willington: *Grubenhaus* 3: plan and section

were c. 54 cm by 80 cm, and though it was not excavated, Saxon pottery was found on its surface. F804 was close to the Iron Age structure H. A large pit 1·03 m wide and 58 cm deep was filled with a brown sandy loam below a very dark loam. In the bottom of the pit was a small post-depression, 30 cm wide and another 7 cm deep. Saxon pottery was found in the pit.

DISCUSSION

While the Saxon settlement at Willington was small, it does not seem to have been impoverished. Not only was pottery present in some quantity, but some of it was in fine wares, skilfully decorated, and might be the products of professional potters. In the 6th century, at least one larger Saxon settlement was in occupation farther west in the Trent Valley, at Catholme, Staffordshire (Losco-Bradley 1977), in a very similar topographical situation. Most of the buildings were constructed with timber posts, with no sunken features, and the few *grubenhäuser* were probably adjuncts to these. At Willington such 'framed buildings' (Rahtz 1976) were searched for in the wide areas of gravel stripped for excavation around Farmstead I, and beyond the excavated areas in the eastern field. Although a few Saxon post-holes were found, none formed the now familiar plans of buildings, and the three *grubenhäuser* must be considered as a unit of settlement. They may have been occupied by a single family, though they were widely spaced if all three were in use together. If they were successive, there was no evidence of the sequence.

Pits are not usually found in large numbers on Saxon settlements, but several were associated with *Grubenhaus* 1. They contained either raw or baked clay, and were perhaps connected with the manufacture of loomweights and possibly pottery. There was no evidence of use for grain storage. If this hut had a specialised function connected with the firing of ceramics, it might well be sited in the fields rather than in a large settlement area.

The life history of *Grubenhäuser* 2 and 3 has been interpreted from their fillings as occupation, abandonment with wind blown deposits accumulating, collapse, and further wind blown deposits. Another possible sequence would be two phases of occupation, divided by wind blown sand. If that were correct the huts might have been occupied seasonally, being linked to a larger, more stable settlement nucleus elsewhere. While this interpretation is attractive, the quantity of pottery and loomweights makes it unlikely that they were mere temporary shelters for shepherds, and it is quite possible that different types and sizes of settlement would have existed independently in the same region.

Whichever kind of settlement it was, its basis was no doubt agricultural. Even for the Saxon period, bone evidence is scanty, and in poor condition, but cattle and horse were represented. Was there any evidence of a field system? As has been noted the three *grubenhäuser* lay within two Romano-British strip fields, and *Grubenhaus* 2 on a field boundary in use both before and after the hut itself. This suggested that the huts were short-lived and utilized the same field system, though there was no direct evidence of this.

THE FINDS

Flint Artifacts by Alan Saville

The 635 flints recovered during the excavations at Willington represent a small but interesting assemblage (Figs. 52–55). The site provenance of the flints is haphazard, with no large group coming from any one significant context or group of related contexts, the majority deriving from the ploughsoil or other disturbed horizons. It is not possible, therefore, to sub-divide the flints stratigraphically, and they are treated here as a single assemblage, which constitutes a virtually random selection of the lithic debris encountered on the site. The indestructible nature of lithic debris inevitably makes for residuality, and this is clearly the case with the present assemblage, which on internal typological evidence can be shown to include Mesolithic, Neolithic, and Bronze Age forms.

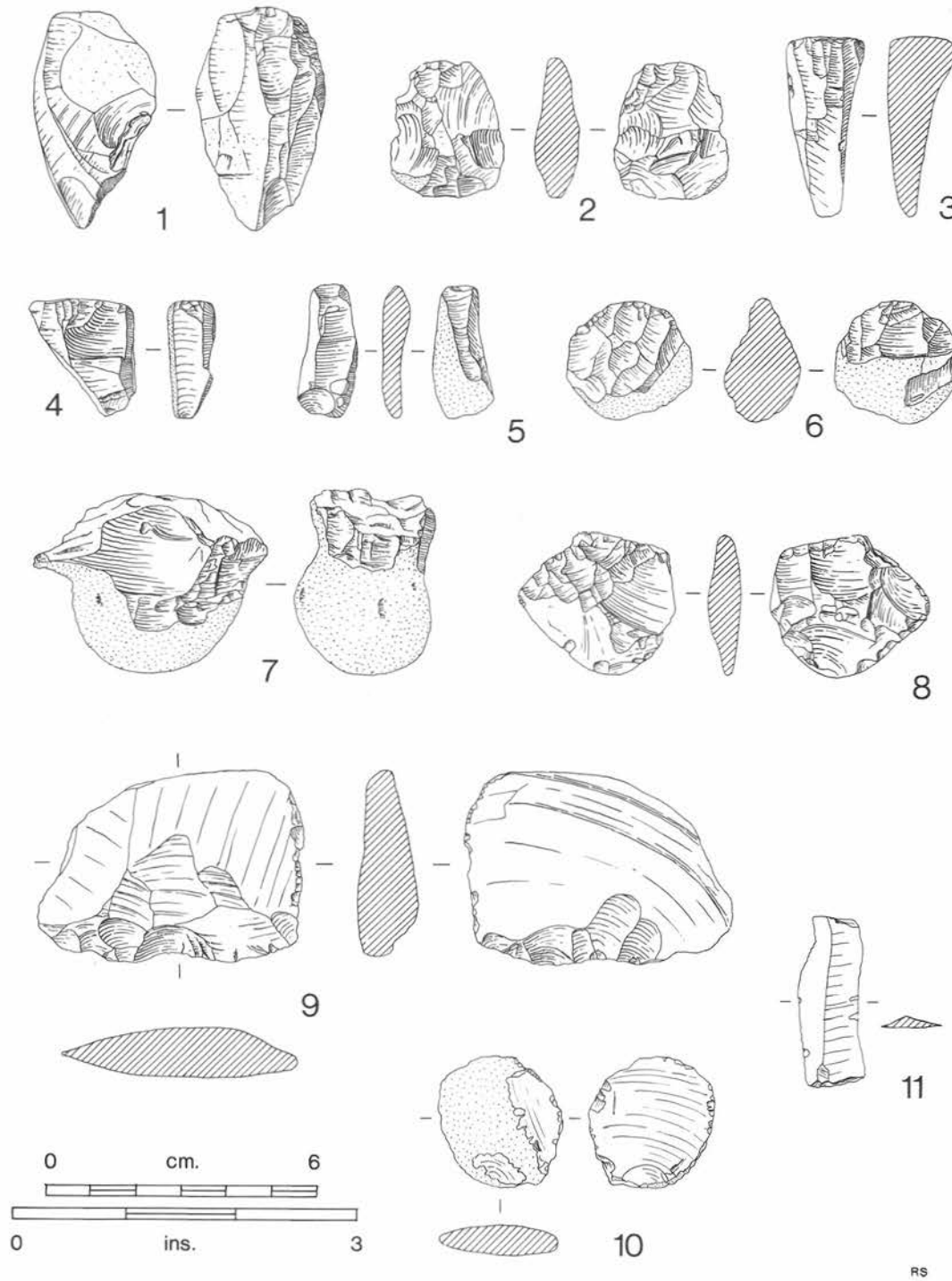


Fig. 52 Willington: Flint artifacts: 1,3,6,7,10,11 unstratified; 2, F161; 4, H.C.5; 5, floodsilt; 8, F387; 9, F851. Scale 2 : 3

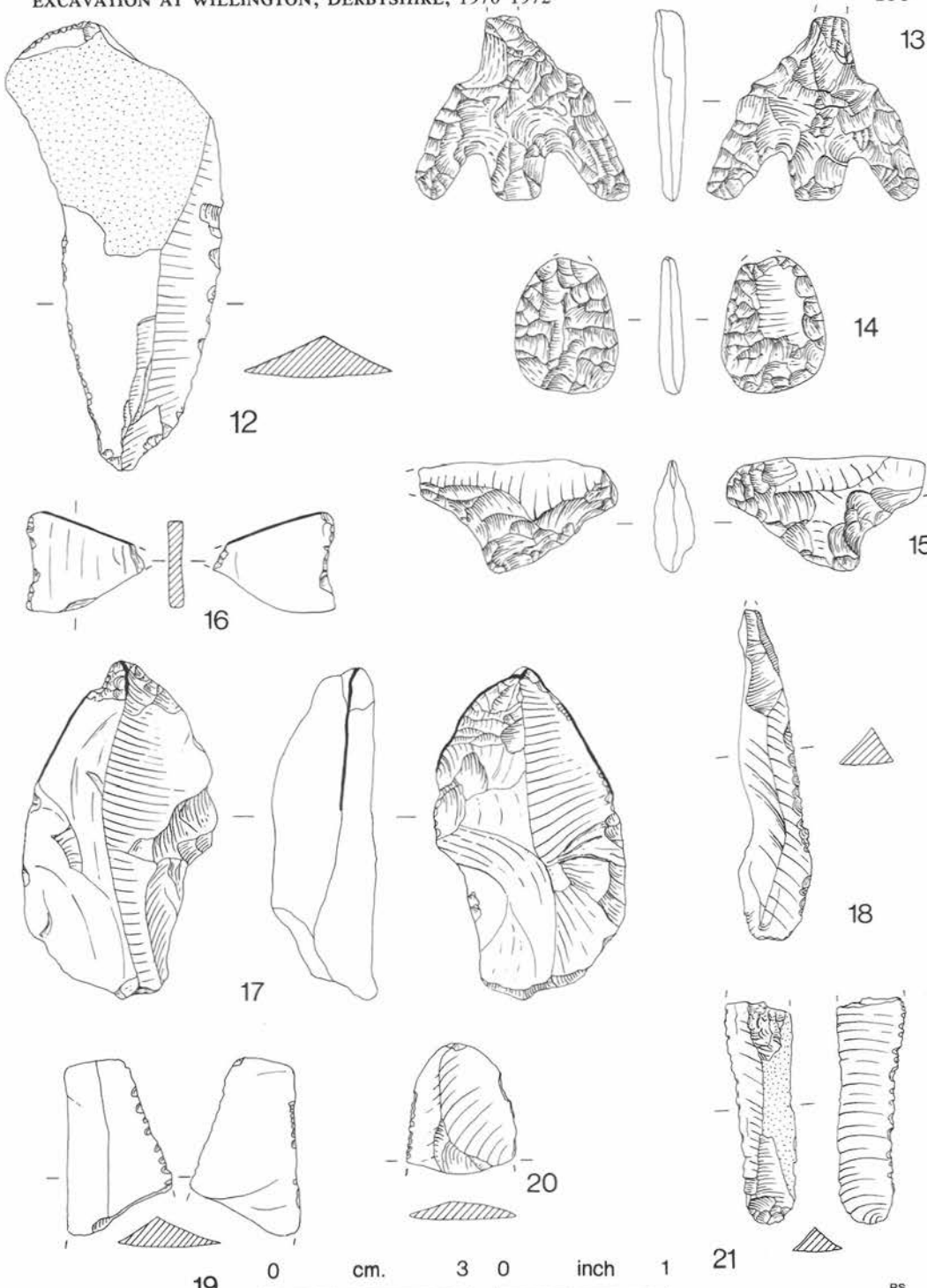


Fig. 53 Willington: Flint artifacts: 12, 14, 16–18, 21, unstratified; 13 floodsilt; 16, F1113; 19, Barrow 1 Mound; 20, F381. Scale, 12, 2 : 3, 13–21, 1 :1

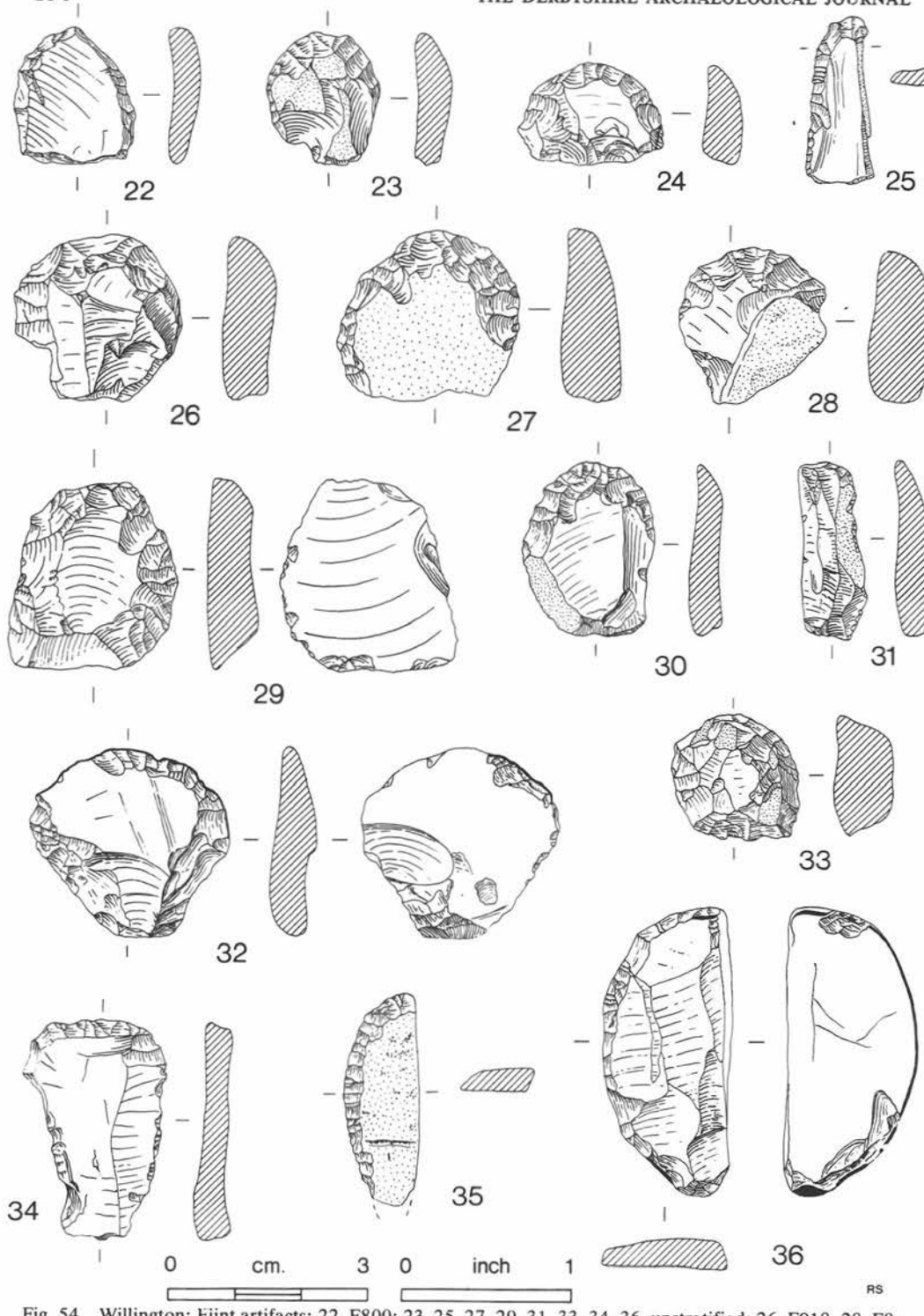


Fig. 54 Willington: Flint artifacts: 22, F800; 23–25, 27, 29, 31, 33, 34, 36, unstratified; 26, F918; 28, F8; 30, 32, 35, Barrow 1 Mound. Scale 1 : 1

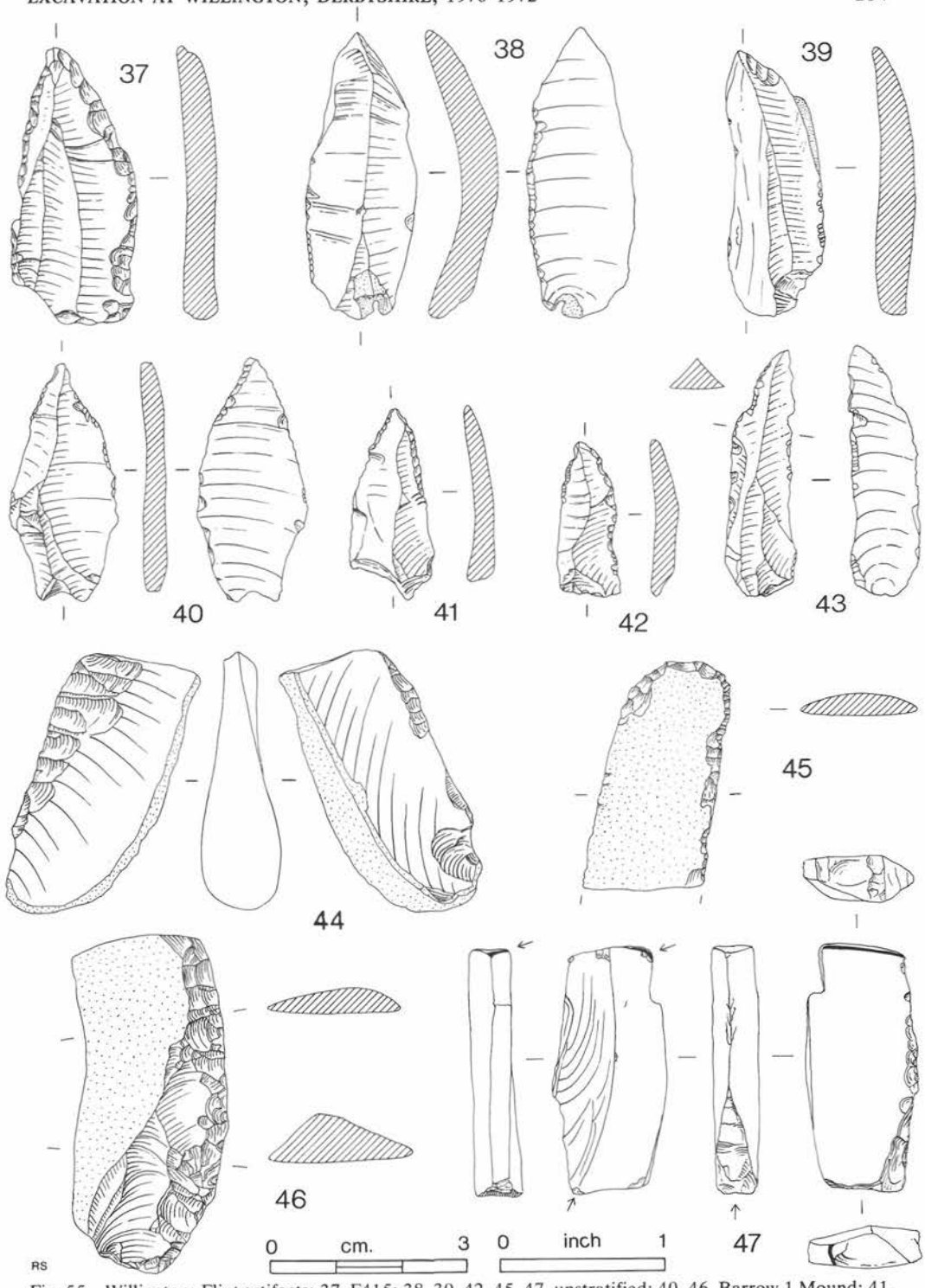


Fig. 55 Willington: Flint artifacts: 37, F415; 38, 39, 42–45, 47, unstratified; 40, 46, Barrow 1 Mound; 41, F801. Scale 1 : 1

The artifact type analysis given in the following table summarises the typological composition of the assemblage.

	Number	*Weight in grams*
Cores	25	360
Core fragments	19	247
Unretouched flakes and fragments	461	1,291
Utilized flakes	30	180
Miscellaneous retouched	53	346
Arrowheads	3	7
Scrapers	22	185
Pointed tools	13	37
Knives	3	20
Serrated flakes	4	6
Burin	1	6
Worn-edge flake	1	1
totals	635	2,686

RAW MATERIAL

An appreciation of the raw material exploited can be gained from a consideration of the cores and the unretouched flakes. Taking the cores and core fragments together, 27 retain some cortex and in 20 instances this can be described as thin, abraded, and worn smooth, probably by water-action. Of the non-cortical cores and fragments nine have densely discoloured thermal surfaces, and many of the cortical cores have these in addition to areas of cortex. These factors, along with the small core size, are indicative of the exploitation of flint pebbles from a gravel source, and these were probably obtained from a water-laid gravel deposit such as pertained in the vicinity of the site. The flint itself is of good quality, and is predominantly of a dark to medium grey colour. An analysis of the 461 unretouched flakes according to flint type gave the following result.

	Number	*Weight in grams*
Undiscoloured: dark/medium grey	306	863
Undiscoloured: light grey	35	67
Undiscoloured: brown-grey	19	42
Discoloured: white/blue-white/blue-grey	52	145
Discoloured: grey-cream	28	127
Burnt	21	47
totals	461	1,291

It is possible that the lighter grey and discoloured grey-cream flint represents exploitation of a different source of raw material, though it may more simply reflect variability of derivation for the flint within the Trent gravels. All the flints in the assemblage are in a sharp condition apart from a single water-rolled flake, and they could easily be distinguished from the litter of unmodified natural gravel-flint fragments on the site.

THE ARTIFACT TYPES

Cores and core fragments

The 25 intact cores were measured and weighed (Saville 1972/3, 10), and the results are tabulated below.

Maximum Dimension in cm	*Number*	*Maximum Weight in grams*	*Number*
2·0–2·99	7	0– 9·9	12
3·0–3·99	11	10–19·9	8
4·0–4·99	6	20–29·9	4
5·0–5·99	1	70–79·9	1

(Min. 2·2; max. 5·2; mean 3·438) (Min. 2; max. 73; mean 14·4).

This analysis clearly indicates the overall small size of the cores, which are almost all in a residual, flaked-out form, as is demonstrated by an analysis of the maximum length of surviving flake scars as struck from the remaining platforms.

Max. flake scar length in cm	*Number*
0·0–0·99	1
1·0–1·99	12
2·0–2·99	12

(Min. 0·6; max. 2·9; mean 1·858).

Typologically the cores were sorted according to the conventional classification based upon surviving platforms (Clark *et al.* 1960, 216).

Core class	*Number*	*Illustration*
A2	9	Nos. 2, 4, 8
B2	9	Nos. 1, 3
C	4	—
D	2	No. 5
E	1	No. 7

This classification tends to mask the rather irregular nature of many of the Willington cores, at least 10 of which had signs of flaking from platforms previous to those they retained. The irregularity may well be due to the need or desire to exploit the cores to their maximum potential.

A bipolar element is present on four of the cores, and in one such case (No. 1, a bipolar bladelet core with dense white/white-grey surface discolouration) there seems little doubt of a Mesolithic date, which may also be true of the blue-grey prismoidal A2 core, No. 2, and of two other cores present. Bipolarity is not in itself, however, an index of Mesolithic date within Midland lithic technology, and a post-Mesolithic date is certain for one of the illustrated examples which has this trait, No. 3. Some of the cores, e.g. No. 4, exhibit the tendency towards extreme thinness, particularly amongst bifacial cores, found in Midland assemblages (cf. Saville 1972/3, Fig. 1, 7), a tendency which is most distinctive in the discoidal form (*ibid.*, Fig. 1, 6), represented here by one core, No. 5, and one core fragment, No. 6. With this type of core, often fashioned on a flake, there is the danger of confusion with bifacially retouched implements, particularly because of the edge trimming involved in platform preparation. In the case of No. 5 the edge is sufficiently uneven for the designation as core to be made with confidence, though this is less easy with No. 6, the abraded edge of which could indicate use. However, since any such use could simply be a secondary function, classification as a core seems more appropriate than establishing a separate typological category (cf. *ibid.*, 14). A similar technological approach is indicated by No. 7, where the resource provided by a slim pebble is exploited by keeled flaking to produce a classic class E core. No. 8, the largest core present, is figured to show clearly the pebble nature of the raw material.

Unretouched flakes and fragments

Most of the flakes in this category are damaged to some extent, and the small size and mixed nature of the sample does not warrant any detailed analyses. The average flake weight of 2·8 grams suggests that the sample is biased towards larger flakes, especially when the core data are remembered. The fact that one flake in this category is 8·9 cm

long, to which may be compared a flake in the utilized category of 9·1 cm (No. 9), and another in the miscellaneous retouched category of 8·4 cm, argues for the occasional availability of extremely large pieces of raw material. Superficially the flint used for these large flakes resembles that generally used on site, though the possibility of importation must be left open.

Utilized flakes

Assessment of utilization is always unsatisfactorily subjective, but 30 flakes were separated out as evidencing edge damage and/or marginal trimming thought to be consistent with utilization (cf. Saville forthcoming 1). The varied morphology of the flakes involved is indicated by the illustrated examples. No. 9 is the largest flake from the site, and has trimming at the distal edge, probably for blunting, with sharp lateral edges. No. 10 is a broad flake with a thinned bulb, hinged-out at the distal end, and trimmed on the sharp right edge. No. 11 is a small cortical flake with a sharp right edge, and No. 12 is a more conventional blade type.

Miscellaneous retouched

The 53 artifacts in this category comprise a variety of broken and otherwise unclassified forms, probably including several scraper fragments. The only illustrated piece, No. 16, is retouched to give a thick point, which is worn smooth extensively at the tip, with less marked wear elsewhere on the periphery. The type of bifacial smoothing at the tip is identical to that found on 'fabricators', and it seems probable that this piece represents a similar implement of divergent form to the more usual prismatic type (cf. Saville 1972/3, 15).

Arrowheads

The three arrowheads are all typologically distinct. No. 14 is a leaf-shaped arrowhead, with near-total bifacial flaking; No. 15, which is on reddish-brown/grey coloured flint, is a *petit tranchet* derivative of class F (Clark 1934); and No. 13 is a barbed-and-tanged arrowhead. All the arrowheads are slightly damaged at their tips. These three implements are the most typologically diagnostic in the collection, so it is unfortunate that all are from superficial contexts producing chronologically mixed finds.

Scrapers

The 22 scrapers could be subdivided as follows:

Type	*Number*	*Illustration*
End	5	24, 25, 26
Extended end	9	17, 18, 19, 20, 21, 22, 23
Side	1	27
Disc	2	28
Others	2	30, 31
Broken (incl. two burnt)	3	29

All the scrapers have undiscoloured surfaces. In size and shape they can be categorised as short, broad, and thin, only two of the total being conventionally 'long', as a summary of the dimensions of the 15 complete and bulbar examples shows.

Length in cms	*Number*	*Thickness in mm*	*Number*	*B:L ratio*	*Number*
1–1·99	2	3– 6·9	4	1:5–2:5	1
2–2·99	6	7–10·9	9	2:5–3:5	1
3–3·99	4	11–14·9	2	3:5–4:5	4
4–4·99	3			4:5–5:5	4
				5:5–6:5	5

Length: min. 1·6; max. 4·9; mean 2·96 cm
Thickness: min. 4·5; max. 13; mean 7·73 mm.

Twelve of the total exhibit 'scale' flaking (Nos. 17, 18, 20–23, 26, 28–30), and five have markedly obtuse platforms (18, 20, 21, 23). Fifteen of the scrapers are illustrated, and the following call for individual comment. No. 23 has its scraping edge formed inversely on an obtusely angled flake, and while the distal and right side edges are scraper-like, the edge on the left side is very shallow and sharp, and not consistent with scraping. No. 24, one of the two 'long' scrapers present, is of a type common in Neolithic contexts. It lacks 'scale' flaking, has a faceted platform, and the narrow proximal end, notched on the left side, has edge wear which could be consistent with hafting. The contrast No. 24 presents with the other scrapers may signify a chronological difference. No. 25 has a narrow scraping edge, which is not wholly retouched, though it is worn completely smooth on the ventral surface. No. 27 is classed as a side scraper because of its scraper-like retouch which is not shallow-angled, though morphologically it resembles knife types. No. 29 is the broken left half of an exceptionally finely 'scale'-flaked scraper. No. 30 has inverse retouch thinning the bulbar area, and the distal scraping edge, which has dorsal retouch on the right, and inverse retouch on the left, exhibits edge smoothing on the ventral and dorsal surfaces respectively. It also has an area of shallow-angled 'scale' retouch on the lower left side dorsally which is not of scraper type. No. 31 is possibly broken, so is not classed as a side scraper, but it has certainly been used in its present form. The ventral surface of the scraping edge down the left side has been worn smooth, and the smoothing apparent on the 'break' edges on the right may result from handling. Abrasion and smoothing at both distal and proximal poles is bifacial, and so marked as to compare with that found on 'fabricators' (cf. No. 13).

Pointed tools

The 13 pointed implements form a mixed group of tools which may have had a variety of functions. The most elaborately retouched, No. 32, is in fact blunt at the distal tip where the original hinged-out terminal has not been modified. This suggests that the lateral edges constitute the functional element, and the invasive blunting on the basal left side suggests a shouldered form. More perfunctory trimming is present on Nos. 33, 34 and 35, on which the point itself seems functional. Only one example has alternating bifacial retouch to form the point, No. 36, and in this case the basal retouch removing the bulb, and the overall thinness and near-symmetry, raise the possibility of it being an atypical arrowhead form. Two examples have blunting retouch, on one (No. 37), or both (No. 38) edges, and these may be Mesolithic examples, as might No. 33 which like No. 38 is densely discoloured.

Knives

There are no true plano-convex knives in the assemblage, though No. 39 can be regarded as a unilateral variant, having a semi-circular cross-section and 'scale' flaking down the non-cortical edge. This tool appears to be complete in its present form, the transverse terminal resulting from a hinge fracture not breakage. No. 40 is the distal end of a cortical blade, again semi-circular in cross-section, retouched across the distal end and down the right side. The retouch is minimal, and functionally this piece could be a scaper. No. 41 is another hinged flake, this time with an S-twist to the right edge which has inverse 'scale' retouch.

Serrated flakes

These implements are all on blades, though only No. 42 is complete, with Nos. 43–45 represented by relatively small segments of the original tools. The serrated flakes are distinguished from the utilised blades by the regularity and invasiveness of their retouch, which forms a 'saw-tooth' edge of close-set indentations.

Burin

The burin, No. 46, is an exceptionally fine and unusual piece. The tool is double-ended, with the burin edge in both cases formed on a transverse edge. The upper facet is formed on what is probably a break, the plain break edge now having small flake scars on the right adjacent to the facet, probably resulting from use rather than preparation. The burin edge itself is worn completely smooth, as is the distal edge of the flake along its ventral surface. This type of wear is known to occur on burins (Semenov 1964, 96–100), though it is difficult to see how the upper edge could have continued in its present worn condition to have been effective in working a 'hard' medium like bone. The lower edge is formed by a negative flake scar struck from the bulbar surface of the flake, thus providing a platform for striking the burin spall, though the facet in this case is uneven, probably as a result of the detachment of small flakes during use. The upper burin edge is 3 mm wide, the lower 6 mm.

Worn-edge flake

No. 47 is a medial flake or blade segment which has been worn smooth on the dorsal and ventral faces of the snapped distal edge. The occurrence of this type of tool, which has a long history of recognition (Evans 1897, 290), has recently been discussed with reference to Mesolithic contexts (Saville 1977), and its presence in post-Mesolithic industries, though not yet published in any detail, cannot be doubted (cf. Smith 1965, 93 and 99). The present implement, on fresh medium grey coloured flint, is almost certainly of post-Mesolithic date, and it is unfortunate that its damaged condition leaves its original morphology in doubt. However, when examined under the binocular microscope (at 20 x), the worn edges can be seen to include deeper striations, all at right angles to the edge. These would be consistent with a forward (and backward?) use mode as in scraping (Semenov 1964, 85–93), and also with use on the same medium, i.e. animal skins, normally associated with scrapers. This raises the semantic difficulties involved in the application of typological terminology which has functional overtones, as in the case of 'scraper'. The wear on No. 47 is certainly suggestive of it having functioned as a scraper, though as an unretouched form which in no other respect resembles a 'scraper' it could not be typologically classified as one. It is clear that pieces of flint of all shapes and sizes, with or without formal retouch, must have functioned as scrapers, and the writer has elsewhere (Saville forthcoming 1) drawn attention to what might be termed perfunctory or minimal retouch scraper types (cf. No. 25). Conversely, tools classifiable typologically as scrapers need not have functioned as such, or need not retain any indication of how they were used. Therefore, until the ambiguities of functional and typological terminology can be resolved, and their implications integrated, it seems valid, for tools such as No. 47, to retain the generalised classification worn-edge implement, which will include tools used as scrapers, but which is non-functionally specific and can include tools which have acquired their edge wear in other ways.

DISCUSSION

The first point to note about this assemblage is the peculiarity of its internal composition. It has already been remarked when discussing the waste flakes that small flakes are under-represented, which could be due to recovery conditions during excavation, and this could also explain in part the high representation of retouched forms, as evidenced by the following breakdown of the assemblage into its main components.

	No.	%	*Weight in grams*	%
Cores and core fragments	44	6·9	607	22·6
Unretouched flakes	461	72·6	1,291	48·1
Retouched/utilized	130	20·5	788	29·3
	635		2,686	

The implements here constitute 20 per cent of the artifact total by number, and even if the utilized forms are abstracted the percentage is still high at 15 per cent. The writer has commented elsewhere in some detail (Saville forthcoming 2) on this sort of imbalance, and the suggestion has been made that it might be a concomitant of the lithic technology involved in the exploitation of a pebble flint resource. In the present instance the imbalance may be exaggerated by an excavation bias towards the recovery of larger flakes and implements, but this seems unlikely to explain another unusual factor in the component breakdown of the assemblage, which is the low representation of cores when judged by weight. Valid parallels are difficult to cite, but even the admittedly small assemblage of 112 flints from a gravel site on the R. Wreake in Leicestershire (Saville 1975/6, 31), which was based upon the exploitation of an identical raw material resource, had a core component of 11·6 per cent by number and 52 per cent by weight. It does not seem possible to argue that the excavations at Willington only encountered areas peripheral to those in which knapping may have been concentrated, since it can be expected that the post-Bronze Age activity in the area would have obliterated the effect of concentrations.

The morphology of the cores is also of interest. In a previous discussion (Saville 1972/3, 17–18), the cultural and functional status of cores similar to those at Willington was examined. With the benefit of subsequent study it has emerged that cores of small size and terminal condition are in fact the norm on Midland sites, and should not be regarded as exceptional. Moreover, although the reasons for flaking-out cores to the extent which is commonly found, as at Willington, have not been established in the sense of achieving a functional explanation for the products, it can be said that there is absolutely no reason to equate small size of core with a Mesolithic date or tradition, since the technology is linked to the raw material and continues through the Neolithic and Bronze Age of Central England.

Finally the typology of the Willington flints and their chronological and cultural implications must be considered. It has already been postulated that one or more of the cores, and possibly other pieces, e.g. amongst the pointed tools, are Mesolithic. The presence of surface discolouration of the flints in these cases is regarded as chronologically significant, so that the small element of discoloured flint within the assemblage as a whole is taken to denote a minimal Mesolithic component. The bulk of the collection is, therefore, regarded as post-Mesolithic, and the three arrowheads, of leaf-shaped, *petit tranchet* derivative, and barbed-and-tanged type, which epitomise earlier Neolithic, later Neolithic, and Bronze Age traditions respectively, imply the possibility of a very broad Neolithic/Bronze Age date range. It must be stressed that the assemblage cannot in any stratigraphic sense be regarded as homogeneous, and could reflect the chance accumulated debris of hundreds if not thousands of years of transient prehistoric activity. Indeed, the absence of any good stratigraphic context for the diagnostic forms does not allow for strict correlation between the lithic remains and the structural, funerary, or ceramic evidence from the site, though there is naturally a strong probability that such a correlation does exist.

In this connection the scrapers and knives are of particular interest, since their morphology and the type of retouch employed are known Early Bronze Age traits (Clark 1933, 271; Smith 1965, 107–108), and in some instances a specifically Beaker context can be demonstrated (Wainwright 1972, 61). It is apposite, therefore, to consider what elements amongst the Willington post-Mesolithic assemblage might conflict with a Beaker association, on the assumption that isolated tool-types such as the leaf-shaped arrowhead could be residual casual losses unassociated with the main on-site occupation. The only relevant category in fact is the serrated flake, which is normally considered to be a specifically earlier Neolithic type, at least in the form represented at Willington (Smith 1965, 91 and 108). However, serrated flakes were apparently present in significant numbers amongst the Beaker assemblage at Belle Tout, Sussex (Bradley 1970, 349), and their chronological range cannot be regarded as

finalised. The single burin might be thought anachronistic, but the presumption that such forms are Mesolithic (e.g. Saville 1972/3, 18) is probably spurious, particularly in view of the increasing evidence for the rarity of this tool form within the later Mesolithic, and on the whole it seems likely that burins, albeit in small numbers, are perfectly acceptable within post-Mesolithic industries (cf. Clark *et al.* 1960, 223; Smith 1965, 242).

The conclusion, therefore, is that the internal evidence of the flint assemblage is compatible with an association between the bulk of it and the known Late Neolithic/Beaker occupation of the Willington site. The small overall size of the flint assemblage may suggest that this occupation was not on a large scale, or not of long duration.

Querns (Figs. 56, 57)

*I am grateful to Mr. J. Crossling and Dr. W. A. Cummins for advice on the identification of the stone.

Querns 1, 2, 3 and 4 are of a type frequently found in Iron Age and early Romano-British contexts in the East Midlands, notably at Hunsbury, Northants, a possible distribution centre (Fell 1937) and at Breedon on the Hill, Leicestershire (Kenyon 1950). Willington 1 and 2 were associated with Iron Age assemblage II pottery, and 3 and 4 were found in loose association with an Iron Age sword. 5 and 6 are Romano-British examples, both from the area of Farmstead I, but neither has any useful associations for more precise dating.

1 and 2. Six fragments of the upper and lower stones of a bee-hive shaped quern of Hunsbury type was found in a pit dug through Hut Circle 7. It was made of medium grained millstone grit, the outer surfaces dressed by pecking, the grinding surfaces worn. The lower stone, 21 cm high and 27 cm diameter had a lip on the edge of its grinding surface and a central hole. The upper stone had a funnel 15 cm diameter with a central hole tapering from 3·5 to 2 cm. No hole for the handle was present on the surviving fragments. The grinding surface was worn, and had partly flaked off, but four grooves concentric with the central hole may be observed cf. Ipswich Museum 1920.52.11 (Philips 1950, 78).

3 and 4. Complete upper and lower stones of Hunsbury type quern of medium grained millstone grit, found by the dragline operator with an Iron Age sword. Upper stone, 26 cm high and 32 cm diameter was dressed on its external surfaces by pecking, with a funnel 13 cm diameter and 12 cm deep and central hole 2 cm diameter. One horizontal hole for handle, 4·5 cm diameter penetrated the funnel. The grinding surface was very worn with large quartz grits protruding. Lower stone, 21 cm high and 37·5 cm diameter had a small central hole 3·4 cm diameter and 4 cm deep. Flat bottom and sloping sides were dressed by pecking. The grinding surface was dished but rising towards the centre and with a lip at the edge. Both grinding surfaces were stained by carbonised grain which was still adhering when the quern was found, and is reported separately (p. 217).

5. From the topsoil of Farmstead I came a fragment of a flat rotary quern c. 34 cm in diameter, with a central hole and a vertical groove in the edge. Its thickness varied from 2·5 cm at the centre to 3·5 cm at the edge, and the grinding surface was worn and dished. The outer surface had been dressed with pecked lines.

6. In the flood silts south-west of Farmstead I were found two joining fragments of a flat rotary quern of millstone grit with large quartz pebbles, 6 cm thick at the outer edge. The grinding surface was worn and dished. The upper surface, dressed by pecking had a groove round the central hole. The diameters were uncertain.

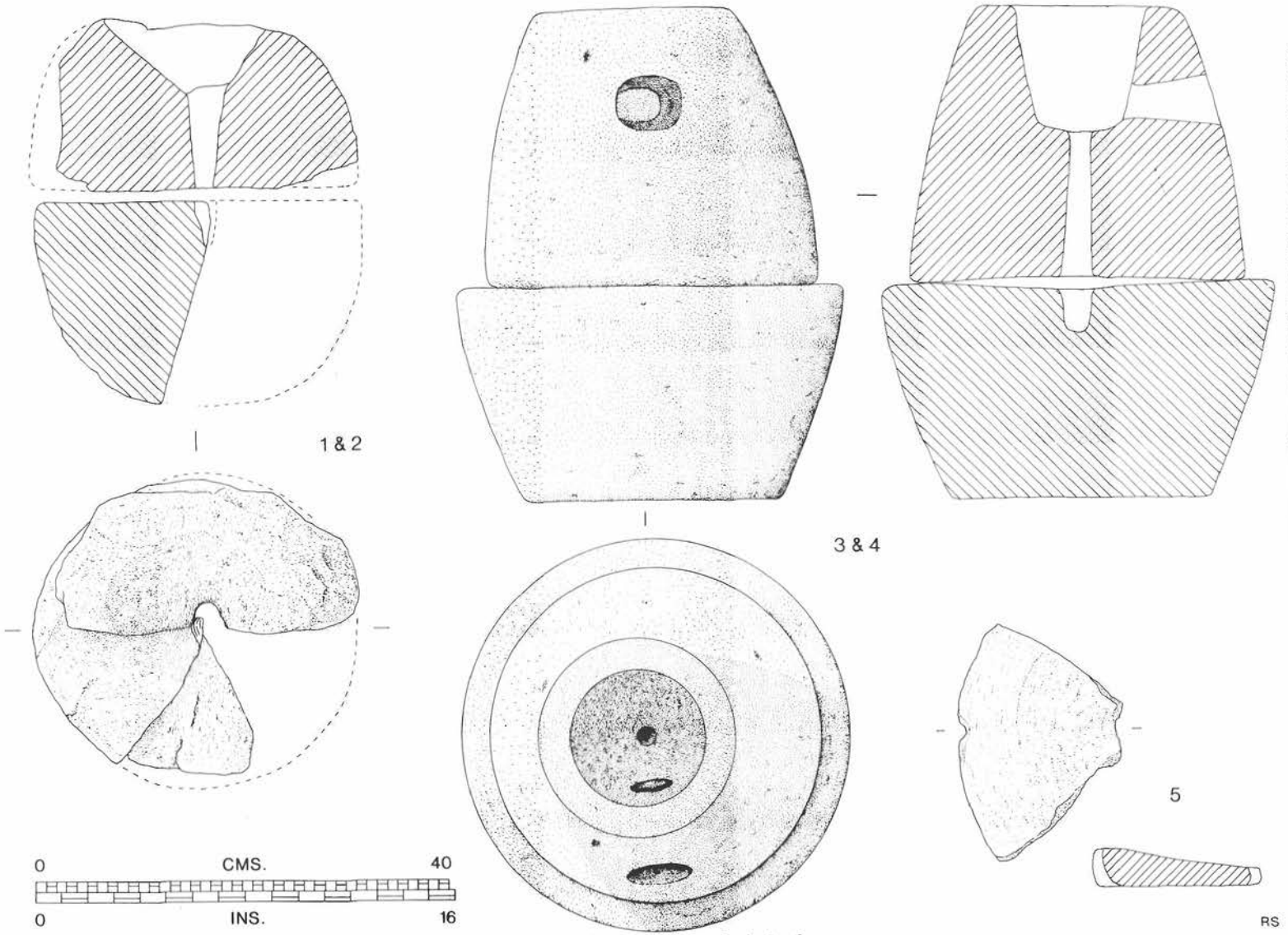


Fig. 56 Willington: Querns. Scale 1 : 6

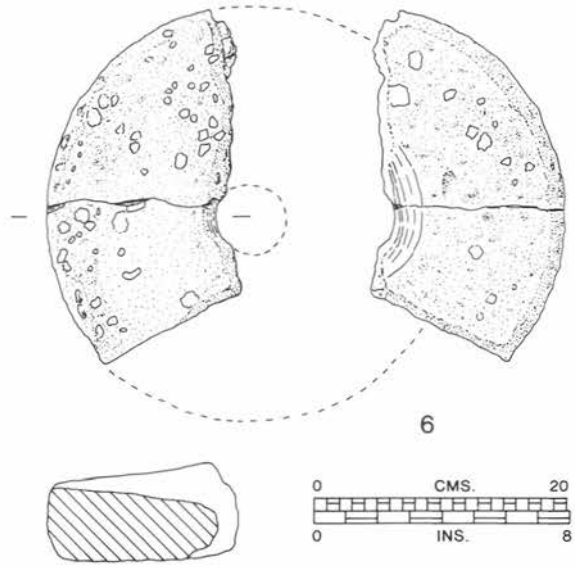


Fig. 57 Willington: Quern. Scale 1 : 6

Neolithic and Bronze Age Pottery by T. G. Manby

POTTERY FROM THE OCCUPATION AREAS (Figs. 58–64)

The sherd material is extensive but in most cases the pieces are small and no complete profiles can be constructed. A wide range of ceramic styles are present that may be considered individually.

Grimston Style

This term is applied to a small number of plain sherds, 1–21 and four not illustrated, from different locations, including F16, F21, F387, F400 and PH22.

The characteristics of these sherds are a fine quality dense fabric, usually laminated in structure, and tempered with crushed white quartz grits. The small size of the individual pieces makes attribution to a particular style of Earlier Neolithic pottery difficult. Like other sites in the Trent basin the assemblages present are very limited. The rim, 14, is a classic Grimston style bowl, probably a carinated form. The Willington finds can be compared in fabric, gritting agent and profiles with finds from Swarkeston (Greenfield 1960, 33), Attenborough (Alvey 1966), and Aston-on-Trent. (The last site produced a small flint industry and carbonised grain that provided a radio-carbon date of 2750±150 b.c. (BM271) (Reaney 1968, 77 and 81, Fig. 6). The Peak District also provides Grimston style pottery at the Green Low Chambered Tomb (Manby 1965, 11, Fig. 6, 1–4) and Astonhill (May 1971, 32, Fig. 2,1). While the Trent Basin is in the distributional area of Grimston style ceramics other contemporary styles did extend into the region. Pottery in the Mildenhall tradition has recently been excavated by J. Collis at Wigber Lowe on the edge of the Peak District Limestone area. Farther east the bowl from Great Ponton, in south-western Lincolnshire is also attributable to the Mildenhall style, which does include plain vessels as well as highly decorated forms.

Grooved Ware

The majority of sherds are attributable to Grooved Ware and two styles or sub-styles can be distinguished, although the small size of many pieces makes finer classification difficult.

Durrington Walls style. Represented by two significant find groups and stray sherds from the settlement site.

Pit group F16. This includes such classical forms as the barrel-shaped vessel with cordon and pendant strips (23, 24, 25, 28). The most elaborate of these has the addition of an applied arc above the cordon and intensive finger-nail decoration (28). This vessel has good parallels for its shape, rim-form, applied decoration and finger-nail work at the Durrington Walls type site (Wainwright and Longworth 1971, Fig. 46 P194; 41 P107–124). Parallels to the various elements also occur at the nearby Woodhenge (Cunnington 1933, Pl. 25,1; 26,3). The vessel form and applied work can also be compared with the Yorkshire site of North Carnaby Temple but internal mouldings and the finger-nail work do not occur there (Manby 1974, 79–81, Fig. 17,4; 19,23 and 29; 27,3). The most novel vessel in this pit assemblage is represented by the fragments of a shallow bowl with incised internal decoration (22). This can be compared with the lower part of a bowl with alternate hatched squares from Puddlehill, Bedfordshire (Matthews 1976, 4–5, Figs. 2,1). This comes from a pit and is associated with Durrington Walls style Grooved Ware, including sherds showing applied pendant strip decoration. A restorable bowl with incised internal decoration was recovered during the British Museum's Grimes Grave excavation (unpublished, exhibited in the British Museum's Grimes Grave Exhibition). Incised internal decoration of a complex character is also represented at Durrington Walls on some nine fragmentary vessels (Wainwright and Longworth 1971, 60 and 139, Fig. 58; pp. 453–60).

Pit Group F851. This is the second major group of Durrington Walls style sherds. Applied decoration is again represented by a small sherd with a portion of a pendant strip (39). An applied arc and pellets occur as well as oval lugs (30,38). The pellets and oval lugs have their best parallels at the East Yorkshire sites of Carnaby Top (Manby 1974, 33–35, Fig. 11, 1 and 7) and North Carnaby Temple (Manby 1974, 46 and 48, Fig. 19, 24 and 36; 20, 40 and 48) These sites also have a substantial proportion of undecorated vessels (Manby 1974, 81) comparable with 29, 30, 31 and 32. The rim sherd with three horizontal cord lines (33) was favoured at the East Yorkshire sites (Manby 1974, 81, Fig. 32) but the extreme form of inturned rim does not occur. In contrast to the pit group F16 the present assemblage has fewer comparisons with the highly decorated ceramics favoured at Durrington Walls.

PH602. This incised decorated vessel (46) is a most interesting form and it is unfortunate that so little of the body remains. The deep internally moulded rim-form occurs at Durrington Walls (Wainwright and Longworth 1971, 56 and 321, Fig. 20 Form 24; 52. P321). The short strokes used to infill the triangular spaces inside the rim and the rectangular ones outside is a technique seen again on a grooved ware rim from Thurmaston, Leicestershire (Rutland 1975). This vessel is probably best attributed to the Clacton style.

The Clacton style of Grooved Ware is represented by small sherds from F387, 47–57; 75; F368, 59–62; F374, 63, the latter two finds show the combination of horizontal grooves with the intervening space filled with finger-nail impressions.

The Willington pottery is a significant addition to Grooved Ware finds in the East Midlands as it provides the widest range of ceramic traits. Previous finds at Risby Warren, Salmonby and Barholm in Lincolnshire with the Derbyshire finds at Green Low, Elton Moor and Whalley 2 (Manby 1974, 3–4) and the recent find at Thurmaston in Leicestershire provide a widespread distribution over the region. Amongst these finds the Durrington Walls style is the most common. The dating of the Grooved Ware styles is still not fully known, an important series of dates are available from the henge monument sites of Durrington Walls, Marden and Mount Pleasant. These dates are associated with Durrington Walls style Grooved Ware in constructional horizons around 2000 b.c. (Burleigh, Longworth and Wainwright 1973, 395). However it is important to appreciate that the dates may be more representative of the henge construction rather than the date range of the ceramic style.

Durrington Walls style sites:	
Durrington Walls Primary Ditch silt	1977±90 b.c. (BM–398)
(Wainwright and Longworth 1971, 21–22 and 411)	2015±90 b.c. (BM–399)
	2055±90 b.c. (BM–400)
Durrington Walls Married Quarters	1647±76 b.c. (BM–702)
(Wainwright 1970, 81–2)	1523±72 b.c. (BM–703)
Marden Primary Ditch silt	1988±40 b.c. (BM–557)
(Wainwright Evans and Longworth 1971, 227)	
Mount Pleasant Primary Ditch silt	2038±84 b.c. (BM–667)
(Burleigh, Longworth and Wainwright 1972, 399)	1961±89 b.c. (BM–663)
	1991±72 b.c. (BM–666)
Stacey Bushes, Buckinghamshire	1830±150 b.c. (HAR–858)
(Green 1976, 13–9)	
Grimes Graves, Norfolk	1831±67 b.c. (BM–778)
(Radiocarbon, 18, 1976, 32–3)	
Fengate, Peterborough	2030±100 b.c. (HAR–397)
(Otlet 1977, 405)	2020±70 b.c. (HAR–399)
	1930±80 b.c. (HAR–404)
	2010±90 b.c. (HAR–401)
Clacton style sites:	
Hunstanton, Norfolk	1736±63 b.c. (BM–704)
(Radiocarbon, 18, 1976, 32–3)	
Barholm, Lincolnshire	2355±130 b.c. (U.B. 457)
(W. G. Simpson, pers. comm.)	

The first series of dates indicates the Durrington Walls style of Grooved Ware was in use by 2000 b.c. and in its origins predates the advent of the Beakers (Burleigh, Longworth and Wainwright 1972 400–2). The implication of this early dating is that Beaker fashions contributed nothing to the decorative repertoire of this Grooved Ware style except, perhaps, the zones of horizontal cord lines. Until more early dates are available from the Clacton style it may be still advocated that some elements, especially finger rustication (Clarke, 1970 I, 269), owe their origin to Beaker techniques.

Beaker (Figs. 65, 66)

The fragmentary nature of Beakers makes the determination of their classes and numbers very difficult. The earliest types are pieces of cord decorated AOC vessels 88, 101 and 102. Many other sherds display portions of decorative patterns only; where these can be determined they belong to Clarke's Basic European Motif Group I (1970, I, 225 and 234). In this class are 87, 105, 103, 104, 84 and 86, all very small sherds, that could have come from vessels of almost any of Clarke's Beaker Groups. However the quality of fabric shown by 84 would be appropriate for a European Bell Beaker. Finger tip rustication on 100 and 82 may place these in the Southern Beaker Group. The large assemblage from the mound of Barrow 1 can certainly be assigned to Southern Beakers, cross-hatched zones and panels in combination with finger-pinched rustication were favoured by the makers of S3 and S4 Southern Beakers (Clarke 1970, I, 269). Comparable material with incised and rusticated decoration came from the Beaker occupation layer at Swarkeston Barrow 4 (Greenfield 1960, 33–7 Figs. 9–10). Radiocarbon dates for S3–S4 and comparable rusticated Beakers are:

Sawdon Moor, Yorkshire S3 Beaker	1530±90 b.c. (NPL–196)
(*Radiocarbon,* forthcoming)	
Wattisfield, Suffolk S4 Rusticated and handled Beakers (*British Museum Quarterly,* 23, 1960–1, 120)	1570±150 b.c. (BM–77)
Durrington Walls. Rusticated Beaker	1610±120 b.c. (BM–285)
(Wainwright and Longworth 1971, 20)	
Windmill Hill. Outer Ditch, S3 handled and rusticated Beaker (Smith, I. F. 1965, 11)	1540±150 b.c. (BM–75)

Bronze Age (Fig. 63)

Two groups of Bronze Age pottery appear among the sherd material. 111, 112 and other un-numbered sherds appear to be from a collared urn; certainly pieces of a flat base occur.

The second group of sherds are notable for a coarse gritted fabric that resembles the tripartite urn from PH 142 (see page 161). They are from:

F918, 11 sherds, cord decorated (110).
PH1A, Rim with comb impressions (very different from Beaker comb) (79).
PH142, cord decorated (109).

In fabric and the use of cord decoration this second group of sherds can be attributed to the same cultural complex and date as the Urn from PH142.

POTTERY FROM THE MOUND OF BARROW 1 (Figs. 65 and 66)

A large quantity of small sherds and crumbs of Southern Beakers. The small size of the pottery makes the reconstruction of vessel profiles impossible and no estimate can be made of the number of vessels represented. The fabric is generally a brittle hard reddish to reddish buff. Comb impressed decoration is not represented, incision and finger-tip rustication predominate. The decoration includes patterns distinguished by Clarke amongst his basic European Motif Group 1 (Clarke 1970). These are zonal motifs such as:

1. Horizontal lines 136, 137, 178.
2. Diagonal lines between horizontals 126,127, 138.
3. Cross hatching between horizontals 126, 127, 154, 134.

While these motifs are common to most Beaker Groups in the British Isles, other sherds show diagnostic features of the Southern British Motif Group (Clarke 1970).

4. Hatched hexagonal panels 122, 123 and probably 129, 130, 132, 142, 143. Hatched lozenge panel 124.

Incised cross hatched zones occur in combination with finger-tip rustication: 134, 154.

Finger-tip rustication alone occurs on a number of sherds including a base 167 and a rim 177. Finger-nail rustication is also present on a single sherd 171.

Cordons are represented with cross hatched zones on sherds 144; and with finger-nail rustication 140,170; and finger-tip rustication 134.

A single sherd of Grooved Ware occurs amongst this assemblage, 169 distinguished by its dark grey gritty fabric and shallow exterior grooves.

POTTERY DESCRIPTIONS (Figs. 58–66)

1. Plain moulded rim, soapy fabric, orange to buff, dark grey core.
2. Rim sherd with rounded lip, hard compact dark grey fabric, stone grit, laminated structure. (F21)
3. Rim sherd with rounded lip, dark grey fabric, stone grit, laminated structure. A shallow horizontal groove or impression below the lip. (F21)
4. Sherd, heavy dense dark grey fabric, reddish exterior, sand grit. (F21)
5. Sherd, dense dark brown fabric, reddish interior, sand grit, laminated structure. (F21)
6. Sherd, heavy dense dark grey fabric, laminated structure. (F21)
7. Sherd, dark grey fabric, laminated structure. (F21)
8. Sherd, orange fabric, angular white quartz grit. (F21)
9. Sherd of a dense grey fabric with brown surface, quartzite sand grit, laminated structure. Indistinct triangular imprint on the interior. (Not illustrated) (F21)
10. Plain beaded rim, orange fabric. (PH400)
11. Body fragment, buff fabric with dark grey core, laminated structure, profuse crushed stone and sand tempering. Coarse cord line impressed decoration.
12. Weathered sherd, reddish exterior with dark grey interior. Cord line decoration.
13. Shoulder or ribbed sherd, orange buff surfaces with dark grey core, laminated structure.
14. Rim sherds, outcurving with beaded lip, 19·5 cms diameter. Grey laminated fabric with orange-buff exterior. Fine grit, some dissolved. (PH22)
15. A rim and a neck sherd (not illustrated). Rim externally beaded, both sherds in an orange-buff laminated fabric. (PH22)

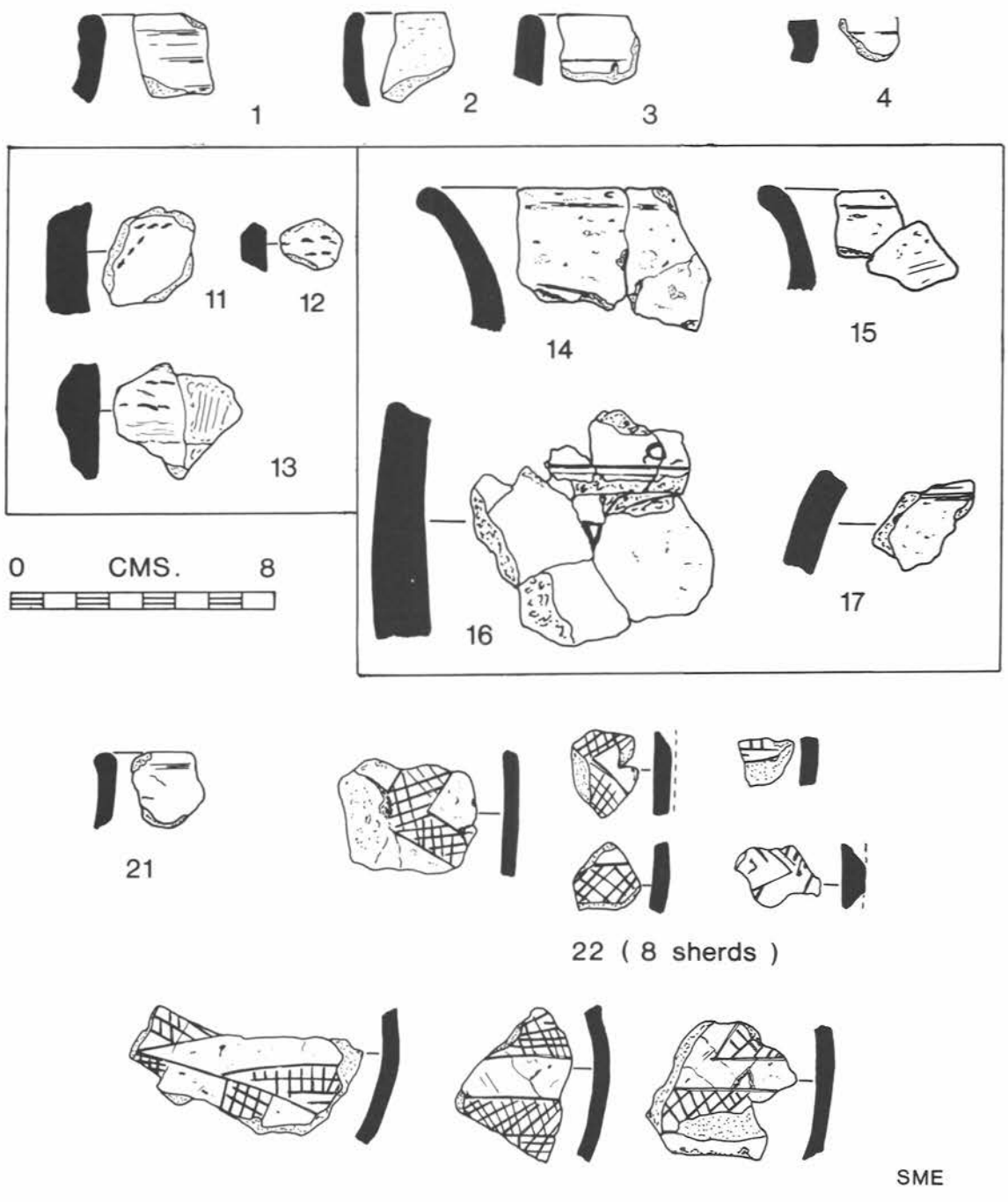


Fig. 58 Willington: Neolithic pottery. Scale 1 : 2

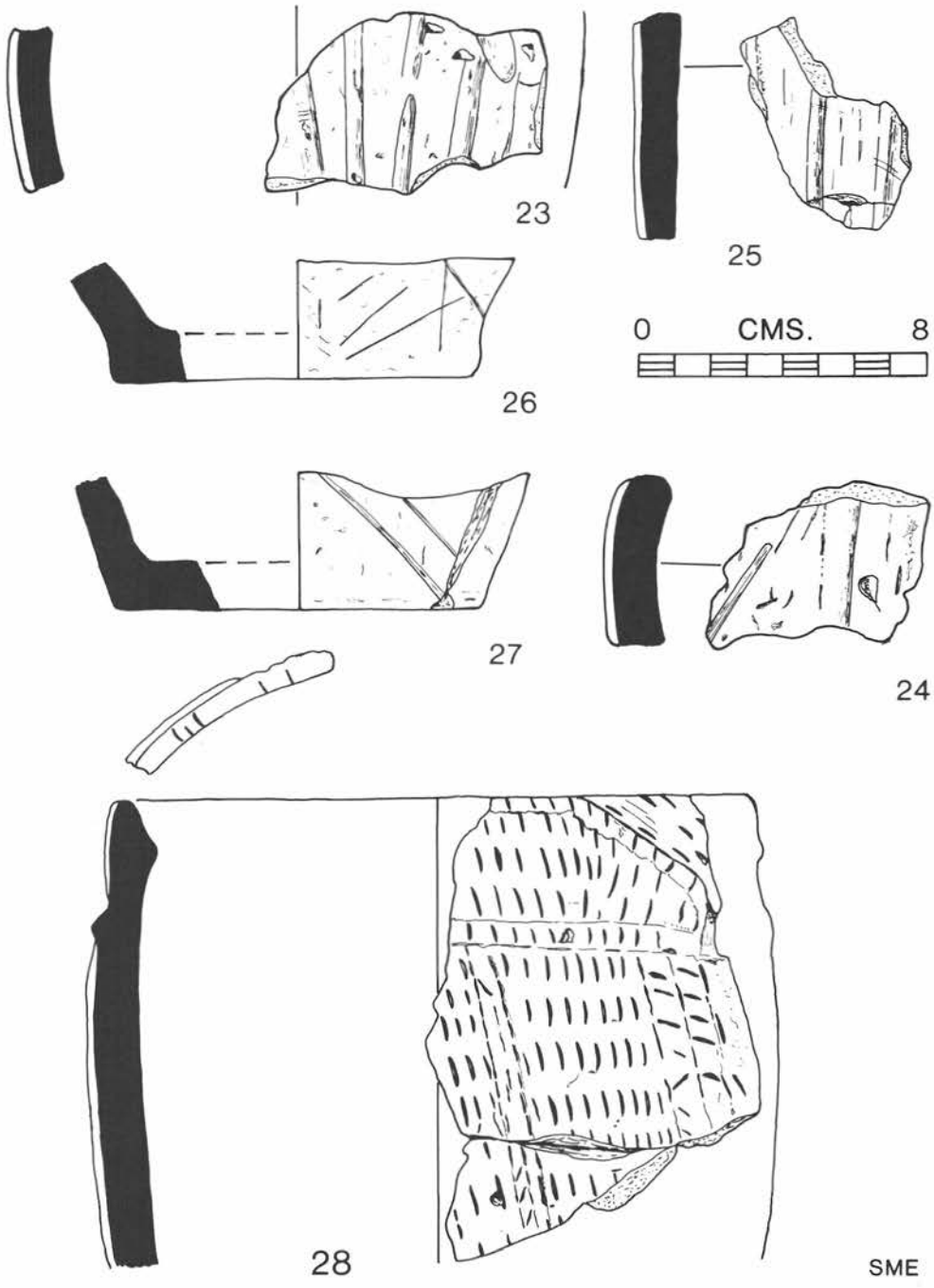


Fig. 59 Willington: Late Neolithic pottery. Scale 1 : 2

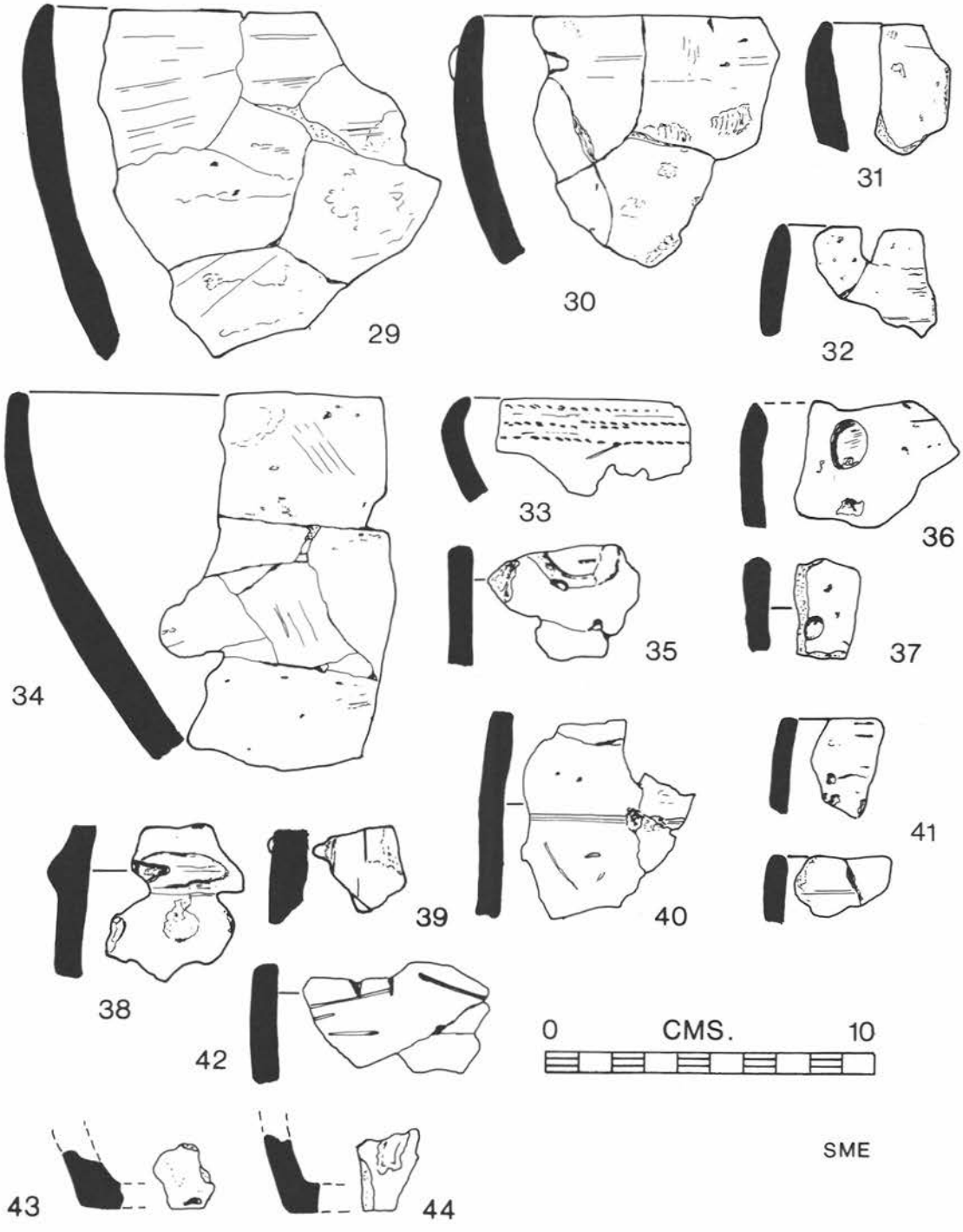


Fig. 60 Willington: Late Neolithic pottery. Scale 1 : 2

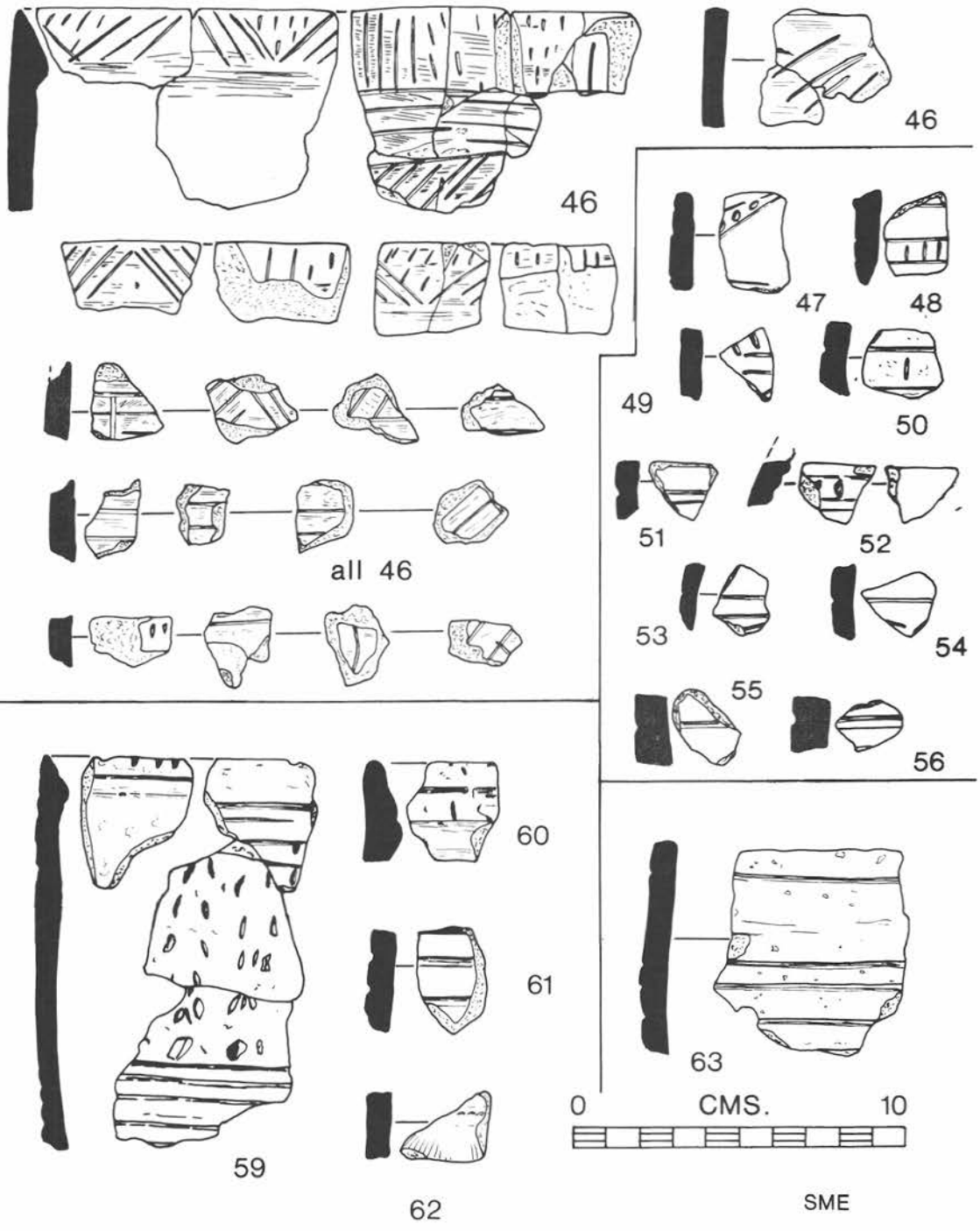


Fig. 61 Willington: Late Neolithic pottery. Scale 1 : 2

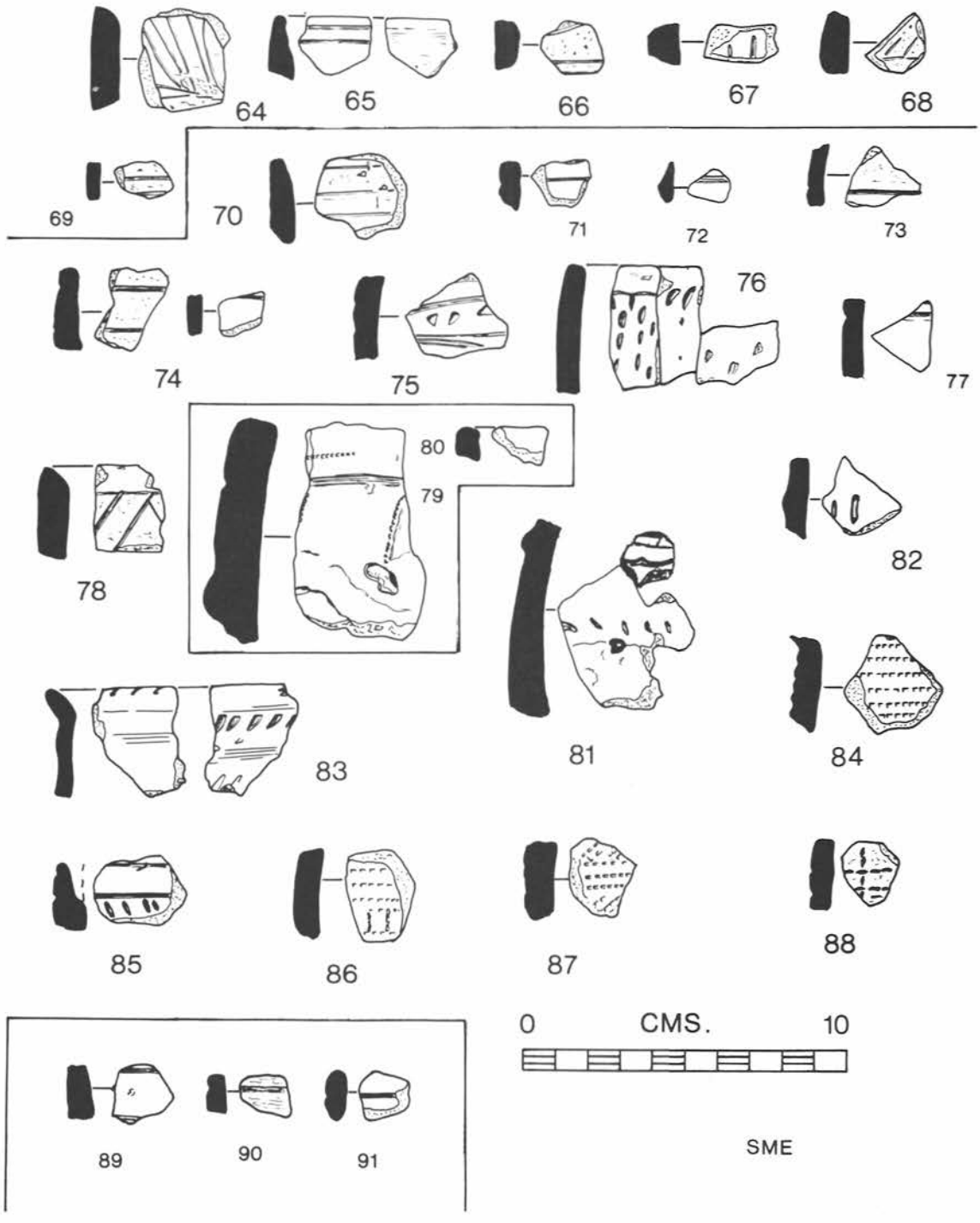


Fig. 62 Willington: Late Neolithic pottery. Scale 1 : 2

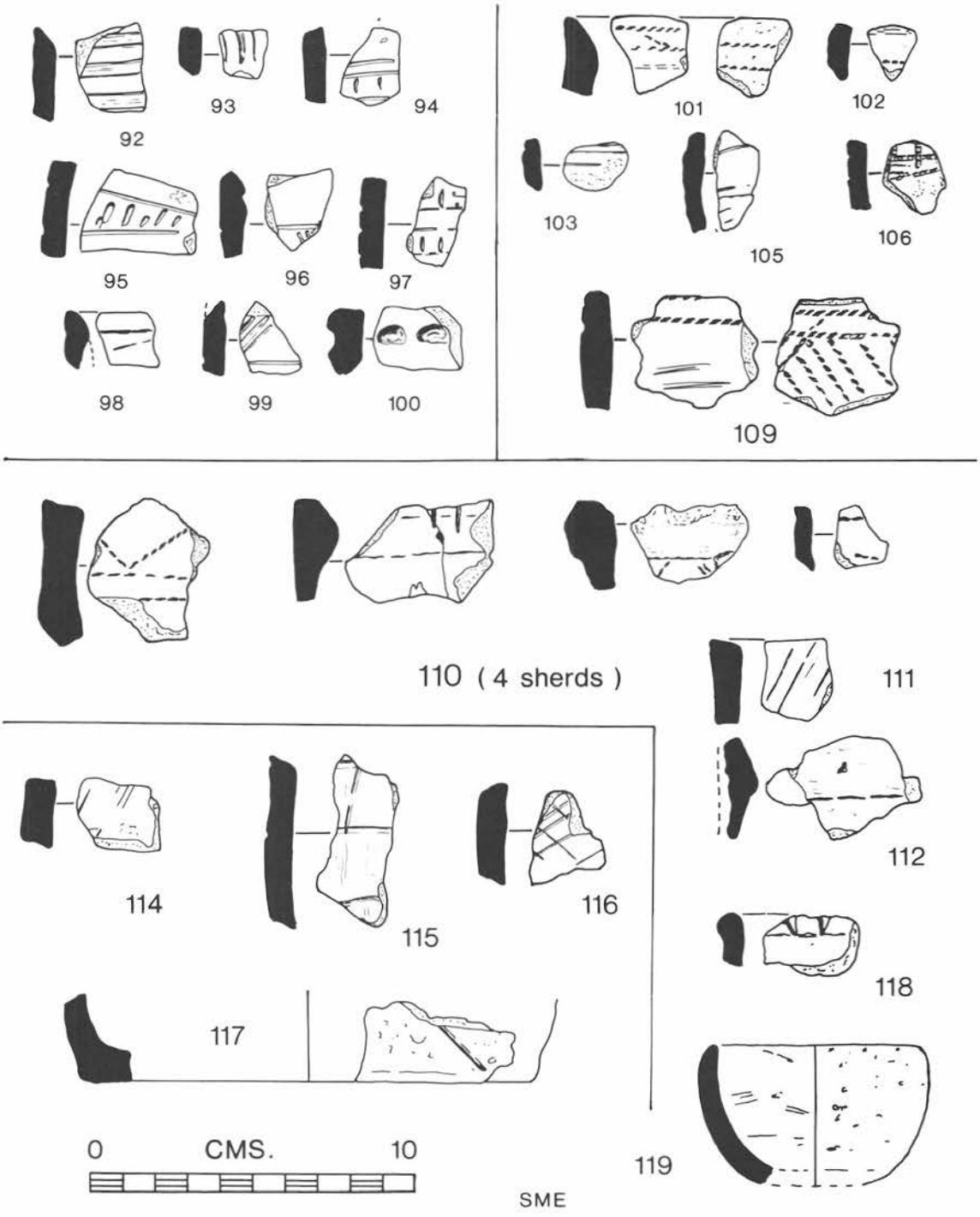


Fig. 63 Willington: Late Neolithic pottery and Bronze Age pottery. Scale 1 : 2

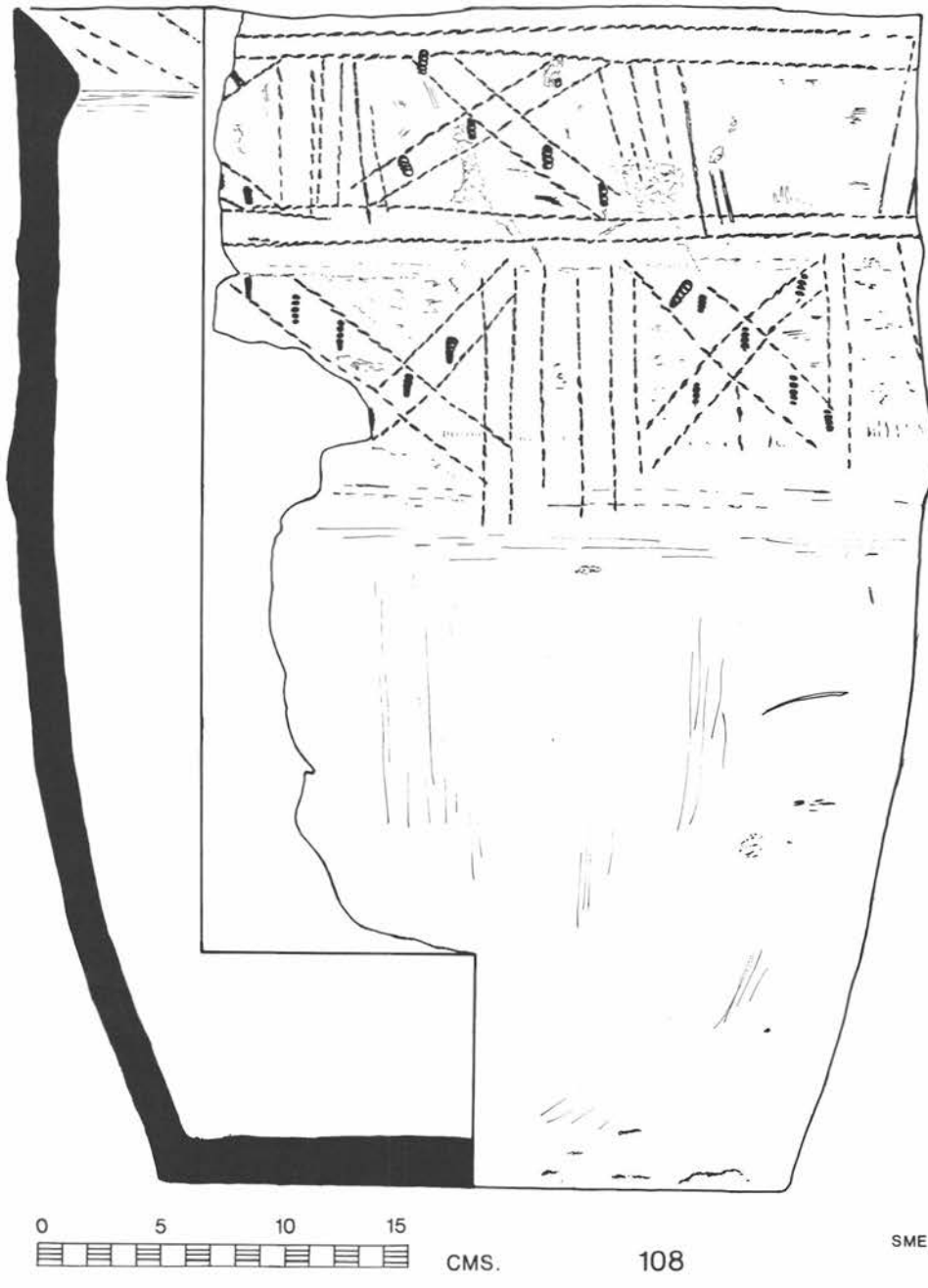


Fig. 64 Willington: Bronze Age pottery. Scale 1 : 2

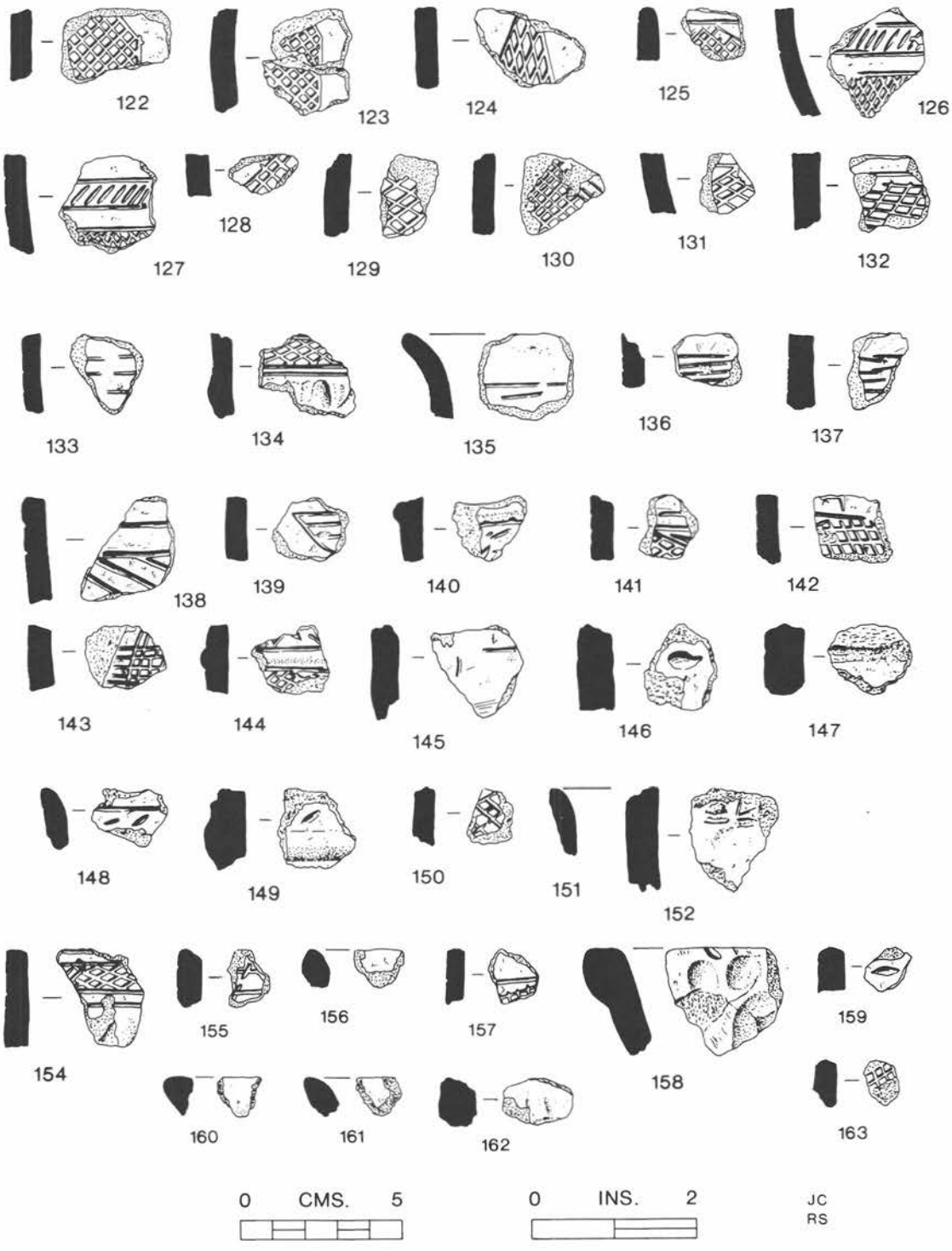


Fig. 65 Willington: Beaker pottery (Scale 1:2)

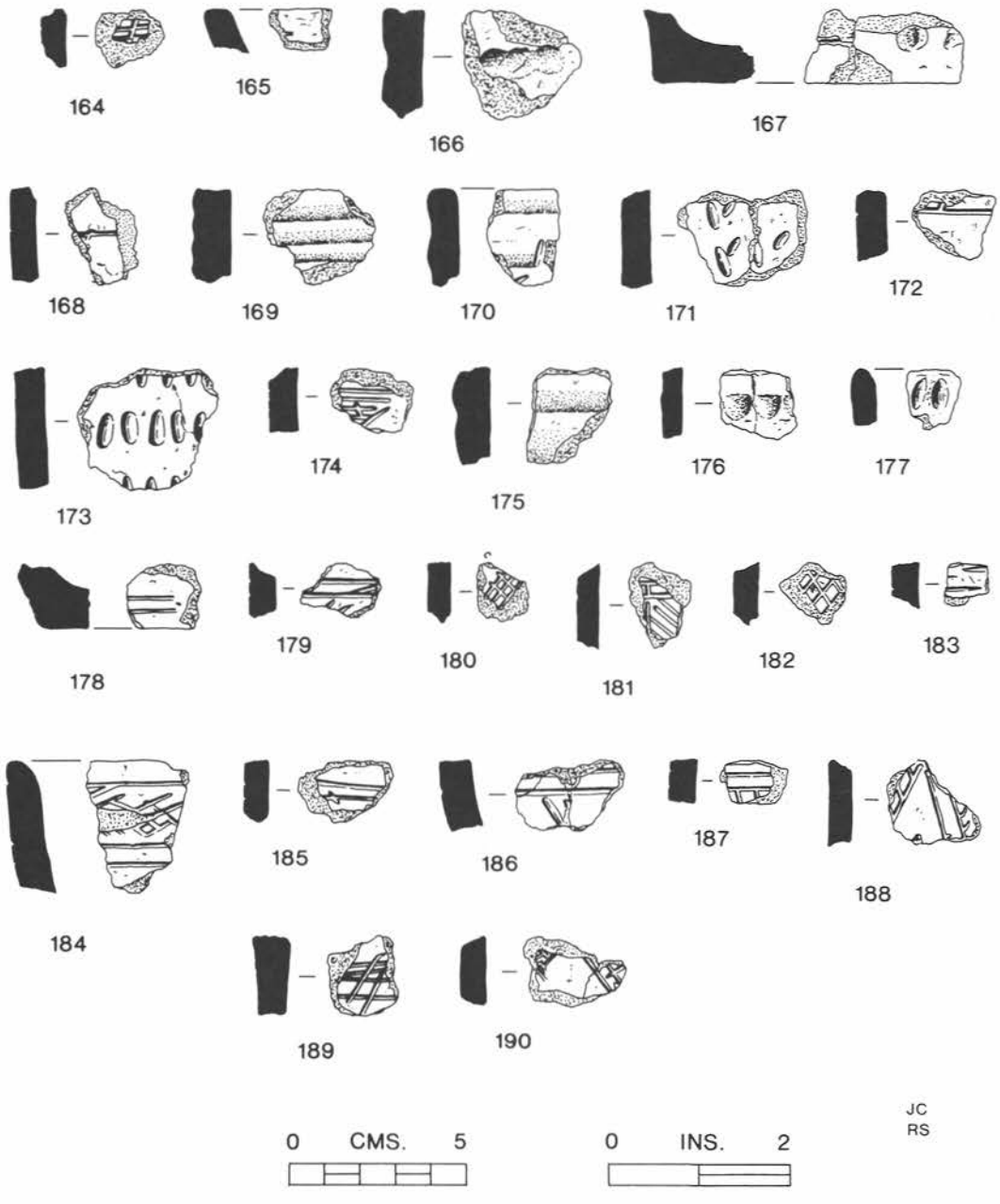


Fig. 66 Willington: Beaker pottery (Scale 1:2)

16. Body sherd, thick dark grey laminated fabric with buff surfaces, angular white quartz grit. A shallow horizontal line with an oval impression above on the exterior. (PH22)
17. Body sherd, dark grey laminated fabric with brown exterior surface, small quartz grit. (PH22)
18. Sherd, orange surfaces with dark grey core, angular white quartz grit up to 5 mm in length. (F8)
19. Two crumbs, brown surfaces, dark grey core. (F8)
20. Sherd, interior flaked away. Buff fabric, laminated structure. (Not illustrated) (PH4)

All the above plain sherds appear to be earlier Neolithic, the laminated fabric would indicate this. However, many are very hard, up to five on Mohn's scale of hardness. The small size, simple rim forms and scarcity of diagnostic features displayed by these sherds makes any dating or cultural attribution very difficult.

21. Rim sherd of Earlier Neolithic Plain Ware. Hard buff fabric with dark toned interior, profuse crushed white quartz grit. (Not illustrated). A plain upright rim, rounded at the lip. Buff fabric with dark grey interior, wall 7 mm thick. A carbon layer over the interior. (F16)

GROOVED WARE DURRINGTON WALLS STYLE

22. Sherds of a broad shallow bowl with interior decoration. Thin hard dark brown fabric. Decorated with sharp incised lines forming hatched strips and triangles alternating with plain zones. (F16)
23. & 24. Two body fragments of the same vessel, grey fabric with reddish buff exterior. Carbon layer on the interior. Applied vertical strips on the exterior. (F16)
25. Body fragments, dark grey fabric with buff exterior surface. A carbon deposit over the interior. Applied vertical strips on the exterior. (F16)
26. Base fragment, 10 cms diameter. Orange buff exterior and dark grey interior. Fine incised lines in a casual arrangement on the exterior. (F16)
27. Base fragment. 10·8 cms diameter. Decorated with shallow diagonal lines on the exterior. (F16)
28. Large sherd from the upper part of a barrel-shaped vessel, rim diameter 18·5 cms. Heavy coarse gritty dark brown to buff fabric. Internally moulded rim, notched across the lip. Neck cordon with applied, slightly diagonal pendant strips, a diagonal strip above. The rib and strips notched at intervals with the finger-nail, the spaces between the strips filled with rows of finger-tip impressions. (F16)
29. Joining rim sherds of a plain bowl, 26 cms diameter. Soft buff fabric, horizontal smoothing marks on the surfaces. (F851)
30. Joining rim sherds of a plain bowl, 14 cms diameter. Hard buff fabric, dark grey core and dark toned interior. A depression just below the lip may be the location of an applied lug, extent uncertain due to the broken edge of the sherd. (F851)
31. Rim sherd, the same fabric as 29, possibly the same vessel.
32. Rim sherd, brown fabric. (F851)
33. Rim sherd, sharply incurving. Smooth hard brown exterior, dark grey interior. Three lines of thick cord line impressions on the outside below the lip. (F851)
34. Joining rim and body fragments of a plain bowl, 20·5 cm diameter. Orange fabric with buff and grey tones on the surfaces, dark grey core. (F851)
35. Wall fragment, dark grey fabric with brown exterior. Scar of an applied arc. (F851)
36. Rim sherd with damaged lip, hard brown fabric. An oval dimple on the exterior is probably the scar left by an applied pellet. (F851)
37. Wall fragment, brown fabric, the interior coated with carbon. A circular depression on the exterior surface is probably the scar of an applied pellet. (F851)
38. Body fragment, brittle buff fabric with dark grey interior. An applied horizontal lug with partial horizontal perforation. (F851)
39. Wall fragment, brown fabric. An applied vertical strip with a groove down one side of it; in the adjoining 'panel' two fine incised lines cross each other. This is from the lower part of a barrel-shaped jar with vertical pendant strips and incised line filling in between. (F851)
40. Wall fragment, same vessel as 33, dark grey fabric with reddish buff exterior. Shallow horizontal line. (F851)
41. Two small rim fragments possibly of the same vessel. Buff fabric, black interior. (F851)
42. Wall fragment, buff fabric, dark grey interior coated with carbon. Shallow incised lines at random on the exterior. (F851)
43. Base angle, dark grey fabric with brown exterior, potsherd grit. A second unillustrated sherd of this vessel. (F851)
44. Base angle, dark grey fabric with brown exterior. (F851)
45. Wall sherd (another joins it), dark grey fabric, buff exterior slightly pitted. (F851)
46. Rim and body sherds of a vessel of Durrington Walls style Grooved Ware. Rim diameter about 21 cms. Deep internally moulded rim bevel, barrel-shaped body. Smooth brown fabric with dark grey tones on the surfaces; evidence of ring construction. Decorated with deeply incised strokes and lines; alternating zones of diagonal and horizontal lines on the body and sets of short lines and strokes inside and outside the rim. (PH602)
47. Sherd, thin reddish fabric with grey interior. Decorated with shallow incised diagonal lines and stab impressions in between. (F387)
48. Sherd, soft orange-buff fabric, traces of an applied rib. Decorated with incised horizontal lines with vertical strokes in between. (F387)
49. Sherd, reddish fabric with dark brown interior. Incised horizontal lines with a row of diagonal strokes above. (F387)

50. Sherd, buff fabric with grey core. Decorated with incised lines. (F387)
51. Sherd, brown with dark grey interior. Decorated with shallow horizontal grooves. (F387)
52. Rim sherds with internal mouldings, reddish fabric with brown interior. The internal rib bears notches. (F387)
53. Sherd, thin brown fabric with reddish interior. Decorated with shallow horizontal grooves. (F387)
54. Sherd, compact orange fabric with sand grit. Shallow groove on the exterior. (F387)
55. Sherd, thick buff fabric with grey interior; weathered and pitted. A shallow groove on the exterior. (F387)
56. Sherd, buff fabric with grey interior. A shallow groove on the exterior. (F387).
57. Not illustrated: sherd in buff fabric with grey core. On the exterior a faint incised pair of cross lines. (F387)
58. Also in this assemblage are four plain sherds of Earlier Neolithic pottery in a compact, laminated fabric with white quartz grit. The interiors are all smoothed and the surfaces vary in colour from dark grey or buff or reddish. (F387)

GROOVED WARE IN THE CLACTON STYLE

59. Three joining sherds of a vertical-sided vessel, hard smooth reddish-buff fabric. Grooved rim bevel with notching over the lip. On the exterior a broad band of vertical rows of finger-tip pinching between zones of shallow grooves. (F368)
60. Rim sherd, brown fabric with spar grit. Internal mouldings below the rim. (F368)
61. Sherd, same fabric as above, possibly from the same vessel. Broad incised horizontal line decoration. (F368)
62. Small sherd, brown fabric with grey core, stone grit. Faint horizontal line on the exterior, possibly cord impressed. (F368)
63. Sherd in a buff fabric, dark grey interior, surface pitted due to the solution of the tempering agent. Alternate plain and incised line zones. (F374)

SHERDS FROM UPPER SILTS OF OLD WATER-COURSES, AND LATE NEOLITHIC SETTLEMENTS 1 AND 2

64. Sherd, brown fabric with dark grey core, stone grit. Decorated with incised diagonal lines on a horizontal line (hatched panel filling).
65. Rim sherd, compact reddish ware, grey core. A pair of incised horizontal lines inside the rim.
66. Sherd, soft brown fabric, reddish exterior, pitted. Decorated with incised horizontal and diagonal lines on the exterior.
67. Sherd, brown fabric with dark grey core. Vertical incised lines on the exterior.
68. Sherd, reddish fabric with dark grey core. Fine incised lines on the exterior.
69. An exterior flake, light yellowish buff fabric. Incised horizontal lines on the exterior surface.
70. Grooved Ware? sherd, buff to dark grey fabric, stone gritted. Incised line decoration.
71. Sherd, buff exterior, dark grey interior. Grooved decoration.
72. Crumb, compact reddish fabric. Grooved decoration.
73. Grooved Ware sherd, brown fabric, surface encrusted with iron salts. Grooved decoration.
74. Two sherds showing incised lines amongst 65 sherds of harsh sand gritted ware with reddish exterior and grey interior.
75. Grooved Ware sherd, dark grey fabric with reddish surfaces. Decorated with shallow horizontal grooves with a row of triangular strokes in between.
76. Rim sherds, possibly Grooved Ware. Brittle dark grey fabric with buff exterior surface. Decorated with rows of D-shaped imprints. (Not illustrated) 26 sherds and 39 crumbs of a similar soft buff fabric, dark grey core. Surfaces pitted due to the dissolution of the tempering agent. All these fragments come from a plain vessel with a flat base; wall thickness 15 mm. (F723)
77. Grooved Ware sherd, compact reddish fabric, dark grey interior. A shallow groove on the exterior.
78. Rim sherd with internal bevel. Brown fabric with grey core, sand and crushed pottery used as a tempering agent. Incised decoration on the exterior.
79. Bronze Age? Thick rim, heavy brown fabric with stone grit. Imprints of a heavy oval-toothed comb, one below the lip and two diagonals remaining on the edges of the breaks. A zone of finger-tip rustication below. (PH1A)
80. Rim sherd, rounded lip, dark brown fabric. (PH1A)
81. Two joining sherds of Grooved Ware. Heavy dark brown fabric, reddish exterior, stone grit. An applied rib with a row of finger-tip rustication below. (PH18)

BEAKER POTTERY

82. Beaker sherd? hard compact buff fabric with dark grey core. Finger-tip pinching used for decoration.
83. Rim sherd with out-turned lip, thin, hard buff fabric with profuse angular white quartz grit. Fluting on the lip, a row of diagonal flutings across a slight moulding under the lip. (PH105B)
84. Beaker sherd, very fine quality fabric-hard buff, thin wall, burnished exterior surface. Horizontal comb impressed decoration. (PH57)
85. Sherd, probably Beaker, soft buff fabric, dark grey interior. Incised decoration alternate plain and hatched zones.
86. Beaker sherd, orange buff fabric, fine grit. Decorated with comb impressions, a row of vertical lines between horizontals.
87. Beaker sherd, heavy dark red fabric with stone grit. Comb decoration consisting of three horizontal lines with lattice pattern above and below. (F600)

88. Beaker sherd, brown, dark grey interior, sand grit. Decorated with cord line impressions.
89. Grooved Ware or Beaker? Sherd, compact brown fabric, reddish exterior. Horizontal grooves.
90. Weathered sherd, reddish fabric with dark grey core, horizontal grooved decoration.
91. Sherd, dark brown fabric with stone grit. A horizontal groove.
92. Sherd of Beaker?, orange to reddish gritty fabric. Decorated on the exterior with broad shallow grooves.
93. Beaker sherd, reddish-orange fabric, weathered. Decorated with vertical incised lines.
94. Beaker sherd, soapy buff fabric. Decorated with incised horizontal and vertical incised lines.
95. Beaker sherd, reddish surface with brown interior, sand grit. Decorated with incised lines, a triangle with vertical filling.
96. Beaker sherd, reddish surface with brown interior, sand grit. Decorated with incised lines, a triangle with vertical filling.
96. Beaker sherd, weathered.
97. Beaker sherd, reddish buff, grey core, weathered. Decorated with short vertical impressions between incised horizontal lines.
98. Beaker rim, sandy buff fabric, dark grey core. Deeply moulded groove inside the rim.
99. Beaker sherd, compact brown fabric, dark grey core. Decorated with incised diagonal lines.
100. Beaker sherd, reddish-buff, dark grey core. Decorated with finger tip impressions.
101. AOC Beaker. Moulded rim sherd, buff fabric with dark grey core. Cord line impressed decoration inside and out. Also two crumbs in this fabric, plain.
102. AOC Beaker. Crumb, buff fabric, grey interior, cord line impressions on the exterior.
103. Small weathered sherd of Beaker? grey fabric. Two incised horizontal lines on the exterior. (F720)
104. (Not illustrated). A small sherd, hard grey fabric, stone grit. (F720).
105. Weathered sherd from a Beaker, reddish to buff, sand gritted. Traces of horizontal line decoration. (F705)
106. Beaker, body sherd, thin orange buff fabric, comb impressed decoration.
107. Beaker (Not illustrated). A base angle and two crumbs in a similar fabric to no. 106.
108. Urn from PH142 (Pl. 1b). A large tripartite urn; pinkish buff fabric with darker tones, grey core, stone grit erupting through the surfaces in places. The vessel was ring-built and has fractured along the junctions.
46·5 cm high; 35 cm diameter rim; 25 cm diameter base. Rim internally moulded and decorated on the bevel with coarse diagonal cord impressions. Moulded cordons or ribs on the exterior which is decorated in two zones of alternating panels of vertical cord lines and saltires, the latter formed by a pair of cord lines with vertical maggot imprints at intervals.
This barrel-shaped vessel with cordons is without parallel amongst the pottery of the earlier Bronze Age in the lowlands of the East Midlands. It belongs to a class of pottery very distinct from the usual collared urn series but sharing with it an association with cremation burial, the use of cord line and cord maggot decoration, but very distinct in the use of coarse stone grit in the fabric. The series of vessels under consideration is related on one hand to the Biconcial Urn Series of Southern England (ApSimon 1972, 141–60) and on the other to the Cordoned Urns of Scotland (Morrison, 1968, nos. 10–12, 27, 32, 36, 49, 58, 62, 66, 70–72, 74, 96, 113 and 55A).
The nearest parallels to the Willington urn come from a limited area flanking the upper valley of the River Derwent, some 25 miles north of Willington. A group of five urns were found at Stancliff, Darley Dale, in 1883 and recorded by L. Jewitt (1878, Fig. 7–10 and 22). Two of these were bipartite vessels; and three were tripartite urns, one with perforated lugs spanning the neck zone between the cordons (Jewitt 1978, Fig. 8 no. 5. This vessel has survived in fragments in the Stoke-on-Trent Museum). Cord and cord maggot decoration had been employed on all these vessels; they are further comparable in fabric with the Willington urn if the two surviving vessels are representative. Three fragmentary vessels, although not certainly of tripartite form were recovered by J. Radley accompanying cremation burials from Cairns A and B of a triple cairn structure on Beeley Moor (Jewitt, 1878, 1–17, Fig. 5,1; 6, 4 and 6). A further vessel, certainly tripartite, came from a disturbed area in a cairn excavated by D. N. Riley at Harland Edge, Beeley Moor (1966, 47, Fig. 10,2).
Turning to the western side of the Peak District, a tripartite vessel of this class comes from Cock Low, Leek in Staffordshire (Stoke on Trent Museum).
The only dating evidence for the Willington Urn and related vessels in Derbyshire comes from Harland Edge where the vessel was probably deposited with a secondary burial and certainly post-dated the radiocarbon dates of 1490±150 b.c. (BM–178) and 1750±150 b.c. obtained from the underlying pits (Riley 1966, 39-40).
109. Rim sherd of buff fabric, blackened externally, decorated on exterior with horizontal and diagonal impressions of twisted cord, and with a single horizontal line of twisted cord just inside the rim. (PH142)
110. Bronze Age vessel of similar type to 108. Eleven sherds of a coarse fabric with profuse harsh grit, dark grey fabric with orange to reddish toned exterior surfaces.
(a) Fragment with moulded shoulder, coarse cord impressions.
(b) Fragment with internal moulded rib, a pair of vertical lines above.
(c) Fragment with moulded rib, a coarse cord line impression above. (F918).
111. Rim sherd with internal bevel, dark grey fabric, brown toned surfaces, angular stone grit. Diagonal incised lines on the exterior.
112. Interior flake with moulded rib, dark grey, brown toned surface, stone grit.

113. Fifteen sherds and crumbs of prehistoric pottery displaying few diagnostic features except for a piece of a flat base, were found in the vicinity of 111 and 112.
114, &
115. Body sherds of coarse red-brown fabric (Barrow 1 mound).
116. Body sherd of similar fabric to 114 and 115 but decorated externally with lightly incised hatching. (Barrow 1 mound).
117. Basal sherd of similar fabric to above with one incised diagonal line on exterior (Barrow 1 mound).
118. Late Bronze or Iron Age? A small cup with rounded base, 6·5 cm diameter rim. Hard compact grey fabric with orange surfaces. Angular white quartz grit. (F301)
119. L.B.A. or I.A. (as above). Rim sherd, externally thickened with triangular notches. Buff fabric with angular white quartz and stone grit. (F301)
120. A piece of daub, pitted and grass marked. Orange buff fabric, no grit. (F301)
121. Also 10 sherds and five crumbs mostly dark grey fabric with brown to orange buff exterior. A hard compact paste with angular white quartz grit. (F301)

Iron Age Pottery By S. M. Elsdon

This group of pottery represents the largest collection of well stratified Early Iron Age pottery so far published in the East Midlands. It is coarse and crude in character and lacks the distinctive fine ware found in Southern Britain.

1. GENERAL DESCRIPTION OF THE POTTERY

A minimum of 483 vessels is represented and the proportions of each ware are expressed in a histogram, (Chart 1, Fig. 67). Just under one quarter of the minimum number of vessels are drawn.

FABRICS: There are five main types of fabric.

A Ware: A very coarse fabric, usually soft, red to brown with dark grey core and often dark grey internally. It has very large (6 mm) white quartz filler which protrudes through the bumpy surface. Occasionally it can be light brown and very crumbly presumably when under-fired. Very rarely it has finger tip decoration, and the surface is normally very uneven.

B Ware: A light brown to red relatively coarse fabric, fairly hard and sometimes burnished. The core is usually light grey. The filler is mainly sand with medium-sized (2·3 mm) quartz inclusions and distinctive small black glistening pebbles; but these rarely protrude through the outer surface. Occasionally there are orange-brown inclusions. Decoration, which is rare, is by light twig brushing with occasional finger nail impressions on the rim.

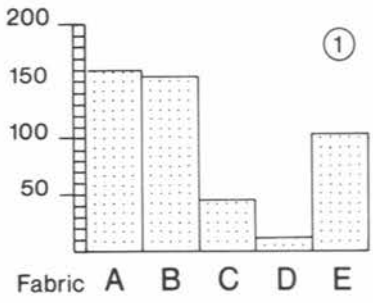
C Ware: A hard, fine ware, brown to black throughout, with minimal, very fine filler. Sometimes there are small pebbles and orange/brown inclusions as in B Ware. It can be burnished or have vertical twig brushing but it is normally undecorated.

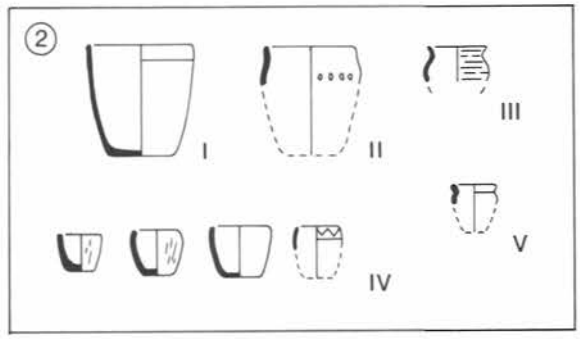
D Ware: A very thick (20 mm) and crumbly ware, reddish brown throughout with sparse pebble inclusions. The surface is very rough and bumpy, sometimes with very deep slash marks. One sherd has small dimples randomly placed.

E Ware: A hard profusely sand filled ware. The surface is light brown to red; the core is grey. It commonly has small orange-brown inclusions giving it a speckled appearance. A second version is sand filled and black throughout.

PRINCIPAL FORMS: Charts 2 and 3, Fig. 67

I. Large straight-sided jar with thickened collar in A ware; nos. 1 and 3.
II. Large jars with upright or slightly everted necks and round to more angular shoulders. Rims are rounded or flattened and occasionally have finger tip decoration as do the shoulders. The wares are A or unburnished B, nos. 2, 6, 13, 23–25, 101. Some rims, apparently of this form, have an internal bevel, e.g. nos. 4 and 8a. There are two body sherds with a markedly angular profile which could be of this form; nos. 80 and 92.
III. Jars with flaring rim and globular body. These are in burnished C ware, nos. 12 and 21.





③

Forms	A	B	C	D	E
I	▨				
II	▨	▨			
III			▨		▨
IV		▨			▨
V		▨			▨

Shading used where relationship found

④

APPLIED DECOR.	Forms I	II	III	IV	V	Fabrics A	B	C	D	E
Finger tip		▨		▨		▨	▨			
Brushing				▨	▨		▨			
Burnishing			▨					▨		
Deep scoring				▨			▨			▨
Random slashing									▨	
Vertical tooling										▨
Regular combing				▨			▨			▨
Tooled chevrons				▨			▨			
Horizontal grooves								▨		

Fig. 67 Willington: Iron Age Pottery Charts: 1. Number of vessels in each fabric;
2. Principal pottery forms;
3. Pottery, forms and fabrics;
4. Types of decoration in relation to forms and fabrics.

IV. Barrel-shaped or straight-sided jars and bowls; they are much smaller than Form 1 and without the thickened collar. Rims are sometimes slightly inturned. Hard sandy E ware is the usual fabric and vertical twig brushing the decoration: nos. 7, 9, 26, 27, 30, 33, 42, 43, 46, 52, 59, 60, 77–79, 84, 91, 98, 103, 113. One flat rimmed jar has random scored decoration: no. 34. Variants of the form have a slight bead rim: nos. 35, 49, 50, 76, 96; while others have an internal bevel: nos. 5, 71, 72, 75, 83, 85. Modifications of this kind are bound to occur in hand-made pottery, especially in a long-lived form, but the intention is clearly the barrel shaped jar.

V. Bowls and jars with a bead rim; Nos. 32, 38, 40, 44, 47, 112. The two necked vessels, nos. 36 and 111 belong to this group as does the one true S profile bowl, no. 47.

VI. This is the one wheel-made pedestal jar base, no. 39, which seems a little out of place in the assemblage.
It can be noted here that there are three other examples only of apparently late Iron Age pottery from Willington. These are the rim of a cordoned bowl, no. 70; a body sherd in fine even combed ware and very similar in fabric to the Wheathampstead combed jars; no. 64 and a rim sherd of a large jar with internally bevelled rim; no. 117.

BASES: In forms 1–5 they are flat, often very thick and sometimes slightly splayed (e.g. nos. 8, 10, 88, 89); only one, no. 105, has a foot-ring.

LIDS: There are four examples in very crude A ware, one with a rough cordon applied internally, nos. 93 and 94, and one with a knob, no. 90. Another lid is in finer B ware; no. 58, while a fourth lid no. 122, is in a red sandy ware.

Amongst other forms are one, possibly two, very crude hand-made bowls, nos. 11 and 48. These occur in the same contexts as scored ware at Whitwell, in Rutland (Todd and Ginty, forthcoming).

One small carinated jar in B ware with fine finger tip decoration on the shoulder and below the rim, and with a flat base, no. 114, belongs to form II although it is smaller than the average.

The thick sherds in D ware must belong to very large and crude vessels but there is no indication of their shape, nos. 53 and 54.

DECORATION: Chart 4, Fig. 67

Decoration is rare and almost entirely confined to finger tipping and scoring.

Only four vessels have finger tip decoration on top of the rim, nos. 23, 24, 49, 68, and there is just one example of finger tip decoration on the shoulder and exterior of the rim, no. 114. One small sherd has finger decoration on the shoulder, no. 51, and one very crude pot has possible shoulder decoration, no. 13. Of a possible total of 323 vessels in A and B wares only six have finger tip decoration which is limited to these wares.

Scored, brushed or combed decoration is far more common and occurs frequently on Form IV pots. It is probably a device to roughen the surface of the vessel and make it easier to handle. It can vary from very light brushing of the surface with vertical and a few horizontal strokes, perhaps done with a bunch of twigs (e.g. nos. 29, 41) to deep random scoring (e.g. nos. 34, 62, 74). One burnished B ware sherd has regular comb decoration possibly in a chevron pattern, no. 59. Sometimes the brushing or scoring is combined with finger nail decoration on the rim, no. 49, which is a typical feature of the Ancaster/Breedon scored ware There are three examples of fine regular combed decoration, nos. 67, 82, 87, and these, together with the horizontal tooled lines on the burnished, round-bodied jar, no. 55, may be of later Iron Age date as is almost certainly the regular combing on no. 64 which resembles Wheathampstead wares.

Two sherds, probably both from form IV vessels, have a tooled chevron decoration, nos. 45, 83 and both are in B ware. Finally two jars, probably also form IV, have evenly spaced vertical tooled lines, nos. 99, 106.

To summarize: Scored, brushed or combed decoration occurs on all wares except A ware which has only finger tip decoration. B ware can have a combination of scoring and finger tip decoration on the rim. C ware is usually burnished. D ware alone has very deep slashed decoration. B ware has the whole range of brushed, scored and combed decoration and E ware has regular combing.

Form II only has finger tip decoration, form III is burnished all over; form IV has brushing and deeper scoring sometimes combined with finger nail decoration on the rim and form V has either no decoration or light brushing.

2. LOCATION AND STRATIFICATION OF THE POTTERY

ASSEMBLAGE I: Figs. 68, 69

Seven discrete features and groups of features contain pottery which seems to form a homogeneous assemblage, and which might belong to an early phase of the Late Bronze Age/Early Iron Age occupation of the site. Numbers 1 to 4 are a group of features in or near Hut Circle 1.

1. Adjacent to Hut Circle 1 was a hearth or kiln hollowed out of the ground, F56 (see p. 83 above and Pl. 2a). It contained cone-shaped baked clay objects possibly thatch or loomweights and 12 vessels, four of which are badly distorted through over-firing; nos. 1–8a. Seven of these vessels are of forms I and II, nos. 1–4, 6 and 8a. Nos. 1–4 are in a very soft A ware with very large quartz filler and in a very crumbly

condition. Nos. 1 and 3 are of form I with a remnant collar rather than an applied strip. Nos. 2 and 4 are of form II and a further vessel, represented only by body sherds, could be of form I or II. Nos. 5 and 6 in forms IV and II respectively, are in the slightly finer B ware but crude and uneven. Nos. 7, 8 and 8a are in a soft E ware and of forms II and IV. There is one Romano-British sherd. Thus of 12 vessels in this hearth or kiln seven are in forms I and II and three are in form IV.

2. A Romano-British pit near Hut Circle 1, F57 contained three vessels in B ware, all of form III, no. 12.
3. A small pit near Hut Circle 1, F95, contained a crude hand-made bowl with possible finger tip decoration; no. 11, and the remains of a second one.
4. The ditch or post hole setting of Hut Circle 1, F62 contained three sherds in burnished B ware.
   All the vessels in the area of Hut Circle 1 are of forms I, II, III and IV, except for one Romano-British stray.
5. A small pit within the area of Neolithic Settlement 2, F713 contained seven cone shaped blocks of baked clay, very similar to those in F56, and shattered fragments of three vessels in A, B and C wares, only two sherds of which were drawable, nos. 9 and 10.
6. A small pit, F421, dug into the F295/431 ditch complex north of Hut Circle 5, contained a large form II jar in very crumbly A ware with possible finger tip decoration on the carination, no. 13. The rim profile of this pot is so irregular that three sherds have been drawn. Also in this pit was the flattened rim of a small jar in A ware and a fine C ware burnished base, nos. 14 and 15. In the surrounding plough-soil were an A ware splayed base, two rounded rims in C ware, (one with an internal bevel) and several body sherds of another vessel in hard C ware, nos. 16–18. In the ditch complex itself, F295/431, were a base and body sherds of a vessel in hard C ware, no. 20. Finally in another channel of this ditch complex F285 were the remains of two vessels in B ware, one with a rounded upright rim, no. 19.
7. This ditch at the western end of the site, F1200, is isolated from the features discussed above. The fill could be an accumulation over a long period but the Iron Age pottery is homogeneous in character, nos. 21–29. From the ditch itself came a minimum of 15 vessels: one fine burnished C ware, form III jar, no. 21, three form II jars in B ware, nos. 23–25 (two of them with finger tipping on the rim), three form IV jars (one with fine combing) nos. 22, 29, two further rims in B ware and a possible D ware sherd. There are Romano-British sherds in the ditch but these decrease with depth as the Iron Age ones increase. The Romano-British sherds are all very small and abraded while the Iron Age ones are in many cases larger, (7–10 cm) and the breaks are fresher, suggesting that there has been less disturbance. At least another 18 vessels in B ware come from surrounding plough-soil.

To summarize this early assemblage: forms I, II and III predominate with crude versions of form IV. Fabrics A and B are apparently contemporary with the finer burnished C ware. Decoration is absent except for rare finger tipping on the rim or shoulder and light brushing.

ASSEMBLAGE II: Fig. 70

Pottery from three discrete features and groups of features in and near Hut Circles 4, 6 and 7 seems to form a homogeneous assemblage which may belong to a later phase in the Iron Age occupation of the site.

1. The pottery from a pit south of Hut Circle 4, F202 and adjacent rabbit disturbance, nos. 34–42, forms a homogeneous group of hand-made vessels with the exception of no. 39 which is wheel-made. From a possible total of 10 vessels in this feature, one is in A ware, four in B, two are in C ware and three in E ware. There are three bead rim bowls of form V, nos. 36, 38, 40, four of form IV, nos. 34, 35, 37, 42 (one in fine hard E ware with deep scoring, no. 34) and a base in B ware with very fine

vertical brushing, no. 41. The base of a pedestal jar, no. 39, is of late Iron Age type but this discrepancy could be accounted for by the fact that the pit had been twice recut during Iron Age times.

2. Features within Hut Circle 4; the central hearth, F201 and a drainage gully, F234/209 produced a similar assemblage, nos. 31–33. There are two bead rim jars in form V, two probable form IV jars and a bowl. All five of these pots are in C ware. The surrounding plough-soil produced a further bead rim bowl, no. 44, two barrel shaped jars, nos. 43, 46, and a B ware sherd with possible chevron decoration between parallel lines, no. 45. An adjacent pit, F223 had two B ware sherds.
3. Hut circle 6, F701, has a crude hand-made bowl in soft sandy E ware, no. 48.

This assemblage can be described as homogeneous on grounds of form, fabric and decoration. The dominant form is the bead rim jar. The barrel-shaped jars of form IV can be seen as a long-lived group which overlap from the earlier assemblage. Decoration is by deep random slashing or light vertical brushing. There is no finger tip decoration and no D ware, the fabrics being B, C and E wares.

OTHER GROUPED POTTERY: Fig. 71

In addition to the two main assemblages there are six other groups of pottery from Ditch Complex F1, Barrow 2 and a ring-ditch F370. These can be separately considered.

Group 1:

Ditch Complex F1, underlies Hut Circle 7 but it could have been at least partly open during the whole of the Iron Age period (and cannot be considered as a discrete feature). As there are joins between pots from the lowest and middle levels of the ditch these can be dealt with together, nos. 49–55. Of about 11 vessels represented, one is in A ware, six in B ware, three in C ware (some fine and burnished) and one in D ware part of which comes from the lowest level. The sherds are fragmentary but, where they can be identified, are of form IV, nos. 49, 50, 52, and there is one example of finger tipping on the shoulder of an A ware sherd, possibly of form II, no. 51. One of the form IV pots, no. 49, has fine twig brushing combined with stab marks, probably made with the end of the twig. The fabric is hard and burnished and there is finger tip decoration in the rim. Another form IV pot, no. 50, has even combing. The two D ware sherds, nos. 53, 54, are probably from the same pot. The scoring is light and random with with possible beginnings of deeper vertical slash marks at the top of one sherd, no. 53, and there are randomly placed small dimple impressions. On this evidence D ware could be claimed as an early fabric since none of the other examples is well stratified. But also from this lowest level of the ditch comes the fine burnished globular pot in C ware with the unique horizontal tool marks, no. 55. It is an unusually fine pot for this apparently early context.

From the surrounding topsoil and plough-soil come two more barrel-shaped jars, one with a crude combed chevron decoration, nos. 59, 60 both in B ware. There are also two tiny B ware bead rim sherds, nos. 56 and 57 and a B ware lid, no. 58. On balance the pottery from this ditch could probably be considered as part of Assemblage I as only two bead rims from the plough-soil and possibly the sherd with the horizontal tooled decoration disturb the general picture.

Group 2

From the surface of Barrow 2 ditches, a pit cut through the fill of the ditch, F292, and a pit within the Barrow, F440, comes pottery of general Iron Age type, nos. 61–69, although there is one sherd which may be Neolithic, no. 63, and a Romano-British pedestal base. These features contained numerous sherds of A ware; sherds with fine brushed decoration, nos. 65 and 67, an upright rim sherd with finger nail impressions on the top, no. 68, two sherds in D ware with deep slashes, nos. 62 and 66, two barrel-shaped jars, nos. 61 and 69 and one sherd in hard E ware with a Wheathampstead parallel, no. 64.

Group 3

A Roman ditch F426 dug through Barrow 2 contained at least 16 vessels of Iron Age type, nos. 70–74. In this ditch were a sherd with deep scoring, no. 74, sherds in C ware with vertical combing and one with a horizontal groove, barrel-shaped jars in B ware, nos. 71 and 72, and the base and rim of a cordoned ware jar of late type, nos. 70 and 73.

Group 4

A small pit to the north of Barrow 2, F254, also contained a mixture of Roman and Iron Age pottery, none drawable.

Group 5

The Iron Age Ring-ditch F370 and internal post holes, 427, 428, produced three vessels in A ware, two in C ware, and the one drawable vessel, a barrel-shaped pot with internal bevel, no. 75.

Group 6

The palisade trench F367 contained what is probably a slightly later assemblage, nos. 76–82, and if A ware is early, then its virtual absence here could be significant. There is one sherd only in A ware, eight in B ware and three in C ware. The forms include an angular shoulder of form II type, no. 80, three or four vessels of form IV, nos. 77–79 and a bead rim of form V, no. 76. One sherd, no. 81, has finger tip decoration; one (not drawn) twig brushing and one, no. 82, light but regular combing. But this trench also contained at least one Romano-British and one Saxon sherd which indicate that the feature was disturbed.

Plough-soil from the area around the Iron Age Ring-ditch F370 and the palisade trench contained pottery similar to that from the features. It included a fine B ware form IV jar with chevron decoration at the rim, no. 83, two further B ware barrel-shaped jars, nos. 84 and 85, and a sherd with regular combing, no. 87. Of the eight vessels from this area one is in A ware, four in B ware, and three are in C ware.

POTTERY FROM SECONDARY CONTEXTS: Fig. 72

Group 1

Pottery from the topsoil which could be loosely associated with Barrow 2 and Hut Circles 4 and 7 contained the knob of a lid, no. 90 and a sherd from a very large jar with a sharp carination, no. 92.

Group 2

In a ditch in the Romano-British Farmstead I are two hand-made and very crude lids, nos. 93 and 94. Lids are rarely found and the assumption must be that stones or wooden covers were normally used. Also in this ditch was a fine S profile bowl in C ware, no. 97.

Group 3

Unstratified from the area of the Romano-British Farmstead I is the barrel-shaped E ware jar with rare vertical tooled decoration, no. 106.

Group 4

The flood silting of the area of the Romano-British Farmstead I produced several Iron Age vessels, nos. 114–116, notable amongst which is the small form II jar with finger tip decoration on rim and shoulder, no. 114.

SUMMARY

The chronological relationship of the various features is set out in Chart 5.

Forms I, II and III are confined to Assemblage I.

Form IV is long-lived and occurs in both Assemblages.

Form V belongs solely to Assemblage II.

Form VI consists of the four or five vessels of late Iron Age date.

Fabrics A, B, C and possibly D belong to Assemblage I and B, C and E to Assemblage II. Finger tip and tooled chevron decoration occur in Assemblage I, twig brushing and deeper scoring possibly belong to both Assemblages, though this depends on the length of life of Form IV. Regular combing comes late in the series. All the pottery in Assemblages I and II, form I–V, is hand-made.

3. DISCUSSION AND DATING

ASSEMBLAGE I: Figs. 68 and 69; Forms I, II and III

These forms all have parallels locally in the general area of the Trent Valley. From Epperstone and Holme Pierrepont come three fine jars of Willington form II type, two with finger nail decoration on the rim (Challis and Harding, 1975, Fig. 9, 2–5). The Early Iron Age site at Redhill, at the confluence of the Soar and the Trent, also has sherds of jars with finger tip decoration on the angular shoulder (Challis and Harding 1975, Fig. 10, 4, 5, 7, 9).

A little farther afield the site at Washingborough, near Lincoln, has large round-bodied jars with upright rims, one with finger tip decoration and there is no scored ware. The fabrics are rough with profuse crushed calcite, shell and flint filler, but hard, thin and well fired (May 1976, Fig. 61, 2 and 4). Associated with the pottery was a fine antler cheekpiece. A radio-carbon date derived from the lowest level with artifacts is 303±70 b.c. (Q–1163). Corrected and calibrated at two standard deviations this gives a range of 640–170 b.c. not inconsistent with a date at the end of the 7th or the 6th centuries B.C. suggested by the archaeological evidence.

Similar pottery was found at Brigg in South Humberside in the vicinity of a trackway like the Bronze Age one at Meare Heath in Somerset. There are pots similar to Willington forms II and III, the form III pot being very like no. 21, except that the Brigg example has an applied cordon at the neck. A second form II like vessel has twig brushed decoration. Associated, but not directly with these pots from Brigg was a leaf shaped spearhead of Late Bronze Age type, a fine bronze pin with a concave disc shaped head and an antler cheekpiece, now lost, possibly similar to the Washingborough one (May 1976, Fig. 62. 1–4). Pollen analysis from clay in the socket of the spearhead showed it had been deposited during vegetational zone VIIA–VIII, *c.* 800–500 B.C.

Finally the closest of the local parallels is from the hill-fort of Mam Tor in Derbyshire. Willington no. 1 is very like a straight-sided bucket jar with thickening at the shoulder from one of the huts on Mam Tor (Challis and Harding 1975, Fig. 1.3). Forms II, III and IV can also be closely paralleled at Mam Tor except that applied cordons are absent (Challis and Harding 1975, Fig. 1 and 2). Mam Tor yielded fragments of a Bronze Age socketed axe and a shale bracelet together with radio-carbon dates of 1180±132 b.c. (Birm. 202) and 1130±115 b.c. (Birm. 192) but the first date comes from a layer *into which* gullies and post holes for the hut were dug and the second date comes from the same layer east of the hut. That is to say that the radio-carbon dates need not be contemporary with the small finds, for which they seem too early, but could apply to an earlier occupation of the site, and a 7th or 6th century B.C. date could still be suggested for the associated pottery.

The antler cheekpiece from Washingborough and the possibly similar one from Brigg are of a type recognised as Urnfield or Late Bronze Age in Switzerland and West Central Europe (Hawkes and Smith 1957, 156). They also occur among later bronzes at Heathery Burn, Co. Durham, which were current in Britain around 700 B.C. (Britton 1967). Thus on local parallels it would seem reasonable to date Willington forms I, II and III with finger tip decoration, twig brushing but no scoring, to around 700 B.C.

Forms I–IV b. Non-local Parallels

These forms also have links with sites further afield at Ivinghoe Beacon, Bucks, Rams Hill, Berks, Maxey, Northants; West Harling, Norfolk, the Breiddin, Powys and Runnymede Bridge, Surrey.

At Ivinghoe large vessels (like form II) and jars with globular body and everted rim (like form III) are associated with pyramidal 'loomweights' similar to those from the Willington hearth, F56. Ivinghoe also produced a bifid class II razor and metalwork of the Ewart Park phase which Britton dates as from the 8th century onwards to around 600 B.C. although the excavators suggest an early 6th century date for the site (Cotton and Frere, 1968, 212).

Rams Hill (Barrett, 1975) has plain straight-sided or convex jars (like form IV) which Barrett compares with those from Itford Hill, East Sussex and South Cadbury, Somerset. Itford Hill gave a radio-carbon date of 1000 b.c.±35 (GrN 6167) and South Cadbury a series of dates from 1064 b.c.±75 (SRR 442) to 870 b.c.±110 (SRR 443) which are fairly consistent with the Rams Hill dates of 1070 b.c.±90 (Harwell 228) and 740 b.c.±70 (Harwell 230). Barrett sees these jars developing into a form with a pronounced hooked rim, absent at Willington but like those at Plumpton Plain, West Sussex, which Hawkes dates *c.* 750 to 500 B.C. (Hawkes, 1935).

This is clearly a long-lived form. Rams Hill also has 'wide bodied situlate' jars (Willington form II) which are compared with those at Ivinghoe. The first use of tooled lozenge type decoration at Rams Hill, of which there are two examples at Willington, nos. 45, 83, Barrett dates to the early 8th to 7th centuries B.C.

For Maxey and West Harling there is no real dating evidence but the pottery has parallels with Willington. Maxey (Simpson, W. G. forthcoming) has jars with upright rims and round or angular shoulders (Willington form II) with finger tip decoration and twig brushing, and a globular jar with flaring rim (Willington form III). West Harling (Clarke and Fell 1953) has large jars with upright or flaring rims, angular shoulders and finger tip decoration on shoulder and rim in the Heathery Burn tradition, (Willington forms II and III).

The Breiddin has short upright necked jars with rounded shoulders and globular or barrel-shaped jars with round or internally bevelled rims. (Willington form IV). These are associated with a radio-carbon date of 868±64 b.c. (Musson 1976, 298).

Finally the recently excavated site at Runnymede Bridge has jars very similar to Willington forms II and III associated with an antler cheekpiece of Urnfield type and Ewart Park bronzes. The radio-carbon dates suggest 9th and 8th century B.C. dates at a conservative estimate (Longley, 1976).

Globular jars with everted rims are found on the continent in Hallstatt C and D contexts, which are early Iron Age phases, for example at the Urnfield at Haps in southern Holland, near the Rhine mouths (Verwers 1972).

Therefore, it would seem reasonable to assume a date of around 700 B.C. for the pottery of Assemblage I at Willington with the possibility of extending back into the 8th century B.C. Forms I–IV can be included in this bracket. Discounting the doubtfully stratified finds from the lowest levels of Ditch Complex F1, true deep scored ware does not occur in this early Willington phase.

ASSEMBLAGE II: Figs. 70, 71 and 72; Forms IV and V

This is pottery mainly from Hut Circles 4 and 7 and adjacent pits. It comprises barrel-shaped and bead rim jars, forms IV and V and includes the few examples of deeply scored ware and probably the very coarse, thick D ware with deep slashing. It has general similarities with pottery from sites in the middle Trent Valley extending eastwards through Leicestershire and Rutland to the Fenlands. Parallels have been selected from six sites of which only two have any good dating evidence.

At the hill-fort of Breedon-on-the-Hill, Leics. (Kenyon 1950) were found bead rim bowls very similar to nos. 32, 38, 40, 44 and 47, barrel-shaped jars with flat or rounded rims as nos. 34, 35, 37, 43 and 48 and jars with vertical tooled decoration and finger tipping on the rim as nos. 106 and 49 (Challis and Harding 1975, Figs. 12 and 13). There are also barrel-shaped jars with an embryonic neck and deep random scoring.

The late date of 1st century B.C. to 1st century A.D. given by Kenyon to this site is now generally discounted, and it can be noted that the site produced a penannular brooch of Fowler's type Aa, which has a 2nd to 1st century B.C. date (Fowler 1960).

The hill-fort of Burrough Hill in Leicestershire produced both bead rimmed and barrel-shaped jars, sometimes with a crude neck and finger tip decoration on the rim similar to nos. 49 and 50 (Challis and Harding 1975, Fig. 11). These jars have both twig brushing and deeper scoring.

The other settlement sites have produced similar pottery to that from Willington but neither has any dating evidence. Whitwell, in Rutland, has barrel-shaped jars with flat, S profile and incipient bead rims and scored decoration (Todd and Ginty, forthcoming). The second is a settlement site in the Trent valley at Holme Pierrepont, south of the gravel pit where the early Iron Age pottery was discovered. From here come two very large barrel-shaped jars in a soft sandy fabric and a jar with an S shaped rim and scoring both on the body and base, (current excavations, Trent Valley Archaeological Research Committee).

The Willington jar with vertical tooled decoration, no. 106 has a fairly close parallel at the settlement site at Ancaster Quarry (May 1976, Fig. 69). Here the jars are straight-sided or barrel-shaped and more frequently twig brushed than scored or slashed. The excavator, on the evidence of brooches and other small finds suggests a date from the fourth to the second centuries B.C. for this site.

Fisherwick, Staffs. (Smith, 1979) is the second site with pottery similar to that at Willington where dating evidence is available. This small farmstead produced barrel shaped jars with random scoring like the form IV jars but with a greater degree of sophistication. There are four radio-carbon dates all from the enclosure ditch and closely associated with the Iron Age pottery. These, when calibrated and calculated to the first standard deviation range from 410–10 B.C. (Birm. 614) to 10 B.C.–A.D. 130 (Harwell 2470). These dates are provisional.

On this evidence one might conclude that the pottery forming Assemblage II at Willington was current from the 4th to the 2nd centuries B.C. possibly extending into the 1st century B.C. or later. There is not enough evidence to suggest a gap between the two periods although this may have been the case. But the barrel-shaped jars are a long-lived and ubiquitous form, they may well bridge the apparent gap.

There remains the question of a terminal date for the Iron Age occupation at Willington. While in Lincolnshire the 1st century B.C. is marked by fine, black burnished decorated pottery, this kind of Late La Tène ware has not yet been found in the middle Trent basin and it is possible that cruder forms of pottery continued to be produced up to and during the early years of the Roman Conquest. The Fisherwick radio-carbon dates would support this thesis, as does evidence from a pit at Whitwell where fine black burnished late Iron Age ware was found associated with scored ware. This pit, however may have been redug. The hypothesis that crude Iron Age forms were persistent and long-lived would explain the presence of the four recognisable late Iron Age sherds in the Willington collection. These may have come to the site through trading contacts with more prosperous areas in the early years of the first century A.D.

POTTERY DESCRIPTIONS

Fig. 68. I.A. Pottery Assemblage I

1. Rim, base and body sherds of large jar in very soft A ware, blackened internally towards base; med-large quartz filler; vertical smoothing marks; Form I (F56)
2. Numerous badly shattered rim and body sherds. Light red A ware with light brown surface; profuse and very large (11 mm) quartz inclusions. Possibly nearly all vessel present but reconstruction impossible. Several sherds badly distorted through over firing; Form II (F56)
3. Rim and base sherds of a jar in soft A ware, some distorted through over firing. Form II (F56)
4. Rim and body sherds in soft A ware, some badly distorted through over firing. Form II (F56)

4a. Body sherds in soft A ware with vertical finger smoothing, not drawn. (F56)

5. Profile of pot in soft B ware; brown; grey core; fine crushed filler; several rim sherds of varying profile. Form IV (F56)

6. Rim and body sherds of jar in soft brown A/B ware; thin walls; med. filler with occasional larger pieces (up to 6 mm); surface very bumpy. Form II (F56)
7. Rim sherds of small jar in soft red B ware; traces of vertical smoothing. Form IV (F56)
8. Base in B ware; smoothed externally with light brown slip; red core; grey interior; partly over fired. (F56)

8a. Rim base and body sherds in B ware fabric as above. Also numerous body sherds of another vessel in A ware, partly over fired. (F56)

9. Rim and several body sherds in hard B ware. (F713)
10. Base and numerous body sherds in A ware. (F713)
11. Bowl in red A ware; marks from finger smoothing; very crude. (F95)
12. Several non-joining body sherds in hard, burnished C ware; sand and orange-brown inclusions. Form III (F57)

Fig. 69 I.A. Pottery Assemblage I

13. Rim (several profiles drawn) and numerous body sherds in very soft crumbly yellow-brown A ware; slight thickening at shoulder and possible finger tip decoration. Form II (F421)
14. Flat rim in A/B ware. Also body sherd of large jar A ware. (F421)
15. Base in hard, black, burnished E ware (F421)
16. Base sherd in hard A ware (plough-soil).
17. Bevelled rim sherd in hard B ware (plough-soil).
18. Flared rim sherd in hard B ware; traces of horizontal brushing. Possibly Form III (plough-soil).
19. Rim in very hard, dark brown B ware. (F285, part of F295/431)
20. Base in hard black sandy ware with some very large quartz pebble inclusions. (F298, part of F295/431)
21. Fourteen sherds of a jar in C ware; fine sand and larger orange inclusions; ext. dark brown and burnished, though unevenly, giving a leathery appearance; int. has horizontal smoothing marks; neck has slight concave groove; traces of soot on ext. Form III (F1200 plough-soil)

21a. Possible base for 21. (F1200)

22. Jar with uneven, flattened and slightly incurving rim; B ware with stones breaking through the surface. Form IV (F1200)
23. Jar in coarse red B ware type with small black stones as filler breaking through the surface. Both surfaces slightly burnished. Rim slightly out-bent with finger tip decoration. Two rim and two body sherds. Form II (F1200)
24. Rim in hard uneven B ware as above; brown surfaces; finger tip decoration on rim. Form II (F1200)
25. Rim of jar as above; possibly same vessel. (F1200)

26. &

27. Rims in same fabric as above. Form IV (F1200)
28. Rim and body sherds in red sandy B ware type (plough-soil).
29. Base in dark brown B ware with light vertical combing. Possibly Form IV (F1200 and plough-soil)

Fig. 70 I.A. Pottery Assemblage II

30. Rim in E ware. (F234/209)
31. Rim sherd in light brown E ware. Form IV (F234/209)
32. Bead rim jar in B ware type; sand, large pebble and other stone inclusions; ext. smoothed, int. eroded. Form V (F234)
33. Bowl in red E ware with orange-brown inclusions. Slightly thinned towards the rim. Non-joining rim and base sherd. Form IV (F201)
34. Rim sherd with only slight curvature suggesting large diameter. Hard, sandy E ware with orange-brown inclusions; dark grey-black ext.; buff int. Scored horizontally and vertically. Form IV (F202)
35. Dark brown E ware; rough horizontal twig brushing. Form IV (F202)
36. Black sandy fabric with pebble inclusions; E ware type (F202)
37. Rim and body sherd of large jar. Hard rough dark grey-brown ext. reddish brown int. E ware. Rough horizontal finger smoothing on ext. Form IV (F202)
38. Two rim and several body sherds. Soft grey sandy ware with orange inclusions. Form V. (F202 and disturbance)
39. About 1/3 of a pedestal base, slightly dished, probably wheel-thrown. Ext. brown-grey; core red, E ware, sherd probably burnt. Form VI. (F202)
40. Rim from large jar, in hard grey ware with brown-buff surfaces, E ware with a few stone inclusions. Ext. encrusted with carbon. Form V (F202).
41. Four base sherds in hard black ware with mica and stone inclusions, B/E ware. The base is slightly dished; foot angle beaded; traces of fine vertical brushing. (F202 and disturbance).
42. Nearly half of jar in six large sherds. Fabric crude and heavy; brown-black to purple and buff B ware. Some sherds have whitish encrustations. The rim is thin, rounded, with a slight concavity below (drawing shows two different profiles). Traces of nearly vertical finger smoothing forming shallow grooves. Form IV (F202)
43. Non-joining body sherds and base. Flat rim with slight in-turn. Sandy E ware with orange inclusions; ext. red to black. Surface lightly brushed horizontally and vertically. Form IV (plough-soil).
44. Rim and several body sherds in E ware as above. Light vertical brushing. Form IV (plough-soil).
45. Red sandy B ware with grey core. Decoration probably three horizontal grooves with a chevron pattern between the upper two. (plough-soil).
46. Flat rim, body sherd and flat base in E ware. Form IV (plough-soil)

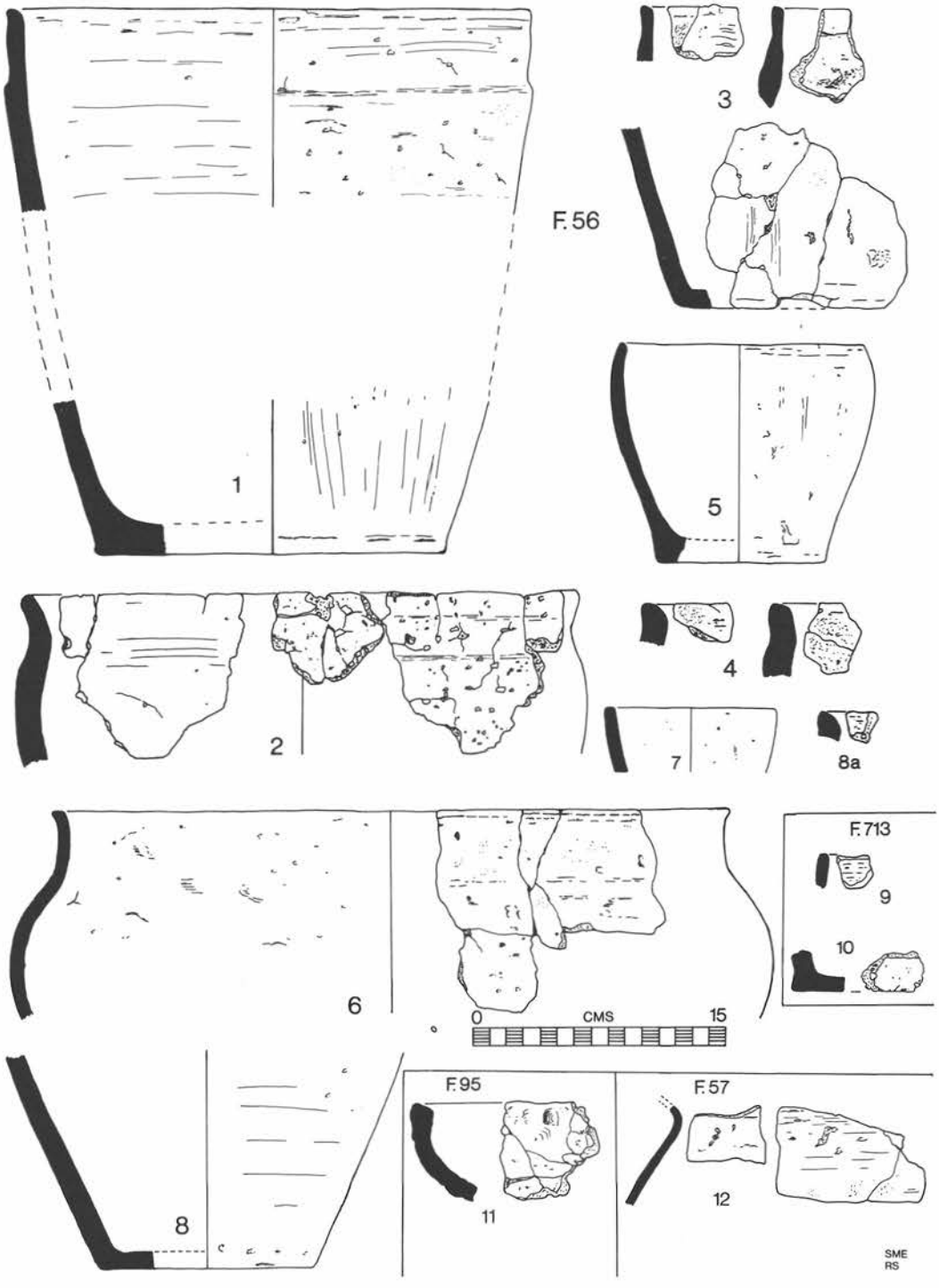


Fig. 68 Willington: Iron Age Pottery, Assemblage I. Scale 1 : 4

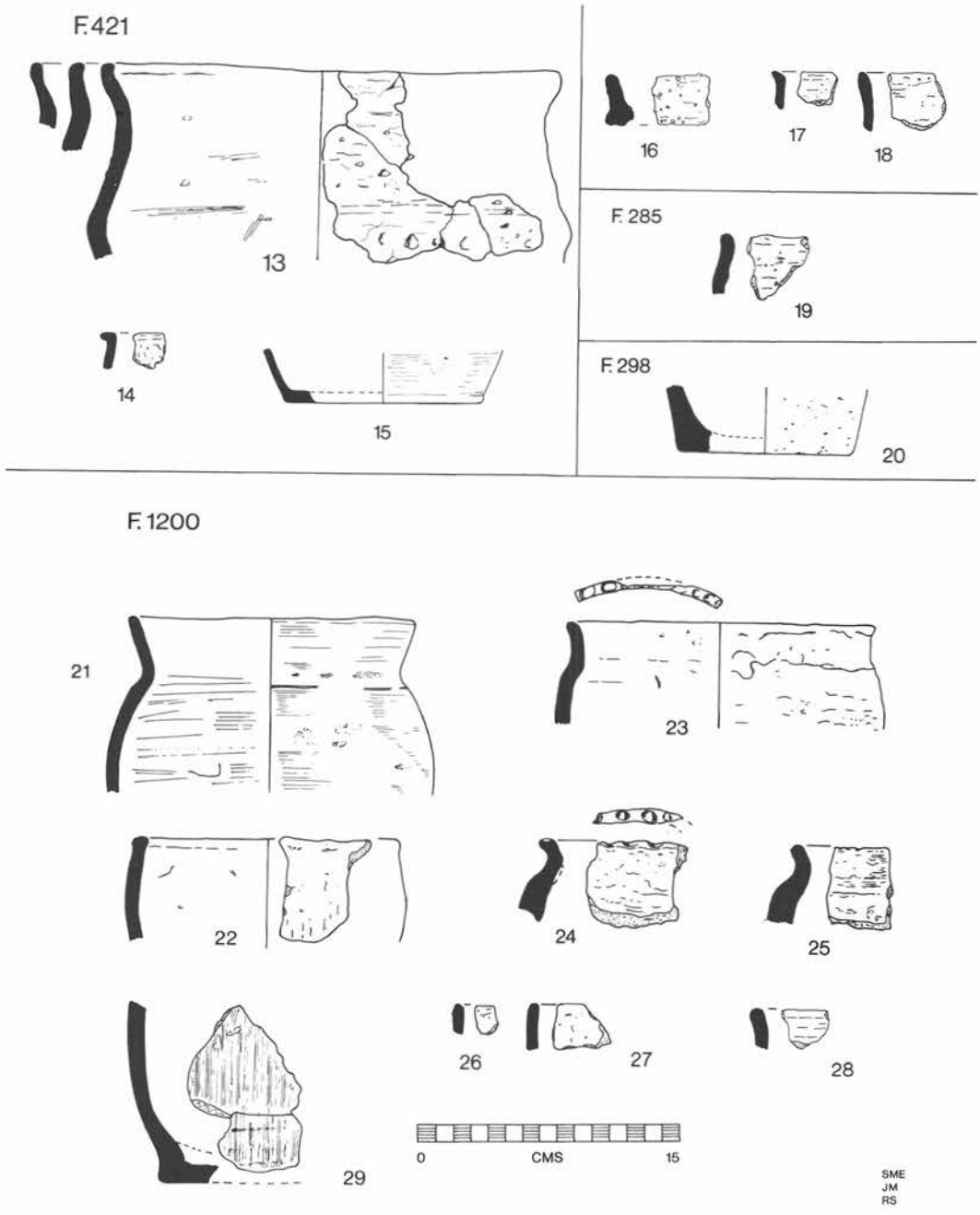


Fig. 69 Willington: Iron Age Pottery, Assemblage I, Scale 1 : 4

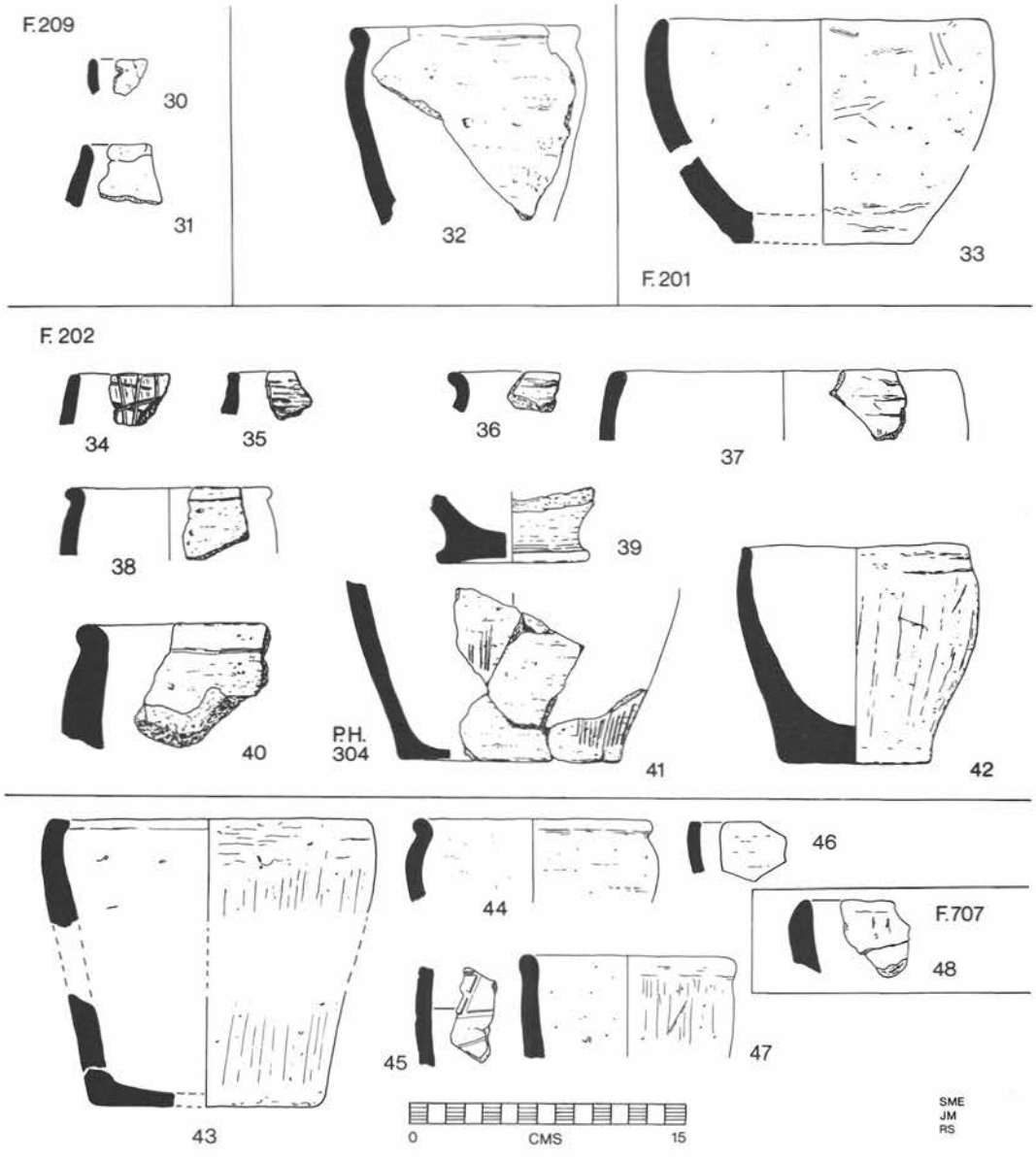


Fig. 70 Willington: Iron Age Pottery, Assemblage II. Scale 1 : 4

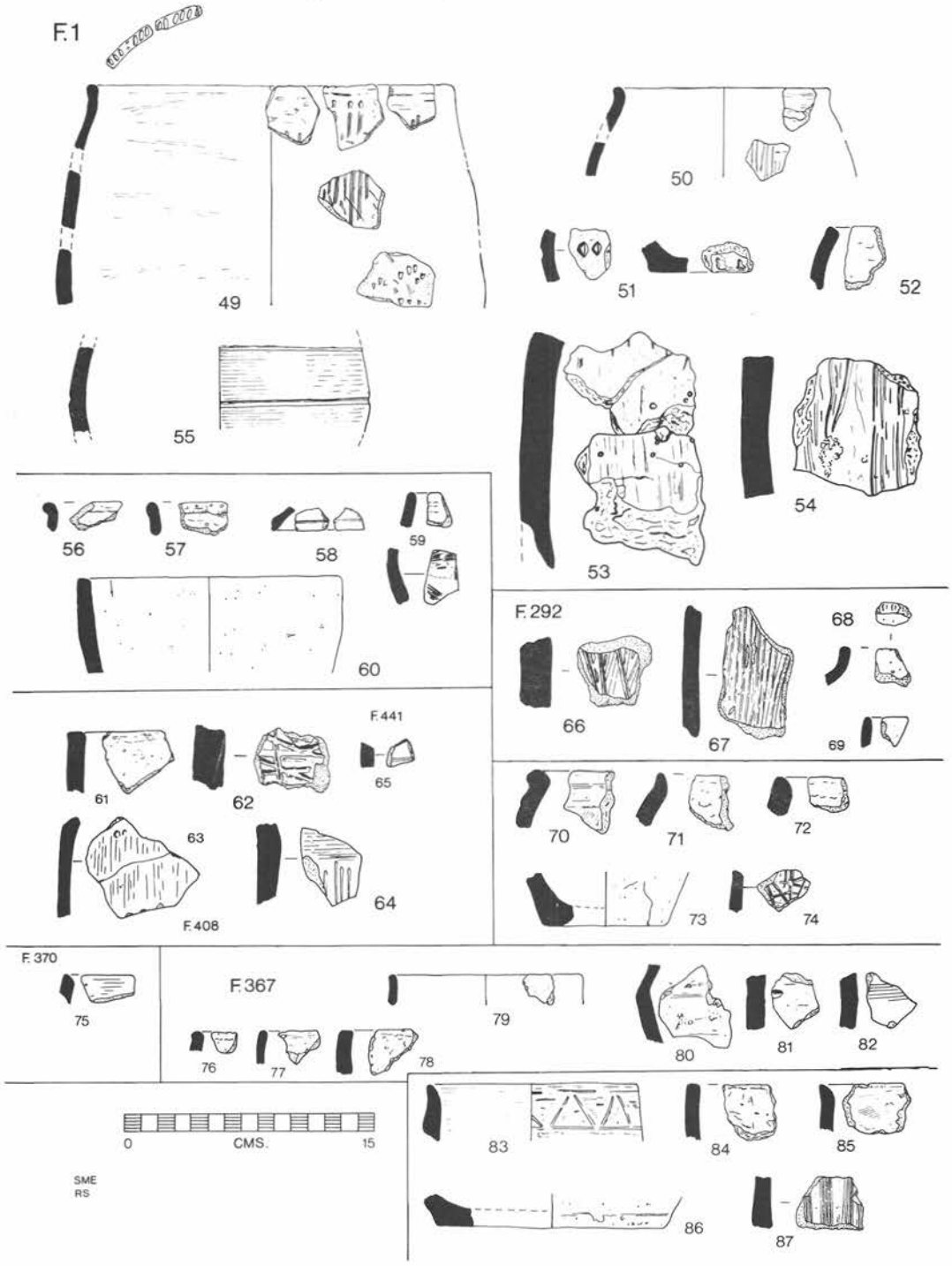


Fig. 71 Willington: Iron Age Pottery. Scale 1 : 4. 49–55, F.1. ditch, 56–60, ploughsoil, 61–65, Barrow 2, ditches and surface, 66–69, Pit cut through Barrow 2 ditch, 70–74, Roman Ditch through Barrow 2, 75, Barrow 3, 76–82, Palisade trench cut through Barrow 3, 83–87, Ploughsoil in vicinity of Barrow 3

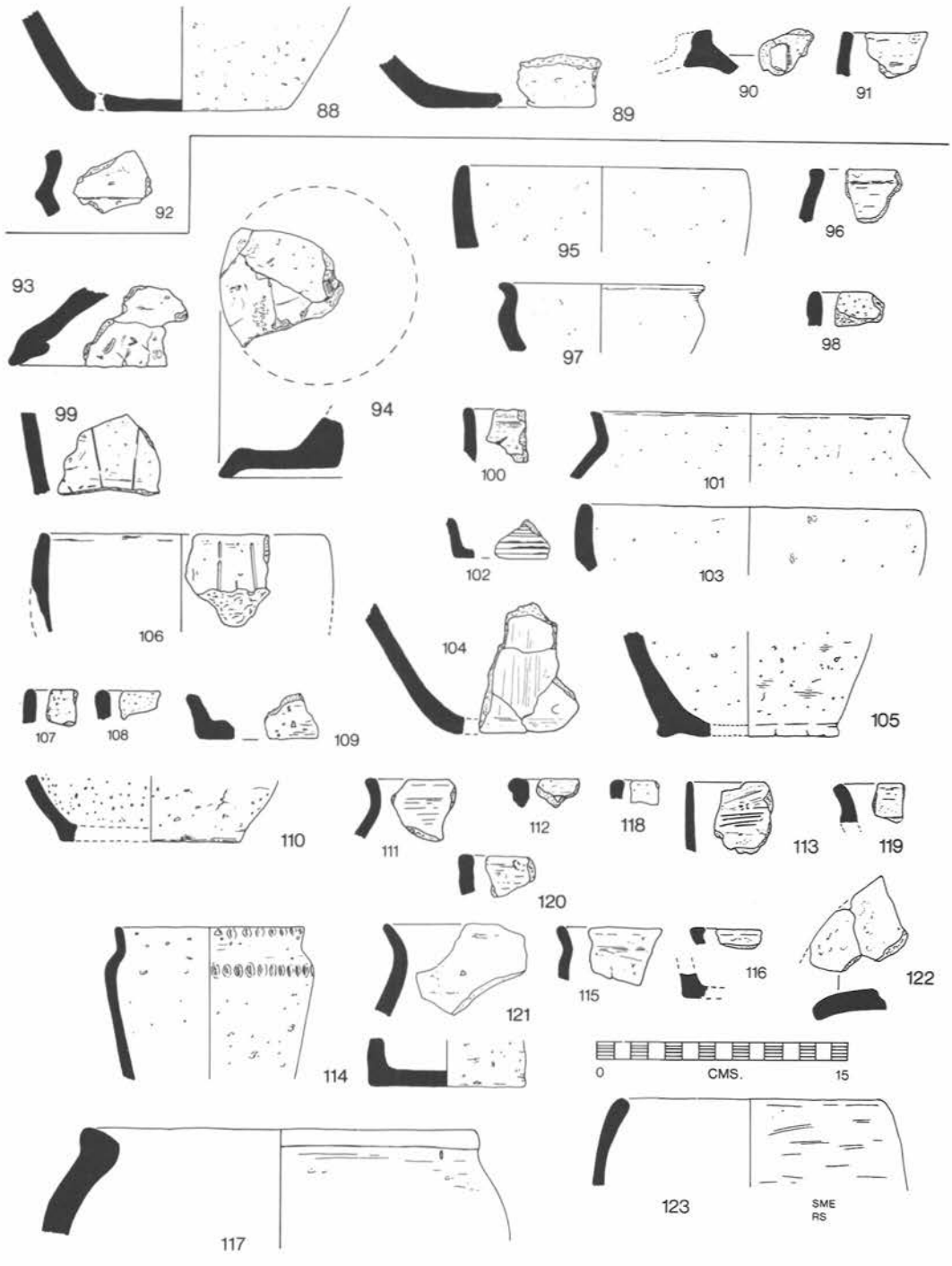


Fig. 72 Willington: Iron Age Pottery from Secondary contexts; Scale 1 : 4. 88–92 & 117, in area of Hut Circles 4 and 7, 93–116, in area of Romano-British Farmstead I.

47. Black sandy E ware. Form V (plough-soil)
48. Bowl in coarse E ware. Rim thinned towards the top. Possibly Form IV. (F701, Hut Circle 6).

Fig. 71. I.A. Pottery from F1 Ditch, Barrows 2 and 3 and Palisade Trench

49. Five rim and 10 body sherds in red to dark brown hard B ware. Both stabbed and light brushed decoration possibly done with the same implement. Roughly burnished with finger nail decoration on rim. It is possible that these sherds represent two vessels. Form IV (F1 complex and plough-soil).
50. Rim and body sherds in dark brown B ware. Light vertical twig brushing and possible finger-tip decoration on rim. Form IV (F1 complex).
51. Red B ware body sherd and base with finger impressions on both. (F1 complex).
52. E ware rim sherd with internal bevel. Form IV (F1 complex).
53. Two joining sherds in very thick, soft D ware. Occasional very large inclusions breaking the surface. Fabric light red to brown with sand and orange-brown inclusions. Rough vertical finger smoothing and small, randomly placed dimples. Possible beginnings of deep slashed decoration towards top of sherd. (F1 complex).
54. Probably same pot as above. (F1 complex).
55. Five sherds in brown B ware, finely burnished. Two, widely spaced horizontal grooves on girth. (F1 complex and plough-soil).
56. Two rolled rim sherds in red B ware. (plough-soil)
57. Rolled rim sherd in dark brown B ware. (plough-soil)
58. Lid with int. groove in brown B ware. (plough-soil)
59. Rim and four body sherds in brown, burnished B ware. Intermittent brushed decoration in possible chevron pattern. Possibly Form IV (plough-soil)
60. Rim and body sherds in dark brown E ware. Form IV. (F206 in F1 complex)
61. Flat topped rim of large B ware jar, ext. black, int. red. Form IV (F410/414)
62. Grey to red surfaces in D ware, 20 mm thick. Deep random scoring. (plough-soil)
63. Buff surfaces and grey core; filler leached out; possibly Neolithic (F408)
64. Hard E ware; ext. brown; grey core. Regular horizontal and vertical combing (plough-soil)
65. Red-brown B ware. Regular combing in possible chevron pattern. (F440)
66. D ware with red ext. and grey core, 20 mm thick; deep scoring. (F292)
67. Hard B/E ware; dark grey, buff int. Regular shallow scoring with serrated ended implement. (F292)
68. Rim and two body sherds; grey E ware. Finger tipping on rim and shoulder. (F292)
69. B ware rim; grey ext. red int. (F2929)
70. Rim of cordoned jar with internal bevel. E ware; dark grey ext. red int. (F426)
71. Rim B/E ware; brown; int. bevel. Form IV (F426)
72. Rim in thick B ware; brown with red int. Form IV (F426)
73. Base in brown B/E ware. (F426)
74. E ware; dark brown ext. red int. random shallow scoring. (F426)
75. Two rim sherds; dark brown B ware. Form IV (F370)
76. Slightly rolled rim in brown B ware. Form IV (F367)
77. Brown B ware. Form IV (F367)
78. Coarse red A/B ware with large quartz inclusions. Form IV (F367)
79. B/E ware; brown; rim and body sherd. Form IV (F367)
80. Red A/B ware with large quartz inclusions. Possibly Form II (F367)
81. As above with finger tip decoration. (F367)
82. Hard red B ware with regular horizontal scoring. (F367)
83. Two rim sherds in hard, dark brown to red, burnished B ware. One zone of tooled chevron decoration. Form II (plough-soil)
84. Two flat topped rim sherds in brown B ware. Form IV (plough-soil)
85. Rim sherd with int. bevel; B/E ware; black throughout. Form IV (plough-soil)
86. Base sherd in brown E ware with mica inclusions; blackened int. (plough-soil)
87. Dark grey E ware. Regular vertical combing with four toothed implement. (F376)

Fig. 72 I.A. Pottery from Secondary Contexts

88. Base and two body sherds in soft, brown, sand filled fabric with traces of leached out shell (plough-soil)
89. Splayed base in brown sandy ware with mica inclusions. (plough-soil)
90. Knob of lid in hard B ware; grey core; red ext. (plough-soil)
91. Rim with internal bevel; E ware; red with dark brown ext. Form IV (plough-soil)
92. Angular body sherd with slight curvature suggesting a very large vessel; possibly Form II (plough-soil)
93. Light red A ware lid with large diameter; applied strip for seating. (F150)
94. Crude lid in dark brown E ware. (plough-soil)
95. Rim of Form IV bowl thinned towards the top; light brown E ware. (plough-soil)
96. Rim in dark brown E wares; traces of horizontal brushing. Form IV (F163)
97. Rim of S profile bowl in black E ware. (plough-soil)
98. Rim and body sherd in coarse dark brown to black B ware, Form IV (plough-soil).
99. Hard red to brown E ware. Seven body sherds, three of which are decorated with nearly vertical tooled lines. (F657)
100. Rim in black B ware. (F620)
101. Rim of Form II jar in hard black E type ware. (plough-soil)

102. Base, possibly wheel-made, in red ware with brown slip on ext. Two rough horizontal grooves. (*Grubenhaus* 2)
103. Bowl, Form IV, in black E ware (plough-soil)
104. Base of very large jar in light brown to black B ware, vertical burnishing marks. (PH154)
105. Base in red E ware; low foot-ring. (F657)
106. Form IV jar in black E ware. Regular vertical tooling. (unstratified)
107. Rim in red B/E ware; Form IV (F555)
108. Rim in black E ware. Form IV (plough-soil)
109. Base in B ware; black with red int. (Disturbance)
110. Base in brown B ware (plough-soil)
111. Everted B ware rim; brown with dark grey core. (plough-soil)
112. Rolled rim with internal bevel; black B ware. (plough-soil)
113. Thin upright rim in hard black B ware. Horizontal brushing. Form IV (plough-soil)
114. Hard B ware; buff ext. and grey core. Rim and base must be the same vessel. Finger tipping on ext. of rim and shoulder. Form II (floodsilt)
115. Brown and badly abraded, filler leached out. (floodsilt)
116. Rim and base in brown B ware. (floodsilt)
117. Rim of large jar in hard heavy brown E ware. (plough-soil)

Roman Pottery By M. Todd

THE DATING OF THE ROMAN FARMSTEADS

The dating evidence for the occupation of the two Roman farmsteads is summarized here and a selection of the more significant vessels illustrated and described. In sum, this evidence is not very extensive, since so little of the pottery was stratified. The picture provided by the material recovered from the deposits is coherent enough, but due allowance must be made for damage to, or even removal of, the later levels on both sites.

Farmstead I

The prevailing impression is of material dating from the late 1st and 2nd centuries. The latest sherds appear to be of Antonine date and no later, unless certain sherds of Derbyshire Ware take us down into a later period. No distinctive late 3rd or 4th century pottery is represented at all.

From Phase 1 features, so little pottery is recorded that a secure date cannot be applied. In Phase 2, most of the pottery will fit comfortably into the 2nd century, only a Derbyshire Ware sherd being possibly later. It is worth noting that a few sherds of mediaeval pottery occur in deposits of this phase, presumably from the uppermost filling. Material from Phases 3 and 4 also belongs to the 2nd century, together with scraps of 1st century and possibly Iron Age pottery.

The more significant individual features are as follows.

Furrow F 508

This is not securely stratified. The Roman material spans the entire Roman period and even a few post-mediaeval sherds also occur.

Furrow F 546

Sherds from a black burnished bowl, probably of 2nd century date.

Pit F 528

Derbyshire Ware jar, probably of the 2nd century but possibly as late as the 3rd. Fig. 73, 1.

Small ditch, F 623

Sherds from three Derbyshire Ware jars: 2nd or 3rd century.

Flanged bowl in cream fabric. Fig. 73, 10.

Abraded fragment of a mortarium: probably 2nd century.

Pit F 502

Fragment of samian cup, form 33: Antonine.

Two Derbyshire Ware sherds: Antonine or later.

Pit F 558

Fragment of a small bowl in grey fabric. A difficult vessel to date, but probably 2nd or early 3rd century.

Pit F 629

Jar with everted rim, Fig. A, 7. Late 1st or early 2nd century.

Pit F 632

Flanged bowl in grey, burnished fabric. Late 3rd or 4th century. One of very few late vessels from this site.

Pit F 636

Scraps of Derbyshire Ware. Abraded colour-coated rim.

Flanged bowl in grey fabric. The last named is of the same type as the bowl in F 632.

Pit F 639

Small jar with everted rim: Fig. 73, 3. First half of 2nd century.

Pit F 662

Storage jar sherd in coarse, dark grey fabric. Such vessels were long lived. This example could belong, like the bulk of the pottery, to the 2nd century.

Hut Circle 6

Small sherd of vessel in pale orange fabric. Roman, but otherwise not closely datable.

Corn drier, dug through Barrow I, F3

Three sherds of Derbyshire Ware, including the rim of a jar and a base.

Base of jar (?) in soft, grey fabric.

Flanged bowl in slightly gritty, medium grey fabric. This is the only distinctive form in the group. Late 3rd to 4th century.

Flood Silt

Level I A mixture of Roman and Mediaeval sherds, the Roman material usually badly abraded. None of the latter is necessarily later than AD 300.

Level II Mostly Roman, but including a few scraps of Saxon pottery. The Roman material again covers a very wide span, down to the 3rd century.

Level III Roman sherds only represented. These are mainly 2nd century, though two may extend into the early 3rd.

Farmstead II

The dating evidence for occupation of this site is less extensive than for Farmstead I. Again, however, the general range of the pottery covers the late 1st and 2nd centuries, with an especial bias towards the period 120–200. A few stratified sherds may indicate occupation in the 3rd century but this is not certain. This view is based on the stratified material only. A *caveat,* however, is necessary, since a number of unstratified sherds of late 3rd and 4th century date were recovered from the side of the site. This might indicate that occupation shifted to some other location nearby or that it continued on the same site and subsequent ploughing has removed almost all detectable traces of those later deposits. The problem is one which has been raised on analogous sites in many areas where later agricultural processes have been intensive. The vessels and fabrics represented at Farmstead II are similar to those of Farmstead I and do not require separate discussion and illustration.

POTTERY DESCRIPTIONS

Fig. 73

1. Derbyshire Ware jar in hard, overfired, purplish-brown fabric. Steeply everted, almost vertical rim. The type is long lived. Derbyshire Ware is now known to have begun before the middle of the 2nd century. This vessel, and no. 2, might then belong to the 2nd century, but equally well could be as late as the later 3rd. F528

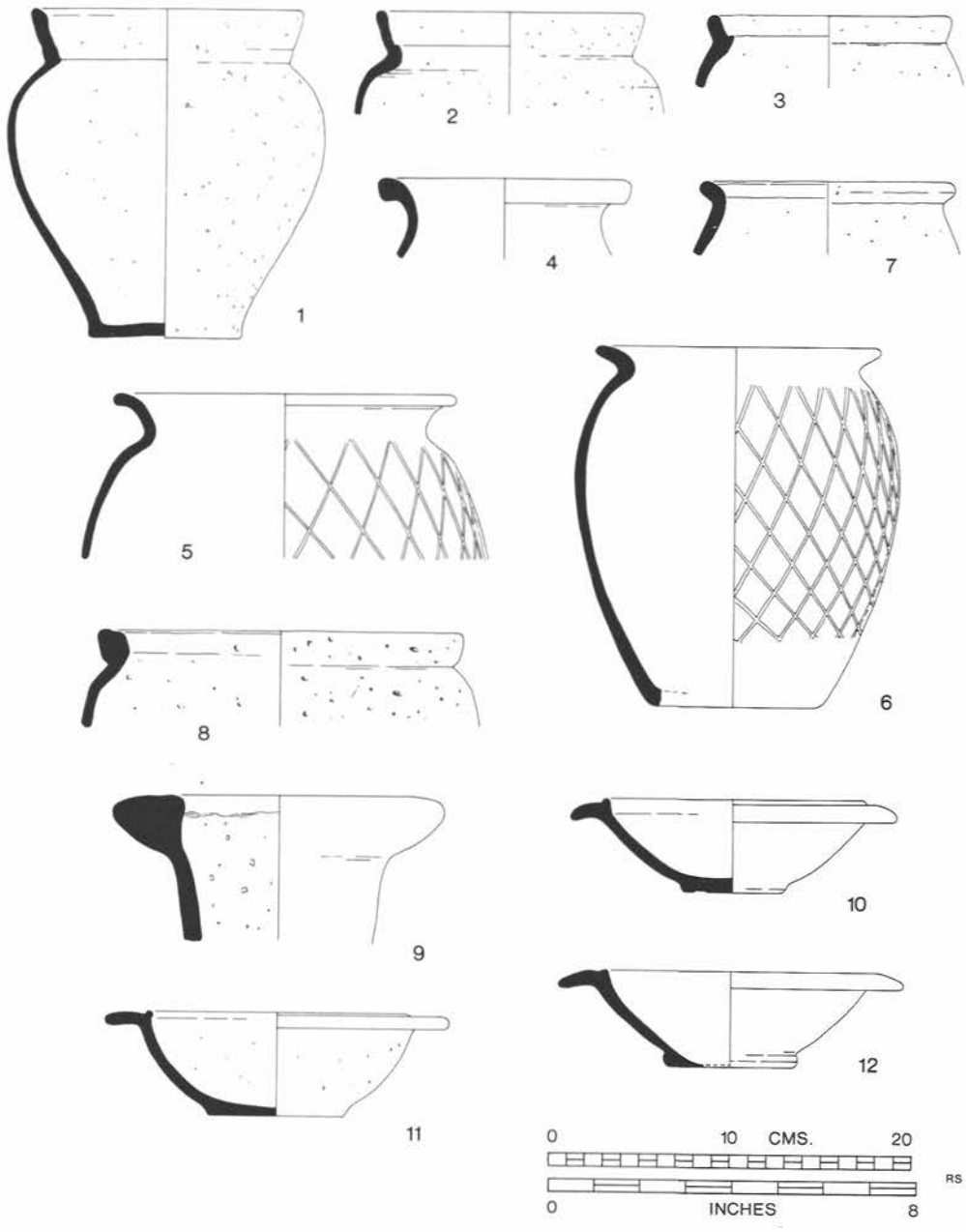


Fig. 73 Willington: Romano-British pottery. Scale 1 : 4

2. Derbyshire Ware jar in hard, orange-brown fabric. Almost vertical rim and sharply pronounced lid-seating. This vessel is a somewhat more delicate version of no. 1 and its dating should be similar. F623
3. Derbyshire Ware jar in hard, pimply, orange-brown fabric, heavily sooted on exterior surface. Prominent lid-seating. This jar form is much less common than that represented by nos. 1 and 2. Its date appears to be similar, beginning in the earlier 2nd century. F936
4. Rim of tall jar in rather soft, sandy, grey fabric. Possibly originally it possessed a darker grey slip, now worn away. A common and persistent form in this region, difficult to date. It could well fit into a 2nd century context.
5. Jar in medium grey fabric with darker grey slip-coating. Lattice ornament in zone on body. A version of the familiar black burnished ware jar. Like its prototype, this vessel should date from the second half of the 2nd century. F589
6. Jar in misfired greyish-brown fabric, with lattice decoration extending from the shoulder to the lower side. As no. 5, this is a version of a black burnished jar form. Its misfired fabric and slightly flattened rim suggest the possibility of local manufacture. Probably later 2nd century. F589
7. Jar with everted rim in sandy orange-brown fabric, heavily sooted on exterior. A simple and long-lived form. The neatly turned rim suggests a date at the end of the 1st century or the beginning of the 2nd. F639
8. Jar with heavy, thickened rim and shallow lid-seating in soft, dark, greyish-brown fabric, originally containing calcite grits, now leached out. Deposit of soot on exterior. Form is common in the last decades of the 1st century and early in the 2nd. F922
9. Rim of amphora, much abraded. Soft, pale buff fabric with gravel inclusions. F1100
10. Flanged bowl in cream fabric, originally smoothly finished, but now badly abraded. For the form, cf. examples from the Flavian-Trajanic kilns at Little Chester: *Ant. Journ.* li(1971), 52 fig. 7, nos. 61 and 78. The number of variants is immense. F623
11. Flanged bowl in sandy, orange fabric, now badly abraded. Traces of white paint on flange. Cf. Little Chester: *Ant. Journ.* li(1971), 52 fig. 7, nos. 71 and 93. Presumably Flavian-Trajanic and most probably a Little Chester product. F918.
12. Flanged bowl in orange-brown fabric, with smooth, burnished surfaces. White paint on flange. Fairly certainly a Little Chester product: *Ant. Journ.* li(1971), 52 fig. 7, 93 for form. Flavian-Trajanic.

Fig. 74

13. Mortarium in smooth, dense cream fabric. Rather small black trituration grits. F918
14. Mortarium in slightly gritty cream fabric with smooth surface.
15. Mortarium in creamy buff fabric, with brown trituration grits.
16. Mortarium in coarse cream fabric, with brown trituration grits.
17. Mortarium in creamy buff fabric, with smooth surface. F631
18. Mortarium in slightly gritty buff fabric and with brown trituration grits.
19. Straight-sided flanged bowl in medium grey fabric, with well burnished surfaces. A very common form current from the later 3rd century onward.
20. Straight-sided flanged bowl in medium grey fabric with burnished surfaces. Dating as for no. 19.

Saxon Pottery

The largest amount of pottery came from *Grubenhaus* 2, with 442 sherds of a total assemblage of 573 sherds. Despite this apparently large assemblage, only one completed profile of a pot, 63, was recovered. The forms were mainly slack, shouldered or globular vessels, though a few instances of a sharp carination (e.g. 66) suggested biconical forms. Rims varied from upright or even slightly inturned, to everted and a slack S shape. From *Grubenhaus* 2 came one example of an ear-lug (160) and two of lugs set on the body, (192, 193). The rounding of the angle between base and wall made it difficult to identify smaller base sherds with any certainty. The fabric was normally thicker at the base, but in 63, exceptionally, was thinner than the rest of the vessel. One base had a footstand (67). One sherd from *Grubenhaus* 1 (49) had a flat base, and a sharp angle between wall and base, and despite its comparatively fresh appearance may be a residual Iron Age sherd.

The fabrics have been divided into five groups but this does not imply a high degree of standardisation. The fabric types form a continuous spectrum, each group merging into others, with considerable variety within each group. The usual tempering agents were sand, angular quartz, and red-brown material, a form of iron oxide, usually crushed, but occasionally in pebble form.

Fabric A: 44% of total. A carefully smoothed but unburnished matt fabric occurred in all shades, from buff to black, but predominantly in lighter colours, especially on the exterior. The core is usually dark, sometimes with just a thin layer of oxydized material on the surfaces, presenting almost the appearance of a slip. The filler is a mixture of sand and the red-brown material, rarely protruding, and the fabric is fairly hard.

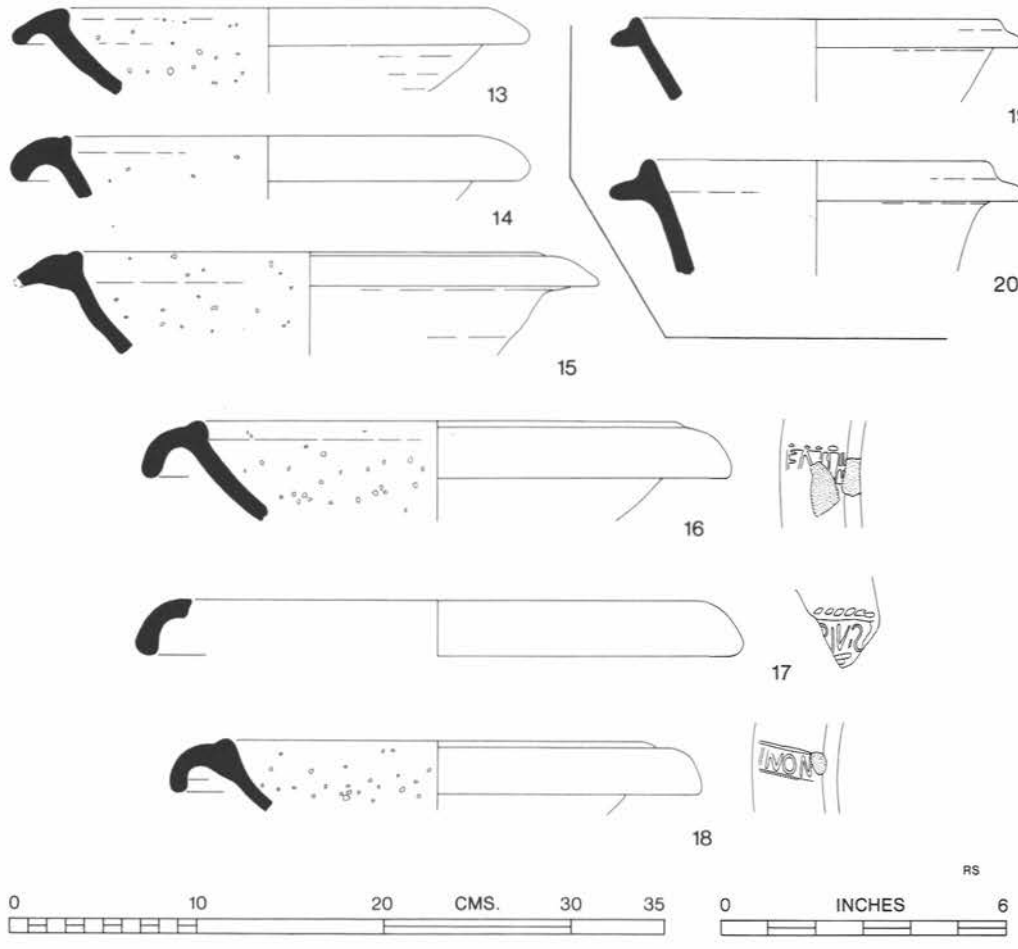


Fig 74 Willington: Romano-British pottery. Scale 1 : 4

Fabric B: 19% of the total. This had a coarser pimply exterior and sometimes interior surface. Though the angular quartz grits can be felt, they very rarely break through the surface, which is usually lightly burnished. Sand and the red-brown material are also present as filler. Fabric B occurred in dark shades, from red-brown to black and was usually a hard fabric.

Fabric C: 1·5% of total. This fabric is similar to B, but with larger angular grits (2 mm) protruding on one or both surfaces. It also occurred in a wider range of colours from red to black, and has a tendency to be slightly crumbly.

Fabric D: 3% of total. A medium to very hard fabric, D is distinctive in being tempered entirely and evenly with sand. Its surfaces are smooth and matt, mainly in dark colours, resembling Fabric A.

Fabric E: 32·5% of total. This fabric comprises all the burnished wares, ranging from very thin hard wares, usually highly burnished in very dark brown to black, to softer, slightly crumbly wares, red-brown to black in colour. It is tempered with sand and red-brown material. The degree of burnishing varies from a very high gloss to a light polish, and is usually continued over the whole exterior surface and inside the rim, but sometimes over the whole interior. Occasionally single burnishing lines can be distinguished (272) though perhaps a broad polishing implement was more often used. The degree of burnish is indicated in the catalogue by the use of the following terms: highly burnished, well burnished, burnished, lightly burnished, slightly burnished. A number of sherds in soft red-brown ware, burnished externally, have a vesicular appearance on the inner surfaces, as if some organic filler had been pressed into the inside, later to be burnt or dissolved out.

DECORATION

Of 573 sherds, 36 were decorated with incised, impressed or stamped decoration. A number of sherds in fabrics B and E are decorated with horizontal bands of fingernail impressions, sometimes pushing up the clay to one side. The impressions themselves were usually vertical, though one sherd had two bands of horizontal impressions below the rim (493). This impressed decoration appeared to cover most of the vessel and to be associated with fairly straight sided forms. Similar decoration is known from Lackford and West Stow (Myres 1977, II fig. 112, 2639, 2640, 2063, 3158) and other sites.

Incised and stamped decoration is found on fabrics A and E, most commonly on the burnished fabrics. On biconical forms decoration is confined to the carination and above, and on the slacker profiles, the upper parts of the vessel only were decorated. Horizontal incised lines with a slashed cordon (283) could be matched at Lackford, Girton, Baston and Riseley (Myres 1977, II, fig. 89, 901, fig. 292, 240, fig. 293, 3264, fig. 240, 1052). Horizontal lines of stamps between incised lines, and a horizontal band of slashing occurred on the upper part of a fairly globular vessel (290). This type of decoration can be paralleled on globular, shouldered and sub-biconical forms, cf. pots from Sancton and Girton (Myres 1977, II fig. 97, 2284, 2352, fig. 100, 179). 'Enclosed zone' decoration (Myres 1977, 1 22–7) without stamps is probably represented by vessels with plain incised lines (278–282), and a more elaborate version (284) was divided by incised lines, into panels open at the bottom, each containing a vertical row of three stamps. This may be paralleled at Northfleet, Loveden Hill and Caistor by Norwich (Myres 1977, II fig. 235, 347; fig. 143, 1292; fig. 236, 1326, 1294, 1851. The stamps are mainly small and circular, but one example from a large swastika stamp was found (289), a design commonly found on Saxon pottery, as a stamp, incised, or occasionally applied. The other large stamp used was a single large ring (65), which was sometimes overlapped. This type of stamp was used at Loveden Hill (Myres 1977, II fig. 135, 1262, 583, 584).

DATING

Too little is preserved of the form of the Willington pottery, for it to provide much evidence of date, though the scarcity of sharply carinated forms would indicate that the assemblage was post 5th century. Among the decorated forms there were no bosses, no

raised or applied features, with the exception of one slashed cordon. The use of enclosed zone decoration both plain and stamped, and the horizontal arrangement of incised lines and stamps on 290, all suggest a date in the 6th century, following Myres' typology.

POTTERY DESCRIPTIONS

Fig. 75

Grubenhaus 1, F368

1. Upright rim; ext. black; int. brownish red; core brown; filler sand and red-brown inclusions—an oxydized iron compound. Fabric A.
2. Upright rim; surfaces grey-brown; core black; filler angular quartz with mica flecks and red-brown material. Fabric A.
3. Upright rim of thin hard sandy fabric; surfaces and core black; filler angular quartz with red-brown material. Fabric A.
4. Not illustrated. Neck sherd of everted rimmed vessel; surfaces red with some smoking; core grey; filler angular quartz and red-brown material. Fabric A.
5. Hard sandy fabric; ext. well smoothed with mica flecks, some angular quartz and one shiny red pebble protruding; int. grey; core black. Fabric A.
6. Basal sherd; ext. grey; int. black; core grey; filler mainly sand with some red-brown material. Fabric A.

7–19. Body sherds of Fabric A; number of vessels uncertain.

20. Not illustrated. Body sherd hard black pimply ware, core black; filler sand with some red-brown material. Fabric B.
21. Not illustrated. Body sherd; ext. red to dark grey with mica and quartz protrusions; int. red; core grey. Fabric C.
22. Upright rim; ext. reddish buff mica-flecked; int. black showing signs of burning; core black; filler sand. Fabric D.
23. Not illustrated. Three joining sherds; hard sandy fabric; surfaces brownish grey with some angular quartz and mica protrusions on interior. Fabric D.
24. Not illustrated. Body sherd; surfaces and core black; filler sand and angular quartz. Fabric D.
25. Upright rim; thin fabric; surfaces black, burnished; core dark grey; filler fine sand with small red-brown inclusions. Fabric E.
26. Upright or slightly everted rim; surfaces black, lightly burnished; core grey; filler sand with red-brown inclusions. Fabric E.

27–48. Not illustrated. 22 body sherds of burnished fabrics; number of vessels uncertain. Fabric E.

49. Basal sherd of very coarse fabric, quite unlike all other Saxon fabrics; sharp angle between wall and base unlike other Saxon forms. Ext. red with streaks of black smoking and protrusions of very large angular quartz grits, up to 9 mm. Broken edges fresh. Saxon or Iron Age.

Grubenhaus 2, F543

50. Very slightly inturned rim; ext. patchy red, grey, black, well smoothed, almost burnished; int. grey-brown, core grey; filler quartz, occasionally protruding; thickness of fabric uneven. Fabric A.
51. Two joining rim sherds of globular? vessel with upright rim; hard fabric; ext. pale orange-red, blackened in places; int. buff-grey; core grey; filler mainly sand. Possibly four or more body sherds of this vessel also present. Fabric A.
52. Upright rim sherd of similar fabric to 51, possibly same vessel. Fabric A.
53. Flattened, folded-over rim; ext. dark red; int. red-brown; core brown-grey. Fabric A.

54–56. Upright rim and two body sherds; ext. orange; int. orange and black; core grey; filler quartz with red-brown inclusions and some large pebbles up to 4 mm. One vessel? Fabric A.

57. Upright flattened rim; ext. surfaces orange-red, well smoothed, almost burnished; core grey; thin fabric; filler large red-brown inclusions up to 4 mm. Fabric A.
58. Rim sherd of similar fabric to 57; possibly same vessel. Fabric A.
59. Upright flattened rim; surfaces red-brown; core dark brown; well smoothed fabric. Fabric A.
60. Small rim sherd with uneven edge, angle uncertain—Lid? ext. orange, smoothed, almost burnished; int. brown; core grey; filler fine sand and mica. Fabric A.
61. Upright flattened and folded-over rim; hard sandy fabric; ext. grey-brown; int. lighter grey with red-brown protrusions. Fabric A.
62. Upright flattened rim; surfaces dark brown, smoothed, almost burnished; core brown; filler quartz and red-brown material. Fabric A.
63. Four joining sherds; complete profile of small bowl with almost flat, very thin base, rounded body and upright, flattened, folded-over rim; hard sandy fabric; ext. patchy buff, brown, orange, grey; int. buff to grey with occasional red-brown protrusions. Fabric A.
64. Joining sherds of base similar in shape and fabric to 63, but larger and thicker. Fabric A.
65. Shoulder of hard grey fabric, well smoothed with mainly sand filler; decorated with four ring stamps, two overlapping. Fabric A.

Fig. 75 Willington: Saxon pottery. 1–49, *Graubenhaus* 1; 50–246, *Graubenhaus* 2. Scale 1 : 4

66. Carination of bioconical? bowl, decorated with four horizontal incised lines on and above carination; surfaces orange; core dark grey; filler quartz and small pebbles. Fabric A.
67–68. One sherd base with footstand and one body sherd; thick fabric 11 mm; well smoothed surfaces; ext. buff; int. grey; core brown-grey; filler quartz and red-brown material. Fabric A.
69–80. Not illustrated. Twelve sherds including at least four basal sherds; thick fabric 12–17 mm; ext. orange; int. brown; core brown-grey. Minimum of three vessels. Fabric A.
81–110. Not illustrated. Thirty body sherds of one or more vessels; thick fabric, 9–18 mm with preponderance of thicker sherds; ext. red smoothed; int. much abraded, red-dark brown, smoothed; core light red; filler quartz and red-brown material. Fabric A.
111–159. Not illustrated. Forty-nine body sherds of fabric A; number of vessels uncertain.
160–167. Three rim and five body sherds of one? vessel; upright rounded rim, one, (possibly two) sherds with beginning of ear-lug; surfaces red to black, well smoothed and pimply; core red-brown. Fabric B.
168. Upright rounded rim sherd of similar fabric to 160 but thinner.
169. Slightly inturned rounded rim; ext. brown, well smoothed; int. red and black; core grey. Fabric B.
170. Upright or slightly everted rounded rim; similar fabric to 169, possibly same vessel. Fabric B.
171. Upright rounded rim of similar fabric to 169 and 170, with sooting inside the rim. Fabric B.
172. Upright rounded rim; surfaces black-brown with occasional protrusions; core grey. Fabric B.
173. Upright slightly flattened rim; ext. black; int. red; core grey; filler fine sand with few small red-brown inclusions. Fabric B.
174. Slightly everted rounded rim; surfaces black, well smoothed; core grey. Fabric B.
175. Slightly everted rounded rim; surfaces red-brown, some burnishing; core grey. Fabric B.
176. Two joining sherds upright or slightly everted rounded rim and rounded shoulder; ext. patchy red, grey, black, lightly burnished; int. red, less well smoothed; core grey. Fabric B.
177–181. Four decorated and one plain sherd of one? vessel; hard sandy fabric; ext. red to black; int. buff-brown, well smoothed; decorated externally by regular horizontal bands of finger-nail impressions. Fabric B.
182. Decorated body sherd similar to 177 but int. dark brown, lightly burnished. Fabric B.
183–184. Two decorated body sherds, possibly same vessel as 182, but int. light brown, slightly burnished.
185. Body sherd decorated with one finger-nail impression; hard thin sandy fabric with some protrusions internally; surfaces brown-black; core black. Fabric B.
186. Two joining sherds decorated with finger-nail impressions, but more lightly than on the preceding examples. Hard thin fabric less sandy than 185; surfaces brown-black, well smoothed; core grey with small red-brown inclusions. Fabric B.
187–191. Not illustrated. Five body sherds of hard thin sandy fabric; ext. red to black; int. brown-black; core grey. Fabric B.
192. Body sherd with plain lug; ext. brown-red, well smoothed with mica protrusion; int. dark brown; core light brown to grey. Fabric B.
193. Body sherd with plain lug; ext. black, lightly burnished; int. dark brown; core brown-red; filler quartz, mica and large red-brown inclusions. Fabric B.
194–198. Not illustrated. Five body sherds hard thin sandy fabric; ext. red to black; int. dark brown; core grey. Fabric B.
199–235. Not illustrated. Thirty-seven body sherds of Fabric B; number of vessels uncertain.
236. Not illustrated. Four joining body sherds of large globular vessel; ext. black and red, well smoothed as in B ware; int. red with angular quartz grits and some mica protruding; core grey. Fabric C.
237–240. Not illustrated. Four body sherds of fabric C; four vessels.
241. One abraded upright rim sherd; surfaces and core black. Fabric D.
242. Basal sherd; ext. buff and black; int. dark grey; core black. Fabric D.
243. Basal sherd of harder, thinner fabric than 242; surfaces grey; core brown. Fabric D.
244–245. Not illustrated. Two body sherds of Fabric D; two vessels.
246–247. Four everted rim sherds of one biconical? vessel with sharp carination; hard thin fabric; ext. black-brown, well smoothed and highly burnished; interior black, less well smoothed, but highly burnished inside rim; core red-brown; filler quartz and red-brown material. Fabric E.
248–249. Two rim sherds of similar fabric to 246; possibly same vessel. Fabric E.

Fig. 76

250. Upright flattened rim; thin hard fabric; ext. black, well smoothed and highly burnished; int. black, less well smoothed, burnished; core grey; filler fine sand with small red-brown inclusions. Fabric E.
251–253. Three everted rim sherds; fabric similar to 250 but less well smoothed externally. Fabric E.
254. Everted rim; thin hard fabric; surfaces slightly pimply but highly burnished; ext. black; int. red-brown; core brown and grey. Fabric E.
255. Slightly everted rim folded to inside and flattened; similar fabric to 254. Fabric E.
256. Slightly everted rounded rim; thin hard fabric; ext. black, highly burnished; int. grey, smoothed; core black; filler sand and large red-brown inclusions. Fabric E.
257. Upright, flattened rim; very thin hard fabric; ext. buff, smoothed, matt; int. black, highly burnished; core black. Fabric E.
258. Everted rim sherd; thicker fabric; surfaces brown, highly burnished; core grey; filler sand and red-brown material. Fabric E.

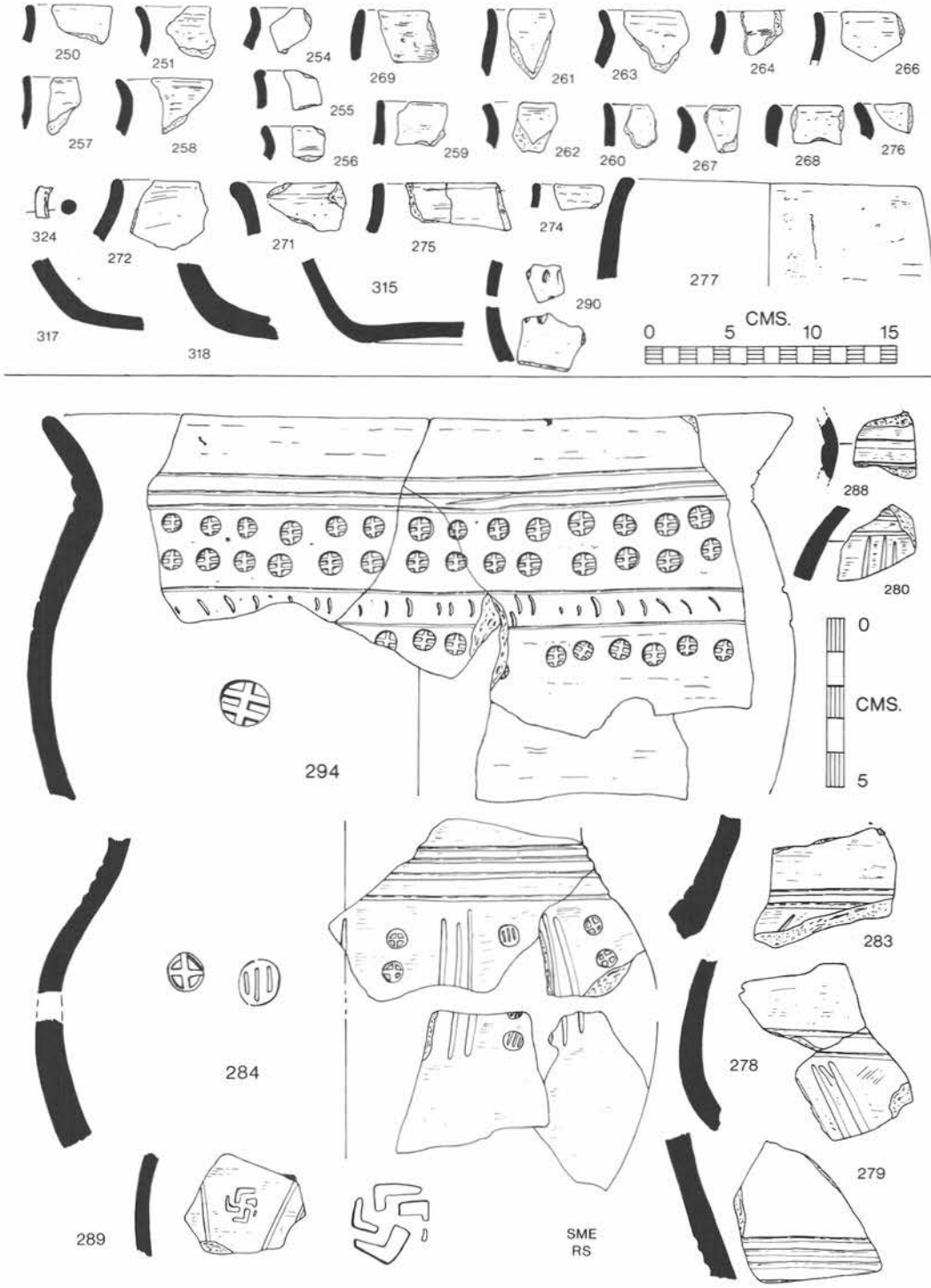


Fig. 76 Willington: Saxon pottery. *Graubenhaus* 2. Scale 1 : 4 except 294, 288, 280, 284, 289, 283, 278, 279 1 : 2; stamps 1 : 1

259. Upright rim; thin hard fabric; ext. brown-black, slightly pimply, well burnished; int. smoother, burnished; core black; filler sand and red-brown material. Fabric E.
260. Slightly everted rim; ext. brown-black, well smoothed, burnished; int. black; filler sand and red-brown material. Fabric E.
261. Slightly everted rim; ext. brown-black, mica-flecked, well smoothed, lightly burnished; int. brown-black, burnished inside rim; filler sand, red-brown material and mica. Fabric E.
262. Everted, flattened rim; surfaces brown-black, highly burnished; core black; filler sand and red-brown material. Fabric E.
263. Everted rim in similar fabric to 262.
264. Slightly everted rim; surfaces light red-brown, highly burnished; core black. Fabric E.
265. Not illustrated. Rim sherd of uncertain angle; similar fabric to 264.
266. Very slightly everted rounded rim; hard sandy fabric; surfaces slightly pimply but well burnished; core black; filler fine sand and red-brown material. Fabric E.
267. Everted rim in similar fabric to 266.
268. Upright rim; ext. brown-black, slightly pimply, well burnished; int. dark brown, smoother, burnished; core dark brown. Fabric E.
269. Slightly inturned rim; surfaces slightly pimply, highly burnished; ext. black; int. dark grey; core black; filler sand and red-brown material. Fabric E.
270. Not illustrated. Rim sherd of uncertain angle; surfaces dark brown, highly burnished; core dark brown; filler sand, red-brown material and mica. Fabric E.
271. Everted rim; surfaces red-brown, well burnished, darker externally; filler quartz and large red-brown inclusions. Fabric E.
272–273. Two rim sherds slightly everted; ext. brown-black, well burnished with very clear horizontal burnishing lines just below the rim; interior brown-black, well burnished; core black; filler sand and large red-brown inclusions. Fabric E.
274. Slightly everted, flattened rim in similar fabric to 272 but thinner. Fabric E.
275. Two joining rim sherds, one from *Grubenhaus 2* and one from adjacent plough-soil; upright rim; ext. buff and dark brown, int. brown-black, both well smoothed and burnished; core black; filler sand and red-brown material. Fabric E.
276. Upright rim in similar fabric to 275, but int. black. Fabric E.
277. Two joining upright or slightly inturned rim sherds; ext. red, well smoothed, lightly burnished; int. grey-brown, smoothed, burnished inside rim. Fabric E.
278–279. Three body sherds, two joining; ext. brown-black, highly burnished; int. grey-black, well smoothed; filler sand, red-brown material and mica. External decoration of incised horizontal and diagonal grooves. Fabric E.
280. Body sherd; hard thin fabric; surfaces black, highly burnished; decorated externally with horizontal and vertical grooves. Fabric E.
281–282. Not illustrated. Two very abraded sherds of similar fabric to 280 with incised and stamped? decoration. Fabric E.
283. Body sherd; ext. black, highly burnished; int. black, burnished, with quartz and red-brown protrusions; decorated externally with two horizontal incised grooves and a horizontal slashed cordon. Fabric E.
284–287. Neck and body sherds of one vessel; ext. dark red-brown, well smoothed, well burnished; int. grey to brown, highly burnished on inside of neck; core grey; filler red-brown material and sand; decorated externally with incised grooves, horizontal on neck, vertical below, dividing surface into panels each containing one vertical line of stamps; two circular stamps, each used in alternate panels. Sherds of this vessel came from the lowest and uppermost layers of Grubenhaus 2. Fabric E.
288. Body sherd; thin fabric; ext. brown, lightly burnished; int. and core black; decorated externally with horizontal incised grooves. Fabric E.
289. Body sherd; thin fabric; ext. light red-brown to dark brown, highly burnished; int. grey, well smoothed; core black; decorated externally with swastika stamp and incised grooves. Fabric E.
290–293. Four body sherds of one? vessel; ext. red-brown to black; int. buff and black; both surfaces well burnished; core red and grey; decorated externally with rows of finger-nail impressions. Fabric E.
294–296. Five sherds, three joining from upper part of vessel with everted rim and rounded body; ext. dark to red-brown, well burnished; int. red-brown, well smoothed, lightly burnished, with cavities on lower part suggesting grass or straw being rubbed into interior, presumably lost in firing. No such cavities appear externally. Decorated externally in horizontal bands, described from the top: horizontal incised lines on neck, row of stamps, row of finger-nail impressions between horizontal incised lines, row of stamps. One sherd very abraded. Fabric E.
297–298. Not illustrated. Two body sherds, probably same vessel as 294.
299–314. Not illustrated. Sixteen body sherds; ext. red or brown; int. red-brown to black, burnished with vesicular appearance as described in 294–8. Number of vessels uncertain. Fabric E.
315–316. Three basal sherds, two joining; surfaces lightly burnished; ext. red-brown to black; int. grey, well smoothed; core grey; filler sand and red-brown material. Fabric E.
317. Basal sherd; surfaces slightly vesicular; ext. red-brown, well smoothed, matt; int. red-buff, lightly burnished. Fabric E.
318. Basal sherd; thick fabric; ext. red-brown, lightly burnished; int. grey, lightly burnished; core dark grey; filler quartz and red-brown pebbles. Fabric E.

319. Not illustrated. Abraded basal sherd; hard fabric; surfaces well burnished; ext. brown-black; int. red-brown; core grey. Fabric E.
320–323. Not illustrated. Four basal? sherds; very thick fabric, 14–17 mm; surfaces lightly burnished; number of vessels uncertain. Fabric E.
324. Cylindrically shaped piece of baked clay, light red throughout and lightly burnished; lug? Fabric E.
325–491. One hundred and sixty-seven body sherds of burnished wares in Fabric E. Number of vessels uncertain.

F544, charcoal staining partly overlying Grubenhaus 2, containing residual Saxon pottery, probably from the grubenhaus. (Fig. 77)

492–493. Two inturned rim sherds; fairly thin hard fabric; ext. black, well burnished; int. brown, burnished; core black; filler sand and red-brown material; decorated externally with two rows of horizontal finger-nail impressions, with vertical impressions below. Fabric E.
494. Rim, slightly inturned, folded to inside and rounded; ext. brown, well burnished; int. grey, less well smoothed; core grey; filler sand and red-brown material. Fabric E.
495. Rim; surfaces brown, well burnished; core brown; filler sand and red-brown material. Fabric E.
496. Rim sherd of similar fabric to 495; possibly same vessel.
497–500. Not illustrated. Four body sherds of fabric E; number of vessels uncertain.

Grubenhaus 3, F 558

501. Two joining sherds of upright rim and rounded shoulder; ext. buff to dark brown, well smoothed; int. grey with some sand protrusions; core black; filler sand. Fabric A.
502. Rim sherd, somewhat distorted; ext. buff, well smoothed; int. black with burnt material adhering; core black; filler mainly sand. Fabric A.
503. Not illustrated. Small upright rim sherd, somewhat abraded; dark grey sandy ware; filler mainly sand with some red-brown inclusions. Fabric A.
504. Slightly inturned rim sherd; ext. buff to black, well smoothed; interior grey to black; core black; filler mostly sand. Fabric A.
505–539. Not illustrated. Thirty-five body sherds in Fabric A; number of vessels uncertain.
540. Two joining sherds of inturned rim; surfaces red-brown to black, almost burnished. Fabric B.
541. Two joining sherds, rim and upper part of high shouldered, almost globular vessel; surfaces buff to black, pimply but lightly burnished with quartz and red-brown protrusions, burnt material adhering just below rim; core black; filler sand with some red-brown material. Fabric B.
542. Everted, folded-over rim; lumpy fabric; ext. red-brown to black; int. black; core grey; filler sand with some red-brown material. Fabric B.
543. Everted rim; surfaces red to black; core grey; filler sand and red-brown material. Fabric B.
544. Two joining rim sherds; ext. black; int. red; core black; filler sand and red-brown material. Fabric B.
545. Slightly everted rim sherd; surfaces brown to black; core black; filler sand and red-brown material. Fabric B.
546. Basal sherd; ext. black, lightly burnished; int. brown to black; core red-brown; filler red-brown material with some sand. Fabric B.
547–555. Not illustrated. Nine body sherds of Fabric B; number of vessels uncertain.
556. Basal sherd; very hard sandy fabric; surfaces light brown to grey; core grey. Fabric D.
557–559. Not illustrated. Three sherds of Fabric D, possibly two vessels.
560–561. Three rim sherds, two joining; surfaces black, well burnished; core black; filler sand with some red-brown material. Fabric E.
562. Upright rounded rim; ext. red-brown, well burnished; int. black, burnished; core grey; filler sand and red-brown material. Fabric E.
563. Everted rim; surfaces dark red-brown, highly burnished; core grey; filler sand and red-brown material. Fabric E.
564. Everted rim, abraded on interior; ext. black, burnished; core grey; filler mainly sand. Fabric E.
565. Not illustrated. Rim sherd; surfaces well burnished; ext. black; int. brown-black; core brown; filler red-brown material and sand. Fabric E.
566. Two joining basal sherds; ext. brown to grey, smoothed; int. black smoothed, lightly burnished; core black; filler quartz and red-brown material. Fabric E.
567. Seven joining body sherds; surfaces dark brown, burnished; core black; filler quartz and red-brown material; decorated externally with two vertical incised lines, ending on slight carination. Fabric E.
568–569. Not illustrated. Two body sherds of Fabric E; ext. smoothed and burnished; int. smoothed but vesicular cf. 294–314 in Grubenahus 2.
570–614. Not illustrated. Forty-five body sherds of Fabric E; number of vessels uncertain.

Pits in vicinity of Grubenhaus 1

F366

615–618. Not illustrated. Seven sherds, four joining of globular vessel; ext. orange well smoothed; int. light grey to orange; core orange; filler angular quartz and red-brown material, occasionally protruding. Fabric A.
619–622. Not illustrated. Four body sherds of Fabric A; number of vessels uncertain.
623. Not illustrated. Body sherd of Fabric B.

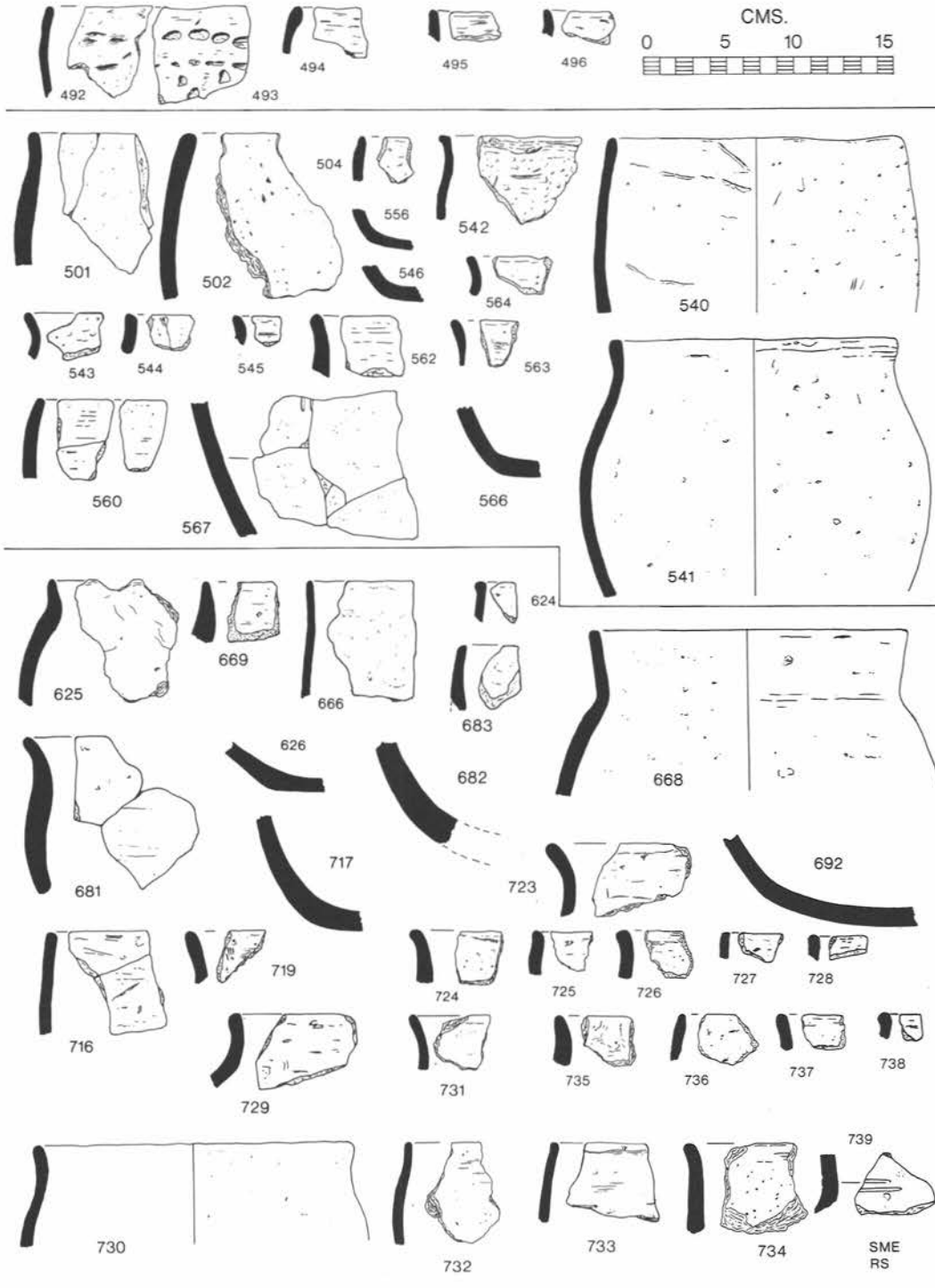


Fig. 77 Willington: Saxon pottery. 492–496, *Grubenhaus* 2; 501–567, *Grubenhaus* 3; 625–739 other contexts. Scale 1 : 4

624. Rolled rim folded outwards; surfaces black, burnished; filler sand with few red-brown inclusions. Fabric E.

F369

625. Rim sherd; ext. reddish buff, well smoothed; int. black with burnt material adhering; core black; filler mainly sand with some red-brown inclusions. Fabric A.
626. Three joining basal sherds; ext. red to black, well smoothed; int. buff-grey with some quartz protrusions; core grey with sand and red-brown filler. Fabric A.
627–643. Not illustrated. Seventeen body sherds of Fabric A; number of vessels uncertain.
644–645. Not illustrated. Two body sherds of Fabric B; two vessels.
646. Not illustrated. Upright rim sherd, inner surface flaked off; ext. dark grey; filler sand. Fabric D.
647–649. Not illustrated. Three body sherds of Fabric E; probably two vessels.

F371

650–663. Not illustrated. Fourteen body sherds of Fabric A; number of vessels uncertain.
664–665. Not illustrated. Two body sherds of Fabric B. Probably two vessels.
666. Upright rim; hard thin fabric; surfaces and core black; filler sand; Fabric D.

F372

667. Not illustrated. One body sherd of Fabric A.
668. Large everted rim; ext. black, pimply, burnished; int. light brown with quartz protrusions; core grey; filler sand and some red-brown material. Fabric B.

F375

669. Upright? rim of hard sandy fabric; ext. black; int. orange with quartz protrusions; core grey; filler sand with some red-brown material. Fabric A.
670–672. Not illustrated. Three body sherds of Fabric A; three vessels.
673. Not illustrated. Basal sherd; surfaces black, bumpy, burnished; core grey; filler sand, red-brown material and mica. Fabric B.
674. Not illustrated. Body sherd, lightly burnished. Fabric E.

F377

675–676. Not illustrated. Two sherds of Fabric A. Probably two vessels.
677. Not illustrated. Body sherd; ext. orange, smoothed; int. flaked off. Fabric A?.
678–679. Not illustrated. Three basal sherds, two joining; ext. buff to black; int. buff to red; core grey; filler red-brown material; one vessel. Fabric B.
680. Not illustrated. One body sherd of Fabric E.

F379

681. Two joining sherds from F379 and F377. Rim and rounded shoulder; hard, sandy fabric; surfaces orange with some dark smoking; core black; filler quartz with some red-brown material. Fabric A.
682. Basal sherd; probably same vessel as 681. Fabric A.
683. Upright rim; ext. pinkish grey; int. dark grey; core grey; filler sand with some small red-brown inclusions. Fabric A.
684. Not illustrated. Body sherd of orange, well smoothed fabric; inner surface flaked off; probably same vessel as 677. Fabric A.
685–688. Not illustrated. Four body sherds of Fabric A; probably four vessels.

F380

689. Not illustrated. Body sherd; orange well smoothed fabric; inner surface flaked off; probably same vessel as 677 and 684. Fabric A.
690–691. Not illustrated. Two body sherds of Fabric A; probably two vessels.

F106, pit south of Hut Circles 2 and 3

692. Two joining sherds of rounded base; ext. orange, smoothed; int. brown-black, smoothed, slightly vesicular; core grey; filler sand and red-brown material. Fabric A.
693–701. Not illustrated. Nine body sherds of Fabric A; number of vessels uncertain.
702–705. Not illustrated. Four body sherds of Fabric E; probably two vessels.

F36, furrow in vicinity of post-holes group G.

706. Not illustrated. Two joining sherds of upright rim; surfaces dark brown, lightly burnished; core black; filler sand and red-brown material. Fabric E.
707–711. Not illustrated. Five body sherds of Fabric A; four or five vessels.
712. Not illustrated. One body sherd of Fabric B.
713–715. Not illustrated. Three body sherds of Fabric E; two vessels.

F548, a pit in the north of Romano-British farmstead I.

716. Two joining rim sherds; surfaces burnished; ext. brown-black; int. and core black; filler sand and red-brown material. Fabric E.

F804, pit or post setting west of Romano-British Farmstead I.

717. Four joining sherds of rounded base; ext. buff, well smoothed; int. grey, well smoothed; core black; filler sand and red-brown material. Fabric A.
718. Not illustrated. One body sherd of Fabric A.

Floodsilts south and east of Romano-British Farmstead I.

719. Rim of black, lightly burnished fabric with angular quartz filler. Fabric D.

720–722. Not illustrated. Three somewhat abraded body sherds; probably same vessel as 719. Fabric D.

Unstratified pottery, plain body sherds not listed.

723. Everted rim, somewhat abraded; surfaces brownish grey; core black; filler angular quartz with some red-brown material. Fabric A.

724. Everted rim, rolled outwards; surfaces red, somewhat abraded; core grey; filler quartz and red-brown material. Fabric A.

725. Rim of hard sandy fabric; surfaces dark grey, mica-flecked, smoothed; filler sand with some red-brown inclusions. Fabric A.

726. Rim of hard sandy fabric; surfaces dark grey to brown; core grey; filler large angular quartz grits with some red-brown material. Fabric A.

727. Upright flattened rim of thin hard fabric; surfaces and core grey; filler quartz, red-brown material and mica. Fabric A.

728. Much abraded rim; surfaces red-brown to black; filler red-brown material with some sand. Fabric A.

729. Everted rim; surfaces grey-brown smoothed, with some quartz protrusions; filler mainly sand.

730. Rim of uncertain diameter; surfaces brown-black, bumpy, lightly burnished; core grey; filler sand and red-brown material. Fabric B.

731. Rim; surfaces black, bumpy, lightly burnished; core grey; filler quartz and red-brown material. Fabric B.

732. Rim of thin hard fabric; surfaces black; core grey; filler sand, red-brown material and mica. Fabric B.

733. Three joining sherds of hard thin fabric; surfaces dark brown, mica-flecked, core grey; filler sand, red-brown material and mica. Fabric B.

734. Everted rim; ext. red-brown, well burnished; int. black, well burnished; core grey; filler sand and red-brown material. Fabric E.

735. Everted rim; ext. black, burnished; int. dark brown, burnished; core brownish grey; filler quartz, red-brown material and mica. Fabric E.

736. Rim of dark burnished fabric, mica flecked; core grey; filler sand, red-brown material and mica. Fabric E.

737. Rim of black, burnished, mica-flecked fabric; filler sand, red-brown material and mica. Fabric E.

738. Rim; ext. dark brown, burnished; int. red, burnished; filler angular quartz. Fabric E.

739. Neck of lightly burnished vessel; ext. red-brown; int. dark brown; core grey; filler sand and red-brown material; decorated externally with two horizontal incised lines. Fabric E.

Later Mediaeval Pottery by Christopher Drage

*I should like to thank Mr. R. G. Hughes for information concerning the Burley Hill-type ware.

SUMMARY

The pottery from the site (Figs. 78, 79), some 650 sherds came from plough furrows, topsoil and modern features. It was locally made and dated from the 12th to the 15th centuries. The bulk of the pottery was Burley Hill-type wares (Types 1–6); the only other identifiable wares were orange and grey gritty ware (Type 7) and a single piece of West Midland origin (Type 8). There are no reconstructable vessels, and the state of the pottery, fragmentary and abraded, was consistent with its arrival on site with other domestic rubbish as night soil, there being no post-conquest occupation of the excavated areas.

DISCUSSION

In the absence of secure contexts the pottery can only be dated by comparison with other local groups, in particular the typological series established at Full Street, Derby (Hall and Coppack 1972). The majority of the pottery (Types 1–6) from Willington is Burley Hill-type ware. Two production centres are known, and this ware occurred in quantity at Full Street in a variety of forms; cooking pots, panchions, pipkins, urinals and jugs from the 12th to the 15th centuries. Excavation has located two production sites in Duffield, at Burley Hill (Hughes 1957) and at King Street, the finds from which are in Derby Museum (No. 783–66). At Allestree wasters have been found (Hall and Coppack 1972, 74–5). The products of these sites are indistinguishable, and are termed 'Burley Hill-type ware'. It is usually hard fired but a less well fired softer form is known.

At Willington the commonest form is the cooking pot. The broad everted rims 21, 22, 27, 33 and the everted square rims, 3, 4, 30, may be dated by comparison with the

vessels at Full Street, nos. 113–114 to the late 13th century. The simple round rims, 17, 18, were produced at the King Street kiln. The flanged rims, 13, 19, 47, are a 12th-13th century form, and the hammer-head rim, 20, a late 13th-14th century form cf. Full Street no. 7, Goltho no. 6 (Beresford 1975). The last two forms have not previously been recognised in a Burley Hill type fabric. The simple panchion rim, 46, must also be assigned to the 14th century, but the broad sloping panchion rim, 31, is a late 14th to 15th century form. (Full Street nos. 212, 218, 193). A number of jug rims are included but nothing is known of the form of these vessels except for 33 and 36; jugs comparable to these have been found in late 13th century contexts at Full Street nos. 147 and 73. A similar date is suggested for the pierced rod handle, 16 (Full Street no. 176) but strap handles, 32, 15, have not previously been recognised in this fabric. The only other vessel forms at Willington are the urinal, 14, and the base of a small jar or jug, 24. Such small vessels were produced at the King Street kiln.

Only a small amount of the Burley Hill-type ware at Willington was glazed, and decoration was confined to combed zig-zag and wavy line motifs, 22, 23, 28, typical of the 13th century (Full Street no. 155). Orange and grey gritty ware has previously been identified only at Full Street, where it occurred in a variety of vessel forms; bowls, cooking pots, and jugs from the 12th to the 13th centuries (Hall and Coppack 1972, 73–4). No attempt has been made to differentiate the oxydized and reduced forms of this ware. At Willington the flat everted-rimmed cooking pots or bowls, 53, 54, dated to the 12th century and the square everted rim, 49, to the late 12th to 13th centuries (Full Street nos. 16 and 68). The jug rim, 30, probably dated to the 13th century. The fabric of the strap handle, 57, is similar to that of a late 12th century jug at Full Street (no. 24) and a late 13th century pitcher from Burton-upon-Trent (Drage 1979, no. 75 DR) and is probably from the West Midlands.

CONCLUSIONS

The nature and small size of the group preclude any firm conclusions but does give some small indications of the pottery available to, and used by the nearby mediaeval village. The earliest pottery of late 12th to 13th century date is orange and grey gritty ware (Type 7), previously found only at Full Street. From the 13th to the 15th century, Burley Hill-type ware predominated, as at Full Street, but there are none of the finer glazed and decorated pieces normally associated with this ware, perhaps reflecting the poverty of the settlement. Only a single sherd, the strap handle, 57, came from outside the immediate locality.

POTTERY DESCRIPTIONS

For the purposes of the catalogue the pottery is treated as coming from a single group and divided on the basis of fabric into eight types. All rim sherds have been illustrated. Only one base sherd, from a vessel of distinctive character, is illustrated.

Type 1 (1–16) (Fig. 78)

Total of sherds 344, 53% of site total. No. of glazed sherds 10.

The fabric is hard, buff-white to orange-buff in colour. The paste is tempered with sand and crushed quartz, producing a sandy surface which is occasionally black or grey. Some sherds are covered with a thick green-brown glaze. This type is a product of the Burley Hill kilns.

1–4. Cooking-pot rim.
5. Cooking-pot rim with a trail of thick green glaze on the rim and interior.
6–13. Cooking-pot rims.
14. ?Urinal rim.
15. Strap-handle with a trail of thick green glaze. The piercings, arranged in a double row in places pass through the handle.
16. Rod handle, covered in a thick green-brown glaze, with large central piercings.

Type 2 (17–28) (Fig. 78)

Total of sherds 172, 26% age of site total. No. of glazed sherds 25.

The fabric is hard, orange-buff to purple-brown in colour. The paste is tempered with sand and crushed quartz, producing a sandy surface. Some sherds have a thick, green-brown glaze. This type is a more heavily fired and reduced variety of Type 1. This type is a product of the Burley Hill Kilns.

17–20. Cooking-pot rims.

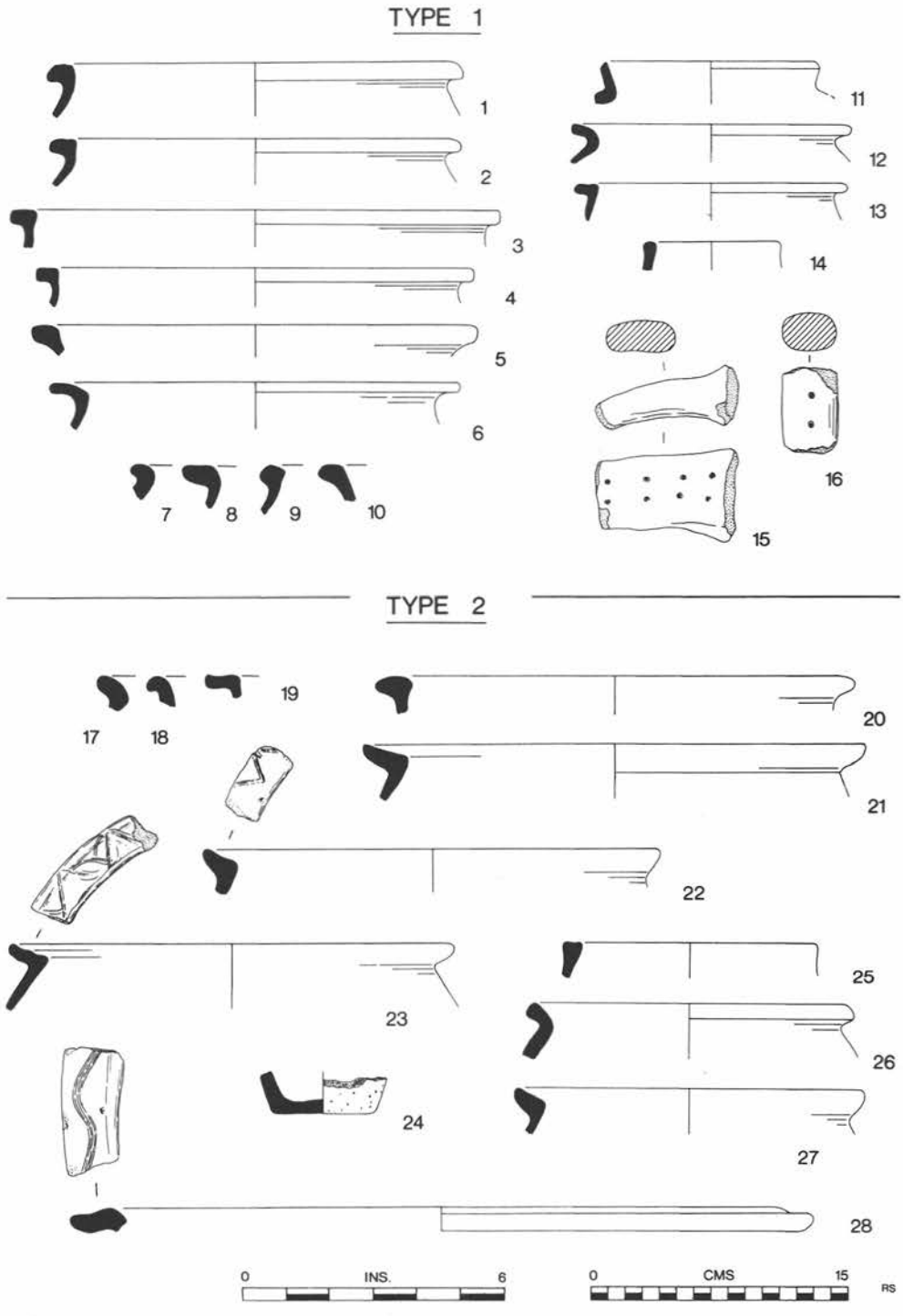


Fig. 78 Willington: Later Mediaeval pottery. Scale 1 : 4

21. Cooking-pot rim with an internal trail of green-brown glaze.
22. Cooking-pot rim with combed zig-zag decoration.
23. Cooking-pot rim with combed zig-zag decoration repeated over a more rounded wavy-line design.
24. Base of a small jug or jar.
25. Cooking-pot rim with trail of green-brown glaze on the exterior.
26. Cooking-pot rim, trail and splashes of brown glaze on the interior.
27. Cooking-pot rim.
28. Cooking-pot rim with internal green glaze and incised wavy line decoration.

Type 3 (29–32) (Fig. 79)

Total of sherds 42, 6% of site total. No. of glazed sherds 6.

The fabric is hard, white-buff to grey-buff in colour. The fabric is tempered with sand, finely crushed quartz and ground up pottery, producing a sandy surfaced ware. Some sherds have a thick creamy, yellow-green or brown glaze. This type is a product of the Burley-Hill kilns.

29. Panchion rim with creamy, green-brown glaze on the interior.
30. Cooking-pot rim.
31. Panchion rim with creamy, yellow-green glaze on the interior and exterior.
32. Strap handle with knife-slashed decoration. The handle is twisted to form a right hand grip and the fabric overfired, producing a blistered browning glaze.

Type 4 (33–36) (Fig. 79)

Total no. of sherds 20, 5% of site total. No. of glazed sherds 7.

The fabric is soft, buff-orange in colour often with a grey-white core. The paste is tempered with finely crushed quartz and small red inclusions. Some sherds are covered with a thick green mottled glaze. This type is a product of the Burley Hill kilns.

33. Jug rim, internally reduced with a trail of thick green-brown glaze on the exterior.
34–35. Cooking-pot rims.
36. Jug rim.

Type 5 (37–40) (Fig. 79)

Total no. of sherds 9, 1% of site total.

The fabric is soft, orange to grey-brown in colour. The paste is tempered with fine sand and occasional larger pieces of quartz. The surfaces are smooth and slightly sandy. This type is a product of the Burley Hill kilns.

37. Cooking-pot rim.
38–39. Jug rims.
40. Strap-handle, grooved, thumb indented and twisted to form a right hand grip.

Type 6 (41–47) (Fig. 79)

Total no. of sherds 35, 5% of site total. No. of glazed sherds 4.

The fabric is soft, orange-beige to grey-brown in colour, tempered with pieces of crushed quartz and small red inclusions. The surface is smooth.

41. Jug rim.
42. Jug rim, with pulled lip and splashes of green glaze on the exterior.
43–44. Jug rims.
45. Cooking pot rim.
46. Panchion rim with trail of yellow-green glaze on the interior.
47. Cooking-pot rim.

Type 7 (48–50) (Fig. 79)

Total no. of sherds 20, 3% of site total.

The fabric is hard, grey-white to orange-grey in colour. The fabric, tempered with sand, finely crushed quartz and black and red grit, has a slightly sandy surface. This type is similar to the orange and grey gritty wares at Full Street.

48–49. Cooking-pot rims.
50. Jug rim.
51–55. Cooking-pot rims.

Type 8 (57) (Fig. 79)

Total number of sherds 1.

The fabric is soft, orange to yellow-buff in colour and tempered with finely crushed quartz. The glaze is thick, green to yellow-brown in colour. This type is of West Midland origin.

57. Strap-handle, grooved and twisted to form a right hand grip. The glaze is thickly applied on the upper surfaces only. The left hand side of the handle bears a single incised line.

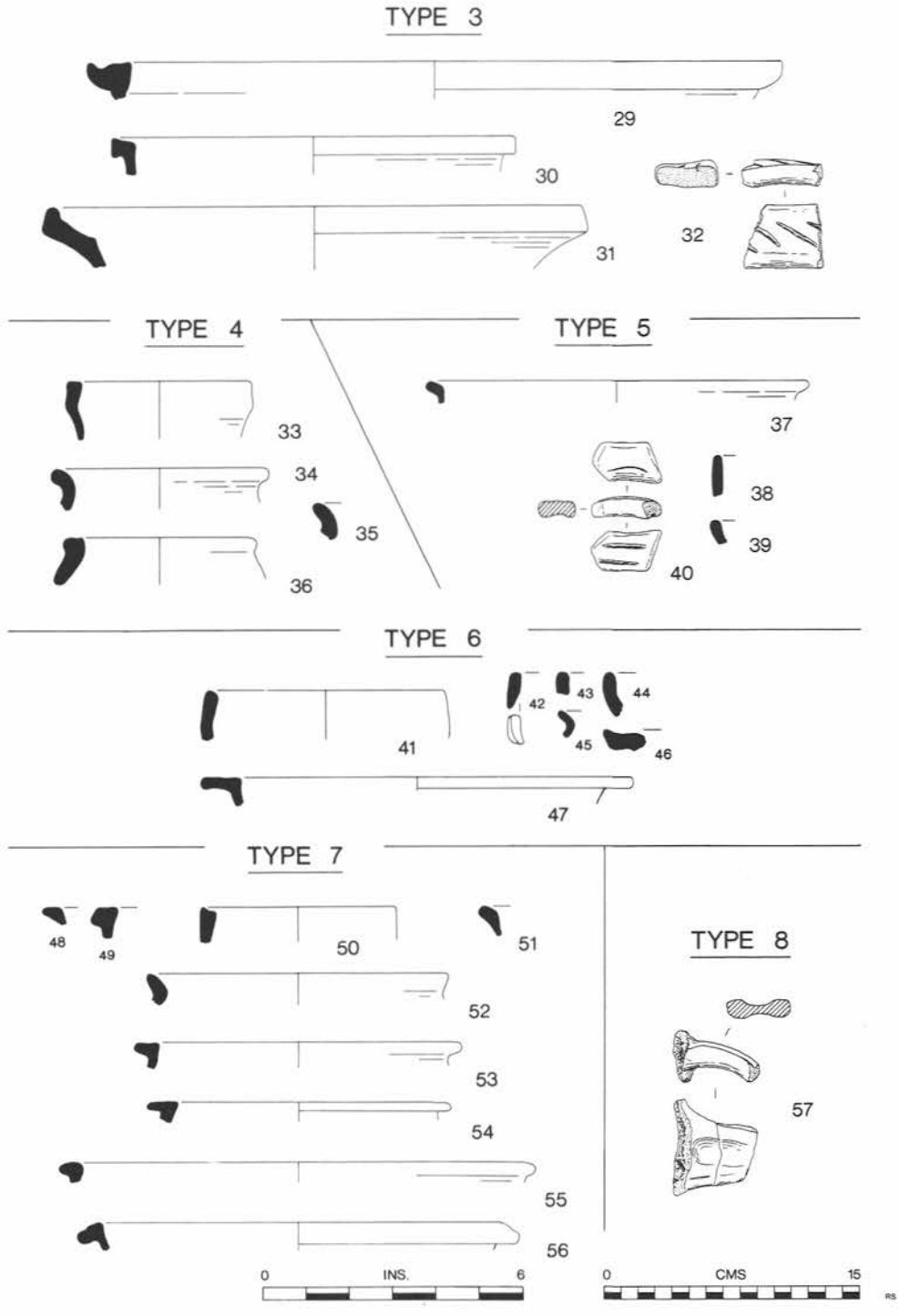


Fig. 79 Willington: Later Mediaeval pottery. Scale 1 : 4

Baked Clay Objects: Iron Age by S. M. Elsdon

BAKED CLAY TRUNCATED PYRAMIDS, CONES AND RECTANGULAR BLOCKS WITH PERFORATIONS

(Figs. 80–85)

There are about 27 of these baked clay blocks from two widely separated features, a hearth, F56 (Pl. 3) and a pit, F713 (Pl. 4).

Shapes, sizes and weights:

The shapes range from truncated pyramids to almost rectangular blocks tapering only slightly towards the top. Cones with rounded tops also occur. Cross sections are accordingly square or circular. Heights vary from almost 18 cm to 12 cm and the diameter of the flat bases is about 10 cm. The long sides of the rectangular bases are also about 10 cm. All have a horizontal perforation about one third of the distance from the top and this is, on average, 1·75 cm in diameter.

Of the 18 reconstructable blocks, eight have vertical holes in the top which do not join the horizontal perforation, while six definitely do not have this hole in the top. One (8) has a shallow indentation in the top; one (1) has a deep groove in the top and another (10) has shallow cord or scored lines across the top.

The estimated original weights vary from 2·72 kg (6 lbs) to 1·81 kg (4 lbs) but most are of the larger size.

The various forms are set out diagramatically in Fig. 80, and forms II, III and IV are the most common.

Fabric:

This is of two kinds. The F713 group is brown throughout, hard and well fired, while that of the F56 group is softer and very friable, with brown to red-brown exterior and dark grey core. In both cases there are sparse quartz inclusions and occasional very large brown pebbles.

Hearth F56: (p. 83 above).

About 19 large blocks were found in the upper filling of this partially silted hollow and they were laid side by side together with a large stone. Pieces of burnt charcoal and bone surrounded the blocks and the sides of the hollow were scorched. Three or four large pots had been set on the blocks, and parts of these were vitrified through over firing of a localised nature. Scattered around the edge of the hollow were about 19 small rectangular loomweights.

Pit F713: (p.84 above)

This hollow contained about 8–9 blocks but they were not lying in any ordered way. The fill contained about 20 badly broken pottery sherds representing probably three vessels. There was no sign of burning in this pit and possibly both the blocks and the pottery were thrown in as rubbish.

In both the above features these baked clay blocks are exclusively associated with Assemblage 1 pottery (Figs. 81–85 nos. 1–10).

About 24 L.B.A./E.I.A. sites have records of 'loomweights' of these types (p. 208) but this list is almost certainly incomplete. Sites which have produced this artifact are not confined to the lowland zone but extend into Scotland and Wales, as examples come from Traprain Law, Burradon in Northumberland and The Breiddin in Powys.

At Ivinghoe Beacon the 'loomweights' are small, 8–12 cm high, with the exception of one fragmentary block which could be 22 cm. Staple Howe, in Yorkshire, has blocks with vertical holes in the top and, like the Willington ones, these do not connect with the horizontal perforations. The heights vary from 14–18 cm and the estimated weights from 0·91 kg (2 lbs) to 2·27 kg (4 lbs). One very small one about 9 cm high and weighing 0·42 kg (15 ozs) when complete compares closely with a weight from F202 at Willington (44). Maiden Castle, in Dorset, has five large chalk blocks up to 24 cm high.

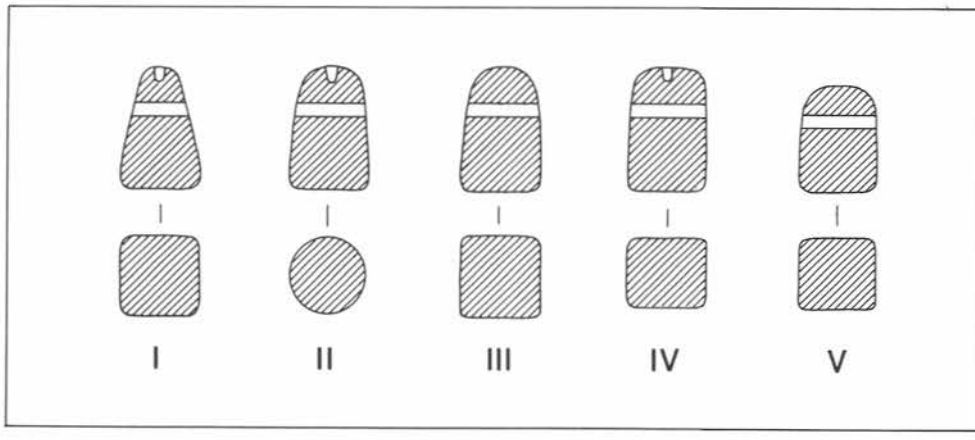


Fig. 80 Willington: Baked clay blocks: principal forms

Two groups of these blocks were found in pits as were the Willington ones. At Mucking, in Essex, six baked clay cones, two or three with dimples in the top, formed part of an assemblage retrieved from a group of pits after machine stripping which also included pots with applied cordon decoration at the neck of Late Bronze/Early Iron Age type (Jones, 1979). But the most interesting parallel is a group of 'loomweights' which were found in a pit in a quarry at Badwell Ash, in Suffolk. The excavator found ten of these blocks placed on a floor of rammed clay and a ledge of potter's clay. 'Five had been used, probably with five others, to fence in a fire-place in which pots were being fired, as the first five discovered were badly burnt on one side'. Fragments of haematite coated ware were found with the blocks and burnt material and charcoal was scattered around and over them. One block, the largest, is 16 cm high and weighs 1·92 kg. It has a horizontal perforation near the top. The other example illustrated in the report is much smaller.

The recently excavated site at Runnymede Bridge in Surrey produced three fragmentary cones and two possible small rectangular weights, and at The Breiddin at least one rectangular block with horizontal perforation was found.

The function of these blocks from Willington is problematical. They would seem too heavy for conventional loomweights and the flat bases suggest they stood on the ground with some supporting an upright in the vertical hole in the top. The horizontal perforations show no signs of wear from suspension and the very friable nature of the fabric argues against their use as thatch weights as they would have disintegrated in the rain. But the largest of the triangular loomweights is of a comparable weight although it is of an unusual type apparently with a perforation at only one corner and a small hole on one side (Fig. 47). It is possible that in hearth F56 the blocks were being fired along with the pottery and also acting as makeshift firebars as was apparently the case at Badwell Ash. But their eventual function, whether as loomweights or for some other purpose, remains obscure.

All these sites with truncated pyramidal blocks and cones are firmly associated with Late Bronze/Early Iron Age pottery of the Willington Assemblage I type. Radiocarbon dates from Runnymede Bridge suggest the 9th and 8th centuries B.C. and the dates from The Breiddin associated with one block are 479±55 b.c. (although this could be reassessed to as late as 3rd century B.C.) . But the dates from Aldermaston Wharf are again Late Bronze Age (pers. comm. R. Bradley). This type of pyramidal weight clearly spans the gap between the Bronze Age 'bun-shaped' examples and the later triangular type which, at Willington, is associated with Assemblage II pottery.

Peter Reynolds, of the Butser Ancient Farm Project, has been studying one of the rectangular blocks with a view to determining the method of manufacture and possible function. He found, experimentally, that when thoroughly dried for three days by a hearth it fired quite satisfactorily in his tunnel type kiln. He concluded that the clay had been firmly wedged to form the blocks.

Reynolds suggests that a rod may have been passed through the horizontal perforations to form a rigid framework for a loom standing on the ground for use with counterweights. The vertical holes might have supported the upright structure. The absence of any signs of wear on the horizontal perforations would support this theory.

What is almost certainly a Late Bronze Age loom has recently been excavated at Wallwitz, Kreis Burg, in Saxony, E. Germany (Stahlhofen 1978). Here loomweights of a pyramidal type were found upright in a pit flanked by two post-holes.

SMALL RECTANGULAR BAKED CLAY LOOMWEIGHTS

(Figs. 82, 83 nos. 13–29)

These weights were found scattered around the edges of the hearth F56, from which the large baked clay cones came. There are about 19, five of which are complete. The average weight is 0·38 kg and the average size 9/8/6 cm. All the weights have horizontal perforations on the long axis c. 8 mm in diameter. There are no signs of wear on the perforations but cord impressions are frequent on the ends of the blocks. It seems probable that these were made when the weights were suspended for drying before firing. Some of the blocks are slightly concave and two, 14 and 15, are sausage-shaped. The remains of what seems to have been a flat circular weight, 12, with a large perforation (2 cm) slightly off centre, was also found in this feature.

Only one other identifiable weight of this type was found from the whole of the rest of the site.

DESCRIPTION OF BAKED CLAY TRUNCATED PYRAMIDS, CONES AND RECTANGULAR BLOCKS IN HEARTH F56

(Figs. 81, 82, 83 nos. 1–11)

Grass or straw marks sometimes appears on the exterior of the blocks. No string or suspension marks are visible and the bases are flat. The blocks were apparently firmly wedged in manufacture and the perforations made with a rounded stick from each side.

1. Form V. Weight: 1·53 kg. Complete c. 1·81 kg. Height: 14·5 cm; groove on top; almost complete.
2. Form I. Weight: 2·02 kg. Complete c. 2·15 kg. Height: 16·5 cm. Horizontal perforation 1·80 cm diam. Almost complete.
3. Form V. Weight: 1·08 kg. Complete c. 1·81 kg. Height: ?15 cm. Horizontal perforation c. 1·5 cm diam.
4. Form II. Weight: 1·05 kg. Complete c. 1·81 kg. Height: ?17·5 cm.
5. Form III. Weight: 1·47 kg. Complete c. 2·15 kg. Height: 14 cm.
6. Form IV. Weight: 2·66 kg. Complete c. 2·72 kg. Height: 17 cm. Horizontal perforation 1·5 cm. Almost complete.
7. Form III/IV. Weight: 2·13 kg. Complete c. 2·61 kg. Height: ? top missing.
8. Form IV. Weight: 1·95 kg. Complete c. 2·27 kg. Height: 17 cm. Horizontal perforation 1·75 cm diam; shallow vertical hole in top; almost complete.
9. Form II. Weight: 2·47 kg. Complete c. 2·61 kg. Height: 17·5 cm. Horizontal perforation 1·5 cm diam; twig or scored marks on base; almost complete.
10. Form III. Weight: 1·25 kg. Complete c. 2·27 kg. Height: 16–17 cm; shallow cord impressions or scored lines across top.
11. Form ?II. Weight: 1·59 kg. Complete c. 2·27 kg. Height: ?16·5 cm; vertical hole probably missing.

11a. (Not drawn) Probable cone unreconstructable.

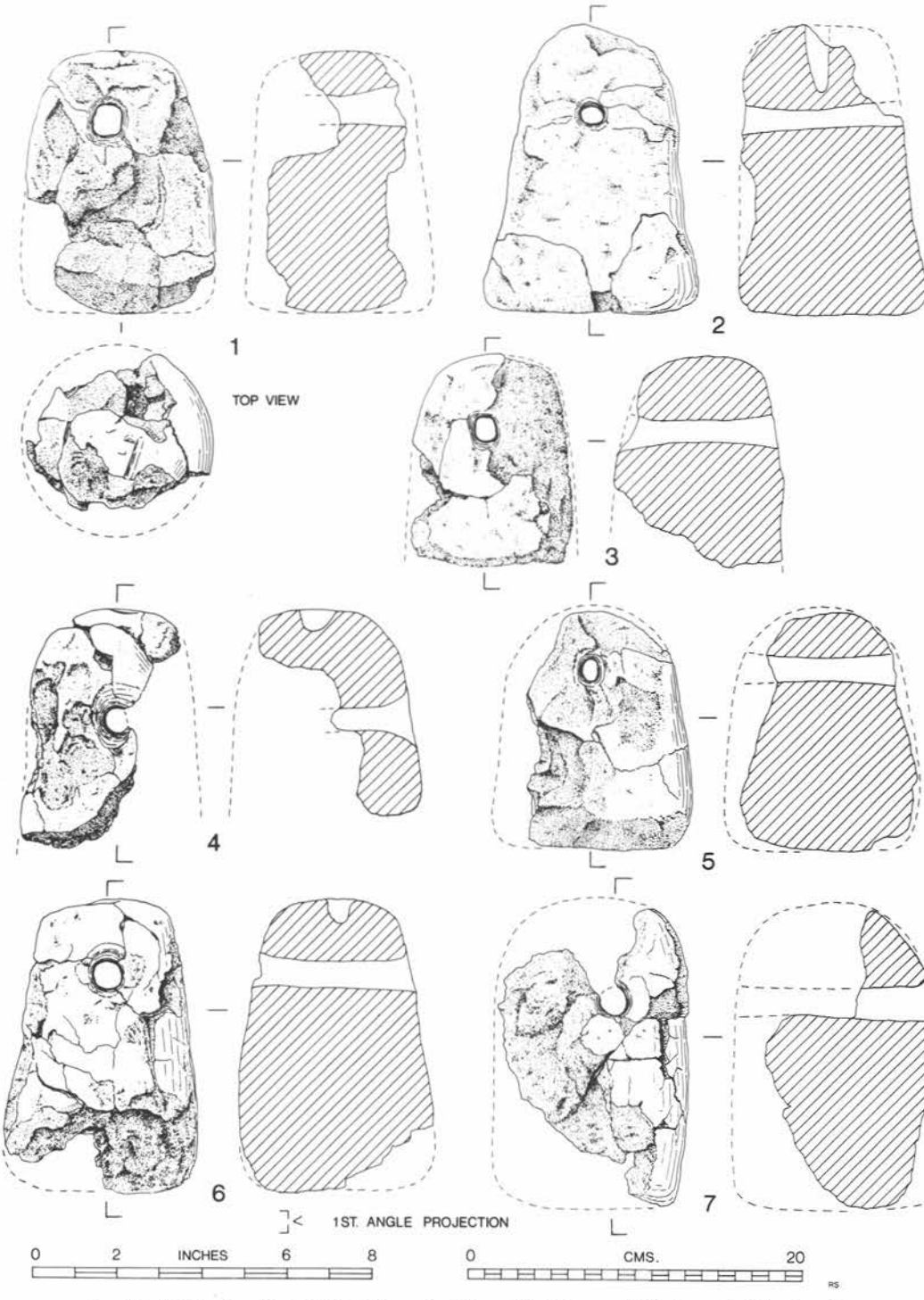


Fig. 81 Willington: Baked Clay Truncated Pyramids, Cones and Rectangular Blocks with Perforations from Hearth F56. Scale 1 : 4

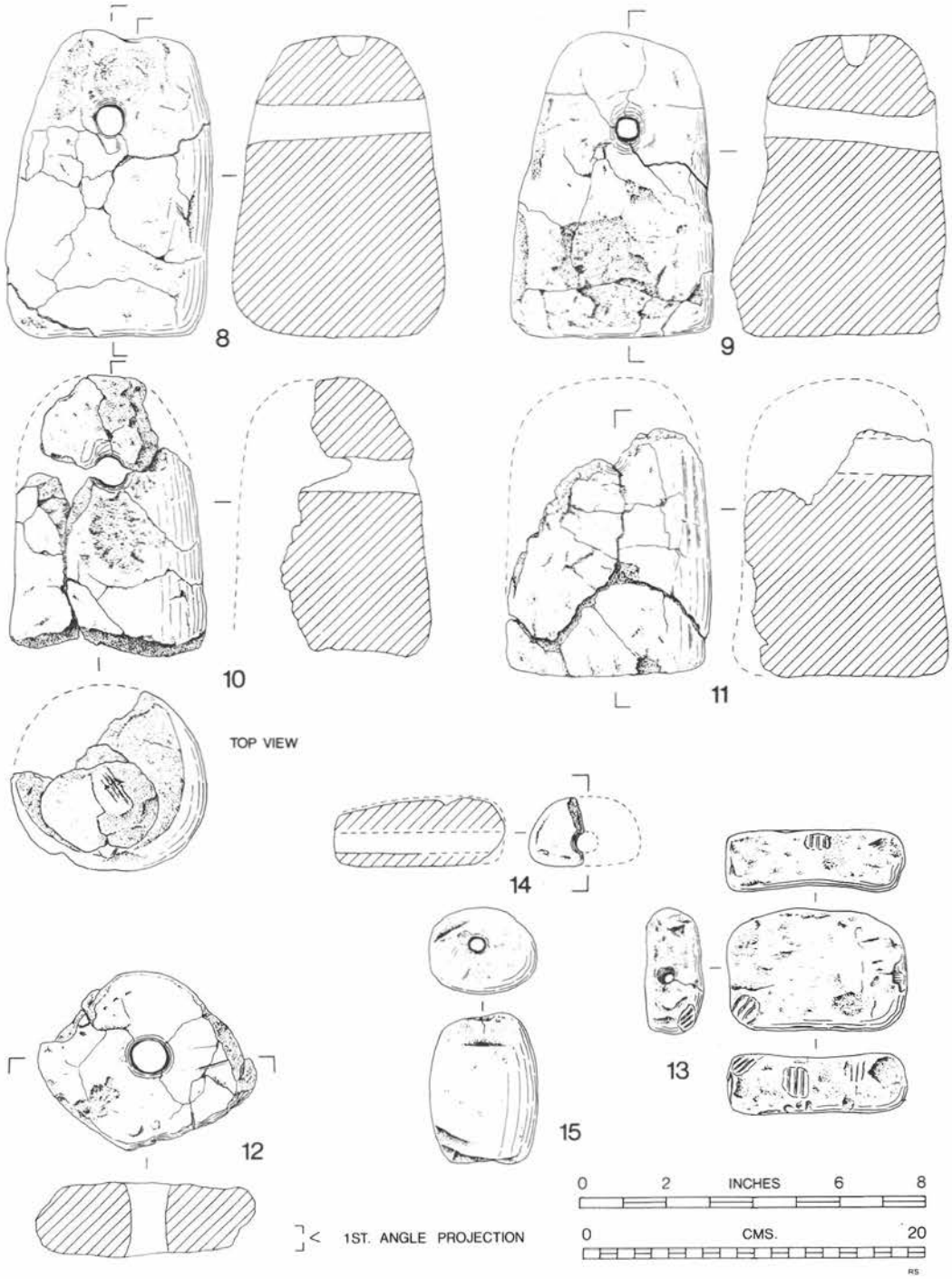


Fig. 82 Willington: Baked Clay Truncated Pyramids, Cones and Rectangular Blocks with Perforations (8–11) and Loomweights (12–15) from Hearth F 56. Scale 1 : 4

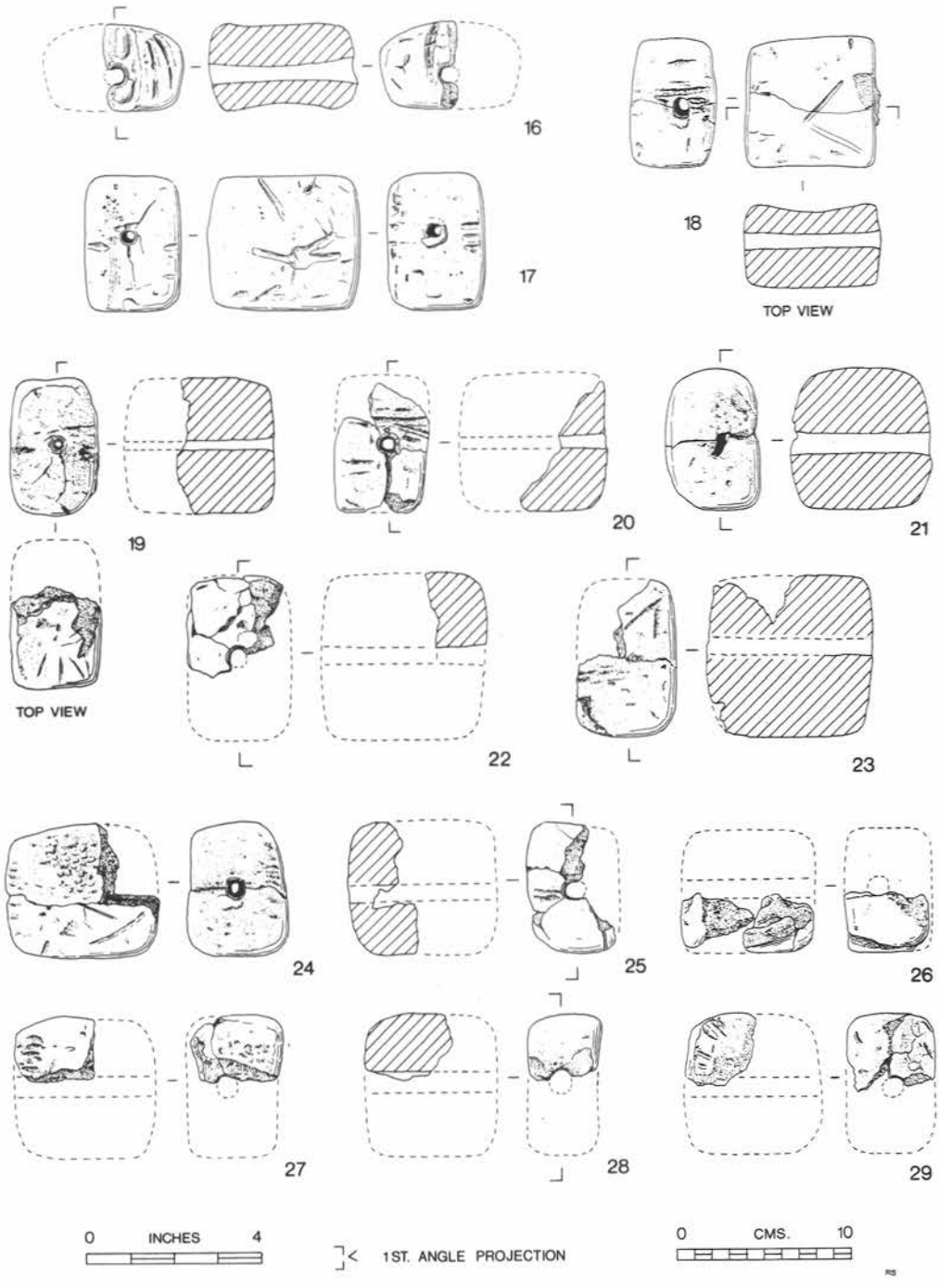


Fig. 83 Willington: Small Rectangular Baked Loomweights from Hearth F 56. Scale 1 : 4

11b. (Not drawn) Almost complete but unreconstructable. Weight: 2·71 kg. Complete c. 2·72 kg. Height: c. 17·5 cm.
11c. (Not drawn) Form II/III/IV. Base fragments.
11d. (Not drawn) Fragments with horizontal perforation.
11e & f. (Not drawn) Fragments of 1–2 blocks. Weight: 3·58 kg and 3·09 kg.
12. Part of flat circular slab with perforation slightly off-centre.

SMALL RECTANGULAR BAKED CLAY LOOMWEIGHTS IN HEARTH F56, F2 AND F918.
(Figs. 82, 83 nos. 13–29)

The clay is better fired than that of the large blocks. The fabric is of a uniform mid-brown, dense with minimal sand filler. The perforations are on the long axis.

13. Complete flat rectangular weight; groups of three parallel grooves, two on one narrow side, one on the opposite side and one on a corner. Weight: 0·31 kg. Perforation 9 mm diam.
14. About half of a sausage shaped weight flattened on one side. Weight: 0·11 kg. Complete c. 0·22 kg.
15. Complete; three diagonal grooves show on one face. Weight: 0·28 kg.
16. Half of small rectangular weight; very deep cord impressions on both ends. Estimated complete weight: 0·39 kg.
17. Complete; grooves on flat face; cord marks at one end and possible fabric impression on the other (left on drawing). Weight: 0·52 kg.
18. Complete; one side concave; V shaped groove on flat face and cord marks at one end. Weight: 0·37 kg. Perforation 9 mm diam.
19. About half rectangular weight; shallow grooves on one corner and faint cord impressions. Perforation 5 mm diam.
20. Part of rectangular weight; deep cord impressions on one end. Perforation 7 mm diam.
21. Complete sub-rectangular weight. Oval perforation. Weight: 0·41 kg.
22. Part of rectangular weight.
23. About half rectangular weight; cord marks at one end.
24. Three quarters of rectangular weight. Perforation 8 mm diam.
25. Part of rectangular weight; cord marks at one end.
26. Fragments of rectangular weight with wide groove on one corner.
27. Part of rectangular weight; cord marks at one corner.
28. Part of rectangular weight.
29. Fragments of rectangular weight; deep cord marks on corner.
29a. (Not drawn) Fragments of rectangular weight.
29b. (Not drawn) Fragments of burnt stone in rectangular and conical shapes.
29c. (Not drawn) Fragments; probably rectangular weight.
29d. F2 (Not drawn) Fragments of small weight with perforation.
29e. F918 (Not drawn) Fragments of possible small rectangular weight.

BAKED CLAY TRUNCATED PYRAMIDS, CONES AND RECTANGULAR BLOCKS IN F713.
(Figs. 84, 85 nos. 30–37)

The fabric is much harder and better preserved than the group of blocks from F56. It is brown throughout with some quartz and occasional very large pebble inclusions.

30. Form III. Weight: 2·72 kg. Complete c. 3·00 kg. Height: 16·6 cm. Horizontal perforation 2·3 cm diam. Shallow dimple in top; largest example; almost complete.
31. Form III. Weight: 2·44 kg. Complete c. 2·49 kg. Height: 13·5 cm. Horizontal perforation 1·5 cm diam. Almost complete.
32. Form III. Weight: 1·78 kg. Complete c. 1·81 kg. Height: 14 cm. Shallow dimple in top; almost complete.
33. Form I. Weight: 2·27 kg. Complete c. 2·39 kg. Height: 12 cm. Horizontal perforation 1·75 cm. Shallow vertical hole; almost complete.

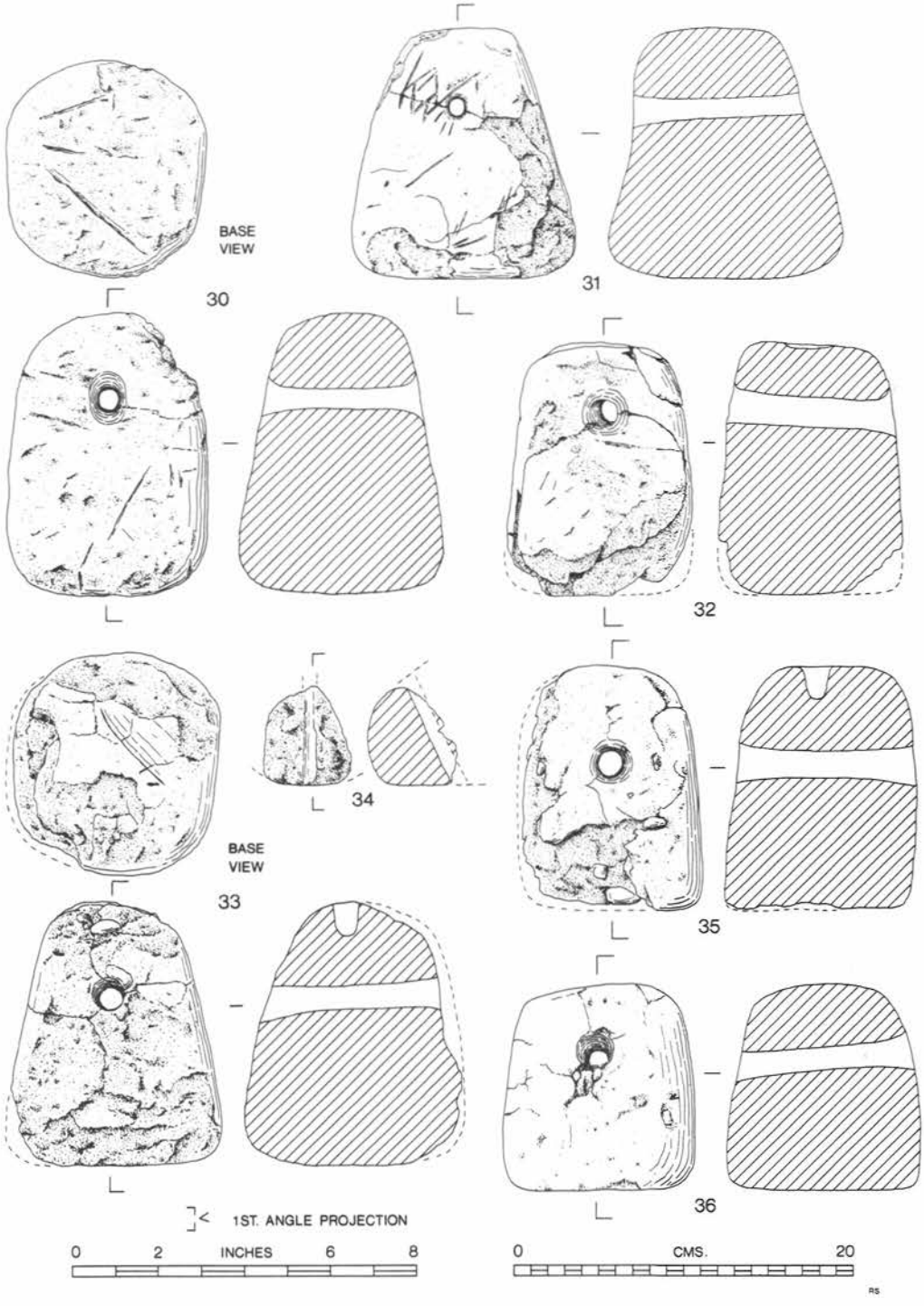


Fig. 84 Willington: Baked Clay Truncated Pyramids, Cones and Rectangular Blocks from F 713. Scale 1 : 4

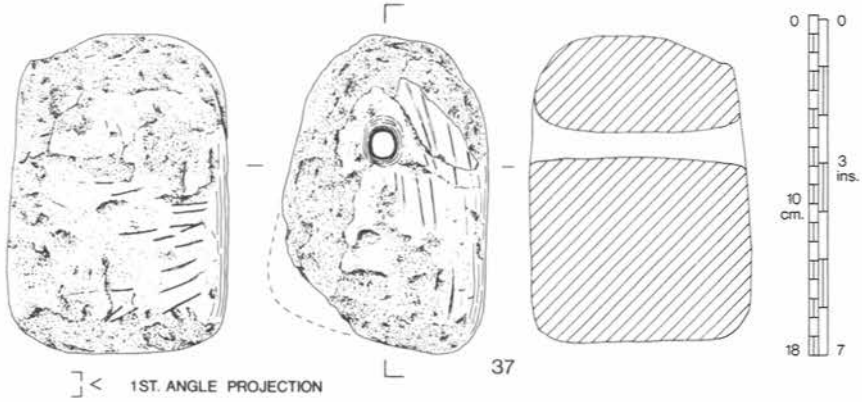


Fig. 85 Willington: Baked Clay Rectangular Block with Perforations from F 713. Scale 1 : 4

34. Fragments of baked clay with dimple in ?top and narrow horizontal perforation. Could be a small rectangular weight.
35. Form IV. Weight: 1·78 kg. Complete c. 1·82 kg. Height: 13 cm. Horizontal perforation 2 cm.
36. Form V. Weight: 1·82 kg. Height: 11 cm. Horizontal perforation 1·75 cm diam. Complete.
37. Form V. Weight: 2·52 kg. Complete c. 2·72 kg. Height 15·5 cm. Horizontal perforation 1·75 cm. Scratch marks on one side; almost complete.
37a. (Not drawn) Fragments of baked clay block with perforation.

TRIANGULAR LOOMWEIGHTS OF BAKED CLAY

(Figs. 86, 87 nos. 38–50)

Many of these weights are in a very fragmentary condition and have been identified on the basis of fabric, or the traces of perforations of appropriate size. About 33 have been recovered from the excavated areas and all but three were found either in the pit (F202) near Hut Circle 4 or in plough-soil associated with it. This means that they are reasonably well related to Assemblage II pottery. One triangular loomweight (no. 51) together with a large quantity of daub, was found in the ditch F1200, where there is a group of Assemblage I pottery but not too much significance should be attached to this as the ditch was open for a long period and also contained badly abraded Romano-British sherds.

Estimated complete weights vary from 2·72 kg to 1·39 kg and at least four are of the large variety with sides of 17 to 18 cm long. Because of the fragmentary nature of most of the weights, it is difficult to estimate the average number of holes. Some have three perforations, one across each corner while others definitely do not. One of the very large examples, 47, has a perforation across one corner, none across the second and the third has a small hole which does not penetrate far. A second large weight, 40, has perforations across two corners and a small hole set diagonally in the third. Only one or two weights, 1 and ?3, have clear evidence of perforations on all three corners and the remaining 28 are too fragmentary for classification. One fragment, 49, has a groove on the outside of one corner.

The largest group of triangular weights comes from a pit south of Hut Circle 4, F202 (Fig. 86) where fragments of about 23 were recovered. In addition the pit contained fragments of a baked clay conical object, 43, and a small sub-pyramidal weight with a horizontal perforation, 44. This pit and surrounding plough-soil are well associated with the largest group of Assemblage II pottery form the site (Fig. 70).

Function:

Very large triangular weights are known from other sites. Maiden Castle, Dorset, has four which are unusually large (average weight 3·63 kg) but there is no mention of the number of perforations. Glastonbury produced at least one triangular weight (3·46 kg) with two perforations. Of the four large weights from Willington one has only one perforation, one has two, another probably only one, while a fourth may have had three. So it is possible that the larger weights do not generally have three perforations and perform some function in stabilizing the loom while the smaller three holed variety are attached to the warp threads of the cloth. Is there a parallel here between the large pyramidal cones and the small rectangular weights of the earlier period?

Professor Wilhelmi has recently published a note (Wilhelmi, 1977) describing experiments using the three holed triangular weights from north German sites. Here two holes have a bunch of warp threads inserted in such a way that the weight can be slid up and down while the third hole has a string attached to move the weight forwards or backwards or to attach it to a frame. Some weights from Kastell Zugmantel, in the Taunus have two perforations with grooves on the outside of the corners (see Willington 49).

Distribution:

In Britain triangular loomweights are apparently restricted to lowland areas where they are widely found after *c.* 500 B.C. The most northerly find to date is Dragonby in South Humberside and the most westerly sites are Sutton Walls in Herefordshire and some in Dorset. Dr. T. C. Champion is currently studying their distribution both in England and Europe in Holland, Belgium and North and Central Germany (Champion 1975) following the work of Professor Wilhelmi (Wilhelmi, 1973) who has recently published a revised distribution map (Wilhelmi, 1977). There is a clearly defined zone of these sites on either side of the English Channel and Dr. Champion suggests they represent a common culture covering much the same area as 'pit and post-hole' sites. Wilhelmi sees some of the north German sites as continuing into the Roman era.

DESCRIPTION OF BAKED CLAY LOOMWEIGHTS FROM F202: C. 22 TRIANGULAR, ONE PROBABLY CONE-SHAPED AND ONE SMALL PYRAMIDAL. (Fig. 86 nos. 38–46)

The fabric is dense brown with sporadic large angular quartz and black pebble inclusions.

38. Two thirds of large triangular weight with two holes across corners and probably third missing; sides c. 17 cm. Estimated complete weight: c. 2·27 kg.
39. Almost complete triangular loomweight with perforations across all three corners; sides 15 cm. Estimated complete weight: c. 1·36 kg.
40. About half of large triangular weight possibly with perforations across only two corners and a small hole set diagonally in the third; one side slightly concave; reddish-brown ext., grey core with occasional very large quartz and pebble inclusions; sides 18 cm. Estimated complete weight: c. 2·44 kg.
41. About one third of triangular weight with a perforation at the one visible corner; small hole on flat side fairly centrally placed.
42. Fragments of a very large triangular weight with a perforation across the one extant corner and a small hole in one side.
43. Possible top of baked clay cone.
44. Small sub-pyramidal weight with horizontal perforation at top. Cf. Staple Howe (Brewster 1963, Fig. 73, no. 2). Weight: 0·37 kg.
45. Fragments of a medium-sized triangular weight with two perforations visible; fabric light brown and flaky.
46. Six fragments of baked clay with finger marks; one drawn.
46a. (Not drawn). Fragments of a large triangular weight, one with a perforation.
46b. (Not drawn). Fragments of a triangular weight.
46c. (Not drawn). Three fragments of weight; could be small rectangular or triangular.
46d. (Not drawn). Fragments of probable triangular weight.
46e & f. (Not drawn). Fragments of two further triangular weights.

There are fragments of about 10 more weights, possibly of the triangular type and five fragments of vitrified clay.

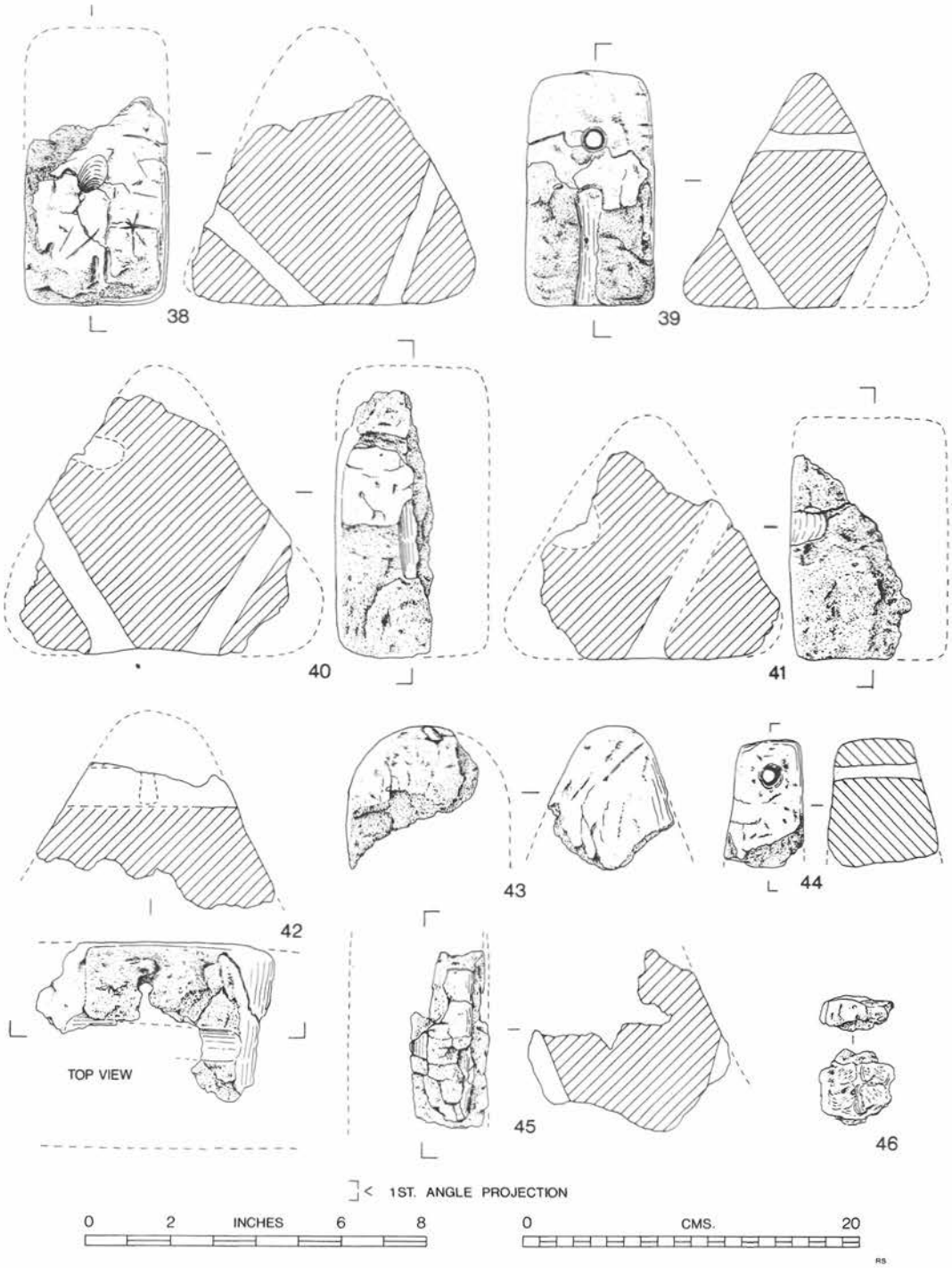


Fig. 86 Willington: Baked Clay Loomweights from F 202, (38–42 & 45) Triangular, (43) Cone-shaped, and (44) Small Pyramidal. Scale 1 : 4

DESCRIPTION OF TRIANGULAR LOOMWEIGHTS FROM OTHER FEATURES

(Fig. 87 nos. 47–50)

47. F292. Almost complete very large and unusual weight. One corner has a perforation; one has none and the third has a small hole which possibly did not penetrate; disintegrated on drawing. The fabric is brown and very crumbly with occasional large pebble inclusions. Estimated complete weight: c. 2·72 kg.

48. F155. Part of triangular weight with two perforations visible; some scoring on base; fabric red with occasional very large pebble inclusions.

48a. (Not drawn) F110. A second very large weight, one perforation is visible. Estimated complete weight: c. 2·03 kg.

48b. (Not drawn) F203. Could be part of a triangular loomweight.

The following are from plough-soil and disturbed areas around Hut Circle 4.

49. Part of a triangular loomweight with a groove on one corner.

50. Fragments of a triangular loomweight with holes across the two extant corners.

50a & b. (Not drawn). Fragments of at least two triangular loomweights some with traces of a perforation.

50c. (Not drawn) Fragments of a triangular weight with perforation.

50d. (Not drawn) F201. Fragmentary loomweight of triangular type with one perforation visible.

51. F1200. Probable fragment of a small triangular loomweight in a coarse, light red fabric. Also two small pieces, probably from the same weight.

FRAGMENT OF COB OVEN (Fig. 87, 52)

This fragment comes from what was probably a hemispherical clay oven. The curve is part of a large central hole which was probably surrounded by smaller satellite holes, as in the example from Little Woodbury (Brailsford 1949). The clay has been roughly pushed together in layers, which has caused the oven to fracture. The fabric is coarse with sparse crushed pebble inclusions and the colour is buff on the exterior surfaces and dark brown to red inside.

It was found in the Early Iron Age ditch, F1200, at the extreme west of the excavations.

LIST OF SITES WITH TRUNCATED PYRAMIDS, CONES AND RECTANGULAR BLOCKS OF BAKED CLAY WITH HORIZONTAL PERFORATIONS NEAR THE TOP

It should be noted that these sites are not confined to southern areas.

Berkshire

Aldermaston Wharf, (Bradley & Fulford 1976, 221, and *pers. comm.* R. Bradley).
Knight's Farm, (R. Bradley *pers. comm.* C 14 dates for both sites are awaited.)

Buckinghamshire

Ivinghoe Beacon, (Cotton and Frere, 1968, 215).

Cambridgeshire Two sites in the Welland Valley

Barholm, (W. G. Simpson, forthcoming).
Maxey, (W. G. Simpson, forthcoming).

Dorset

Eldon's Seat, (Cunliffe and Phillipson, 1968, 223–4).
Hengistbury Head, (Bushe-Fox, 1915, 64. PL.XXXI. no. 12).
Maiden Castle, (Wheeler, R.E.M. 1943, 294–7).

East Lothian

Traprain Law, (Cree, 1923, 258).

Essex

Mucking, (Jones, 1979).

Kent

Northdown School, Margate, (D. Perkins *pers. comm.* Isle of Thanet Archaeological Unit).

Lincolnshire

Tallington, (W. G. Simpson, forthcoming).

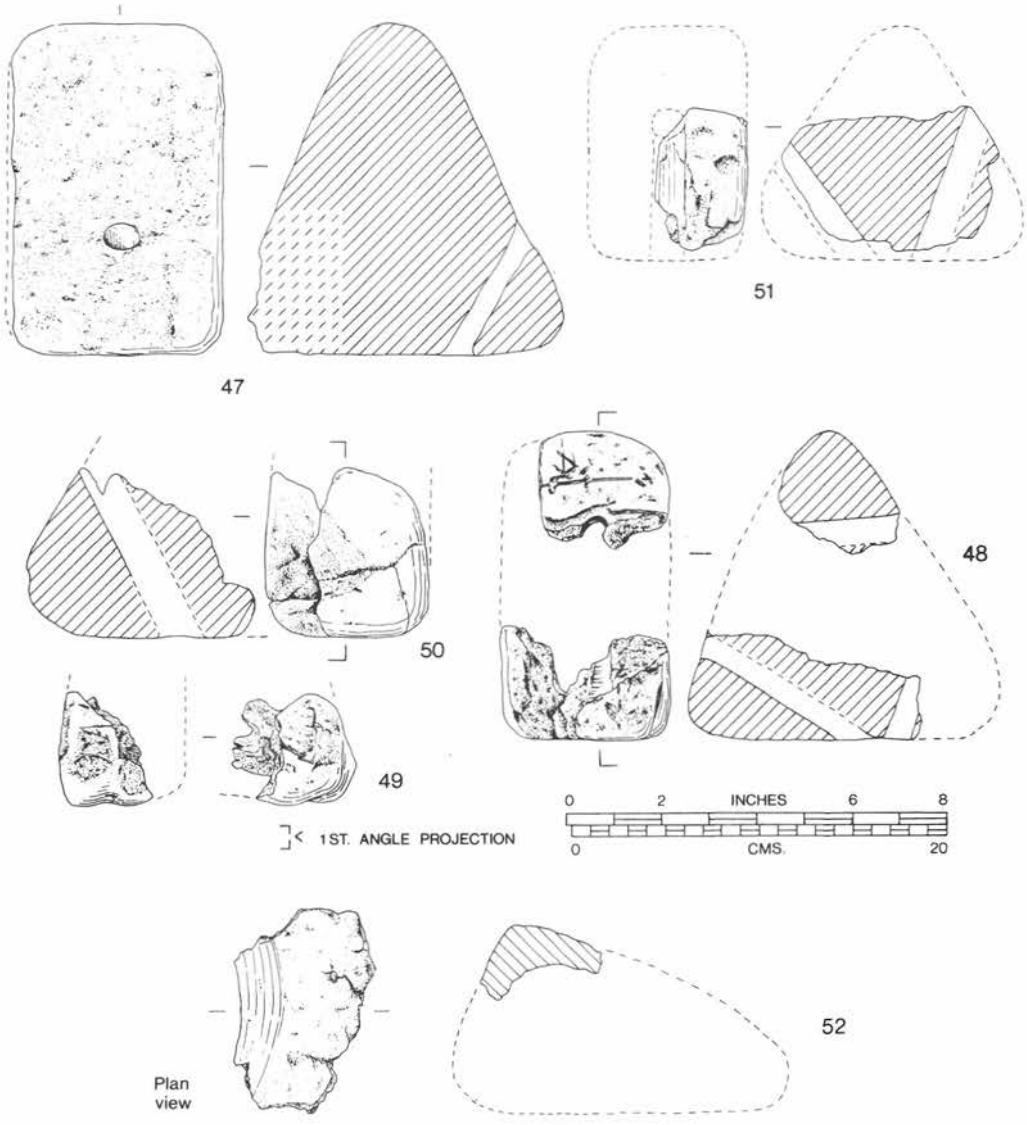


Fig. 87 Willington: Baked Clay Triangular Loomweights from F 292 (47), F 155 (48), disturbed areas around Hut Circle 4 (49 and 50) and oven fragment from F1200 (52). Scale 1 : 4

Norfolk
West Harling, (Clarke and Fell, 1953, 33).
Northamptonshire
Fengate, (Hawkes and Fell, 1943, 193).
Northumberland
Burradon, (Jobey, 1970, 80–82).
Powys
The Breiddin, (C. Musson *pers. comm.* Report forthcoming).
Somerset
Glastonbury, (Bulleid and Gray, 1917, 573, Fig. 172).
Suffolk
Badwell Ash, (Winbolt, 1935, 474–5, B.M. 1935, 12.3.1).
Lakenheath, (B M. 82–24. 1 and 2, British Museum 1905, P. 140).
Surrey
Byfleet, (Guildford Museum).
Kingston Hill Nr. Coombe Warren, (B.M.58. 4–6. 2).
Petters Sports Field, (Needham and O'Connell, 1977, 125).
Runnymede Bridge, (D. Longley, forthcoming (b)).
Sussex
Kingston Buci, (Curwen and Hawkes, 1931, 208–9).
Plumpton Plain, (Holleyman and Curwen, 1935, 38).
Yorkshire
Staple Howe, (Brewster 1963, 128–30).
Thwing, (*Pers. comm.* T. G. Manby).

SAXON CLAY OBJECTS

Circular Saxon loomweights were found in all three *Grubenhäuser,* and in a pit F838 west of *Grubenhaus* 2. *Grubenhaus* 2 contained approximately 40 weights, 1, approximately 20 weights, and 3, only three weights and a few fragments. All these weights were unfired, in contrast to the three fragments in F838 which had been baked. In *Grubenhäuser* 1 and 2, the weights were lying in heaps, some perhaps fallen, already broken and disintegrating at the time of excavation. Few were successfully disentangled and lifted, and fewer still are capable of illustration (Fig. 88).

All the weights were of the ring type (Hurst 1959 23–5) i.e. they had been made from a coil of clay, rather than a disc of clay pierced to form a hole. In some the hole is wider than the thickness of the clay, Hurst's early, annular type; in others the hole is the same size, or smaller than the clay coil, Hurst's middle Saxon, intermediate type. They contained little filler, but occasional pebble inclusions occur. Whether the weights were intended to be fired is not known. Both fired and unfired examples are frequently found in *Grubenhäuser.* The scarcity of fired examples at Willington would suggest that they were used in a green state. Estimated weight of individual loomweights is 200–300 gm.

One spindle whorl of baked clay tempered with angular quartz grits was found in *Grubenhaus* 1 (Fig. 88). It was 4·8 cm diameter, pierced by a hole 1–1·4 cm diameter. The whorl was thickest towards the centre (2·1 cm) but tapered to 0·9 cm at the edge. The fabric was hard and neatly smoothed and finished.

The Coins by M. Todd

1. *As* of Hadrian, badly worn. Obverse head to right. Reverse almost illegible. A.D. 117–138. F 504.
2. Halfpenny of George II. Young head of 1729–39. F 501.

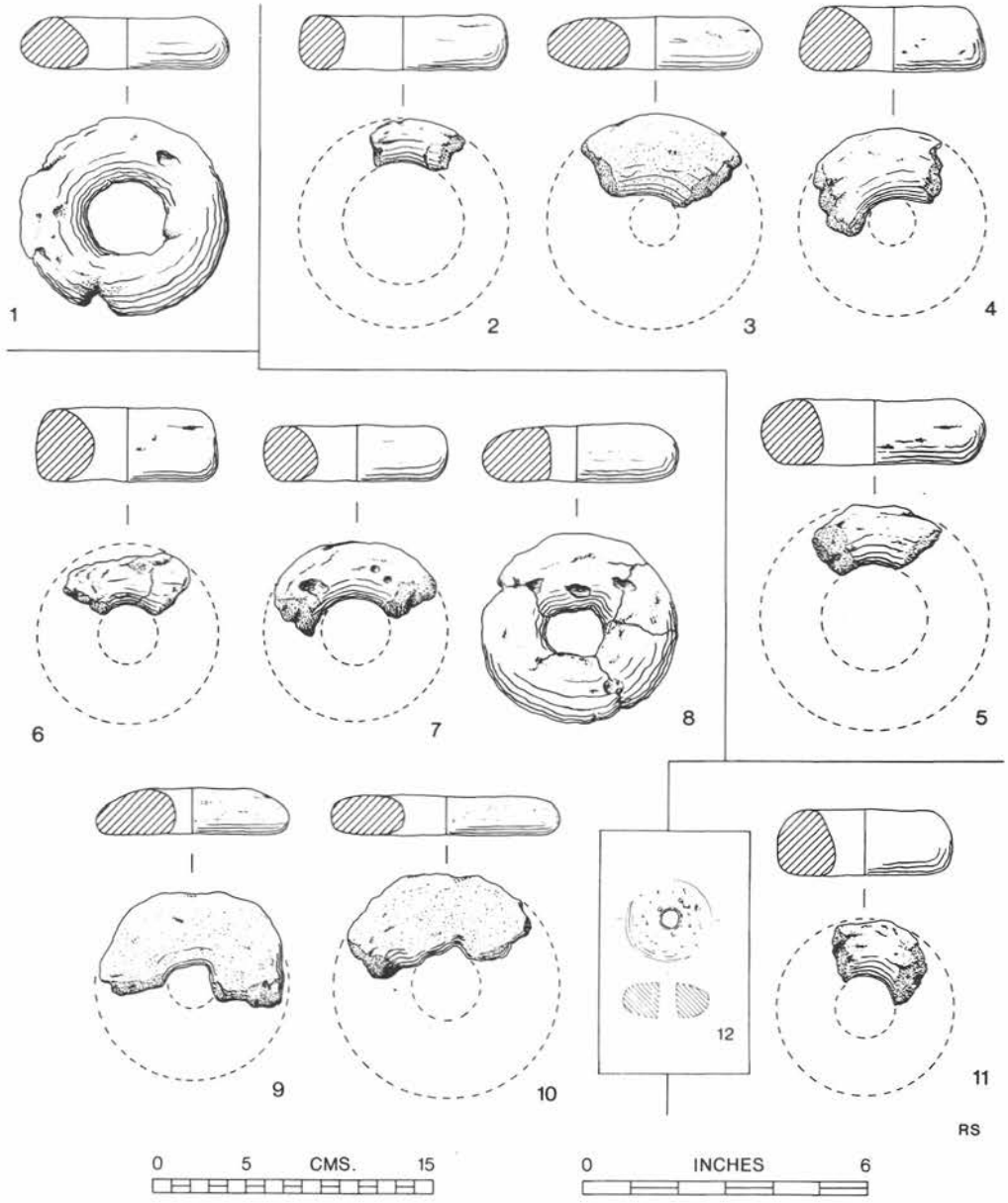


Fig. 88 Willington: Saxon loomweights and spindle whorl. Scale 1 : 4

Metal Objects (Figs. 89, 90)

1. Iron Sword, Fig. 89, by S. M. Elsdon

The iron sword was found by workmen near the dragline and is thus without associations.

The form is of gently tapering La Tène type with two cutting edges and the blade is 43 cm long, a little shorter than the average. The narrow tang, with a rectangular cross-section, is bent over at the top. As the blade is now broken, the overall curve is possibly not as great as indicated by the drawing, but the bottom portion has a distinct curve at one side. The blade is badly decayed and the section appears flat and slightly rounded except near the hilt where more is preserved. Here it is thicker with a distinct lozenge profile and it is possible that this profile originally extended right down the blade. A lozenge section, accompanied by a moulded mid-rib on the scabbard, is seen by Jope as an early feature in the British La Tène dagger series from the Thames (Jope, 1961, 317). The gently tapering blade is also an early La Tène feature.

The earliest known La Tène sword from Britain is that from Standlake in Oxfordshire which Jope has recently suggested was made about 200 B.C. (Jope, 1971, 69).

Local examples include a sword from the Trent at Sutton, north of Newark and another from the Witham near Lincoln (May, 1976, 128–9, Pls. 3 and 4). The first of these can be dated to the later 3rd to early 2nd century and the second to the 2nd century B.C., on the basis of scabbard designs.

The closest parallels to the Willington sword are two iron ones dredged from the river Witham between Fiskerton and Washingborough. Both have the remains of iron scabbards and one has a chape with an open ring moulding of La Tène II type (Challis and Harding 1975, 65 and Fig. 14) similar to the middle period La Tène sword from Champagne (B.M. Guide 1905, Fig. 48 No. 7). One of these swords has a distinct lozenge section on the blade which is about 53 cm long. Challis and Harding (1975, 66) would relate these two swords to the scabbard front plate from Lisnacrogher, Co. Antrim. This belongs to Piggott's Group IIIA (1950, Pl. III, 14 and 15) which developed from a 'Witham-Torrs' tradition and the suggested date is the first half of the 3rd century B.C. But May (1976, 130), on the basis of the plain bronze scabbards of La Tène II type, suggests a date in the second, or at the latest, the 1st century B.C. for these two swords. A 2nd century B.C. date would seem reasonable for the Willington sword although the more precise evidence, which would have been provided by the scabbard, is missing.

2. Fragment of iron band 1·9 cm wide, 3 mm thick, present length 3·5 cm. Iron Age pit F202.

3. Bronze penannular brooch of grooved knob type, complete with pin: cf. Kirkby Thore (British Museum 1966, 51, Fig. 12) Fowler Type A4 (1960, 151–2), Romano-British ditch, F573 in Farmstead I.

4. Bronze bow and fantail brooch with spring and footplate; pin missing; Collingwood Type X (Collingwood and Richmond 1969, 294–5). Wide bow with vertical ribbed decoration; bow expanded at top and bottom with a knob on each corner as on the Water Eaton brooch (British Museum 1922, 58 Fig. 67); simple rib below the bow with two small lappets are a vestigial plate. Foot expanded with single incised line inside the edge. 2nd century A.D. Plough-soil, Farmstead II.

5. ?Bangle of thin bronze wire. Incomplete. Ploughsoil Farmstead II.

6. Bronze fragment, fitting or staple. Hearth F982. Farmstead II.

7. Fragments of small iron bowl. Ditch F550 in Farmstead I.

8. Not illustrated. Fragmentary tubular iron object, perhaps a shoe for pointed implement or post. ?Intrusive modern piece. Ditch F514. Farmstead I.

9. Iron Hook. Pit F655, Farmstead I.

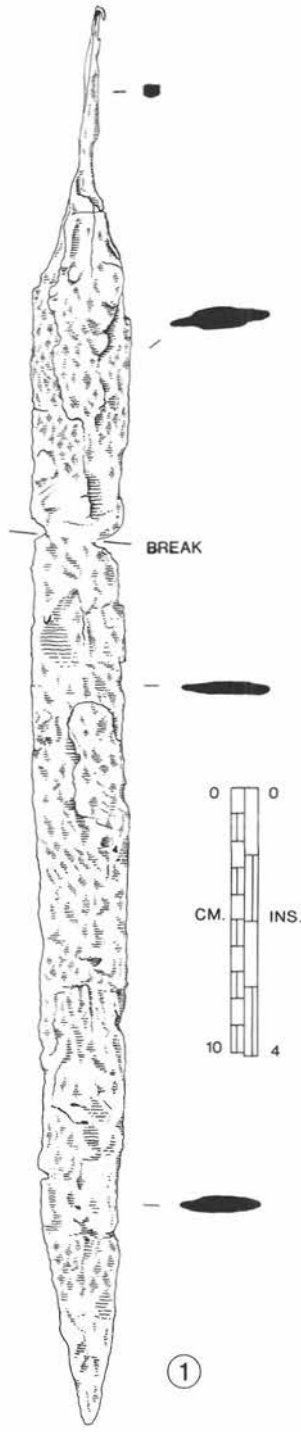


Fig. 89 Willington: Iron Age Sword

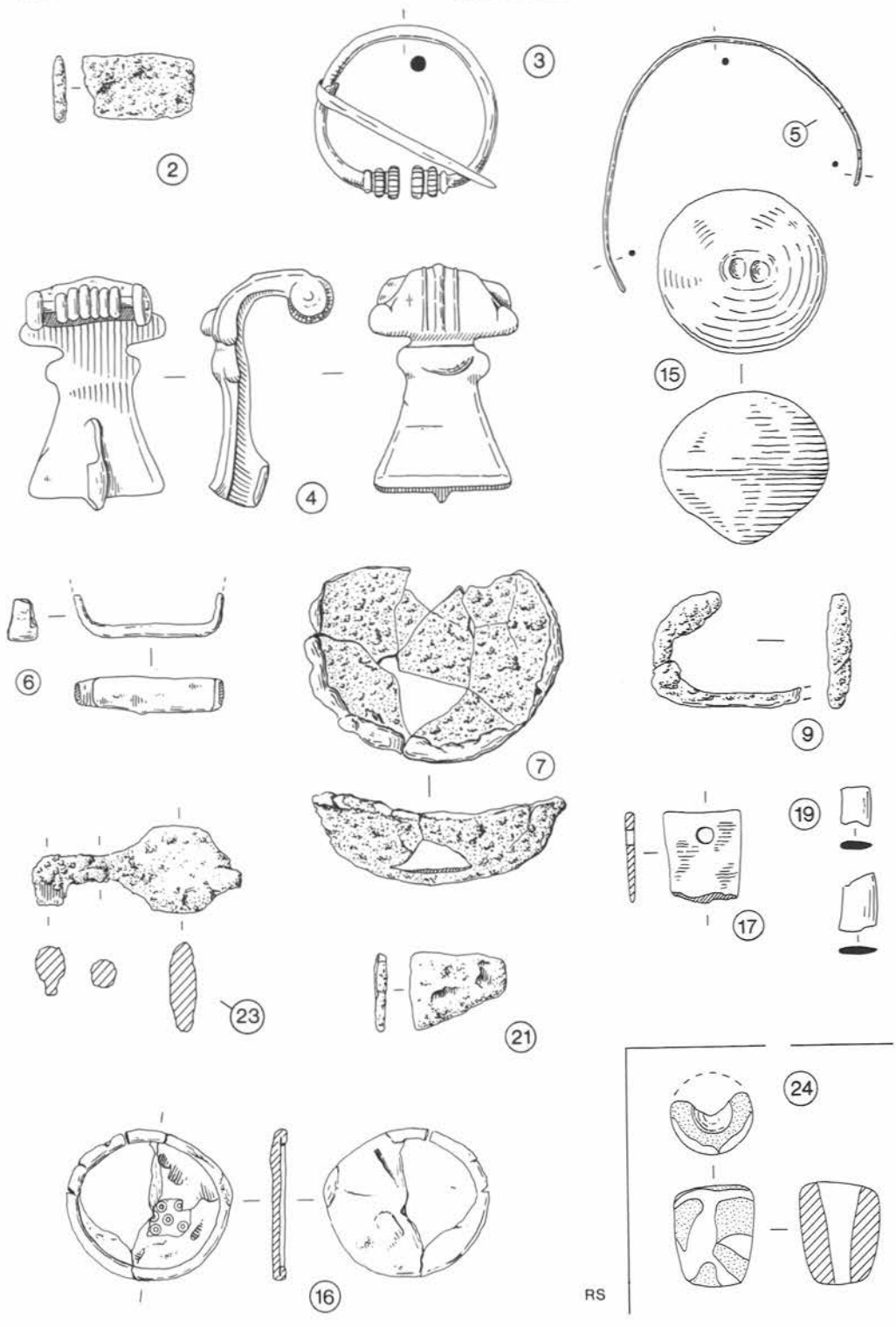


Fig. 90 Willington: Metal and other objects. Scales 2, 5, 7, 15, 21, 23, 1 : 2; 3, 4, 6, 9, 16, 17, 19, 1 : 1; 24, 2 : 1

10, 11. Not illustrated. Two iron bands, complete but broken, each of approx., 17–18 cm diameter, 2 cm wide, 3 mm thick. Fittings probably attached to wood or other perishable material. Hearth F982, Farmstead II.

12. Not illustrated. Iron pin or nail. Hearth F982. Farmstead II.

13. Not illustrated. Many small iron fragments, mainly nails where identifiable from Farmsteads I and II.

14. Not illustrated. Lead slag from Post-Hole 827, Farmstead II.

15. Lead steelyard weight of Roman type, weighing 500 gm. Unstratified.

16. Bronze roundel, diameter 2·4 cm backplate 1–1·5 mm thick, folded forward at edges to bind very thin sheet bronze front plate with stamped ring and dot ornament. Fragmentary condition. Saxon, *Grubenhaus* 1.

17. Bronze fitting broken, but rectangular and 1·3 cm wide, 1·5 mm thick, present length 1·5 cm with one pierced hole. *Grubenhaus* 1.

18. Not illustrated. Folded bronze fragment. *Grubenhaus* 3.

19. Curving bronze strip, 5 cm wide 1·5 mm thick. Part of small pennanular brooch? Saxon pit F366.

20. Not illustrated. Iron pin or needle. Fragmentary. *Grubenhaus* 3.

21. Iron fragment. Fitting with ?rivet attachment. Saxon pit F369.

22. Not illustrated. Tiny fragments of iron from all three *grubenhäuser,* and a possible nail, extremely fragmentary, from *Grubenhaus* 2.

23. Iron key of mediaeval type IB (London Museum 1940, 134–5, Fig. 42, plate XXIX). X-ray photographs suggest that the key had a solid stem, bored at the end, and two tines. The bow was probably of open work, and the inner edge of the loop may be faintly visible. This type is dated to the 11th and 12th centuries A.D. in England. F976.

24. Half a tubular bead, 8 mm long 6 mm maximum diameter; hole bored from one end, diameter diminishing from 4 mm to 1 mm; dark red and yellow paste. *Grubenhaus* 3.

Animal Bones by Mary Harman

As the site lies on an acid subsoil, bones were preserved only if they were in a localised alkaline soil in features, or if they had been burned. As expected, comparatively few pieces were found.

Most of the calcined fragments were too small for identification, and few features produced more than 25 grammes. In a few instances, such as the hearth, F56 several pieces fitted together to form a whole or major part of a bone.

Cattle teeth and occasionally horse teeth formed a large proportion of the bones which had not been burned, though these were generally in poor condition, only fragments of enamel surviving. Most of the recognisable bones were also from the larger animals.

There are too few bones for any useful analysis, and there is very probably also a bias in preservation and recovery; the bones and teeth of large animals such as cattle may remain in recognisable form by virtue of their size, so that their apparent predominance is unlikely to represent the true proportions of the different species.

The rabbit bones are without doubt intrusive modern specimens.

1973

ANIMAL BONE LIST

F1 Cattle tooth fragment; calcined fragment (Iron Age).
F12 Calcined fragment (Bronze Age—Barrow 1).
F21 Cattle jaw fragment (Neolithic).
F35 Calcined fragment (undated).

F40 Cattle tooth fragments (Iron Age).
F56 Numerous calcined fragments comprising: Cattle metatarsal Sheep/Goat right scapula; Canid left metatarsal V; Other calcined fragments (Iron Age).
F106 Cattle: the following bones were identified: Skull probably complete when deposited; mandible; L+R: several vertebral fragments; several rib fragments; scapula; humerus, L distal end; ulna, R proximal end; metacarpal, R proximal end; pelvis part R ilium; femur, L + R shafts; metatarsal, R shaft and part distal end; phalanx 1, 3; phalanx 2, 3; phalanx 3, 2. These were probably all derived from the same animal which had a full set of permanent teeth in wear, and was aged about five years. It was horned. Cutting marks on the ascending ramus of the right mandible may be evidence for decapitation. There was also a metatarsal shaft from a very young animal. (Saxon)
F114 Calcined fragment (undated).
F115 Calcined fragments (undated).
F142 Cattle tooth fragments (Iron Age H.C.2).
F150 Sheep/goat phalanx 1 R, fragment possibly ilium (Romano-British).
F150 Subsoil immediately above; pig phalanx, four rib fragments.
F160 Calcined fragment (undated).
F202 Cattle teeth, three molars; Horse teeth, two molars; Sheep/goat radius shaft fragment (Iron Age).
F210/218 Calcined fragment (Iron Age, H.C.7).
F220 Cattle tooth fragments (Iron Age).
F224 Cattle/Horse long bone shaft fragment (undated).
F234 Cattle tooth fragment (Iron Age H.C. 4).
F254 Cattle tooth fragments (Romano-British).
F268 Cattle scapula L part blade (plough-furrow)
F277 Calcined fragment (undated).
F292 Cattle tooth fragments (Romano-British)
F364 Calcined bone (Iron Age).
F366 Cattle tooth fragments, mandible fragment, calcined (Saxon).
F367 Calcined fragments (Iron Age).
F368 Cattle tooth fragments; Horse teeth, three small molars; calcined fragments (Saxon, *Grubenhaus* 1).
F369 Cattle tooth fragments; calcined fragments (Saxon).
F371 Calcined fragment (Saxon).
F372 Cattle tooth fragments (Saxon).
F375 Cattle tooth, calcined (Saxon).
F377 Cattle tooth (Saxon).
F380 Cattle tooth (Saxon).
F382 Calcined fragments (Iron Age).
F387 Calcined fragments (Neolithic).
F415 Cattle tooth fragments, humerus L. distal end (plough-furrow).
F424 Cattle tooth fragments; calcined fragments (undated).
F426 Cattle tooth fragments (Romano-British).
F430 Cattle tooth fragments (undated).
F435 Calcined fragments (Romano-British).
F438 Calcined fragment (Iron Age).
F508 Calcined fragments (plough-furrow).
F514 Calcined fragment.
F534 Cattle tooth (plough-furrow).
F541 Calcined fragment (Romano-British).
F543 Cattle four teeth; calcined fragments (Saxon, *Grubenhaus* 2).
F546 Calcined bone (plough-furrow).
F558 Cattle mandible fragment, two teeth; Cattle/horse long bone shaft fragment; sheep tibia fragment, calcined; calcined fragments (Saxon, *Grubenhaus* 3).
F572 Calcined fragments (Romano-British).
F586 Cattle tooth fragment; sheep part ulna, tibia part distal epiphysis, both calcined; calcined fragments (Romano-British?)
F615 Cattle tooth fragments (Romano-British).
F620 Calcined fragments.
F630 Calcined fragments (Romano-British).
F637 Cattle tooth fragments (Romano-British).
F719 Cattle tooth (undated).
F800 Sheep four teeth (Modern?)
F804 Cattle tooth. Horse complete set of cheek teeth for left mandible (Saxon).
F851 Calcined fragments (Neolithic).
F911 Cattle teeth (Romano-British).
F912 Cattle teeth (Romano-British).
F914 Calcined fragment (Romano-British).
F918 Cattle teeth (Romano-British).
F924 Horse tooth (Romano-British).
F982 Two bird bone fragments, calcined, one the distal end of the femur; calcined fragments (Romano-British).

F984 Calcined fragment (Romano-British).
F986 Calcined fragment (Romano-British).
F991 Cattle jaw fragment, calcined (Romano-British).
F997 Cattle tooth fragments (Romano-British).
F1104 Calcined fragment (Romano-British).
F1200 Cattle humerus R distal end, 19 teeth; pig tooth; calcined fragment (Iron Age).
F1204 Sheep tibia shaft fragment, calcined (undated).
PH22 Calcined fragment (Neolithic).
PH24 Calcined fragment (Neolithic).
PH81 Calcined fragments (undated).
PH193 Calcined fragments (undated).
PH327 Cattle/horse scapula, part glenoid fossa (undated).
PH413 Cattle scapho-cuboid, calcined (undated).
PH626 Cattle/horse scapula, part glenoid fossa (undated).
Barrow 1. Calcined fragment (?Late Neolithic)
Flood silts Cattle tooth fragments.
Cattle two teeth.
Cattle tooth.

Seeds by Camilla Dickson

Carbonised grain adhering to a rotary quern of Hunsbury type unstratified.

Hordeum vulgare L. emend. Lam. (Hulled six-row barley).
50 well preserved grains; 4·2–6·1 × 2·1–3·2 × 1·6–2·7 mm.

Triticum dicoccum Schübl. (Emmer.)
35 well preserved grains; 4·9–6·2 × 1·9–2·8 × 1·8–2·7 mm.

Avena sp. (Oats)
2 grains; one entire, 5·3 × 1·5 mm. It is not possible to identify these grains further; their small size suggests *A. fatua* L. (Wild oat) or *A. strigosa* Schreb. (Black Oat).

Rumex acetosella L. (Sheep's Sorrel).
1 nutlet.

Gramineae (grasses) 2 grains.

Hulled six-row barley is commonly found in Iron Age samples. Emmer, a primitive wheat species, is of interest since its main distribution in the Iron Age was in Southern England; Godwin (1975) has not recorded it north of Wiltshire. However the author has identified a few grains from a Scottish Iron Age site (unpublished). Its cultivation continued in Britain during the Roman period (Godwin, 1975) and possibly even later in Scotland.

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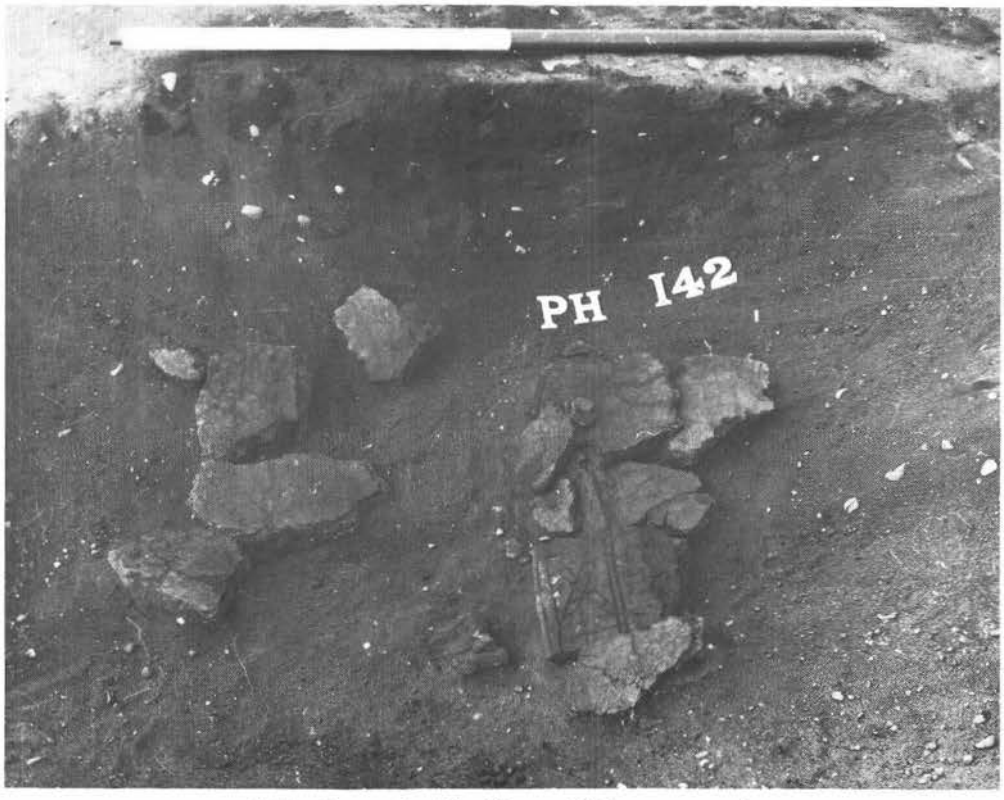
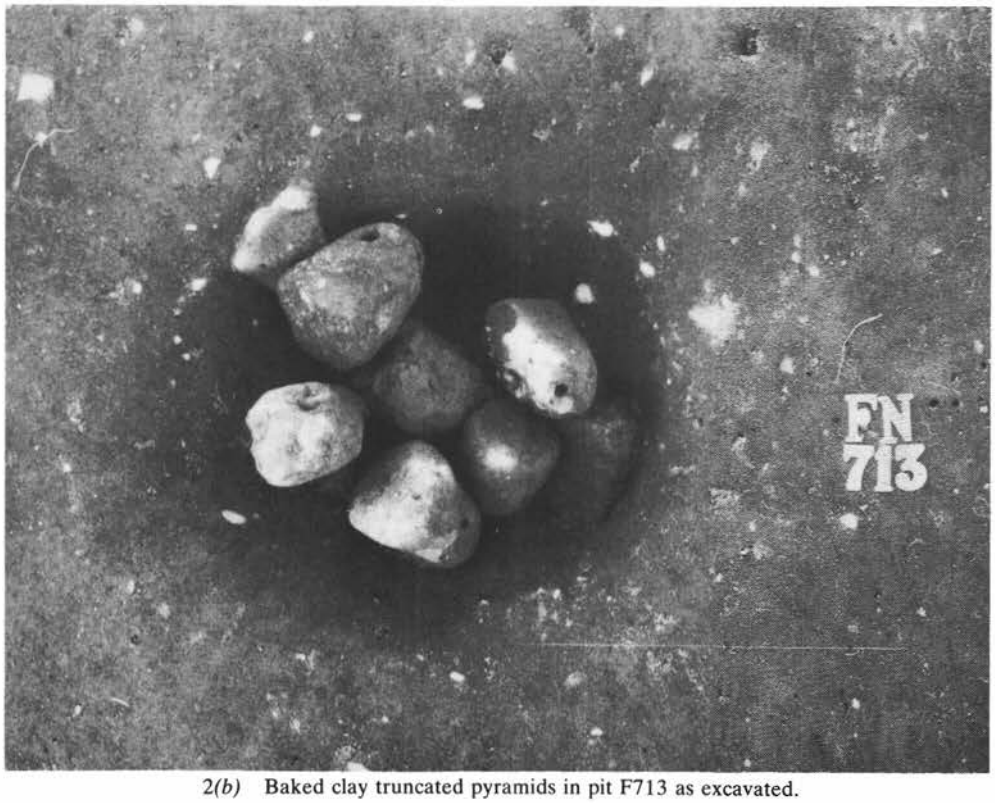
1 *(a)* Trapezoidal structure, D, Late Neolithic Settlement 1.

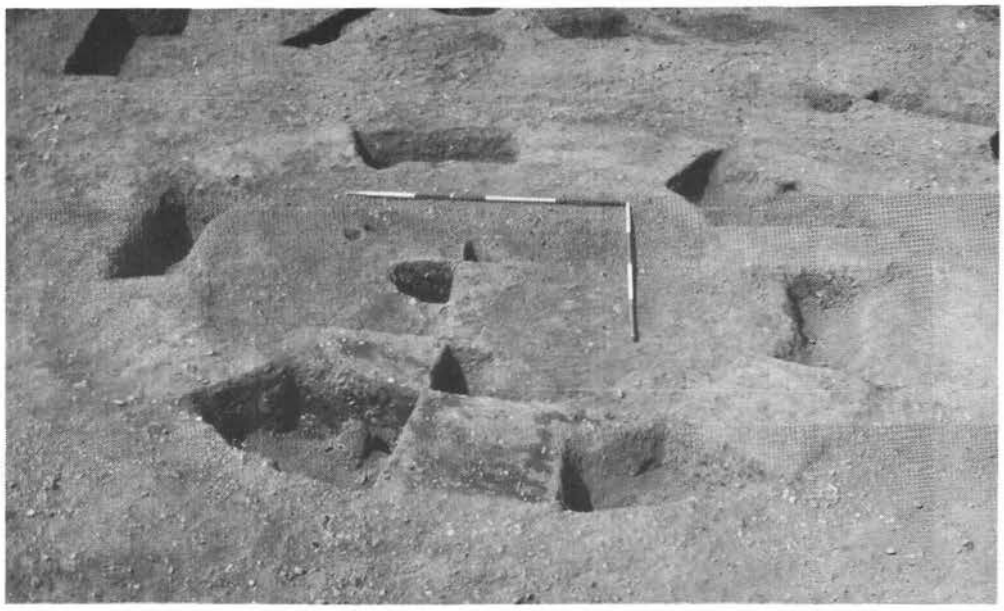


1 *(b)* Bronze Age Urn (Pot no. 108), as excavated.

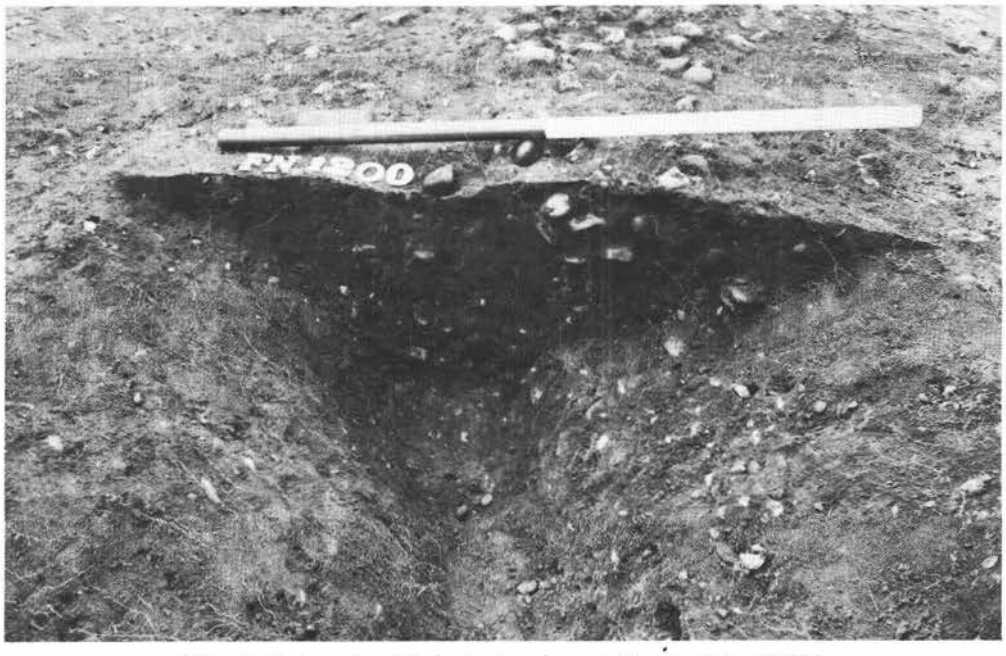
2 *(a)* Early Iron Age hearth with pots and rectangular loomweights resting on truncated pyramids of baked clay.



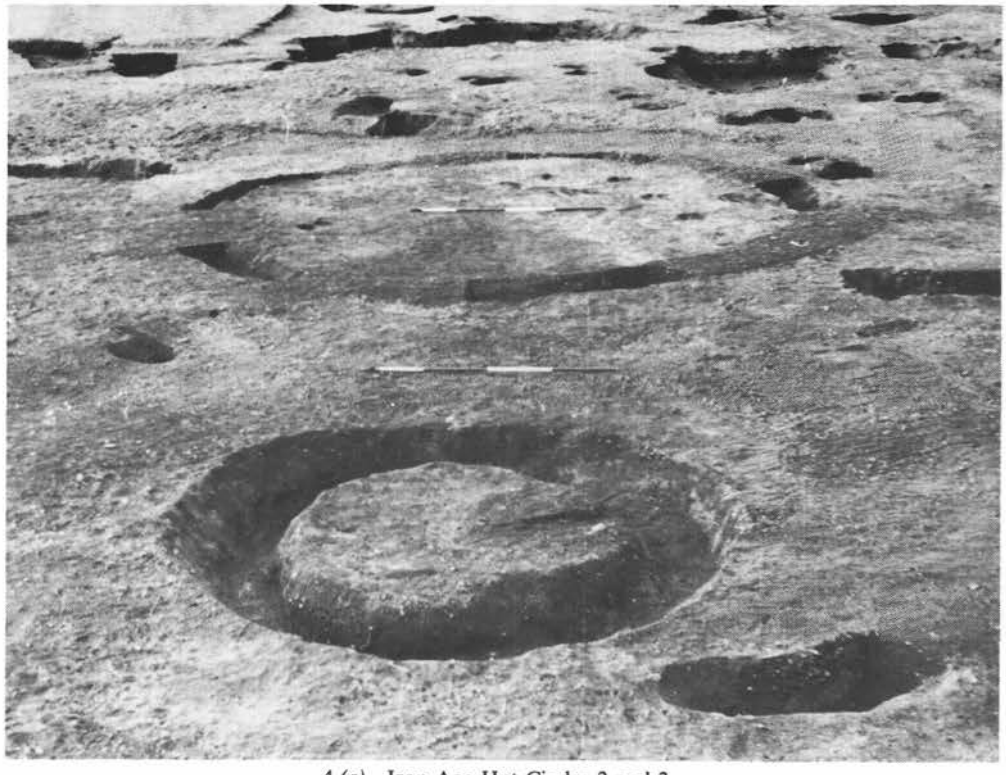
2*(b)* Baked clay truncated pyramids in pit F713 as excavated.



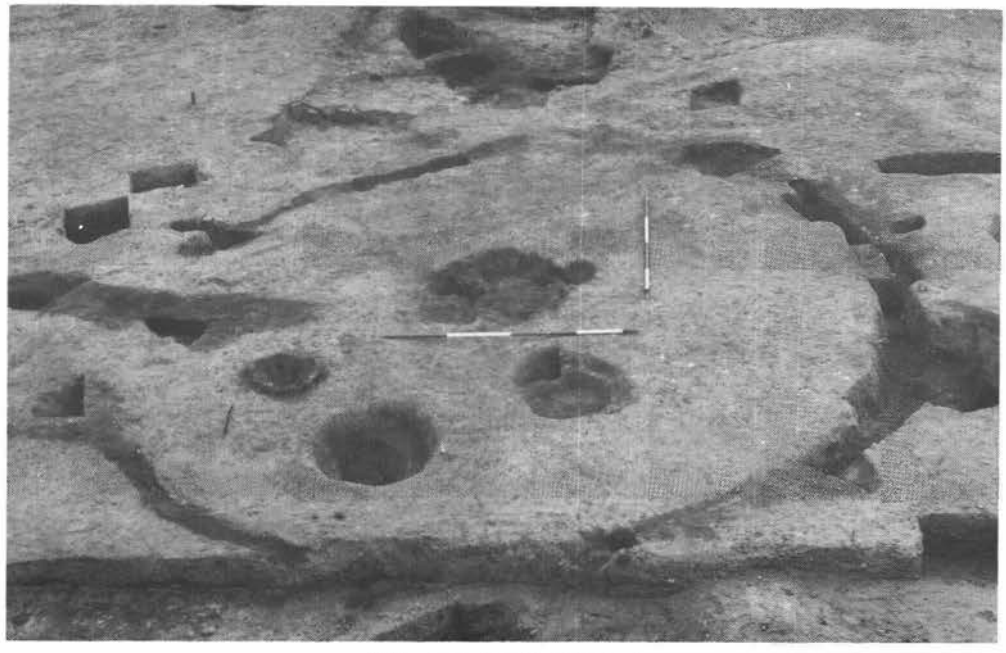
3 *(a)* Early Iron Age Hut Circle 1.



3*(b)* Early Iron Age Ditch at extreme west of excavations, F1200



4 *(a)* Iron Age Hut Circles 2 and 3.



4 *(b)* Iron Age Hut Circle 4.

5 Clay-lined pit from Hut Circle 4.