



THE ARCHAEOLOGY OF
ARDLEIGH, ESSEX:
Excavations 1955-1980

East Anglian Archaeology

Heritage Conservation, Essex County Council 1999

EAST ANGLIAN ARCHAEOLOGY



Frontispiece

Excavation of the original 'urnfield' finds in the late 1950s. The figure holding the spade is Felix Erith. Part of Erith and Longworth 1960 Group H is shown

To the memory of Felix Erith, farmer and archaeologist, 1906–1991

The Archaeology of Ardleigh, Essex: Excavations 1955–1980

by N.R. Brown

with contributions by
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Cover illustration

The landscape at Ardleigh as it might have appeared around 1200 BC.
Painting by Roger Massey-Ryan

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Summary

The archaeology of Ardleigh just north of Colchester in north-east Essex came to prominence largely through the efforts of a local farmer, the late Felix Erith. When mechanical ploughing was introduced on his farm in the mid 1950s, fragments of Bronze Age pottery were brought to the surface. Wherever this occurred, Erith excavated the immediate area. In this way many cremation burials, the majority in highly decorated Deverel-Rimbury urns, were recovered. An account of these discoveries was published in 1960 (Erith and Longworth) which clearly established the importance of the Ardleigh cemetery. Its pottery, flamboyantly decorated with finger impressions, applied cordons and 'horseshoe handles', became the classic Deverel-Rimbury ceramic of southern East Anglia.

Erith's work in the late 1950s coincided with the formation of the Colchester Archaeological Group (CAG), of which Erith became a prominent member. Following the discovery of the burials, cropmarks began to be observed at Ardleigh, and a prolonged campaign of aerial photography revealed numerous cropmarks. These included many ring-ditches and an extensive complex of trackways and ditched enclosures. Within this cropmark landscape, Erith and the CAG conducted numerous excavations, these included a number of the ring-ditches, which yielded many more urns. In addition a remarkable enclosed Middle Iron Age roundhouse, 'Belgic' burials, a ritual pit, and various Roman features, including kiln sites, were excavated. The ritual pit was dug around the time of the Roman conquest. Its fill contained a unique ceramic service of vessels attested elsewhere in bronze and used for the preparation, flavouring and serving of beer.

The airphotographic evidence was collated in the early 1970s, by which time Ardleigh represented one of the largest cropmark complexes in Essex. A large part of the cropmark area was scheduled as an Ancient Monument in 1976. The Central Excavation Unit (CEU) of the Department of the Environment undertook investigations at Ardleigh in 1979–80. Their work, directed by John Hinchliffe, was designed to shed light on the nature and development of the cropmark complex, and to place the

CAG's relatively small-scale work in a broader context. The CEU excavated twenty-three areas; these ranged from small trenches placed to examine the relationships of particular cropmarks and sample boxes placed in 'blank' areas of the cropmark complex, to open area excavations. One of the latter, about 70 × 70m, was placed in the area of the original burial finds of the 1950s. This revealed the pits from which Erith's urns had been recovered, set amongst an extraordinarily dense concentration of ring-ditches. Two major later Bronze Age ditches were also recorded. The majority of the ditched trackways and enclosures produced finds of earlier Roman date, and included a short-lived defended phase. Dumps of waste from pottery production were recovered from a number of the ditches. A small later Roman cemetery reused a large ring-ditch in the north of the cropmark complex. Two of the graves produced twenty-nine chalcedony beads apparently derived from Hungary, and representing the largest properly provenanced collection of these beads in north-west Europe. Three Saxon graves, together with a fragment of an irregular field system, lay in the area of the main Bronze Age cemetery.

This volume publishes the results of the CEU's work, together with an account of the CAG's excavations. An illustrated corpus of Ardleigh style Deverel-Rimbury ceramics, from the site itself and from other sites in north-west Essex, including the major assemblage from the cemetery at White Colne, is presented. The Bronze Age cemetery complex at Ardleigh — one of the largest in East Anglia — which originated in the Early Bronze Age, flourished throughout the Middle Bronze Age and continued into the Late Bronze Age, is described and discussed. A full account of the evidence of Roman pottery production at Ardleigh, a rural production centre in the hinterland of Colchester, is included. The nature and development of the cropmark landscape is described and discussed, and its relationship with the present landscape assessed. Finally the present condition and potential of the archaeology of Ardleigh is briefly described.

'The long habit of living indisposeth us for dying.'
Urn Burial, Sir Thomas Browne

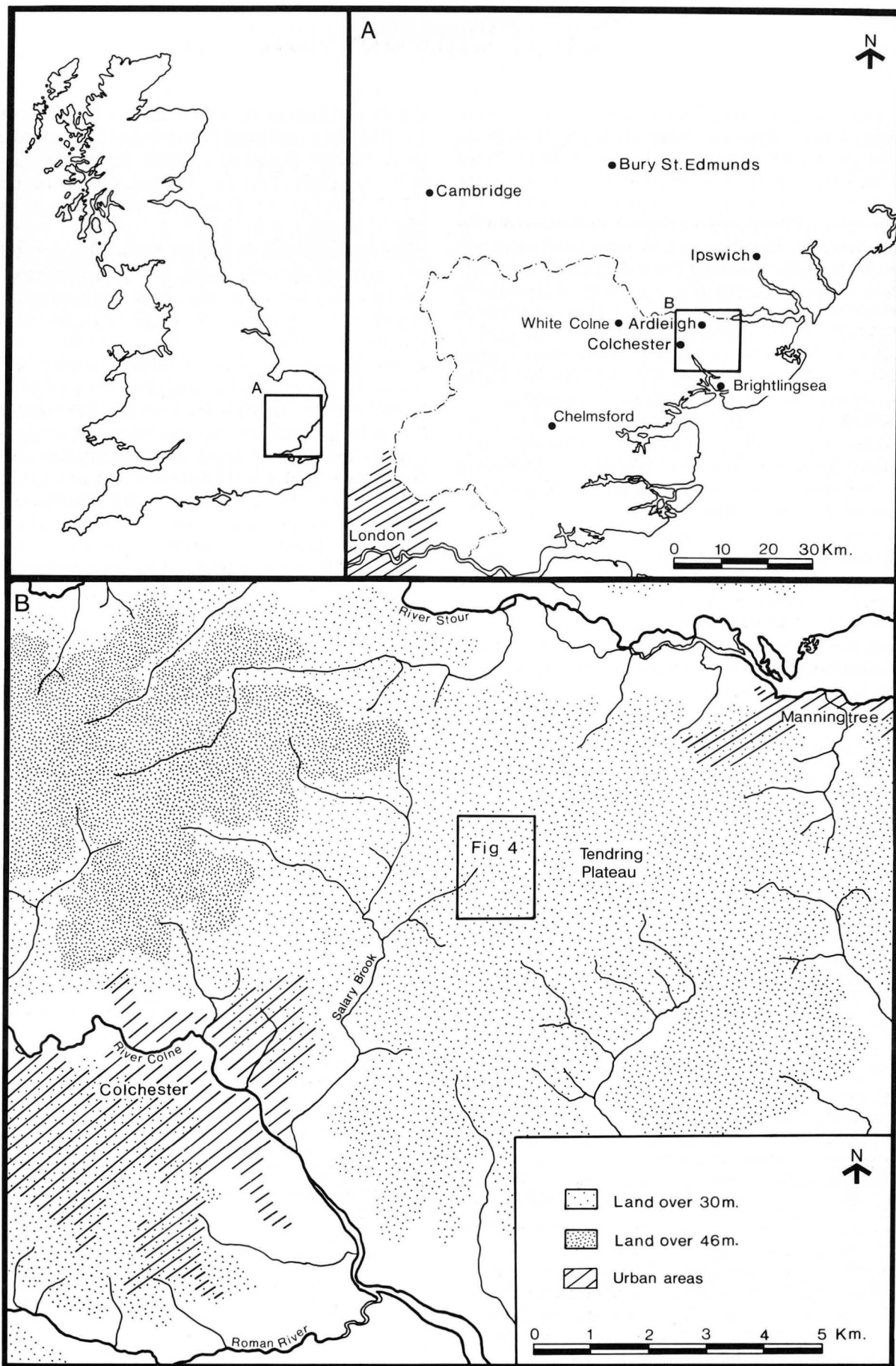


Figure 1 Location map showing position of Ardleigh in relation to Colchester, the Tendring Plateau, Stour and Colne Estuaries

Part I. Introduction

I. Preface

This report and its associated archive are concerned with investigations carried out within a large cropmark complex at Ardleigh. Excavations were undertaken by the Central Excavation Unit (CEU) of the Department of the Environment during 1979–80. This work followed on from a series of excavations carried out by a local farmer, Mr Felix Erith, and the Colchester Archaeological Group (CAG) over a period of twenty years from the late 1950s. The CAG's work was rapidly published in the group's bulletin and much of it is reproduced here. Together this work provides one of the most extensive examinations of a major cropmark complex in Essex and has resulted in the recording of one of the largest concentrations of Bronze Age burials in East Anglia.

II. Location of Material

All finds and archive material from the CEU excavations are held at Colchester Museum. All CAG sites are recorded in the Group's Annual Bulletin and finds are held at Colchester Museum together with a photographic archive.

III. Location and Topography

Ardleigh lies approximately 7km north-east of Colchester on the edge of the Tendring Plateau (Fig.1). The village is a nucleated one with a church and crossroads at its centre as shown on the Chapman and André map of 1777; which also indicates the other main features of the historical topography of the Parish, the large triangular 'Ardleigh Heath' south of the village (Fig.2). The form of this heath is fossilised in the triangular pattern of roads around the area now known as Burnt Heath, about 2km south-east of Ardleigh Church. Further small greens and heaths (Fig.2) lay south and north of Ardleigh connecting with the large Dedham Heath to the north and forming part of a string of heaths which formerly surrounded Colchester.

The Tendring Plateau occupies much of a peninsula in north-east Essex bounded on the north by the broad expanse of the Stour Estuary, with the Colne Estuary to the south and the North Sea to the east (Fig.1). The plateau is dissected by a series of streams, the valleys of which are cut quite steeply, in some cases approaching ravine-like proportions (Erith 1976). Ardleigh is situated at the head of a tributary of one of these streams, the Salary Brook. South of Ardleigh, the Salary Brook forms a deep, steep-sided valley through Crockleford. Many centuries of agricultural activity, culminating in the intensive arable exploitation of the plateau in the past few decades, have had the effect of softening the contours of many of the valley sides. It seems likely that, in the prehistoric period, valley slopes may have been rather steeper. Aerial photographs frequently show extensive infilled erosion gullies, along the valley sides especially notable along the valley of the Bentley Brook (SMR No.3063). It seems

possible that such features were still at least partly open in later prehistory; however, their depositional history is unknown. The soils of the Tendring Peninsula are generally conducive to cropmark formation and the area has one of the greatest concentrations of cropmarks in Essex (Priddy 1981). Even in the London clay area of the eastern peninsula, patchy deposits of sand and gravel and deposits exposed on valley slopes produce numerous cropmarks.

The cropmark complex at Ardleigh itself lies on extensive gravel deposits which have recently been described by Bridgland (1994) in a section at Martells Hall Gravel Pit immediately south of the cropmarks. The upper deposits below the present topsoil represents a much disturbed cyroturbated palaeosol (Bridgland 1994, 301, fig. 5.9). The mixed nature of this deposit appears to have caused occasional difficulties in the recognition of archaeological features (below p.18).

IV. History and Methodology of Archaeological Investigations at Ardleigh

The earliest archaeological discoveries at Ardleigh (Couchman and Savory 1983, 4) are a Neolithic flint axe from a field north of Frating Road and west of the orchards (Fig.3), and a Beaker, recovered in 1942, during gravel extraction at Martell's Hall north-west of Slough Lane (Clarke 1970, 225). However, major discoveries and coherent investigation began in the mid 1950s when Felix Erith started to record a series of remarkable Bronze Age burials. Erith's discoveries caused some consternation in the small community of professional archaeologists of the late 1950s, since the organisation necessary to deal effectively with such situations did not then exist. This is revealed in correspondence between Grahame Clark at Cambridge and Rex Hull then curator of Colchester Museum, part of which is preserved in the museum's records. A letter of 31 December 1956 from Clark states :-

'Dear Hull,

I was interested to hear about the finds at Ardleigh. Situations like this only emphasise one of the great weaknesses of British archaeology. We so badly need a regionally organised archaeological service to cope with such situations, in the same way that they have in Germany. It is quite impossible for us here in Cambridge to cope with a site so remote. Apart from having 120 students to deal with in the Department, we have only one member of the staff free for field work, and he has his hands sufficiently full in this neighbourhood. If I can interest anyone in the work, I certainly will do so.

With best wishes for 1957'.

Hull's reply rather forlornly concludes :-

'Might we not get a State service of some sort if the Universities united to demand it? It should in my opinion be closely connected with the local Museums service and so provide a lever for boosting that'.

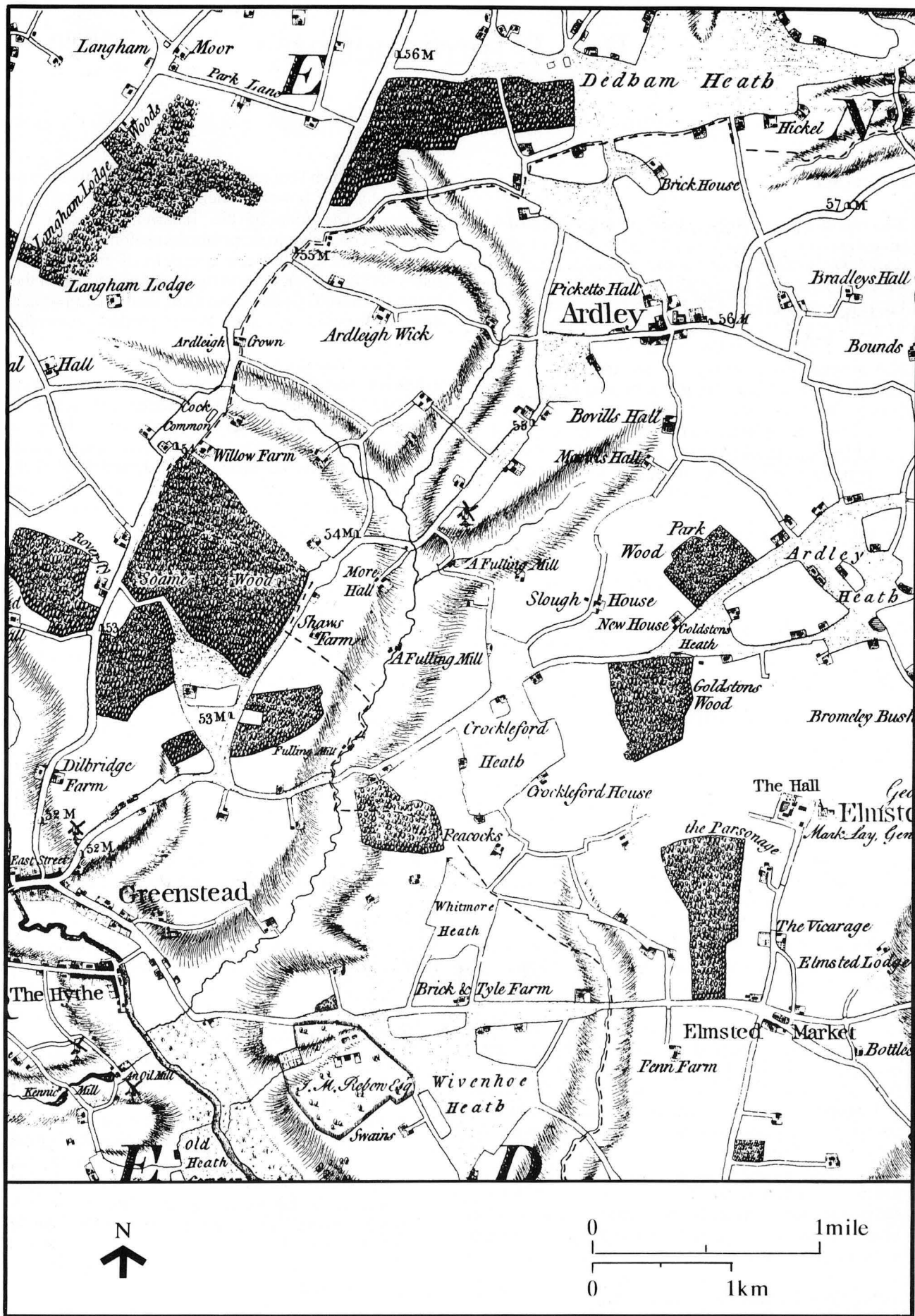


Figure 2 Extract from Chapman and André map of 1777, showing settlement at Ardleigh focused on the church and crossroads and around Ardleigh Heath

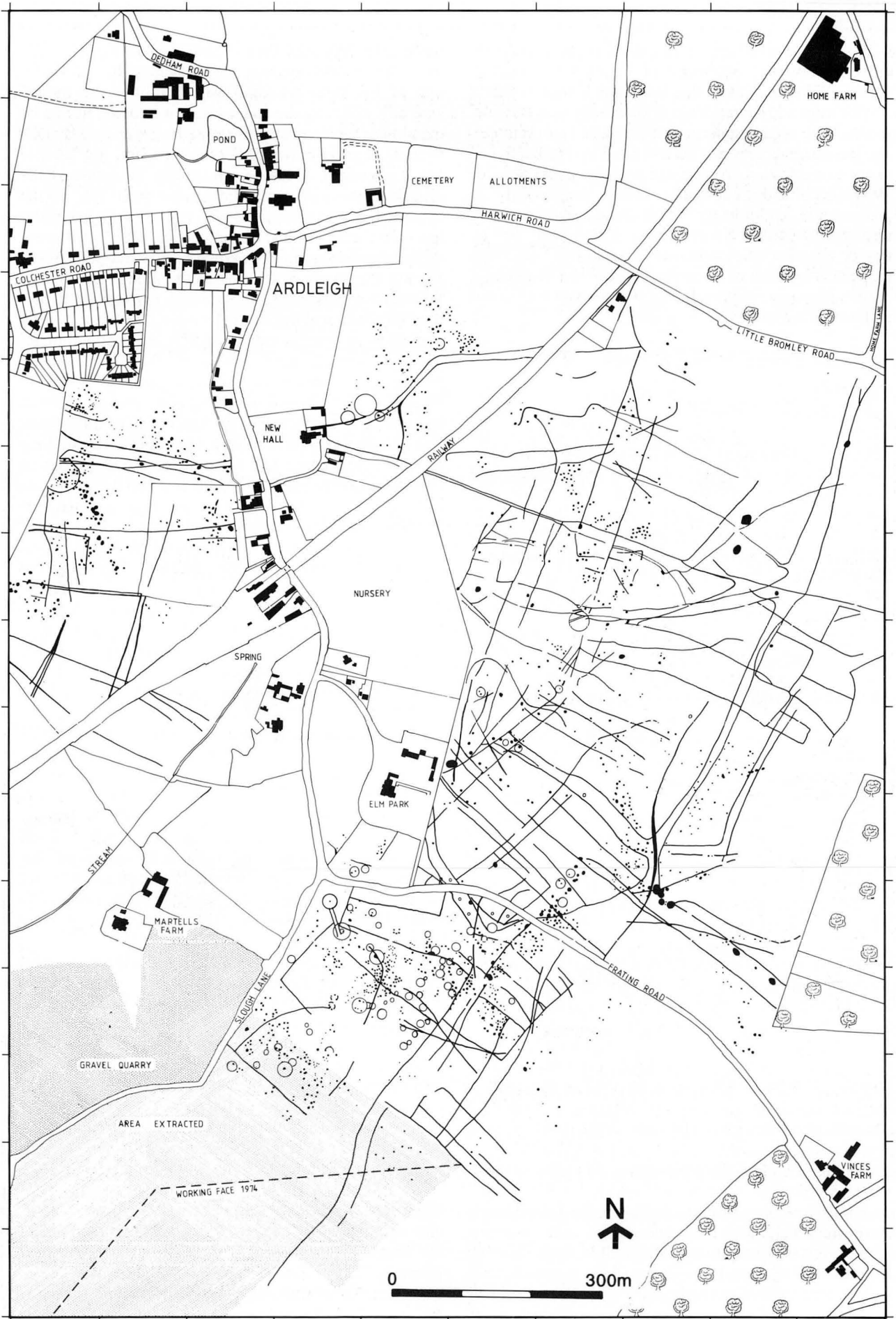


Figure 3 The Ardleigh cropmark complex, the 1970s sketch plan. This was the plot used by the CEU in locating their trenches

Clark's letter reflects his longstanding admiration for the organisational efficiency of German archaeology (Clark 1938). It is ironic that the future author of *World Archaeology* and *Archaeology at Cambridge and Beyond*, should have regarded north-east Essex as '...so remote'. The last sentence provided the means which eventually led to Ian Longworth's involvement with the publication of 1960 (Erith and Longworth). Given the inability of professional archaeology to undertake fieldwork in response to Erith's discoveries, it is fortunate that he proved a sympathetic landowner. So central is Erith's role in the development of the archaeology of Ardleigh that it seems appropriate to include a brief account of his life and archaeological work.

V. Felix Erith: Farmer, Archaeologist and Historian

by P. R. Sealey

Felix Henry Erith was born on 16 June 1906 at Hackney, the second son of Charles Erith, a businessman and mechanical engineer. Felix was brought up at Sutton in Surrey and educated at Clifton College in Bristol. After school he worked for thirteen years in the City of London for Lloyds in marine insurance, but the financial world was not to his liking and in 1937 he bought Vinces Farm at Ardleigh. His father had founded a brick company and it was the sale of this successful concern that had financed the dramatic change in career. Felix brought with him to Ardleigh his wife, Barbara P. Hawken, whom he had married four years earlier. His ancestors could be traced back to Elizabethan times in the Suffolk villages of Clare and Cavendish, a part of the world Felix discovered in 1925 on a walking tour with his brother, Raymond: the move to Ardleigh was a conscious return to his family roots. Felix had a real perception of the continuity of rural life and this was one of the mainsprings for his subsequent involvement in archaeology and local history.

Felix had no knowledge of agriculture and so he spent a year as a mature student at Writtle Agricultural College training for his new life. Farming was then in a depression but he immersed himself in his work and eventually transformed the fortunes of Vinces Farm. He was active in the National Farmers Union and contributed many articles to agricultural periodicals. Felix farmed at Vinces Farm for the rest of his working life, did not retire until he was 78, and died there on 14 June 1991, two days before his eighty-fifth birthday. He is survived by two sons and a daughter.

His interest in archaeology developed in 1955, when Felix took the opportunity to replace horse locomotion with a Ferguson plough when his horseman retired. This new plough cut 30 centimetres deep, so disturbing (for the first time since antiquity) some 10 centimetres of sub-soil: it was this deep ploughing that brought to light so much of the archaeology on Vinces Farm. In September, the tractor driver noticed Roman pottery in the Long Eleven Acres field. Felix took the sherds to Colchester Museum where he showed them to the curator, M.R. Hull. This was the start of a long friendship between the two men. A small excavation followed and the coarsest wares present proved to be Bronze Age: the famous urn cemetery at Vinces Farm had been discovered.

Clearance of the soil where Bronze Age pottery was prolific revealed a cluster of cremation urns. Excavation

of the cemetery lasted from 1955 until 1960. Felix evolved his own method of locating and excavating the site. He (or one of his farm workers) would follow the tractor, carefully watching the soil when it was being turned by the plough for signs of urns (Plate I), it was no easy task to spot the gritty brown pottery in the loam. In a letter to I.H. Longworth, Felix describes how he followed the plough in the winter of 1959-60, no mean feat on the exposed and windswept Ardleigh landscape: 'I am glad it is all done now, as I had to walk behind the plough every working day for six weeks'. When Bronze Age pottery was spotted, the tractor driver was sent to plough an adjacent field for the half-an-hour or so it took to excavate an urn. A small trench was dug around the pot. Soil was carefully cleared away, leaving only some 7.5cm of earth clinging to the walls of the vessel: this was the last to be removed, after which the pot was tied with string to prevent the wall collapsing. The urn was measured in the ground and then transferred to a potato tray for excavation of the interior indoors. The position of the urn was indicated by sticking a cane in the ground; data for each vessel was logged on egg record cards, many of which still survive in the site archive at Colchester Museum. Conservation of the urns was also undertaken by Felix in person.

Although technical advice and some practical assistance was provided by Colchester Museum, the Bronze Age cemetery was excavated in its entirety by Felix with one or two of his farm hands and his son, Robert. By 1960 they had retrieved just over one hundred urns from a cemetery contained within an area some 250 by 50 metres. Thus Felix uncovered one of the largest sites of its kind in eastern England, a remarkable feat for a working farmer.

Professor Grahame Clark at Cambridge was notified of the discoveries and he suggested that I.H. Longworth, then a research student (above) should help Felix with the publication of the cemetery; collaboration between the two men was harmonious and productive. It was typical of Felix to make the results of his work available to others in this way. It was Longworth who completed the published report to a professional standard and who put the cemetery in its national context (Erith and Longworth 1960). But the contribution of Felix himself should not be overlooked: even the drawings of the urns were his own work. This aptitude for draftsmanship was shared with his architect brother, Raymond.

In March 1957, the students of the second year of an archaeology class at Colchester founded the Colchester Archaeological Group. In the third and final year, the tutors included Hull, and it was through him that Felix was introduced to the group. In the Colchester Archaeological Group, Felix found congenial and sustaining archaeological companionship and it was his friends there that provided the labour and expertise to continue the Ardleigh excavations.

In 1961 when Hull became the first president of the Colchester Archaeological Group, Felix took over as chairman until 1963. From 1957 to 1966 he represented the Essex Archaeological Society on the Museum and Muniment Committee at Colchester. A letter of his gives a sorry picture of civic life: 'I am now on the Colchester Museum Committee....It seems to consist of town councillors anxious to get away as soon as possible, and terrified of spending rate-payers' money on 'cultural activities''. His own services to archaeology were



Plate I Erith following the newly introduced mechanised plough and marking sherd scatters as they appear



Plate II CAG excavation team at ring 3. The urns shown are, from left to right, 23, 22, 2 (Primary) and 18, badly truncated, 20 is in the foreground by the scale, which is in feet



Plate III Felix Erith showing visitors ring 3 during course of excavation (see Plate VIII for key to vessels shown)

rewarded in 1968, when he was elected Fellow of the Society of Antiquaries of London.

When the excavation of the flat urn cemetery was drawing to a close, Felix was introduced to R.H. Farrands, who had seen circular cropmarks at Ardleigh in the dry summer of 1959 when he was flying over the parish. These circles turned out to be the ditches of yet more Middle Bronze Age graves (this time under vanished barrows), west of the excavated urnfield. Felix reacted to this exciting development in typical fashion. Now a leading figure in the Colchester Archaeological Group, he mobilised its resources to excavate the ring-ditches. As many as a dozen members turned up on weekends to toil under his direction on a succession of ring-ditches from 1960 until 1974; most of those located by Felix and his friends were explored. Not all were located by aerial survey: Felix himself discovered six on the ground, at least one of them from the vantage point of a combine harvester. Nor were all the ring-ditches examined on land owned by Felix. Ring 10 was discovered by him from the top of a mound of topsoil on the edge of the Martell's Hall gravel pit. Such was his skill as an archaeological negotiator that he could secure permission to excavate where a formal approach from an institution might have failed. Once a ring was located on the ground as a cropmark, Felix would walk through the standing crop and drop a piece of slate in the centre of the ring so the site could be located when the grain had been harvested; excavations generally by the quadrant method followed (below p.7).

The national importance of the Bronze Age cemetery has deflected attention from the other fieldwork undertaken at Ardleigh by Felix and the Colchester

Archaeological Group. An extensive Late Iron Age settlement and cremation burials of the same date were discovered. With P.R. Holbert, Felix dug a Middle Iron Age roundhouse and enclosure just north of Vinces Farm itself. For many years, the pottery from this site was one of the few coherent assemblages of the period in Essex. Nor was the Roman period neglected. A kiln was uncovered in 1955 and discoveries of sherd dumps with wasters established Ardleigh as the site of a significant rural Roman pottery industry.

In 1978 Felix published his swan song, a monograph on Ardleigh in 1796 that represented the fruits of over twenty years research. The basis of the work is a list of the inhabitants of the parish in 1796 compiled by the vicar of Ardleigh in anticipation of an invasion by the French. Felix supplemented this data by making full use of documentary and topographical source material in the Essex Record Office and elsewhere to give a comprehensive account of the population of the village, a remarkable feat for rural England before the census records of the following century.

Anyone who met Felix for the first time would never have suspected that this kindly and unassuming man had excavated almost single-handed one of the largest Bronze Age urnfields in eastern England. All the material from his excavations was presented to Colchester Museum and Felix was one of the greatest single benefactors of the museum since the 1939-45 war. Bronze Age urns from Ardleigh are on display there, as well as in London and at Cambridge. Felix only ever thought of himself as an amateur but he acknowledged the need for prompt publication of evidence: his own record is proof of that. A

lesser man might have been reluctant to share his work but the readiness with which he made his findings fully available to others was exemplary. Nor should it be forgotten that we are dealing with a farmer, one whose interest in the past had to be woven around busy working days. Without the sustained and intelligent interest Felix took in Ardleigh, a whole chapter in the archaeology and history of Essex would forever have remained blank: his example makes one wonder what has been lost elsewhere through ignorance, apathy and greed. As he commented himself; 'In the last few years, when nearly every acre in the country has been ploughed deeper than ever before one might expect to hear of numerous new finds. Actually hardly any have turned up, and one must conclude that those which have, have not been recognised.' (Erith 1958).

VI. CAG Excavation Methodology

The investigation of the original Ardleigh urn cemetery followed an effective but rather *ad hoc* methodology described above. The early influence of archaeological advice presumably from Hull may be detected by the presence of pointing trowels in the photograph of Erith's excavation of some of the burial urns discovered in the 1950s (frontispiece). It is doubtful that a farmer would immediately identify a pointing trowel as an appropriate tool for such work, unless informed that it was the traditional instrument of archaeological excavation.

The excavation in conjunction with the CAG of the ring-ditches (above) followed a rather more formal pattern reflecting both archaeological advice and the increasing expertise of Erith and the CAG. The cropmark ring-ditches revealed at Ardleigh were numbered 1–10 (Fig.5). An initial ring-ditch excavation had taken place at Gt. Bromley and consisted of a simple trench through the centre of the cropmark (Edwards 1959). Subsequently, the CAG excavations became rather more sophisticated, the quadrant method, the familiar archaeological technique of barrow excavation, being employed for the investigation of rings 1, 2, 3, 6 and 10 at Ardleigh (below p.17) and a ring-ditch at Newhouse Farm, Gt. Bromley (Erith 1962a). Excavation of rings 4 and 5 was rather different; the excavation of ring 4 comprised a rectangular area at its centre with four trenches extending across the circular ditch. Even less of ring 5 was excavated, a rectangular area at the centre with a trench extending across the circular ditch to the north, and two further short trenches placed to examine the ditch to the south and west (Fig.12). The reason for this change in methodology is unclear. It would clearly have left rather more of these two ring-ditches *in situ*, though subject to continued erosion through ploughing. Perhaps the most likely explanation is a decline in the availability of workers when rings 4 and 5 were excavated. Photographic evidence seems to indicate that the available excavation team was at its largest during the excavation of ring 3 in 1961 (Plate II), whilst only two people are acknowledged as helping with the excavation of ring 4 (Erith 1966).

Plans and sections were recorded and included in the reports in the CAG Bulletin. Photographs were also taken — mostly general shots of excavations or details of *in situ* urns (e.g. Plates VI–X). However, features and deposits were often only sketchily recorded and rarely given identifying letters or numbers. Even the relatively late excavation of the Iron Age enclosed roundhouse (below

p.26), has little detailed description or identification of features or deposits. Instead groups of post-holes *etc.* are all identified by a single letter. By contrast, individual burials and urns were frequently separately identified in plans and sections and this occasionally extended even to sherd material from the ring-ditches.

The investigation of the enclosed Iron Age roundhouse represents a significant development in the Group's excavation technique. This work was undertaken in 1967–8 and the first season's work was conducted using a grid of boxes across the southern part of the enclosure. The difficulties encountered with this method led to the adoption of an open area technique during the following year. This resulted in the recording of a much more detailed plan of this part of the site (below p.26). The adoption of this technique can be seen as part of a wider pattern in which area excavation came to dominate excavation in Britain in the 1960s following its pioneering use in previous decades (e.g. Beresford and Hurst 1990, 32–33).

VII. CEU Investigations at Ardleigh

An assessment of the pottery from Ardleigh, taking into account both the original material published in 1960 (Erith and Longworth) and the material from the CAG ring-ditch excavations, was published in 1975 (Couchman). A sketch plot (Fig.3) of all the air photographic evidence from Ardleigh, the result of a long photographic campaign by R.H. Farrands, I. McMaster, RCHME and Essex County Council, was prepared in the 1970s. This plot was subsequently published (Couchman and Savory 1983) and a large part of the cropmark scheduled as an Ancient Monument in 1976. Following the scheduling of the site, the Central Excavation Unit (CEU) of the Department of the Environment carried out a programme of fieldwork with the aim of clarifying the date and nature of various elements of the cropmark complex and assessing the effects of agriculture. A similar investigation had been suggested by Essex County Council Archaeology Section in the late 1970s (Essex County Council undated). This, and the CEU's programme, indicate the considerable attention being paid by the archaeological profession to the effects of plough damage in the late 1970s (e.g. Hinchliffe and Schadla-Hall 1980; Lambriick 1977).

The 'Preliminary Research design and outline programme' for the CEU project held in the site archive sets out three objectives:-

- A. To assess the archaeology of the cropmark site.
- B. To examine the effects of cultivation on the archaeological levels.
- C. In pursuit of objective A and B, to implement and test an alternative methodology to large-scale excavation.'

Of these three objectives, A is the most fully developed in the original research design being divided into four broad aims:-

1. It is unclear, on the basis of the evidence so far recovered from the site, whether the wide date range of material recovered is indicative of continuous or periodic occupation, *i.e.* whether the palimpsest of cropmarks is a reflection of the continuous development of the landscape over time or of distinct but coincidental periods of land use separated by

periods of desertion. It will be one of the principal aims of the project to settle this point by determining the apparent duration of distinct periods of human activity, by an examination of the apparent points of overlap of landscape elements relating to different periods and, in particular, by the seeking out of evidence relating to land use so that the development of the landscape may be examined.

2. Irrespective of its place within the development of the site, the Bronze Age urnfield in itself still raises points which require elucidation. It is therefore intended:-

(a) To establish the relationship between the cremation burials and the ring-ditches. Although it is clear from the excavated examples that cremation burials occur within the ring-ditches, it is uncertain whether they occur exclusively in this context, bearing in mind that the presence of the ring-ditches was not recognised until after the majority of burials excavated by Mr Erith had been recovered.

(b) To establish the character of the ring-ditches. Analysis of the ring-ditches by diameter would appear to demonstrate four, possibly five, distinct groups. It is unclear whether all are of similar date or function.

(c) To determine the limits of the principal cemetery area.

3. It is hoped to achieve an estimation of the character and extent of the Early Iron Age occupation attested by earlier discoveries.

4. The most intensive and widespread occupation of the area would appear to have occurred in the late Iron Age/Early Roman period. It is presumed that the bulk of linear cropmarks relate to this occupation. It is the aim of the project:-

(a) To confirm the dating of the trackways and associated field systems.

(b) To establish the principal areas of occupation and the duration of that occupation.

(c) To establish the function and sequence of the trackways and field systems.

(d) To establish the extent of the cemetery, known from chance finds, associated with this occupation.'

For objective B it was simply stated that:-

'This assessment will be carried out through three principal sources of information:

(i) The history of agricultural use of the area.

(ii) The comparison of levels and fragmentation of occupation-derived material in adjacent ploughed and uncultivated areas.

(iii) The examination of the fragmentation of occupation-derived material in the ploughsoil and in stratified levels throughout the excavated area.'

For objective C five methodologies were proposed:-

1. Use of selected, small-scale excavation to answer specific questions.

2. The excavation of transects at intervals across the area. Work by CEU at Verulamium indicates that the upper 5cm of ploughsoil represents an acceptable sample of the total depth. It is therefore intended that transects 1m wide and 5cm deep be used, though periodically total excavation of the ploughsoil within the transects will be undertaken as a control. Density

of occupation-derived material will be critical, as the technique is based on the hypothesis, tested as valid at Verulamium, that even where the plough has inflicted no recent damage the presence of a focus of occupation such as a building will be indicated by an intensification of occupation-derived material in the ploughsoil. A network of transects should therefore be capable of locating occupation areas which can then be tested by excavation.

3. Geophysical survey. To be carried out by A.M. Lab. over a part of the area at least.

4. Ph survey. To be carried out by A.M. Lab. to attempt to locate areas of intensive occupation.

5. Intensive fieldwalking survey after ploughing, plotting occupation-derived material on a 5m grid over the whole area. The success of this method will depend on both the density of material and the survival of ceramic material of different periods.'

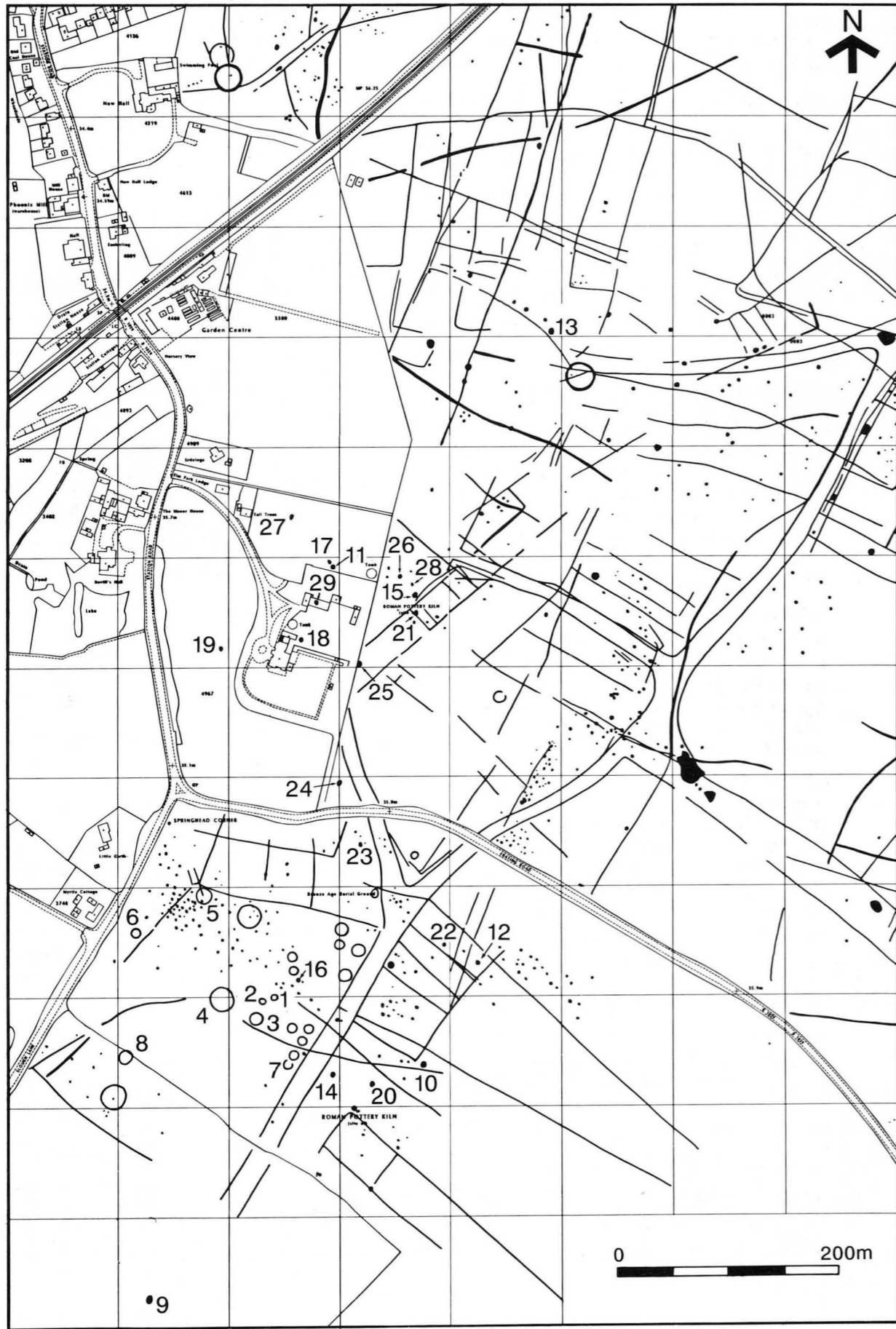
The CEU's investigations when added to the results of the CAG's work go a long way to addressing objective A of the original research design. However, this is not the case with objective B; the archive contains little information regarding the history of the agricultural use of the area (point Bi above). There is virtually no information contained in the archive regarding Bii-iii, comparison of degree of fragmentation between ploughed/unploughed land, stratified contexts etc. Whilst there are occasional references to sieving, and the topsoil of some of the smaller site sub-divisions was removed in 5cm spits as part of the projected sieving programme, there is no account of this work or discussion of the results in the archive, nor do there appear to be any figures relating to this work. Discussion of this aspect of the project is therefore impossible.

Of objective C only C1, selected small-scale excavation, appears to have been fully, and very successfully, implemented. Point C2, transect excavation, does not appear, in the event, to have been employed. Trial geophysical work in the form of magnetometer survey was carried out but without much success. An A.M. Lab. report preserved in the archive states '...larger ditches and pits can usually be found even on gravel, especially where burning associated with domestic or industrial activity has occurred. A number of such features were, therefore, tested with the magnetometer but without success. There was no response from one of the largest ditches, even where the topsoil had been stripped, nor from an area of exposed soil which was visibly burnt'. The planned phosphate survey was apparently never carried out. Although an intensive fieldwalking programme was carried out over an area immediately west of Elm Park (Hinchliffe 1981), the archive only contains a series of pottery finds plots which indicate some areas of Late Iron Age and Roman occupation within part of the cropmark complex (Fig.6).

Whilst it may seem regrettable that so little can now be said about objectives B and C of the original research design, in practice, even were more information available, it is doubtful whether anything useful could now be accomplished. Almost twenty years ago, when the project was first conceived, such methodologies were largely untested. However, since then the situation has changed dramatically, and the literature is now voluminous (e.g. Haselgrove *et al.* 1985, Shennan 1985, Richards 1990, Sperry 1992).



Figure 4 The Ardleigh cropmark complex, the 1994 rectified plot. This plot has been used as the base for all later figures in this report which show cropmarks



Key to Figure 5

- 1-8 CAG ring-ditches 1 to 8
- 9 Burials recorded in 1974 (Couchman and Savory 1983)
- 10 Three Late Iron Age burials and post-Deverel-Rimbury pottery
- 11 Late Iron Age burials, Early Iron Age pottery and loomweights
- 12 Late Iron Age burials
- 13 'Belgic' and Roman pottery spread over '10 acres' (Erith 1960)
- 14 'Belgic' pottery from field surface
- 15 'Cauldron Pit'
- 16 Roman pit
- 17 Roman pottery
- 18 Roman finds from Elm Park general location only (Going below ...)
- 19 Roman pit
- 20 Roman kiln
- 21 Roman kiln
- 22 2nd/3rd century AD burial
- 23 Roman pottery, dump of kiln waste (Going below ...)
- 24 Roman pottery, kiln waste in pit (Going below ...)
- 25 Roman pottery, kiln waste in pit (Going below ...)
- 26 Roman pottery and fired clay from field surface (Going below ...)
- 27 Roman pottery (Going below ...)
- 28 ?Roman kiln (Going below ...)
- 29 Elm Park kitchen garden, Roman ditch

Figure 5 Cropmark complex with location of CAG excavations and earlier finds marked

Belgic Pottery



Roman Pottery



0 200m

Figure 6 CEU fieldwalking plots. Given the nature of fieldwalking material it appears likely that the amount of 'Belgic' pottery has been overestimated at the expense of Early Roman ceramics which dominate the excavated material (Going p.141). The smallest dots represent 1--19g of pottery, the largest over 60g. Cropmarks are shown solid, modern features dashed

Twenty-three excavation trenches were opened within the cropmark complex. These were numbered from 1 to 23 and referred to as 'Site sub-divisions' or more simply as 'Areas'; their locations are shown on Fig.7. A series of linked trenches (Area 5) were placed to investigate a large cropmark ring-ditch and associated trackway in the north of the cropmark complex. A large area (7) was opened in the vicinity of Erith's original finds of burial urns. Further substantial trenches were located to the west of Elm Park (Areas 8, 20, 21 and 22) where there was a dense concentration of linear cropmarks, trackways and enclosures and where the work of the CAG, together with CEU fieldwalking, indicated a variety of Late Iron Age/Roman settlement evidence. Narrow trenches (Areas 4 and 9) and small boxes (Areas 2 and 6) were placed to examine the major cropmark trackways and what appeared from cropmark evidence to be a small cursus (Area 11). A group of 10 × 10m boxes (Areas 13–19) were sited to examine a major linear cropmark and investigate survival of archaeological deposits in areas without cropmark evidence. Further very small trenches (Area 10 and 23) were placed to check the alignment of features examined within the larger areas and to assess survival of deposits at the edge of Elm Park (Areas 1–3). Elm Park has escaped modern plough damage, and part of a Roman ditch had been excavated by CAG within the grounds in 1965 (Holbert and Erith 1965 and below p.33).

Usually topsoil was removed by machine, although in some of the smaller trenches, particularly those in Elm Park, excavation was entirely by hand. Areas were hand cleaned, planned and all features either fully excavated, or excavated in segments. Segments and fills were given a context number in a consecutive series from 1: 8291 (a few numbers not used are listed in the archive). Major cropmarks were numbered in a consecutive sequence beginning with 1, cropmarks referred to in the discussion are shown numbered on Fig.114 and where their numbers are cited in the text these are prefixed 'C' to avoid confusion with the site context numbers. Small finds were also allocated a number in a consecutive sequence beginning with 10101.

Post-excavation work began in 1981. A letter contained in the archive and dated December 1980, from Geoff Wainwright to John Hinchliffe concerning post-excavation and publication proposals asked:-

'When the time is right could you please let me have a forward estimate of timing with the staff and volunteers you would like to have involved. I think this is necessary for each project but we have never requested it before'

Since the discipline has become so used to the rigours of MAP 2 assessments, updated project designs *etc.*, it is extraordinary to recall how different things were twenty years ago.

It was intended that publication of the CEU's work would include a full account of the CAG's excavations. Whilst these had been published in the Group's bulletin, its rather limited availability and poor production standards (at least before 1970) had obscured the full importance of the Group's work. As part of this process, all the published Middle Bronze Age urns from Ardleigh were collated for re-publication in a single place, since it was intended that the publication would include a definitive account of the ceramics of the Ardleigh Group. However, post-excavation work on the project stopped in

the early 1980s. In 1992 Essex County Council were asked by English Heritage to carry out an assessment of the archive with a view to archive completion and preparation of a publication proposal. This work was completed in 1992–3 and a publication proposal submitted in March 1994. This proposal was agreed but work was postponed to allow funding of the very large excavation at Elms Farm, Heybridge, Essex. In December 1994 funding was agreed for the Ardleigh publication report and work began on preparation of this report in April 1995 under the direction of the author.

VIII. Replotting of Cropmark Complex

by D. Strachan

The transcription (Fig. 4) was carried out in order to produce an accurate cropmark plot, at a scale of 1:2500 of the Ardleigh complex, a detailed account is contained in the site archive. A number of inconsistencies had been noted in the 1970s sketch plot: in particular the plot did not match the excavated position of features revealed by the CEU.

All available photographs were borrowed from the National Library of Aerial Photography (NLAP). This consisted of 316 specialist black and white oblique photographs, and 74 black and white vertical photographs. The majority of NLAP oblique photography was taken by the RCMHE Aerial Photographic Unit (between 1974–1989), although it also contained a number of Farrands prints (from 1959–78). The vertical photography consisted of RAF National Survey photography (from 1946–1954), Meridian Airmaps (from 1974 and 1980) and Huntingdon Surveys (from 1970). The Cambridge University Committee for Aerial Photography (CUCAP) collection was also consulted, a total of 57 black and white obliques dating from 1959–1979. In addition, the available photographs from the Essex Sites and Monuments Record (ESMR), consisting of 134 black and white and colour obliques, were used. The ESMR collection contained a number of RCHME and CUCAP prints, in addition to photography taken by the Archaeology Section, Farrands, McMaster and Erith. The general quality of photography varied greatly, and field control was a particular problem encountered with the oblique photographs.

The area of the cropmark complex requested for plotting was divided into six areas (A–F on Fig.7) for which surrounding mapped features gave control for rectification of oblique photography using the AERIAL 4.20 computer rectification system. Additional features, which appeared on photographs which did not sustain the control required for computer rectification, were sketch plotted. Full details of the methodology employed are contained in the archive, together with a plan differentiating those features sketch plotted from those computer rectified. Brief details on major differences between the 1970s plot and the new version are noted below.

AREA A (Fig. 7) to the immediate south-east of Ardleigh Church; this area contained one CEU trench (area 5).

(i) Three small ring-ditches appearing on the 1979 plot were not included, two of these (to the south-east and north-east of ring-ditch 652) were disregarded as being agricultural features appearing on CUCAP



Plate IV Aerial photograph of CEU ring-ditch 652 (Area 5), taken in July 1986 after the excavation. Ring 652 shows as a thick dark line with a thinner conjoined ring-ditch to the north. This did not appear on the 1970s sketch plot and lay outside the CEU trenches. *Crown copyright (ref.TM 0529/12) RCH/ME*



Plate V Ring-ditches at Ardleigh visible as cropmarks at ground level c. 1960. This is the area of the main cemetery although the particular ring-ditches shown are not identifiable. The hedge line in the background is Slough Lane with the dragline of Martell's gravel pit just visible to the left

photography, the other did not appear on any of the photographs examined. An additional ring-ditch was identified (on a single photograph Pl.IV) conjoined with ring-ditch 652.

AREA B (Fig.7) a large area to the south and south-east of Glebe Cottages which was not trenched by the CEU.

(i) Several new features were recorded, especially in the west and north-east of the area. All of the features on the 1970s plot were considered to be archaeological and were replotted, although the position often varied from that assigned to them in the 1970s.

AREA C (Fig.7) the area to the east of Elm Park contained five large CEU trenches (6, 8 and 20-22).

(i) A group of three ring-ditches at TM 058 286, and five at TM 057 287, which appear on the 1970s plots were not identified. An additional ring-ditch, at TM 057 286, was located. In addition, a length of trackway shown on the 1970s plot, running parallel to the main trackway at TM 061 286, was not located.

AREA D (Fig.7 centred at TM 057284) between Martells Hall and Chancery Farm contained ten CEU trenches (7, 11 and 12-19) which concentrated on an area of ring-ditches, a section of trackway and a feature which had been interpreted as a possible cursus.

(i) A number of small ring-ditches on the 1970s plot were not located; a large ring-ditch at TM 054 285 was also not located. These features were not transferred to the current plot. Given that it is known that some of the ring-ditches were recorded by Erith from the ground (above and Pl.V), it is possible that these

features never showed up on air photographs. It should also be noted that most of the dense cluster of ring-ditches in Area 7 did not show on air photographs. It is possible that in this respect the number of ring-ditches shown on the 1970s plot more closely reflects the density of archaeological features, although precise positions may be doubtful.

(ii) The use of secondary control was employed, although this resulted in unacceptable error readings. This limited the oblique photography available for computer rectification. Control on oblique photography was especially a problem with Farrands low-level photography which showed the majority of the smaller ring-ditches. It is likely, therefore, that the 1970s plot was the result of sketch plotting with a similar control problem. Six ring-ditches were computer plotted, however, and the composite results suggested a good degree of accuracy.

AREA E (Fig.7) to the south-west of area D contained no excavated trenches.

(i and ii) The five small ring-ditches at TM 053 282 on the 1970s plot were not located. The large ring-ditch with the central pit (CEU 54) appeared on only one Farrands oblique, with very poor control and was manually plotted.

AREA F (Fig.7) to the north of Vincens Farm, this area contained no CEU trenches, although the main feature was an enclosure which had been excavated by CAG. The enclosure appeared on only one Farrands photograph, and computer rectification of this (using secondary control) confirmed its position on the 1970s plot.

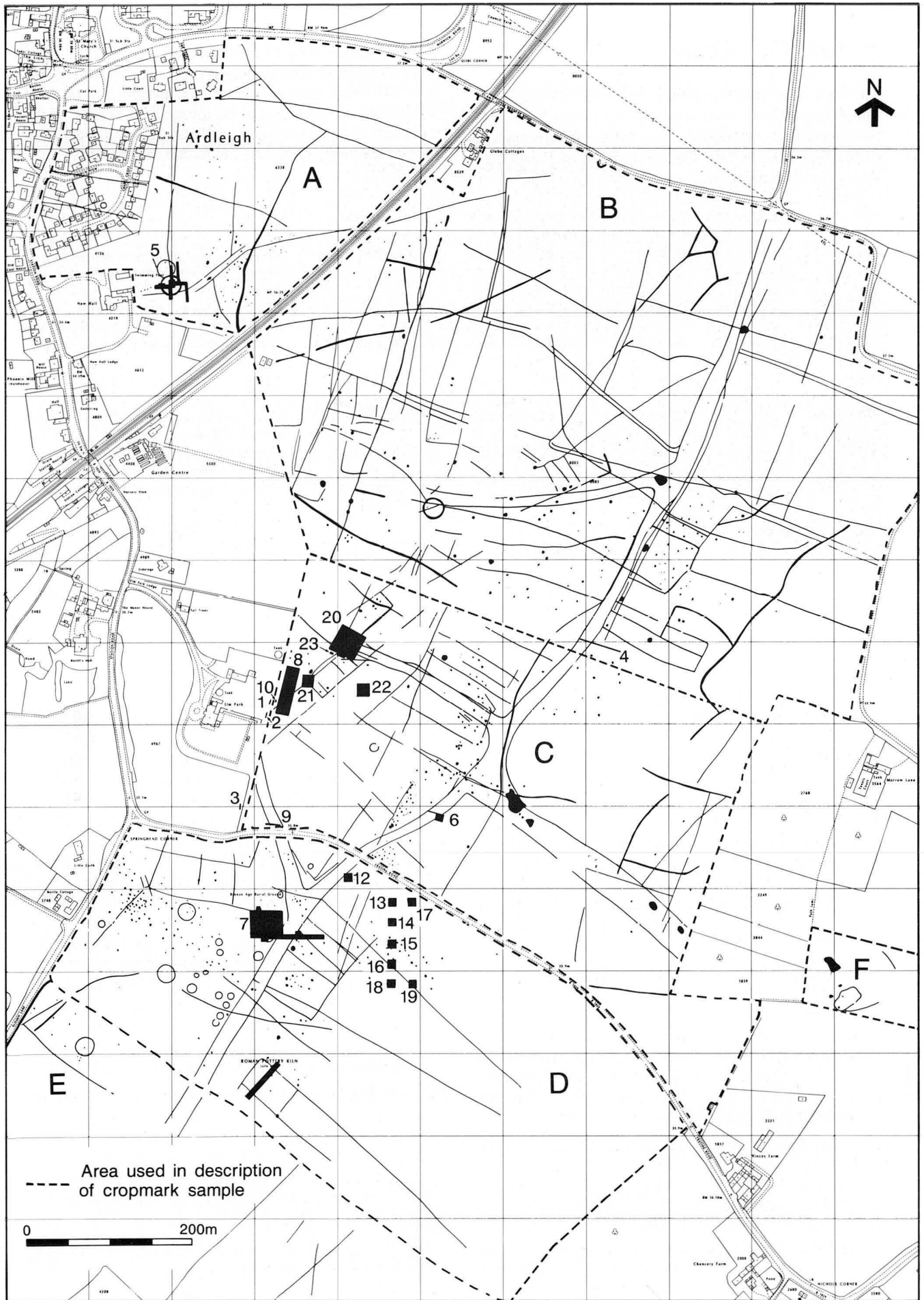


Figure 7 Cropmark complex with location of CEU excavation areas. Letters relate to areas used in replotting the cropmarks, and these areas are indicated by broken lines

IX. Radiocarbon Dates

The 1 and 2 sigma ranges refer to 68 % and 95 % confidence ranges respectively. The calibrated date ranges listed in the table have been calculated using the maximum intercept method of Stuiver and Reimer (1986), and data from Pearson and Stuiver (1986) and Pearson *et al* (1986). Dates

are quoted according to the convention of Mook (1986) and have been rounded outwards to 5 years. *Nb* HAR-5744 and 5745, are based on preliminary results only, no final results and certificates can be found. Full details of the radiocarbon dates provided by Sarah Hill of the Ancient Monuments Laboratory are contained in the archive.

<i>Lab No.</i>	$\delta^{13}C(0/00)$	<i>Radiocarbon Age (BP)</i>	<i>Calibrated Date Range (1σ)</i>	<i>Calibrated Date Range (2σ)</i>	<i>Context</i>
HAR-3908	-26.1	3600 \pm 80	cal BC 2125-1885	cal BC 2195-1750	Charcoal (<i>Quercus</i> sp. from mature timbers) and charred nutshell (<i>Corylus avellana</i>). Cremation 909
HAR-5126	-25.8	2870 \pm 80	cal BC 1210-925	cal BC 1310-840	Charcoal (<i>Quercus</i> sp.). Lower fill ditch 1912 (1939)
HAR-5128	-26.0	2940 \pm 70	cal BC 1265-1035	cal BC 1395-930	Charcoal (<i>Quercus</i> sp.). Lower fill of ditch 1912 (1937)
HAR-5129	-27.1	3050 \pm 70	cal BC 1415-1225	cal BC 1495-1100	Charcoal (<i>Crataegus</i> sp.). Ditch 7503 (7542)
HAR-5743	-28.9	3020 \pm 100	cal BC 1420-1105	cal BC 1510-990	Charcoal (<i>Alnus glutinosa</i>) from mature timber). Cremation 7245
HAR-5744	-27.6	2880 \pm 70	cal BC 1210-945	cal BC 1300-900	Charcoal (<i>Alnus glutinosa</i> from mature timbers). Cremation 7249
HAR-5745	-25.6	2810 \pm 150	cal BC 1255-820	cal BC 1410-770	Charcoal (unidentifiable). Cremation 7210

Table 1 Radiocarbon dates

Part II. The Excavations

I. Colchester Archaeological Group's Work

Bronze Age

Ring 1 (Erith 1960a) (Fig.8)

East-west and north-south trenches were laid out dividing the ring-ditch into quadrants for excavation. Subsoil was then removed to the surface of the gravel and the ditch excavated, with the exception of four narrow baulks at the end of the east-west and north-south sections (Fig.8). The ditch was up to 0.9m deep and 1.5–2.4m wide, U-profiled and steep sided to the north, rather more sloping sided in the other three sections (Fig.8). The lowest fills comprised a thin deposit of stony clay, described as 'pug', with gravelly layers of iron pan above it on the north side. Above this the fills were nearly stone free. The division between a lower 'wet loam' fill and upper disturbed soil appears very marked in the section drawing (Fig.8), such that the upper fill could be considered a recut. However, the distinction between these two fills is not described in any detail and might simply reflect the ground-water levels at the time of excavation. The variety of layers revealed in the apparently 'natural' gravel, at the edge of the ditch on the south, and to some extent the west side, may indicate some kind of recutting or disturbance of the ditch edge; but it is at least as likely to represent the very mixed nature of the upper levels of the natural deposits at Ardleigh (Bridgland 1994, 299–305).

A narrow strip of 'woodash' was recorded within the ditch of the south-western quadrant about 1.7m deep. Deposits of disturbed soil with some charcoal were recorded at a similar depth in the north-west quadrant. Four sherds of Bronze Age pottery were recovered within the south-west ditch quadrant, three sherds came from the north-east ditch quadrant (Fig.8). Four 'Belgic' and/or Roman sherds were found in the south-east ditch quadrant, at depths of up to 0.37m.

A central sub-rectangular pit about 1m² and up to 0.45m deep, contained the upper parts of two inverted large urns '...just gently touching' (Erith 1960a, 51). The pots did not rest on the natural gravel at the base of the pit (Fig.8) indicating that some silting of the feature had taken place prior to their deposition. The pit fill beneath the urns contained a single sherd of Bronze Age pottery. A patch of stony sand on the eastern side (Fig.8) was considered by the excavator to be upcast from the pit (but see below p.18). Removal of the subsoil from the inside of the ring-ditch revealed no further features. However, nine Bronze Age sherds were recovered in a band running south from about the centre of the ring-ditch to the ditch edge.

Ring 2 (Erith 1960b and c) (Fig.9; Pls VI and VII)

The site was excavated after harvest in 1959. The topsoil was largely removed by labourers, the subsoil surface was then cleaned and quadrants laid out (Pl.VI). The subsoil was removed to the surface of the gravel, and the ditches

were completely excavated with the exception of four baulks at the east, west, north and south sections, together with small areas of ditch which extended beyond the limit of the excavation (Fig.9).

The ditch was about 0.75m deep and 2m wide with shallow sloping sides and an uneven base. The primary fill comprised about 0.05m of stony clay. The remaining fill was of similar consistency as the subsoil but with rather more stony, sandy deposits on the outer edges of the ditch and central feature, which appear likely to be variations in the natural gravel (Fig.9). Thirty-three sherds of Bronze Age pottery were recovered from the ditch (distribution shown on Fig.9; for depths see Erith 1960c). Four other sherds were recovered during removal of the subsoil from the interior of the ring-ditch in the south-east quadrant.

Within the interior, parts of two urns were visible at the surface of the subsoil. The lower part of a globular urn (Fig.9) survived at the centre of the barrow, the rim having been ploughed off. The interior of the vessel contained cremated bone (below p.159): no cut for a burial pit was observed. About 1m to the north-west, the upper part of a bucket urn (Fig.9, Pl.VII) was recovered: in this case a burial pit could be traced from the surface of the subsoil (Fig.9) filled with 'dirty soil' and stones. Cremated bones were recovered from the urn fill but lost prior to examination.

Removal of the subsoil revealed the undulating upper surface of the gravel across the interior of the ring-ditch. Both urns lay within a shallow depression in the gravel surface roughly 1.3m in diameter and bounded on the south, east and west sides by a sandy deposit (Fig.9 section, not shown on plan).

Ring 3 (Fig.10; Pls VIII and IX)

The excavation methodology was broadly similar to that employed for rings 1 and 2. East-west trenches were laid out and the ring-ditch excavated in quadrants. The ditch was V-profiled with a slightly-rounded base, 1.3m deep and up to 2.2m wide, and with a shallow primary fill of stony, sandy clay. Above this, the section (Fig.10) shows a uniform loam fill, but with the lower/middle silts incorporating large stones presumably derived from the gravelly ditch sides and/or any accompanying bank or mound. Deposits of 'stony soil' around the outside edge of the ditch, particularly on the north side, were taken by the excavators to be the remains of an external bank. In the north-east quadrant of the ditch a deposit of cremated bone and ash, adjacent to a large urn fragment (Fig.10), was considered to represent a burial redeposited in the ditch during destruction of the barrow mound. However, it could equally be regarded as a secondary burial inserted into the ditch (below p.171). About 100 Bronze Age sherds including at least two other large fragments were recovered from the ditch. A few 'Belgic' or Roman sherds were also found in the upper ditch fill (Erith 1961a).

SECTIONS ARDLEIGH RING ONE

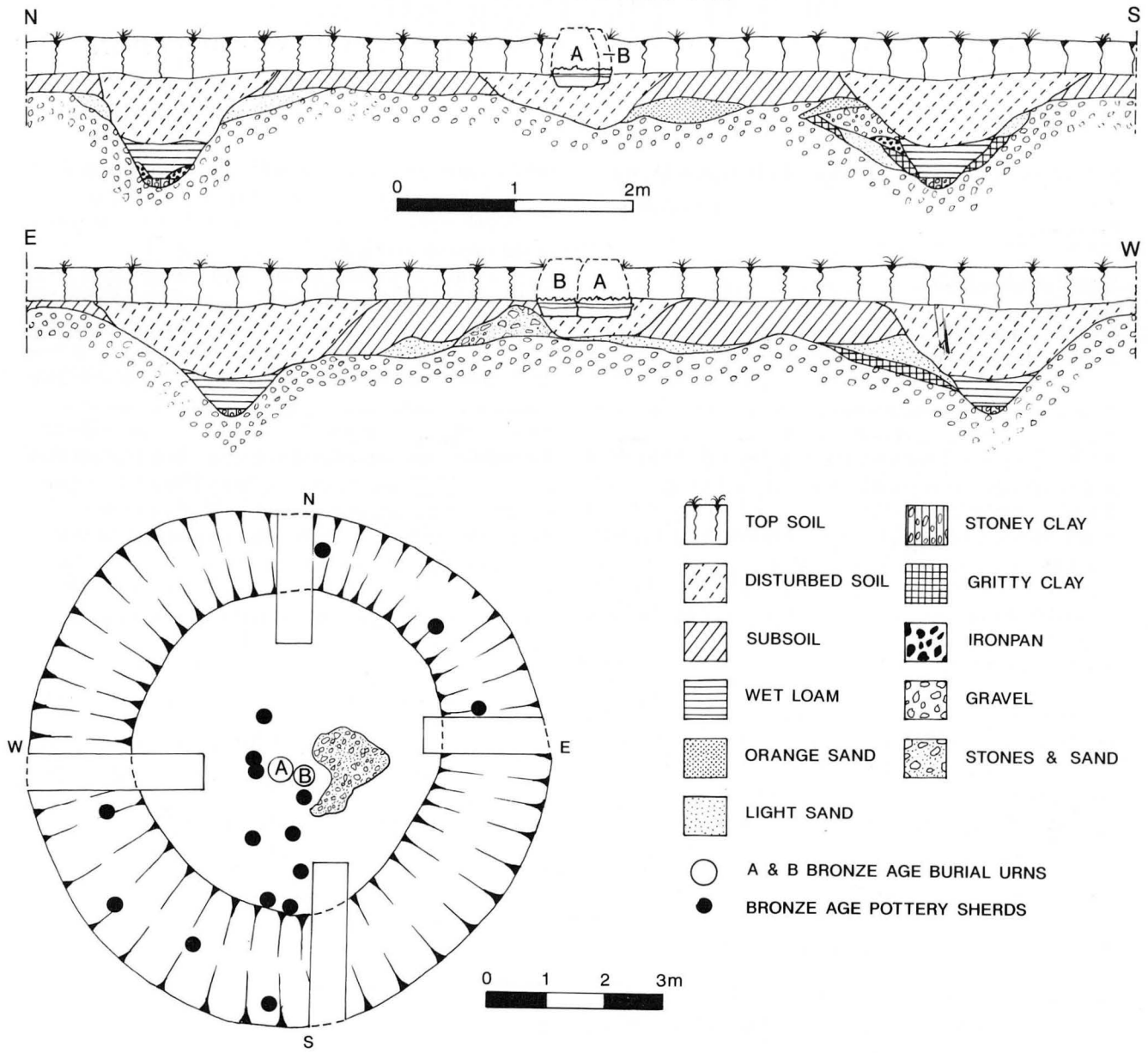


Figure 8 Plan and sections of Ardleigh ring 1 after Erith 1960a

SECTIONS ARDLEIGH RING TWO

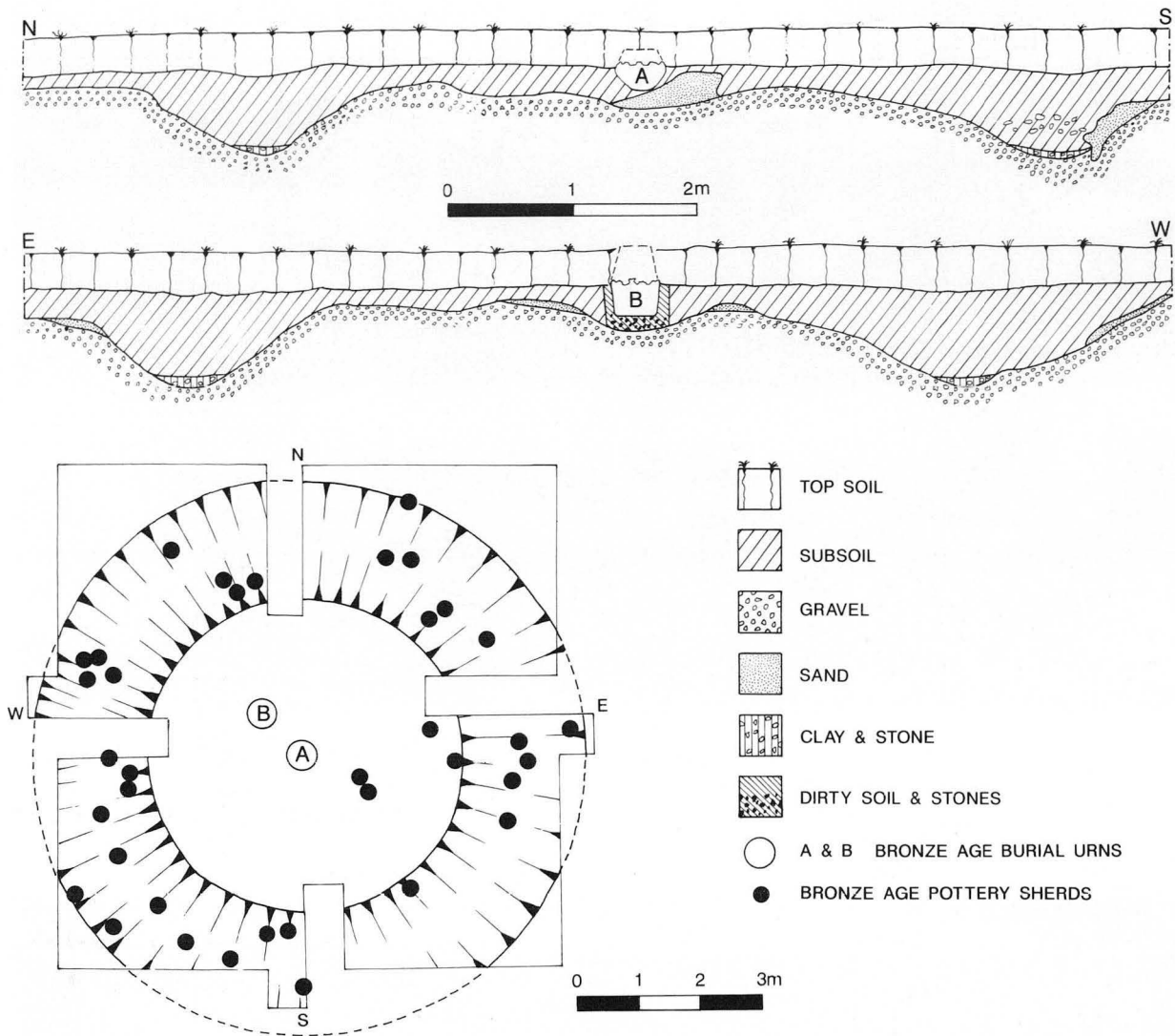


Figure 9 Plan and sections of Ardleigh ring 2 after Erith 1960b and c



Plate VI Ardleigh ring 2 during excavation, showing quadrant method typically used by CAG. The Globular urn which contained the central burial can just be seen protruding from the baulk



Plate VII Ardleigh ring 2 during removal of the baulks. The central burial is visible together with the secondary burial contained within a bucket urn



Plate VIII North east quadrant of ring 3 in course of excavation. Burials shown are, from left to right, 8, 9, 7, 2, 3, 1, 5, 6 and 4 in the right foreground. Burial 3 is on top of the paired burials 1 and 2. Note the badly truncated urns 8 and 6 placed at a relatively high level. The small urn 9 was also badly damaged, but in this case reconstructable (Fig.63.76) as a large rim sherd (just visible in the plate) had fallen down to lie beside the base. Scales in feet



Plate IX Ring 3 during course of baulk removal, urns shown are, from left to right, 23, 22, 21 (Primary), 18, 20 and 19 in foreground. Scale in feet

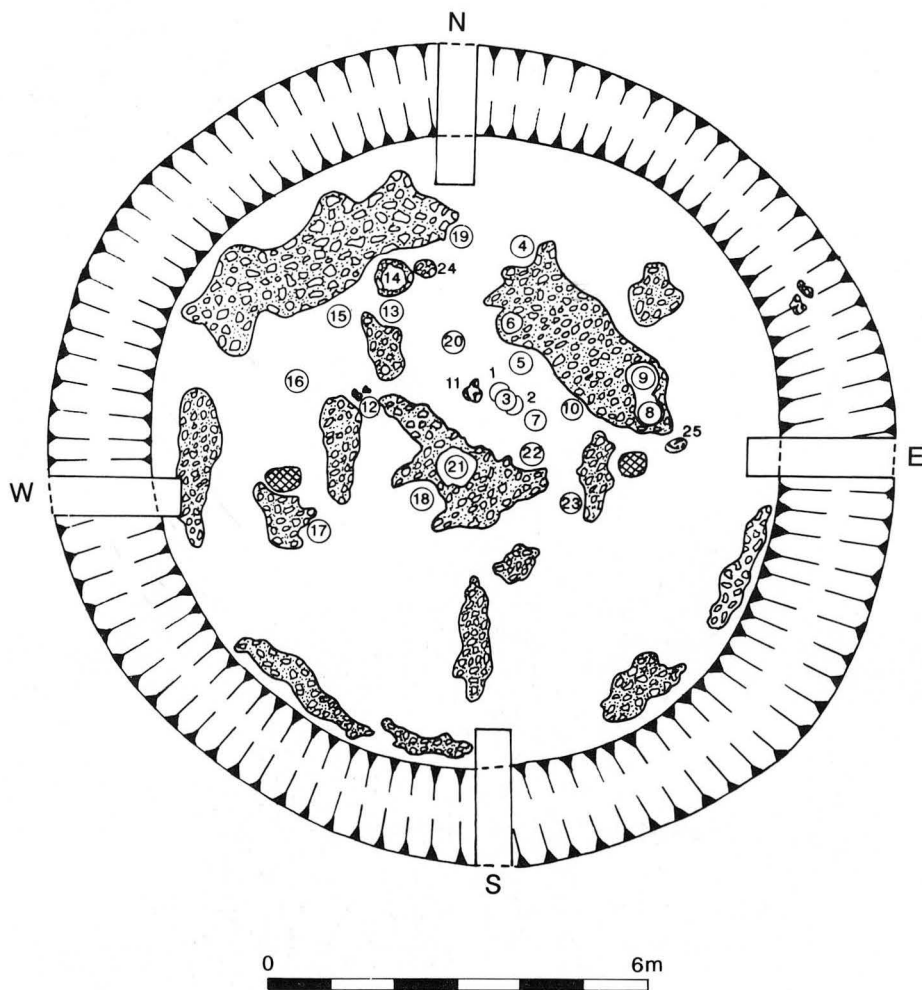
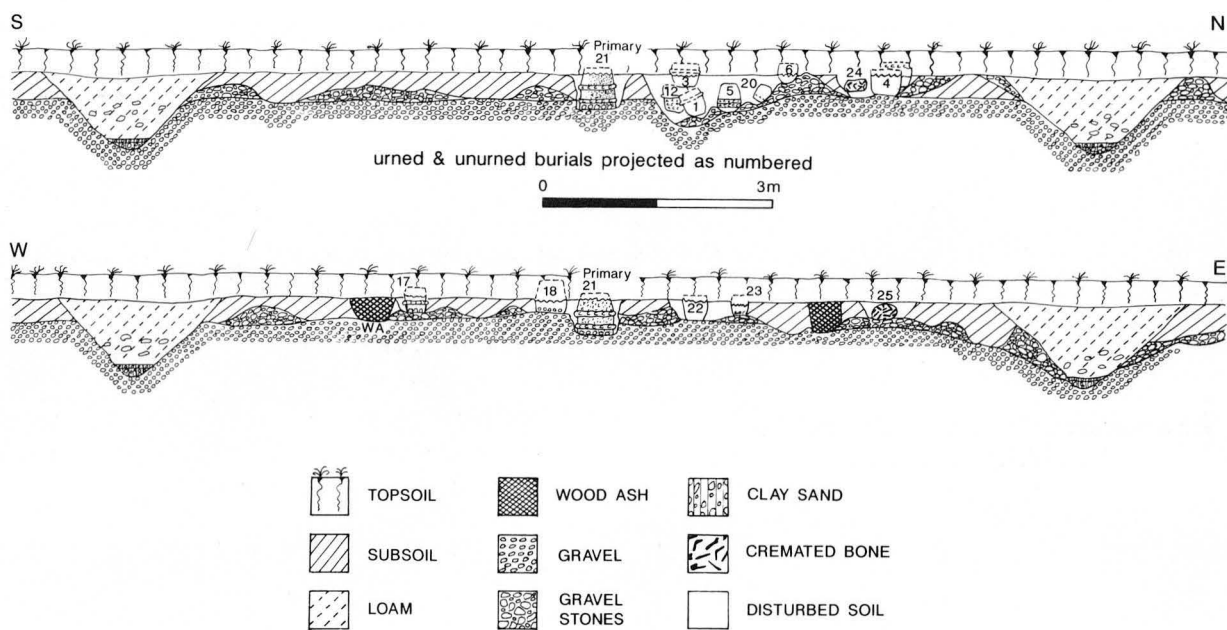


Figure 10 Plan and sections of Ardleigh ring 3 after Erith 1961a and b

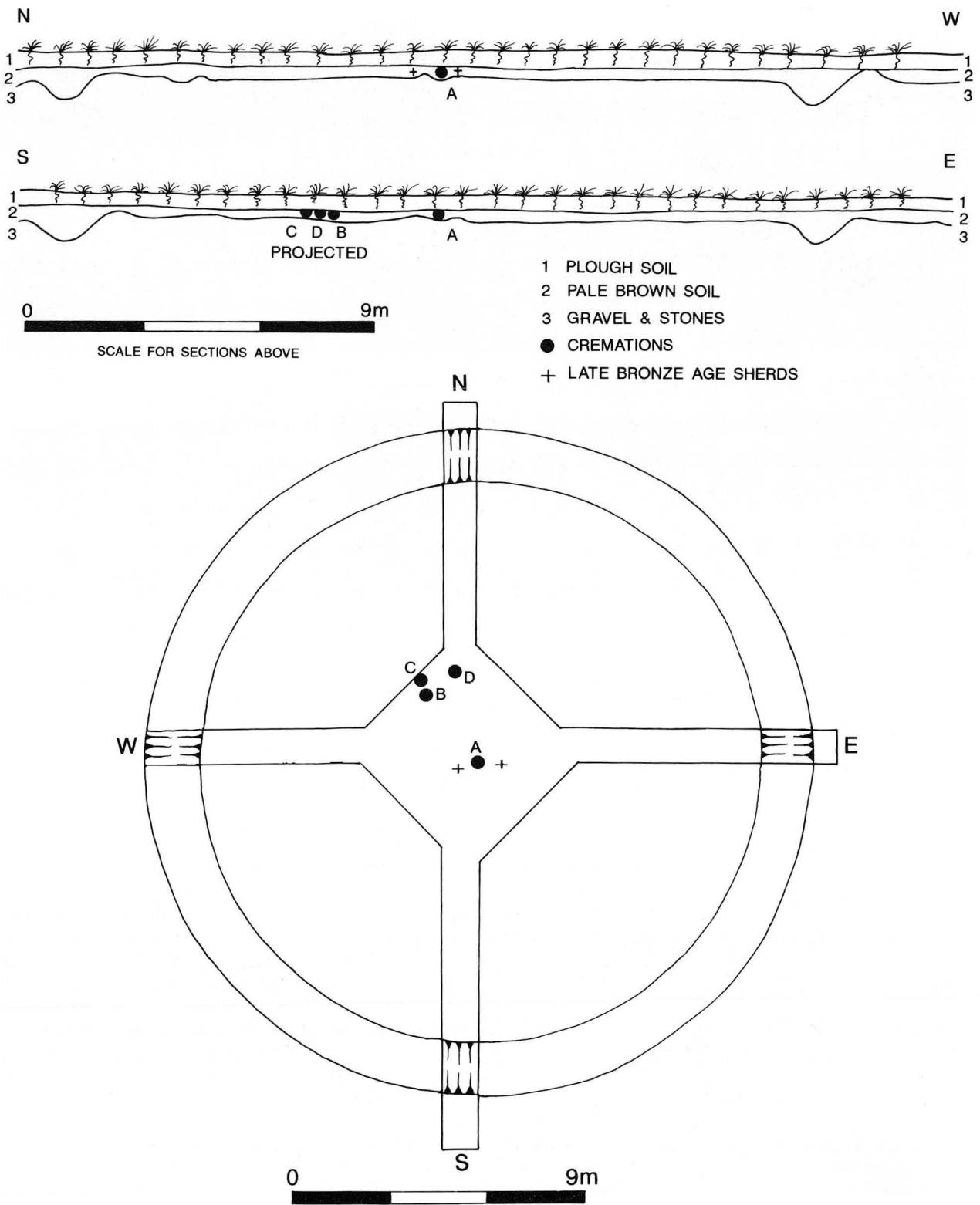


Figure 11 Plan and sections of Ardleigh ring 4 after Erith 1966



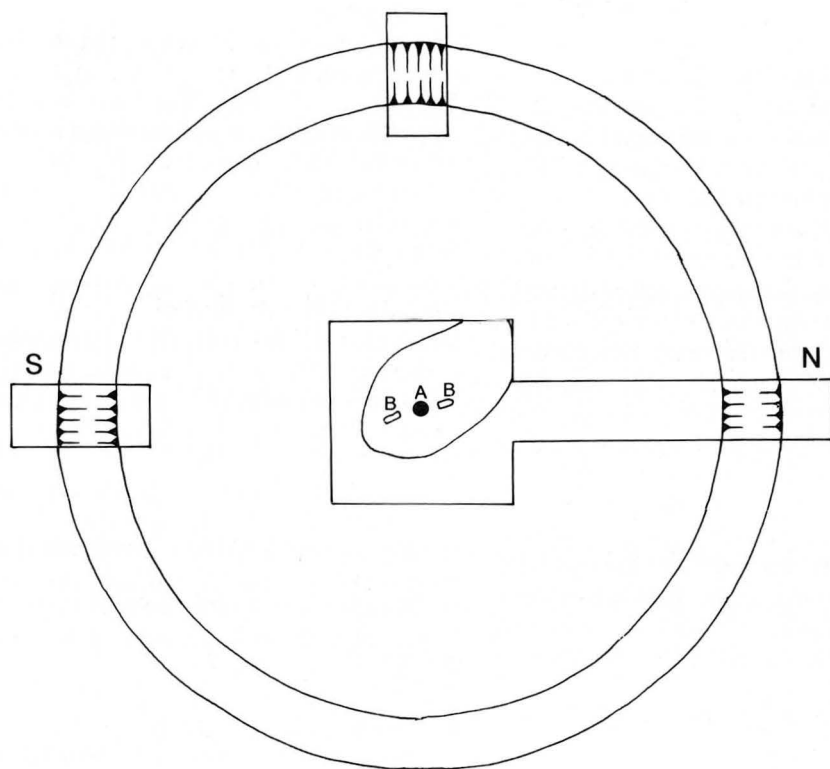
Plate X Ring 4 in course of excavation showing the central box and one of the four trenches (the one running north) excavated across the ditch. The central burial lies beneath the unexcavated block in the foreground, the three other unurned cremations can be seen as slightly raised areas around the upright six foot scale

In the interior a centrally placed pit (Fig.10) contained a very large and distinctive urn containing cremated human bone (below p.159). Two pits lay to the east and west each about 3m from the primary burial. The western pit was about 0.25m in diameter and 0.3m deep, the eastern 0.3m in diameter and 0.35m deep: both were filled with 'woodash' with no cremated bone or other material. Three unurned and twenty-three urned cremation burials were recovered, all except two being north of a line through the centres of the woodash pits and central burial (Fig.10). The three exceptions were burials 17, 0.75m south-east of the western 'woodash' pit 18, just 0.3m south-west of the primary burial, and 23, 0.8m south-west of the eastern 'woodash' pit (Fig.10). Large patches of very stony gravel deposits are shown on the plan and sections and it is clear from the text and accompanying drawings (Erith 1961a and b) that these were regarded by the excavators as 'upcast' from the ditch. However, some of the burials, e.g. Nos 8 and 9 (Fig.10), together with the primary central burial, cut through these deposits. Moreover the ditch itself, on the east side, clearly cuts through one of these stony layers, which lies on either side of the bottom of the ditch (Fig.10). In some cases the stony deposits are beneath the 'subsoil' layer, in others on top of it (Fig.10). It is difficult to see how all of this material could be the result of upcast from the ditch and/or burial pits. It seems likely to represent the undulating and mixed nature of the upper surface of the gravels. The very mixed nature of the upper gravel at Ardleigh, essentially a relict soil much affected by cyroturbation, has recently been described by Bridgland (1994, 299-305) at Martell's pit, just 2-300m south of ring 3.

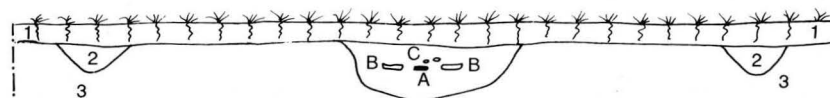
Ring 4 (Fig.11; Pl.X)

This ring-ditch was originally located on the ground in 1959, however, the precise location was subsequently lost. A salutary warning begins the CAG report on the site; 'The centre was recorded by measuring to certain electricity and telegraph poles, but the electricity posts have since been realigned to avoid a new gravel pit, and the telephone post was removed when the wires were put underground...' (Erith 1966). Luckily the cropmark briefly reappeared in May 1965 and excavation took place that autumn. The methodology differed from that employed during the excavation of rings 1-3. In this case two trenches were opened north/south and east/west across the ring-ditch, with a box approximately 7m square opened in the centre (Fig.11, Pl.X). The ditch was excavated in four places and was 4-5m wide and up to 1.3m deep, V-profiled, the fill being simply described as 'stone-free, pale brown soil'. The central area was progressively lowered to the surface of the gravel. This process revealed four unurned cremation burials immediately below the ploughsoil (Fig.11).

The central burial was described as large with 'much wood ash', the cremated bone included remains of an adult and a young child (below p.161). The other three were described as small and lay in a group at the edge of the central excavated area 3-4m north-west of the central burial. Cremations B and C (Fig.11) each contained the remains of a child (below p.161), cremation D contained only few unidentifiable pieces of bone. Three sherds of Bronze Age pottery including a rim (below p.168) were found at the subsoil/ploughsoil interface about 1m from the central burial. A single Bronze Age sherd was found in the northern ditch segment.



0 5 10m



- | | | | |
|---|-------------------|---|------------------------------|
| A | PATCH OF ASHES | 1 | PLOUGHED SOIL |
| B | SITULA-SHAPED URN | 2 | STONE-FREE SILT AND BACKFILL |
| C | POT SHERDS | 3 | NATURAL GRAVELLY SUBSOIL |

Figure 12 Plan and sections of Ardleigh ring 5 after Erith 1975

Ring 5

(Fig.12)

Again a rather different methodology was used from that employed in the excavation of rings 1–3. The ring-ditch was first noticed as a cropmark in the summer of 1960, but only clearly defined during a summer drought in 1974; excavation took place after harvest that year.

A trench was excavated from north of the ring-ditch, to a box about 5m × 5m at the centre, in addition short trenches were excavated just across the ditch on the south and east side (Fig.12). The ditch was V-profiled and just under 1m deep (Fig.12), the fill being described as 'stone-free silt' and 'backfill'. A roughly oval pit about 5m × 2m and just over 1m deep was recorded at the centre of the trench. As with the ditch, the fill was described as 'stone free' and 'backfill' contrasting clearly with the surrounding orange-brown natural gravel.

Two sherds of Late Bronze Age/Early Iron Age fineware (below p.177) were recovered from the upper fill. Below these lay a subcircular patch of ash about 0.15m in diameter and 0.025m thick, which contained two pieces of cremated bone. To the north and south of this deposit, two large, joining sherds of a shouldered jar (below p.171) had been placed interior uppermost (Fig.12).

Ring 6

This ring-ditch was first observed as a cropmark in 1959 and excavated over two seasons in the autumn of 1960 and 1961. The excavation methodology was the same as that employed for rings 1–3. The ditch was V-profiled, about 1m deep with a fill of 'stone free soil'.

Unlike the other ring-ditches, no plan or sections appear to be preserved. However, the original excavation report (Erith 1962b) was accompanied by a page of interpretive cross sections describing a possible sequence of construction, use and destruction of the site (Fig.110)

Two pits between 0.6m in diameter and up to 0.65m deep were recorded about 1–2m apart, at the centre of the ring-ditch (Fig.108) and another larger pit was located '...almost at the circumference due east'. The fills of all three features were described as pure soil. Over one hundred sherds were recovered from the ditch which was fully excavated. A few were Bronze Age and one of these lay close to the bottom of the ditch. However, the majority were Roman found scattered through the fills at depths of between 0.3 and 0.7m.

Ring 8

(NB ring 7 was not excavated)

This ring-ditch on land at Martell's Hall was destroyed by gravel extraction without excavation. However, Erith (1972) recorded its destruction:-

'This ring-ditch has now been taken by the gravel-pit, but while the topsoil was being removed I was able to observe the circle in the subsoil. In the centre a hole about 4 feet square had been made in antiquity, but had been rifled in more modern times. Four black nondescript sherds of Bronze Age pottery was all that we found. The circular ditch was 2½ feet deep and contained nothing other than silty soil.

Four yards outside the circle to the south-east, a Roman pot had been buried complete. It was common form Cam. 268, and contained nothing but soil.'

Ring 10

(NB ring 9 was not excavated and lies beyond the area covered by this report)

This site at Martell's Hall Farm was first seen as a cropmark in 1962 and was excavated in advance of gravel extraction in September 1963 (Fig.104).

The excavation was carried out using the method employed for investigation of rings 1–3. The ditch was found to be only 0.3m deep, with 'a stone-free fill' easily distinguishable from the surrounding gravel. The ditch was fully excavated and six sherds of a Bronze Age urn were found at a depth of 0.15m in the south-west quadrant of the ditch. All that survived of the central burial was the base of one urn, which contained a few cremated bones of an adult. Two pits each about 1m from the central burial lay to the north and south, each was about 1–3m in diameter and 0.75m deep. A third large pit lay at the eastern circumference 'touching' the ditch. Fills of all three features were described as 'stone-free soil'. No plan or section accompanied the report, although a simplified plan appeared as part of a figure comprising comparative plans of a number of the Ardleigh and other local ring-ditches (Fig.108; Erith 1963, 44).

Late Bronze Age/Early Iron Age

Very little definite evidence of occupation or burial at this period has been recovered from Ardleigh. The notable exception being ring 5 (above p.19 and p.24). However, settlement evidence has proved elusive. Finds of pottery were noted by Erith (1962a) from eight locations within the cropmark complex. However, no clear details of these finds or their precise locations are known, nor can the material currently be located amongst the collections at Colchester Museum. The exceptions are parts of two small vessels recovered from ploughsoil in the south-eastern part of the cropmark complex (Fig.5). A sandstone pestle is said to have been '...ploughed out with the pottery' (Erith 1962a).

Middle Iron Age Enclosed Roundhouse

(Figs 13–15)

This site lies to the south-east of the main cropmark complex, about 200m from the point where the cropmark of the wide trackway C13 (Fig.114), enters an area of orchard/nurseries and can no longer be traced. The introduction of mechanised ploughing brought a few 'nondescript prehistoric sherds and red clay loomweight' (Erith and Holbert 1970, 4) to the surface. In 1959 aerial photography revealed the enclosure (Farrands 1960).

Before commencing excavation at Lawford Tye in 1963 (Shennan *et al.* 1985), Mr Brian Blake, then of Colchester Museum, excavated some long narrow trial trenches which located the enclosure ditch and a circular ditch within it. Further trial trenches were attempted by CAG the following year, but abandoned due to the hardness of the ground. A note on all this preliminary work was published by Blake (1965). The excavations were eventually carried out in two summers in 1967 and 1968; an area of the south-western part of the enclosure was excavated in a series of boxes 12 × 12 ft (approx. 4 × 4m) with baulks between. However '...certain disadvantages experienced by the use of boxes...were encountered.' (Erith and Holbert 1970), and accordingly the rest of the site was excavated as an open area. In the light of features revealed in the 'open area' excavation,

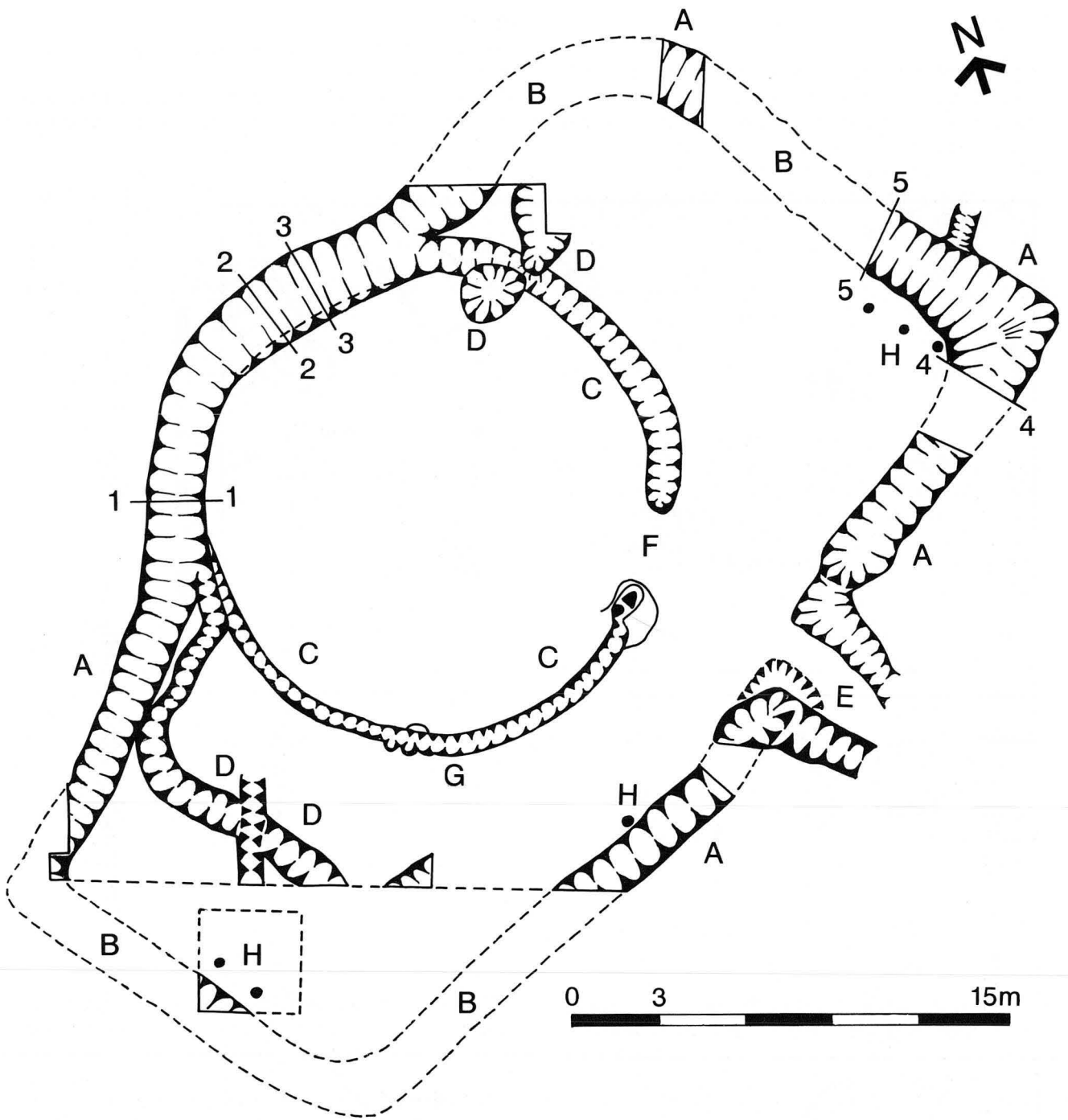


Figure 13 Plan of enclosed roundhouse after Erith and Holbert 1970

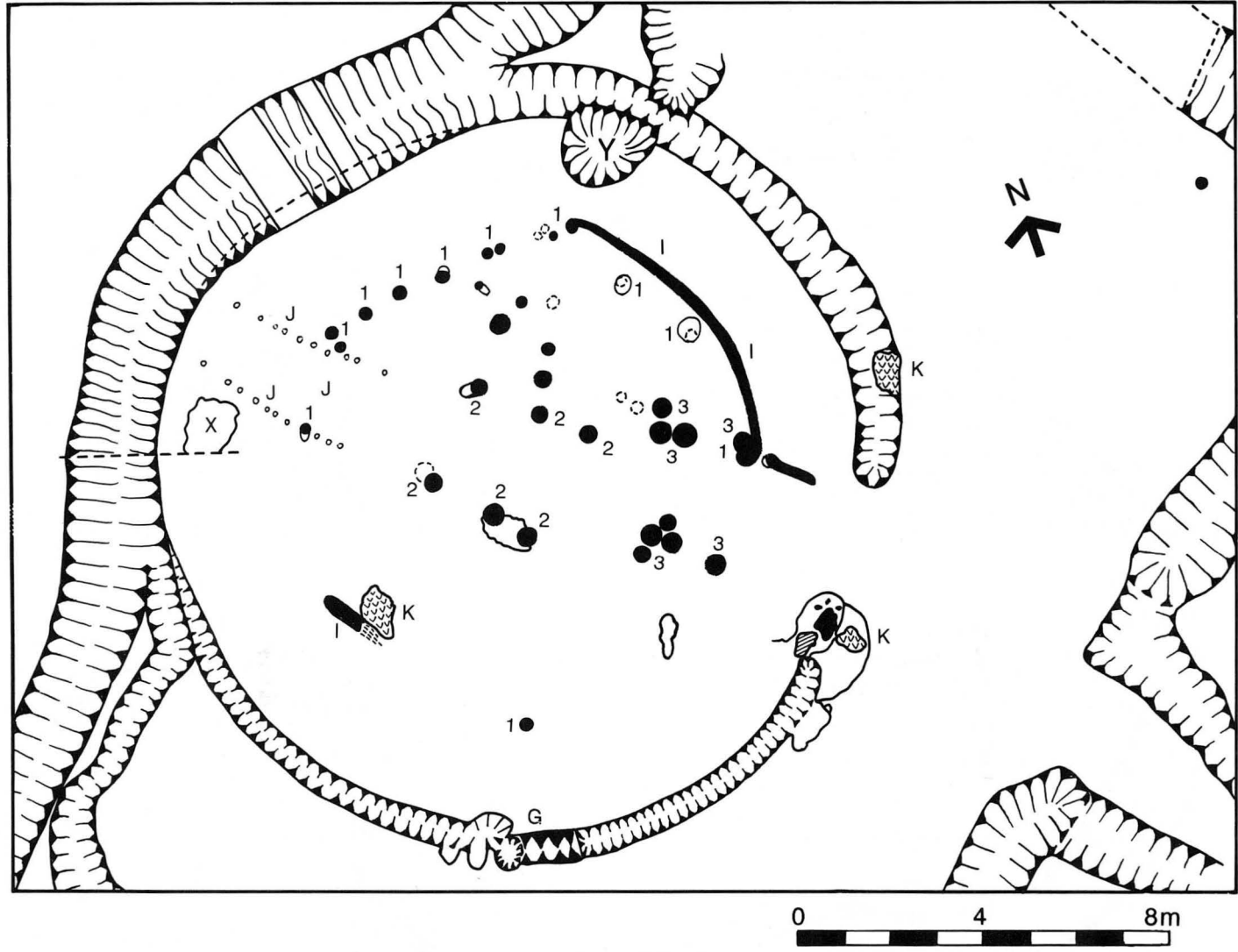


Figure 14 Plan of roundhouse after Erith and Holbert 1970

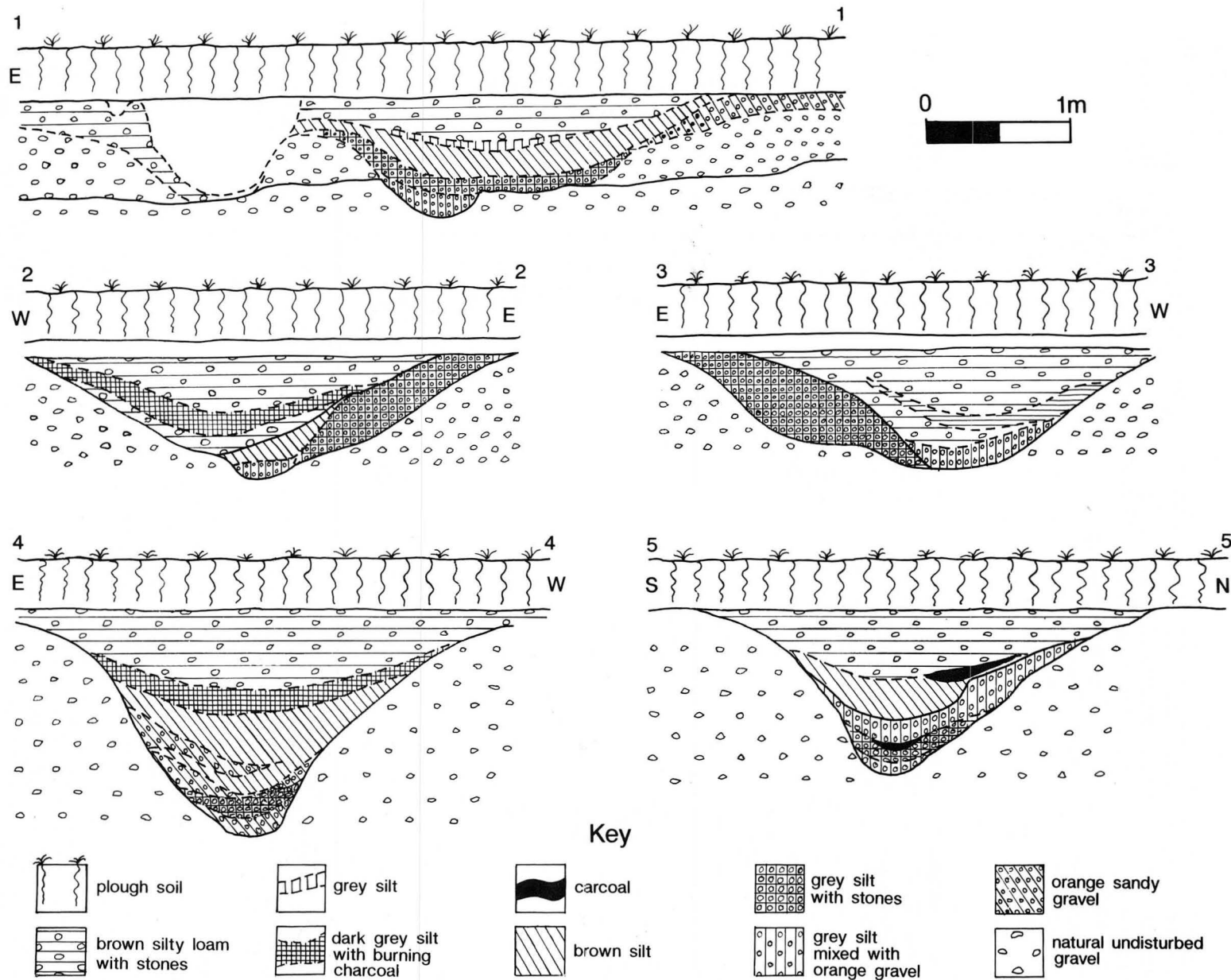


Figure 15 Sections of enclosure ditch after Erith and Holbert 1970

parts of the area which had remained under baulks in 1967 were re-examined in 1969.

The ditches and pits/post-holes recorded were distinguished by letters, the latter not individually but as groups (Figs 13 and 14). Thus post-holes associated with the main enclosure 'A' were all labelled 'H' wherever they occurred (Fig.13). Most of the north and south sides and south-east corner of ditch A were excavated; most of the west side and north-east corner were left undug. Five sections were recorded across the enclosure ditch, three in the north side and two at the south-east corner (Figs 13 and 15).

Ditch A varied from 1.5–3m in width and between 1 and 2m in depth. The shallowest part of the ditch was on the north side where it converged with circular ditch 'C' (Fig.15), and deepest at the north-east corner. The entrance on the south side was flanked by narrow shallow gullies, the butt ends of which could not be defined (Fig.13). The circular internal ditch 'C' was completely excavated and described as U-shaped although no sections appear to have been drawn. To the north of the east-facing entrance (labelled F on Fig.13) ditch 'C' was up to 1.3m wide and 1m deep. South of the entrance the ditch was less substantial, up to 1.15m wide and 0.75m deep. The plan shows an arc of ditch from the entrance, to a point marked 'G' on the plan (Fig.13), here there is a short length of deeper gully (Fig.14) and some associated post-holes, none of which are described in the text. Another arc of gully, again not described, runs from 'G' to the junction of enclosure ditch 'A' (Fig.13). 'Masses of red fired clay, ashes, pottery and loomweight fragments' (marked K Fig.14), were recovered from the butt ends of this gully. However, the plan indicates that they lay beyond the ditch butt end on the south side, in an area defined on the plan by solid lines within which is an irregular patch shaded black like the post-holes and other internal features (Fig.14) but not described. A second feature is shown shaded with horizontal lines, none of these features are described and the shading does not appear on any key, it is therefore unclear what they represent.

Within enclosure 'C' various features comprise part of a roundhouse structure. A narrow V-profiled curving gully 0.2m wide and 0.3m deep marked I on the plan (Fig.14), ran parallel to, and about 2m from, ditch 'C' with post-holes associated with both north and south ends (Fig.14). An apparently similar gully, runs from close to the southern end of 'I' towards the entrance gap in enclosure 'C' (Fig.14). A row of posts marked '1' on the plan (Fig.14) continued the line of gully I on the west side with a 1.8m wide gap opposite the entrance gap in enclosure 'C'. This gap was bounded by two rows of parallel stake-holes both marked 'J' (Fig.14). At the south end of gully 'I' a rectilinear arrangement of posts marked 3 on the plan (Fig.14), appear to form part of an entrance structure. The south-east corner was marked by a single post, the south-west corner by a cluster of four posts, the north-west by a group of three posts and the north-east by a pair of posts associated with the end of gully 'I'. Six posts (marked 2) apparently at the centre of the roundhouse formed a rectilinear structure about 3m square defined by two parallel rows of three posts (Fig.14). A scatter of post-holes, not given any identifying number lay north of these posts. All these features are concentrated in the northern half of the area enclosed by ditch 'C' (Fig.14). The preliminary trial trenches and the excavation in boxes of the southern half of the site were clearly not conducive

to the recognition of these features which were often distinguished by rather slight variations in colour and texture (Erith and Holbert 1970, 8). However, in 1969 the southern part of the site was re-examined, and earlier baulks removed. This revealed a short length of gully similar to that recovered to the north and also marked I on the plan (Fig.14). A single posthole was also revealed and marked '1' (Fig.14). A patch of fired clay in a 0.15m hollow was interpreted as a hearth ('K' Fig.14). However, its proximity to the short length of gully (Fig.14) makes such an interpretation unlikely if the gully formed part the foundation of a wooden structure.

Late Iron Age

(Fig.16)

Extensive Late Iron Age 'Belgic' pottery scatters were recorded by Erith during ploughing (Erith 1960d, 2; Erith and Holbert 1974,1), north and east of CEU Area 20 and 22, (below p.178). Quantities of 'Belgic' pottery were also recovered from the ploughsoil in the vicinity during fieldwalking by CEU (below p.178). Similar finds from the ploughsoil were recorded south of Frating Road (Fig.5, Erith 1960d, Thompson 1982a). A selection of the pottery from the ploughsoil at Ardleigh was published by Thompson (1982a).

Ploughing also revealed three cremation burials accompanied by 'Belgic' pottery south of Frating Road (Fig.5, Erith 1960d). The largest of the burials (Thompson 1982a burial A) contained five vessels, the cremated bone was placed between rather than within the pots. A sketch (reproduced as Fig.16) of this burial shows the disposition of the bone and pots. The second burial (Thompson 1982a, burial B) consisted of a pair of pots: no details of the burnt bone with this burial were recorded. The third burial was again of a pair of pots (Thompson 1982a, burial C) one upright, the other on its side. 'There were a few pieces of burnt bone between them' (Thompson 1982a). A sketch preserved in Colchester Museum (Thompson 1982a, 580) shows the positions of the burials relative to one another indicating a triangular arrangement. To the north nearer Frating Road (Fig.5) three further burials were recorded. The first consisted of a pair of pots, one of which contained burnt bone (Erith 1960d fig.3, Thompson 1982a burial D). The second was represented by another pair of pots, one a butt beaker; both pots were upright with burnt bone between them (Thompson 1982a burial E). The third burial comprised a single butt beaker (Thompson 1982a burial D) containing burnt bone. It is possible that one or other of the latter two burials is actually the 'Gallo-Belgic burial' recorded by Couchman and Savory (1983). Another later Iron Age burial is said to have been recovered from

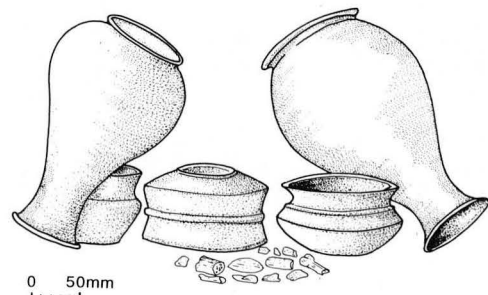


Figure 16 Drawing of Late Iron Age burial showing disposition of pot and burnt bone, after Erith 1960d

the vicinity of Elm Park, again no other details are known (Couchman and Savory 1983). With the exception of this burial, all these features lie south and east of the main Bronze Age cemetery and a major Bronze Age linear feature excavated in CEU Area 8, 20 and 21 (below pp 42–51). This feature was apparently used to demarcate the Late Iron Age settlement (below p.178)

The outstanding feature of the Late Iron Age excavated at Ardleigh was a large pit, which lay just beyond this western boundary of the Late Iron Age/Roman settlement. The feature yielded a remarkable range of finds, apparently deliberately deposited, which incorporated copies in pottery of bronze vessels, including strainer bowls and a cauldron. This has led to the feature being referred to as the Cauldron Pit.

The Cauldron Pit

by P.R. Sealey
(Figs 17 and 18)

The opportunity is taken here to offer a reassessment of the Ardleigh Cauldron Pit, linked to a selective re-publication of its contents (below pp 117–19). This exercise is justified by the intrinsic interest of the pit and its fill, particularly as the only record of the excavation is a brief report in a journal not readily available to the wider archaeological public.

Evaluation of the extant pit material shows it had been muddled with finds from at least one other Ardleigh site

before it was donated to Colchester Museum in 1978. This unhappy situation is irretrievable because individual sherds had not been marked with site codes and context numbers. This precludes a reappraisal that would have encompassed a comprehensive re-publication and quantification of the pit fill. But it has proved possible to find most of the pottery illustrated in the report, and such vessels whose stratigraphic context was recorded have been redrawn for the present project (below Figs 82 and 83).

This account of the pit is based of course on the published report. In the interests of clarity it was not felt necessary to give page references for each and every statement of fact given below; details can be found in the excavation report itself (Erith and Holbert 1974).

Discovery and Excavation

The feature subsequently revealed as the Cauldron Pit was discovered by R.H. Farrands from aerial photographs he took of Ardleigh in June and July 1959 (Farrands 1960, 15). Excavation took place some years later, as a research excavation (Fig.17) in 1972–73 by the Colchester Archaeological Group, under the direction of F.H. Erith and P.R. Holbert. A report appeared the following year (Erith and Holbert 1974). The pit is at TM 0565 2875, some 6m outside the boundary ditch of the Late Iron Age and Early Roman settlement.

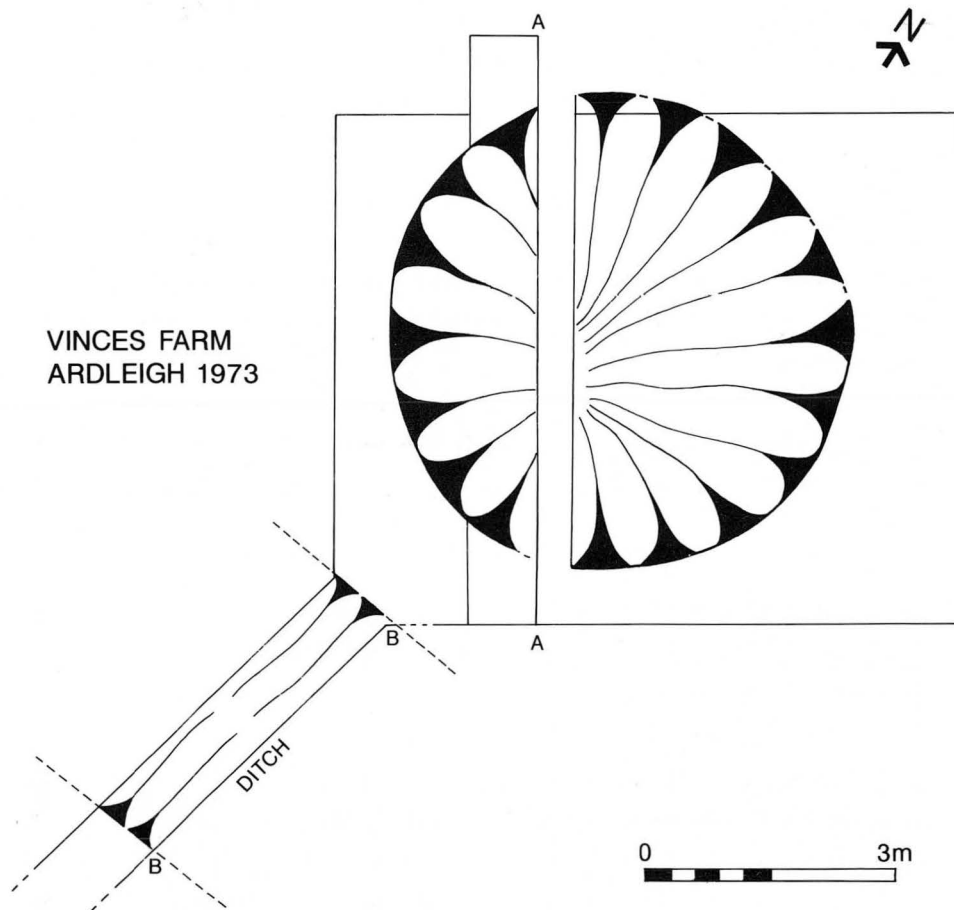


Figure 17 Plan of Cauldron Pit after Erith and Holbert 1974

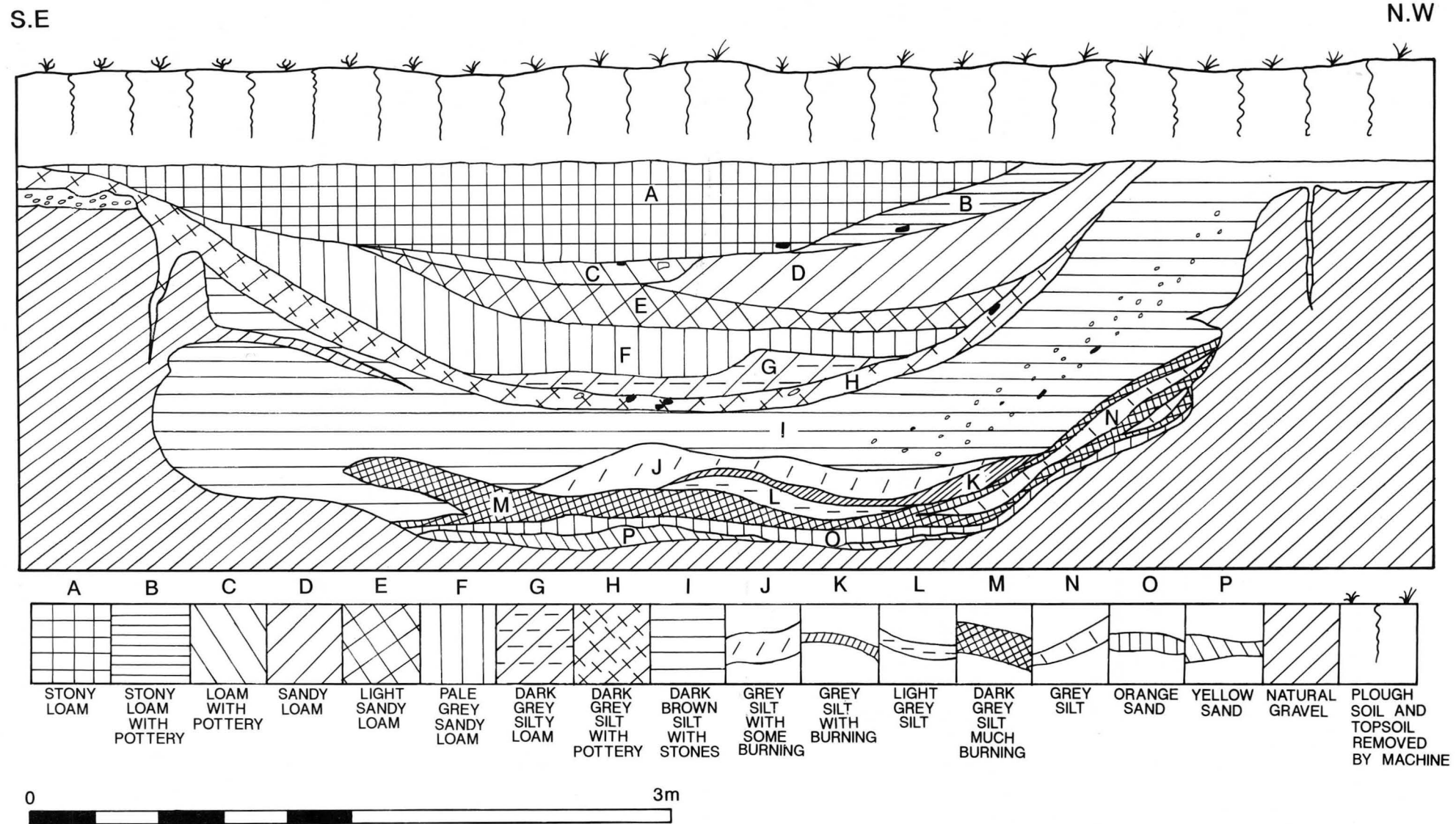


Figure 18 Section of Cauldron Pit after Erith and Holbert 1974

Stratigraphy and Phasing

Excavation showed that the feature discovered by Farrands was a circular pit cut into the natural gravel to a depth of 1.5m below the base of the modern plough soil. It was steep sided, except on the north. The section (Fig.18) shows that part of the south side was undercut and that it had slumped into the pit when it was backfilled. It is unlikely the pit was dug in the summer because the ground at Ardleigh bakes hard then (Anonymous 1962, 108). The lowest fill was two sterile sandy layers some 15cm deep, which need represent no more than sand washed in during a downpour of rain. The vulnerability of features on Essex sites cut in sand and gravel to rapid erosion in storms has been described elsewhere (Hedges and Buckley 1978, 236; Wilkinson 1978, 298).

Onto this sand was dumped the 30cm of the Phase I deposits, Layers N to J. They show signs of intense burning, and were rich in Late Iron Age pottery of Belgic type; some of the pottery itself shows signs of having been burnt. Masses of tiny rib bones were present which proved too fragile to remove for identification; the excavators suggested they were the remains of rodent-like animals. The burnt debris was thrown in from the north and did not cover the entire floor of the pit. At least some of the pottery sherds are large and unabraded; joins allowed several complete profiles to be reconstructed. The pottery was apparently a more or less contemporaneous group, with no hint of earlier residual material. It does not represent old or redeposited detritus but bears every appearance of material consigned to the pit not long after its first breakage. The spouted strainer bowls — as well as the cauldron from the infill above — indicate that the sherds are relics of a feast deposited in the pit.

Phase II is the backfill of the pit, represented by dark brown silt with stones that covered the burnt layers on the pit floor and extended up to the old ground surface.

Phase III was a recut of the pit after the backfilling operation of Phase II. This new pit extended 1.2m below the base of the modern plough soil and (when excavated) approached within 20cm of the top of the Phase I deposits. The fill of the recut is the most inadequately documented phase of the Cauldron Pit, but the section suggests periodic dumping until only a shallow saucer-like depression was left.

Chronology

The Phase I material from the floor of the pit includes nothing specifically of the 1st century BC and is pottery current in the three or four decades prior to the Roman invasion (below, p.117). It was dumped in the pit c.AD 45: the local copies of girth beakers (Pots 2 and 3 Fig.82) went out of production thereabouts, and the jar with an internal rim edge (Pot 8 Fig.82) is a type assigned to the conquest period. The Phase II backfilling operation must have taken place *immediately* after Phase I because Pot 8 has been restored from sherds from the Phase II infill itself and from Layers J to K below.

The Phase III recut took place not long after, by c.AD 55. Its date is fixed by the *terra rubra* from Layer H (below p.119) This ware is rare or absent on military sites founded after c.AD 50. Although it may have continued to reach civilian markets for a while longer (Rigby 1973, 20), its absence from Chelmsford (Going 1987) shows the trade had finished by the time of Boudica. This chronology is consistent with the other stratified datable finds from the

recut (below p.119), Layer G has a c.AD 50–100 brooch, and the local copies of butt-beakers (Pots 11 and 15) suggest a pre-Boudican date, as such forms likewise are not present at Chelmsford.

The excavators said that the upper layers of the pit were dominated by Cam forms 108, 218, 246 and 266; from here too presumably came the mortarium sherd, a Verulamium region product of Flavian or early 2nd-century date (Erith and Holbert 1974, 8, fig.7 no.36, 14). There is nothing in the Phase III infill that is exclusive to the 2nd century and — mindful of the chronology of the forms cited — it would seem that the pit had been filled by c.AD 125 at the latest.

Roman

(Figs 19 and 20)

A variety of features and deposits were recorded and conveniently listed by Couchman and Savory (1983, 8). Unfortunately, little information regarding the features or finds of this period is now preserved, and the accounts in the CAG Bulletin are rarely as detailed as the descriptions of the ring-ditch excavations.

Kilns were recorded in the south of the cropmark complex (Fig.5; Couchman and Savory 1983 and VCH 1963), and east of Elm Park, the latter being recovered during the CEU excavations (below p.64). Roman pottery and other finds were recorded from the ploughsoil east of Elm Park and at other locations within the cropmark complex (Fig.5, VCH 1963). Pits of Roman date were recorded in the south of the cropmark complex (Couchman and Savory 1983, 8). Within Elm Park itself Roman pottery of 3rd-century date was found in the 1920s to the north of the house, a pit possibly of late 1st/early 2nd-century date was recorded to the west of the house (Erith 1965, Couchman and Savory 1983), whilst a substantial part of a ditch alignment was excavated within the kitchen garden (Holbert and Erith 1965).

This last excavation was prompted by the recovery of Roman pottery during gardening work and took place in September 1964. Two trial trenches (Fig.19, I and II) located part of the butt end of a ditch. Three further trenches (Fig.19, III–V) located a second ditch to the west, and successive small extensions to the excavated trenches revealed the butt end of the second ditch and carried the excavations to the limit of the area available for investigation (Fig.19, Holbert and Erith 1965, 17). Two slightly curving lengths of ditch were revealed, with butt ends separated by a gap of less than 1m. The ditches were rather irregular features (Fig.19) varying in depth between 0.75 and 1.3m and with shallow sloping sides. They produced a large amount of pottery and oyster shell, particularly in the area of the two original trial trenches, where substantial quantities had been dumped from the north-west side of the ditch. The pottery apparently contained wasters (below p.141) and was broadly of late 1st/early 2nd-century date (Holbert and Erith 1965). A large quern stone, about 0.45m in diameter, was also recovered.

A 2nd/3rd-century grave group is said to have been found in the south of the cropmark complex (Couchman and Savory 1983), although no other details are known. A complete Roman pot, apparently deliberately placed, was recorded close to ring 8 (above p.24) during rescue recording prior to gravel extraction in Martell's Hall quarry. The base of a substantial pit/well with part of a tree trunk lining was also revealed during quarrying at Martell's Hall (Erith 1965b, fig.20).

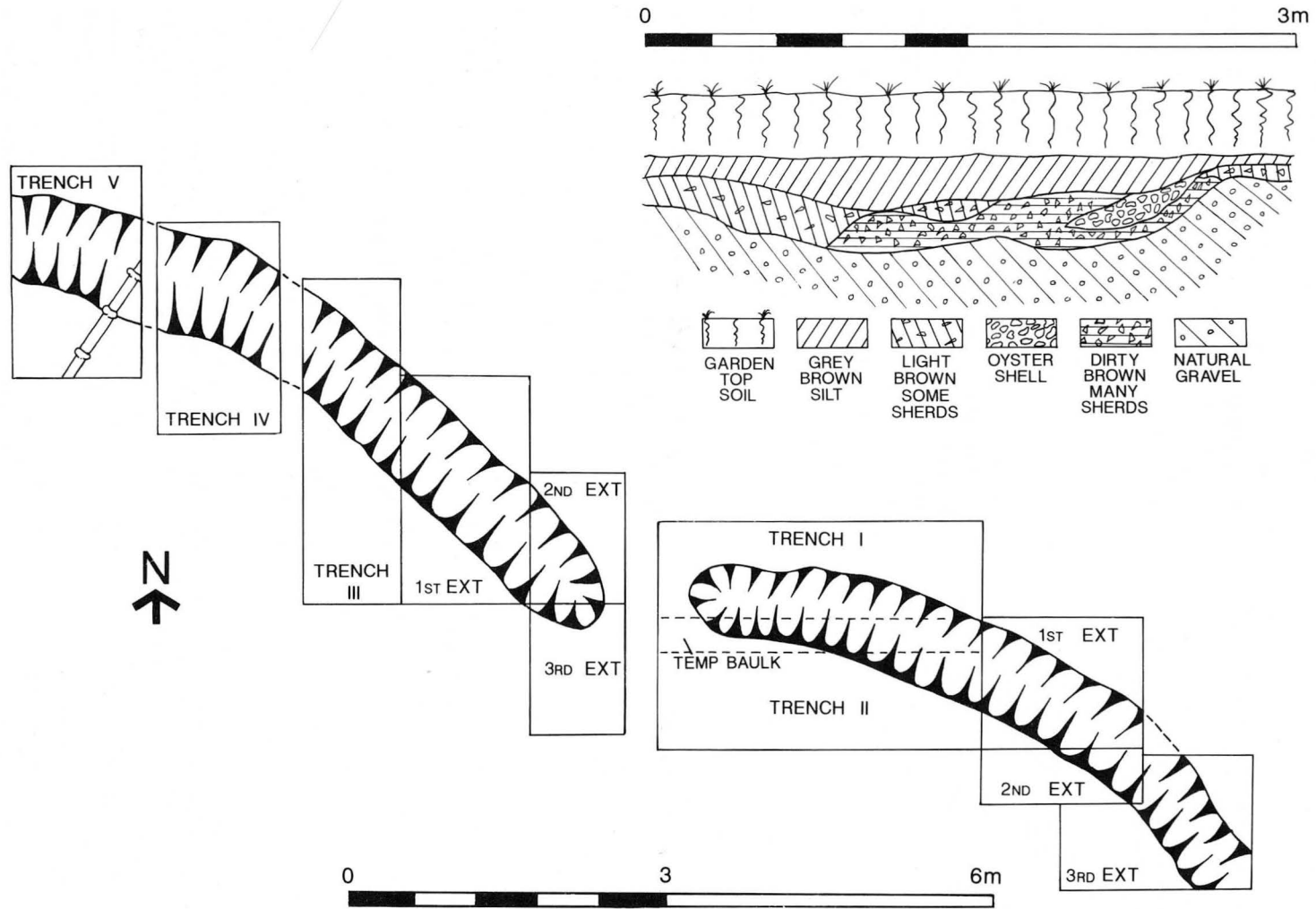


Figure 19 Plan and section of ditch in Elm Park after Holbert and Erith 1965

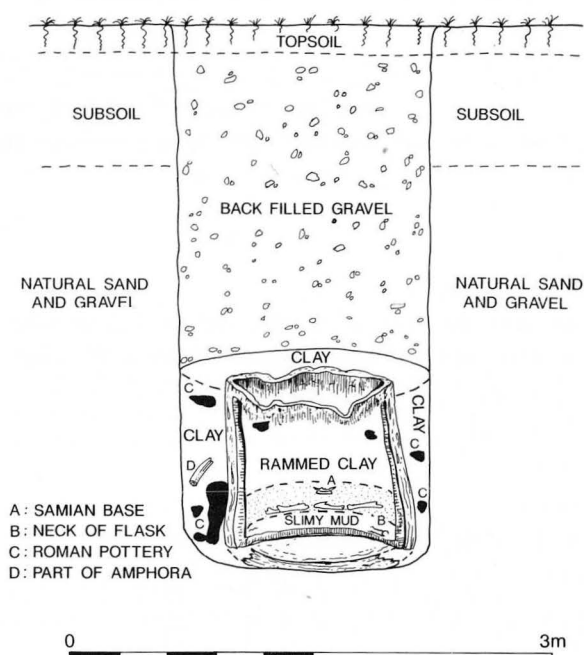


Figure 20 Section of tree-trunk lined feature after Erith 1965b

The hollowed-out tree trunk lay at the base of a pit about 1.65m in diameter. The gap between the tree trunk and the pit was filled with clay and occasional lumps of stone. Fragments of Roman pottery were recovered from this clay. A hole in the side of the tree trunk had apparently been sealed with clay and a lump of tree root. The interior of the trunk was described thus:-

'The internal clay seemed fairly clean and very tight, as if it had been rammed intentionally into position. For more than two feet down there was a solid mass of clay, mixed with occasional sherds of Roman pottery and perhaps half a dozen pulpy bits of matter. Having cleared the two feet of clay, a layer of red-brown soil was revealed, in the top of which was the base of a Samian bowl. In this soil layer was a large quantity of animal bones and parts of antlers.

The soil layer continued down for 6 to 8 inches, below which clay was again encountered, but (except round the edge) not clean as previously, as it looked and felt more like slimy mud. In this slimy mud was the rim of a Roman jar or flask (this was later found to fit together with a fragment of pottery found in the lining of clay *outside* the tree-trunk). The bottom of the tree-trunk had been trimmed level all round and the places where two roots had once protruded showed well trimmed flat to the side. The hollowing out of the interior appears to have been done with a curved chisel or gouge. It was mentioned in a Press account that the trunk showed signs of burning. This is incorrect; the blackish appearance was due to wetness and age, there was no sign of ash (Erith 1965b, 32).'

A report by H.E.P. Spencer (Erith 1965b, 37) describes the bone recovered from the tree trunk:-

- '1. The Broken remains of one antler of a RED DEER Stag of small type. The pair would have had perhaps 14 points. No bones, other than the antler, of this deer were recognised.
2. Most of the bones belonged to a young HORSE, "Equus caballus", not more than two years old. They included the fragmentary remains of the skull. Presumably the skull was entire but in such a decayed condition that it could only be extracted in pieces. Among these the pre-maxillary with incisors was recognisable; the upper pre-molars and molars; parts of the nasal bones and of the skull.

Of the skeleton of this animal only one limb bone, a metatarsal (a bone of a hind foot) was represented; and this crumbled when handled. One scapula (shoulder blade) was present and some half dozen vertebrae from the neck, thorax and lumbar regions.

At no time in over forty years experience have any bones in such a curiously decayed state come under my observation. They are so fragile that they will hardly bear being touched at all and are more or less encrusted or impregnated with the mineral substance VIVIANITE (Hydrous ferrous phosphate). This mineral is often present where animal substances decay in the presence of iron.'

The excavators considered that the clay deposits had been deliberately packed into and around the hollow tree trunk. As the machine driver had observed no clay deposits or obvious differences in the overlying gravel, the excavators had assumed that the shaft above the tree trunk had been backfilled with gravel, the implication being that the tree trunk lining had never extended much beyond its surviving height. However, it seems just as likely that a more substantial tree trunk had once existed, the upper part of the timber having decayed without trace, only that portion below the water table being preserved. This certainly seems to be the case with other timber lined wells at Ardleigh (e.g. Well 7683 below p.64).

II. Central Excavation Unit's Work

Introduction

(Fig.21)

The Central Excavation Unit's work at Ardleigh was designed to date major elements in the cropmark complex, to provide a context for the 'urnfield' cemetery recorded by Erith (Erith and Longworth 1960), and to assess the effects of cultivation on the archaeological deposits (above p.7). In the centre of the cropmark complex, where a range of sites and finds had been recorded by Colchester Archaeological Group, a large area was fieldwalked (Fig.6). A series of 22 discrete trenches Areas 1-12, 16, 19 and 20-21 were then excavated to investigate cropmarks C13-15, 17 and 18 in the fieldwalked area (Fig.7). Topsoil was removed by machine to subsoil level, the trenches were then cleaned by hand, planned, photographed and archaeological features selectively excavated. Topsoil in some trenches was partly removed by hand and sieved as part of a projected sampling programme (above p.8).

Neolithic

The only evidence of this period was a rimsherd (below p.76), recovered from a partly excavated shallow oval ?natural feature in Area 14, and a few sherds recovered during excavation of Area 5.

Bronze Age

(Figs 22–36)

Area 5

(Figs 22 and 23)

This trench was laid out to examine ring-ditch 652 and adjacent cropmark features. Four 2m wide offset quadrant trenches running from a 3m x 3m central box were opened, parts of the east-west trenches were subsequently extended north and south to accommodate the full length of five Roman graves (below p.51). Another trench 2m x 27m ran south from the east end of the eastern east-west trench, placed to examine cropmarks to the south of ring-ditch 652. A further trench 2m x 20m ran north from just inside the ring-ditch (Fig.22). This trench had been used to locate the ring-ditch and was not further excavated. Prior to excavation, the area within ring-ditch 652 survived as a very slight rise of c.10cm in the modern ground surface. Beneath the ploughsoil a layer of brown loam (layer 632, 630 in Fig.23) occurred, much disturbed and of variable thickness, but in places 15cm deep. This layer may represent the spread remains of the barrow mound and the layer below, a pale yellow-brown loam (657 Fig.23) might, therefore, be the old ground surface. Outside the ring-ditch a layer of brown sandy material (621 and 624 in Fig.23), appears to derive from continuing degradation of the barrow mound after the ditch had been completely filled.

Four features were revealed within the central excavated area (Fig.22). A shallow pit (908) lay at the edge of the excavated box, with a single post-hole (906) adjacent to it. At the centre of the ring-ditch a shallow oval pit (685) was devoid of finds. Immediately adjacent to and west of 685 was a small pit (909), which produced a large quantity of cremated bone, placed on a bed of charcoal.

The ditch was up to 3m wide and 1.6m deep. The ditch profile and fill sequence varied around its circuit. On the west side (Plate XI; 514 in Fig.23) the ditch had an irregular, slightly stepped profile. The initial coarse fill (921) appeared to derive from the interior; this was succeeded by a silt layer (737), which was in turn sealed by a coarse deposit derived from the exterior (678). The upper fill (675) was largely homogenous, possibly mixed by animal burrows. The north section (518 in Fig.23) was U-profiled with a coarse primary fill (674) succeeded by loam fill 913, and 726) filling a possible recut capped by a substantial coarse stony deposit (912) derived from outside. It is possible that layer 734 represents the fill of a shallow recut sealed by an accumulation of loam (704, 911).

On the east side (515 in Fig.23), the ditch preserved a U-profile at the lowest level, above which the sides had eroded into a sloping profile, with a particularly shallow slope on the interior. The lower fills (684, 741, 739) comprised fairly coarse material apparently derived from the interior. Particularly coarse stony layers 742, 743 occurred at the point where the slope of the ditch sides changed. The shape of the top of layer 739 might indicate a shallow recut filled by a stony layer (738), derived from the interior, and a deep deposit of stony loam (633).

The southern segment was steep sided with a slightly V-profiled base (517 in Fig.23). A silt layer 696 filled the bottom with a clay deposit on the south side. Above these deposits, layers of largely stone-free fill, (710, 714, 668), were interspersed with coarser layers (711, 669, 713, 709) apparently derived from both interior and exterior. The shallow hollow left by these deposits was filled with layers of sandy loam (664, 661, 660, 643).

Area 7

(Figs 7, 24–26)

This area was situated within the field from which numerous urns had been recovered in the 1950s. Aerial photographs indicated the presence of ring-ditches (above p.12). The area was excavated in two seasons, the eastern half in 1979 (Plate XIII) and the western in 1980, and measured 32m x 42m. There were small box extensions to north and south and a long narrow extension (5 x 49m) to the east, across cropmark trackway C10. Fourteen complete or near complete ring-ditch plans were recorded in Area 7 (1018, 1021, 1024, 1027, 1030, 1033, 1052, 1320, 1337, 7015, 7020, 7078, 7112, 7262), together with parts of three others (7106, 7248, 1049) and an arc of ditch (1379) which might be the truncated remains of another (Fig.24).

The ring-ditches can be divided into four groups based on size. The first group comprises four ring-ditches; a pair (1033, 7078) which with a third slightly offset to the north (1052), forms a rough line running north-east/south-west across the excavated area, with a fourth ring-ditch (1030) situated to the east of this line. These four ring-ditches are 9m in diameter with ditches up to 1.5m wide and 0.45m deep. It is possible that ring-ditch 7248, only part of which occurred within the excavated area, may have been of similar size, the ditch being 1.3m wide and 0.4m deep. The second group comprises ring-ditches 1337 and 7020, south-west of 7078, together with 7112 to the west of 7078; these ring-ditches are between 7 and 8m in diameter, with ditches up to 1.1m wide and 0.3m deep. Only a small part of ring-ditch 7106 occurred within the excavated area; it had a ditch 1.1m wide and 0.45 deep and might belong to either groups one or two (Fig.24).

The remaining two groups comprise much smaller ring-ditches. Ring-ditches 1018, 1024, 1027, 1028 and possibly 1049 comprise group three (Fig.24). These ring-ditches are 5–6m in diameter, the ditches up to 0.8m wide and 0.2m deep. They lie to the north and east of ring-ditches 1030 and 1052 of group one (Fig.24). They cluster closely together, with the ditches as little as 0.5m apart. Indeed, ring-ditch 1018 seems to have a ditch 'flattened' in the south-east sector to avoid impinging on the ditch of ring 1021 (Fig.24). A small part of ring-ditch 1049 just 'clipped' the north-west corner of the excavated area, the ditch was 0.8m wide and 0.2m deep. This ring-ditch would seem likely to belong with group three or possibly group four.

Group four comprises tiny ring-ditches between 3 and 4m in diameter with ditches 0.2–0.4m wide and not more than 0.15m and often as little as 0.05m deep (Fig.25). The southern part of ring-ditch 7262 appears to have been so shallow that it had been removed by ploughing. It seems likely that the curving arc of ditch 1379 is all that remains of a ring-ditch, over half of which had been removed by ploughing.

Key to sections

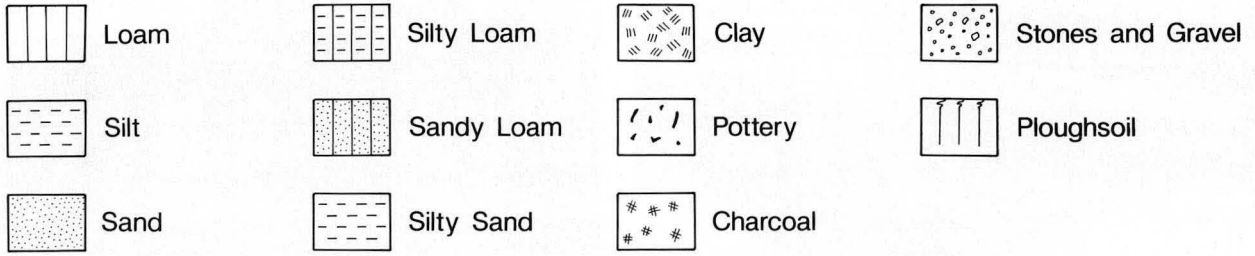


Figure 21 Key to CEU sections

Ring Ditch 652

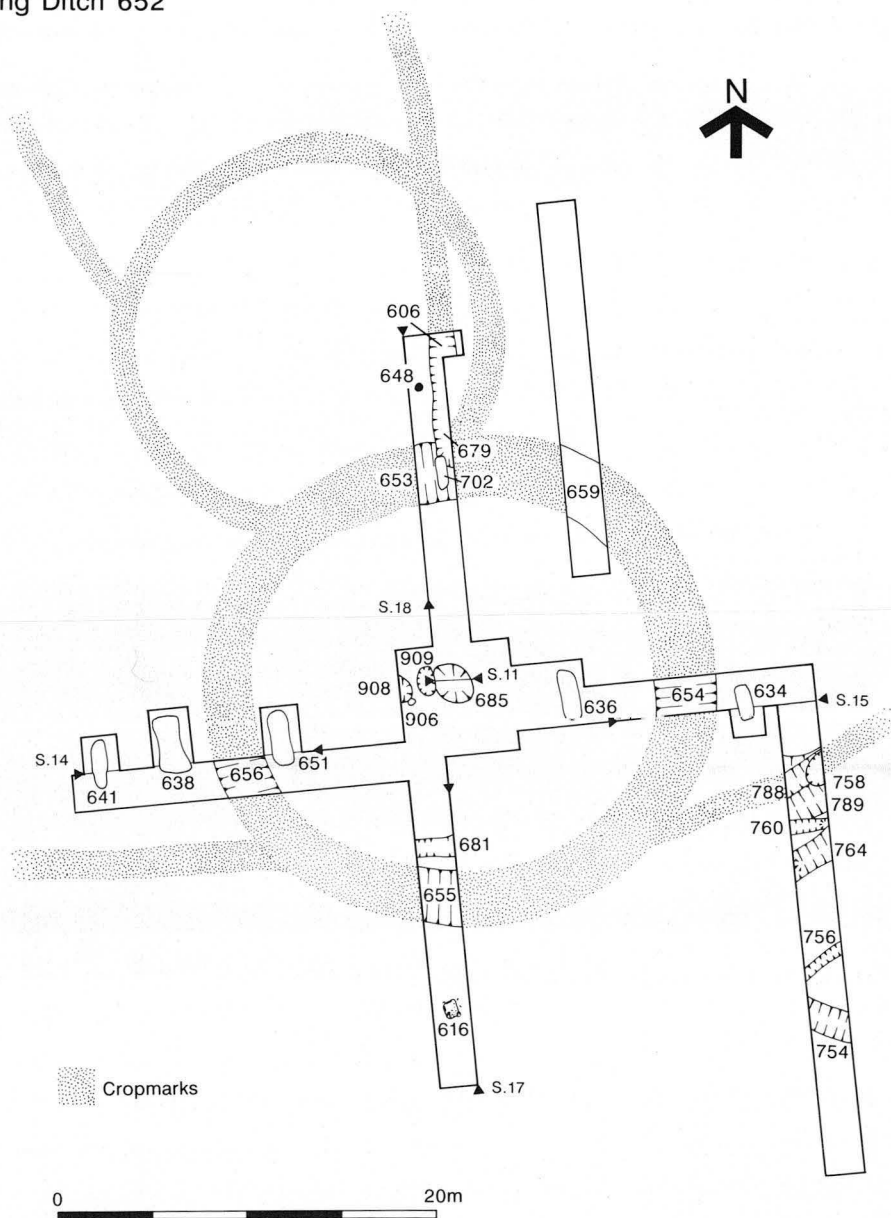


Figure 22 Plan of CEU Area 5

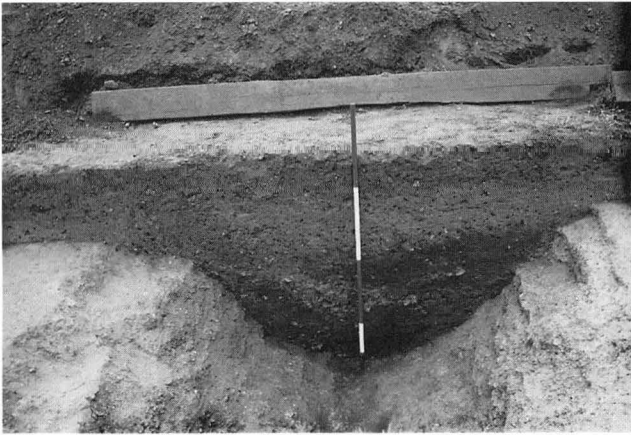


Plate XI Section of ring-ditch 652 CEU Area 5.
Metric scale

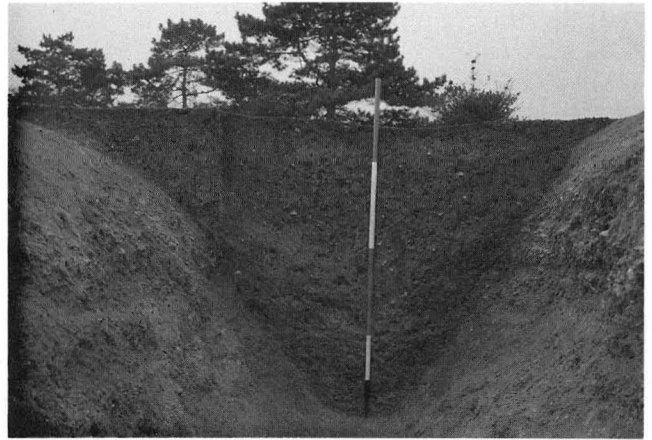


Plate XII Section of Bronze Age ditch 1912 CEU Area 8.
Metric scale



Plate XIII CEU Area 7 in course of excavation. Ring-ditch 7020 in foreground, ring-ditch 7078 behind.
Metric scale

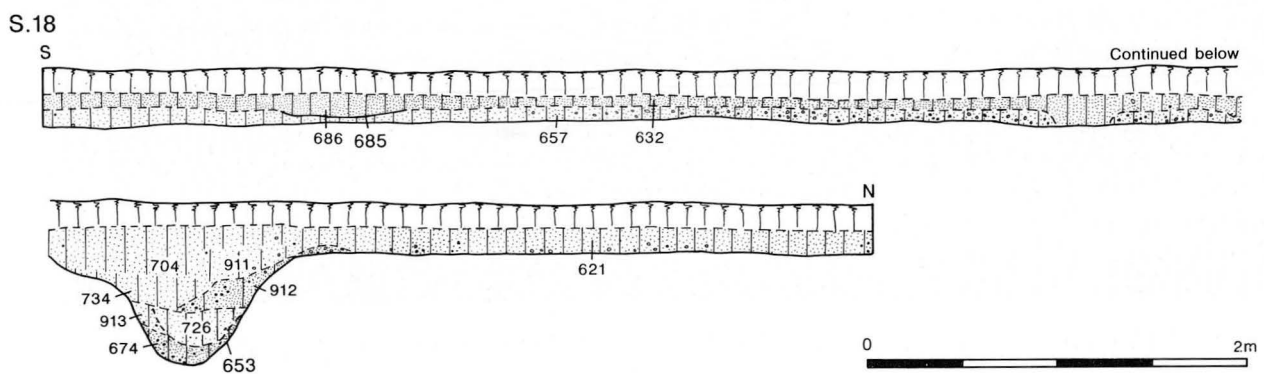
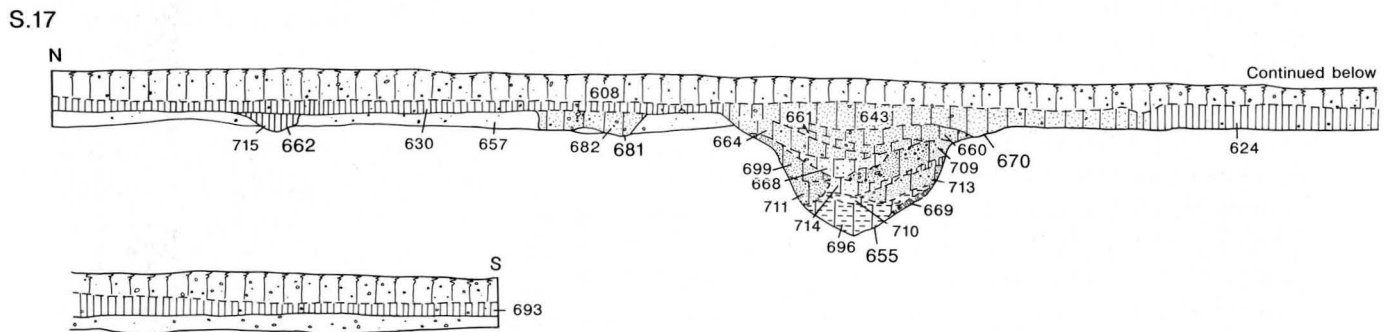
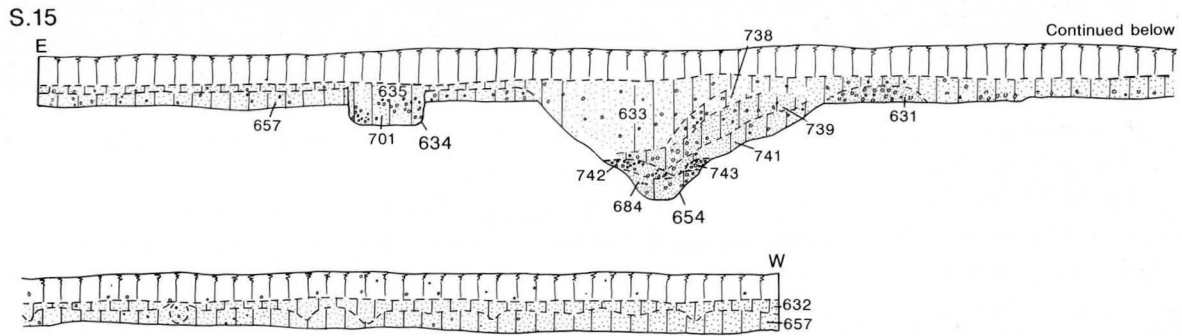
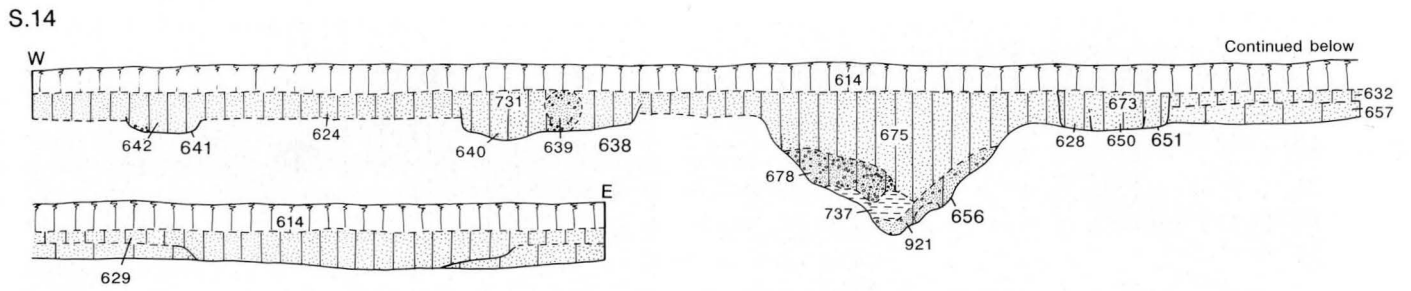


Figure 23 Sections of CEU Area 5

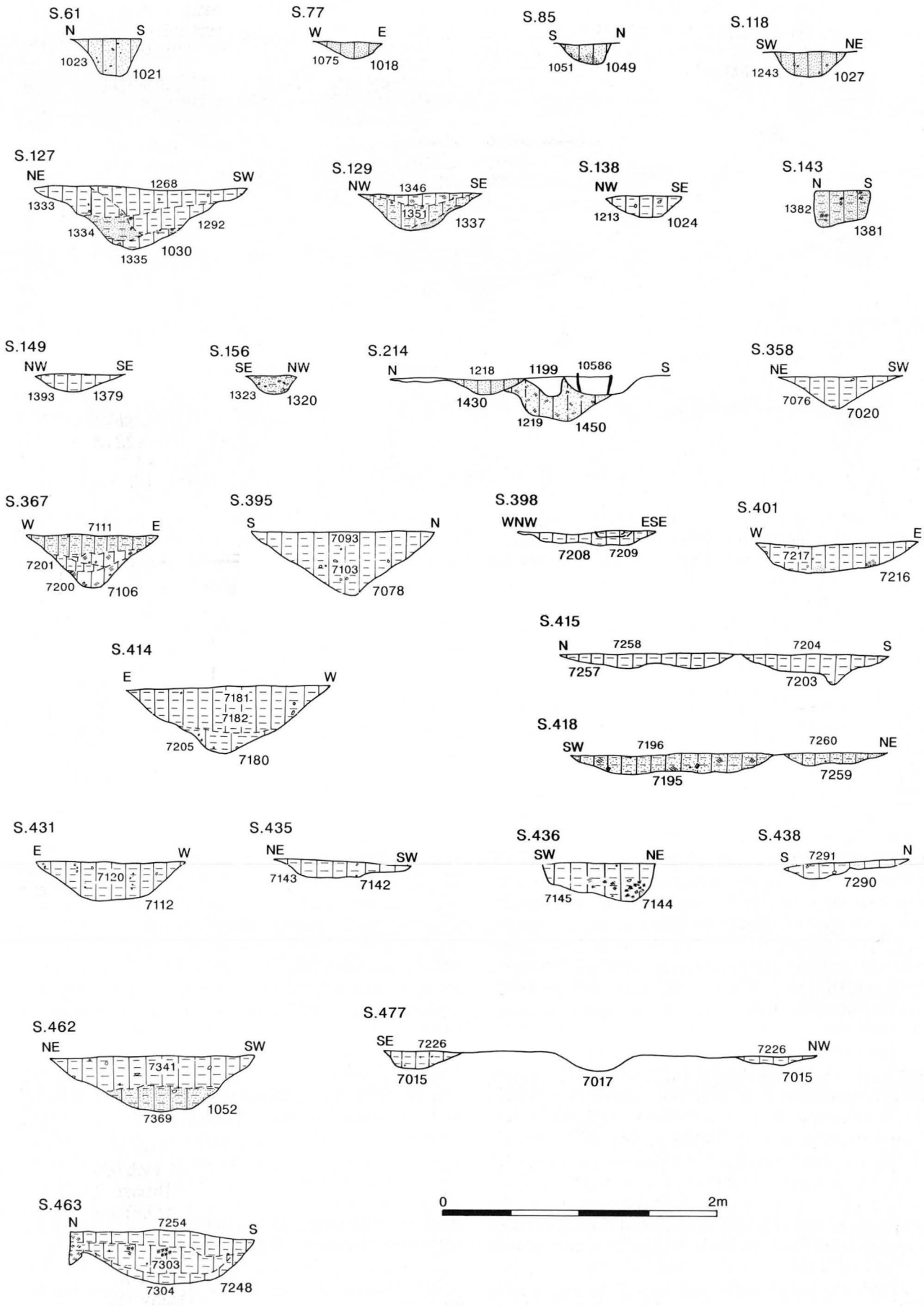


Figure 25 Sections of CEU Area 7

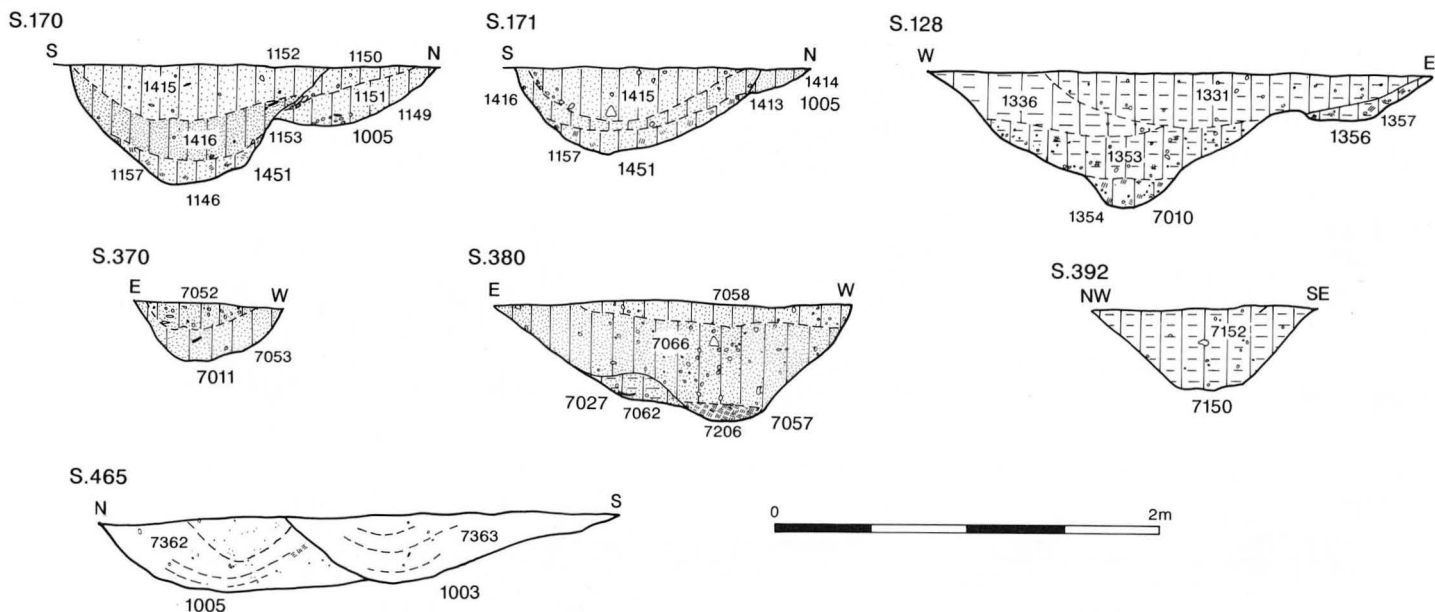


Figure 26 Sections of CEU Area 7

Of the largest group one ring-ditches, only one, 7078, had any probably contemporary internal features: a small pit (719 Fig.24) offset from the centre of the ring-ditch with sherds of Bronze Age pot at the top of its fill. Three small post/stake-holes (1279, 1281, 1427) within 1030 might be contemporary with the ring-ditch or could be later. Two of the group two ring-ditches contained internal features; a sub circular feature (1399) close to the centre of ring 1337, produced no finds, whilst an irregular shallow feature (7156) south of the centre of ring 7112 produced fragments of Bronze Age pottery and cremated bone. Three of the group three ring-ditches had internal features, a shallow irregular depression (1046 Fig.24) was recorded in the centre of ring 1021, and part of an elongated ? pit was recorded within ring 1049. A feature, 1384, within ring 1024 was considered likely to be of natural origin by the excavators. A six-post structure within ring 1018 (Fig.24) may post-date the ring-ditch. By contrast with this rather sparse evidence for internal features from the first three groups, all four tiny ring-ditches of group four had centrally placed pits (ring 7262, pit 7268; ring 7015, pit 7017; ring 1379, pit 1381; ring 1320, pit 1199). All four pits contained cremated bone and in one case, pit 1199, part of a burial urn (below p.76).

The north side of ring-ditch 7112, south side of 7248 and west side of ring-ditches 7078, 1033, 1052, form a roughly rectilinear open area about 12m x 17m. Within this rectilinear zone were numerous small pits, a tight cluster of about twenty pits ran in a band 3-4m wide across the south of the area. These features were separated by a gap of 2-3m from, a second band, again 3-4m wide, of about eleven pits which ran across the centre of the area (Fig.24). This central band of features was separated by about 2m from a small scatter of four or five pits in the north of the area (Fig.24).

These pits were broadly oval, up to 1.4m long and 1m wide, but occasionally as small as 0.4 x 0.3m, and varied in depth from 0.07-0.16m (e.g. Fig.25). Three of the pits contained substantial parts of Bronze Age urns with cremated bone: pit 7160 yielded an upright vessel with finger-tip rustication (below p.76), all but the lowest

0.15m having been removed by the plough. Pit 7219 contained an inverted globular urn of which only the rim survived, and pit 7280 contained a fragmentary inverted urn (below p.76), much of this feature having been destroyed by Roman ditch 7150 (below p.56). Some of the other pits contained cremated bone, often in small amounts, and the fills of a number of these features contained Late Iron Age and Roman sherds as well as Bronze Age pottery. At least six pits (7193, 7195, 7144, 7142, 7216, 7240) also contained modern finds. This, together with the mixed nature of the fills often containing small 'lumps' of fill, led the excavators to suggest that many of the pits in this area were the sites of urns removed by Erith in the 1950s.

Areas 8, 20 and 21 (Figs 27-34)

These three areas contained elements of a linear feature which could be traced, in the excavated trenches and as a cropmark (C 2), running roughly south-west/north-east for a distance of approximately 180m. At the north-east end, the cropmark (Fig.4) suggests the ditch turns though about 90° to run for about 20m north-west, although the evidence is equivocal. In Area 8 the ditch, here designated 1912 (Fig.27, Pl.XII), ran diagonally across the southern part of the trench and was between 3-4m wide and up to 1.8m deep, broadly of U profile. Sections 261 and 282 (Fig.28) show the north-west side of the ditch as rather more vertical, perhaps indicating a more rapid accumulation of silt from the north-west, perhaps derived from a collapsing bank. Coarse material derived from this north-west side in section 261 (Fig.28, 1928, 2015) may support this notion. The silting seems broadly similar throughout the length of the ditch in Area 8: between 0.2 and 0.4m of coarse sandy primary silt, followed by a succession of silt loam, loam and sandy loam fills. The latest deposits all appear to fill a hollow on the south-eastern side of the ditch (sections 261, 282, 286 Fig.28).

Cropmarks indicated the ditch was continuous between Areas 8 and 21. However, within Area 21 the ditch, here designated 8086 (Fig.29), came to a clear butt

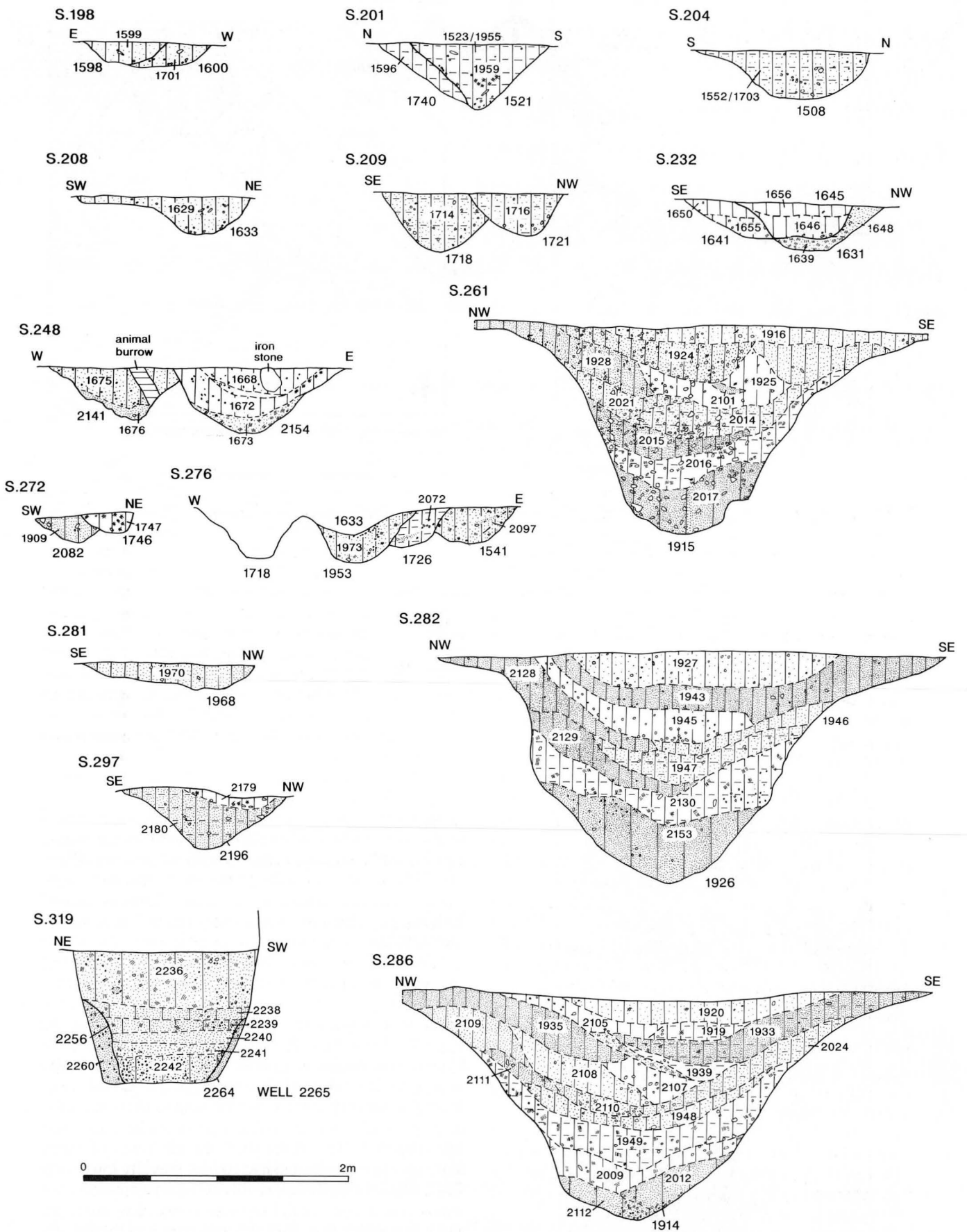


Figure 28 Sections of CEU Area 8

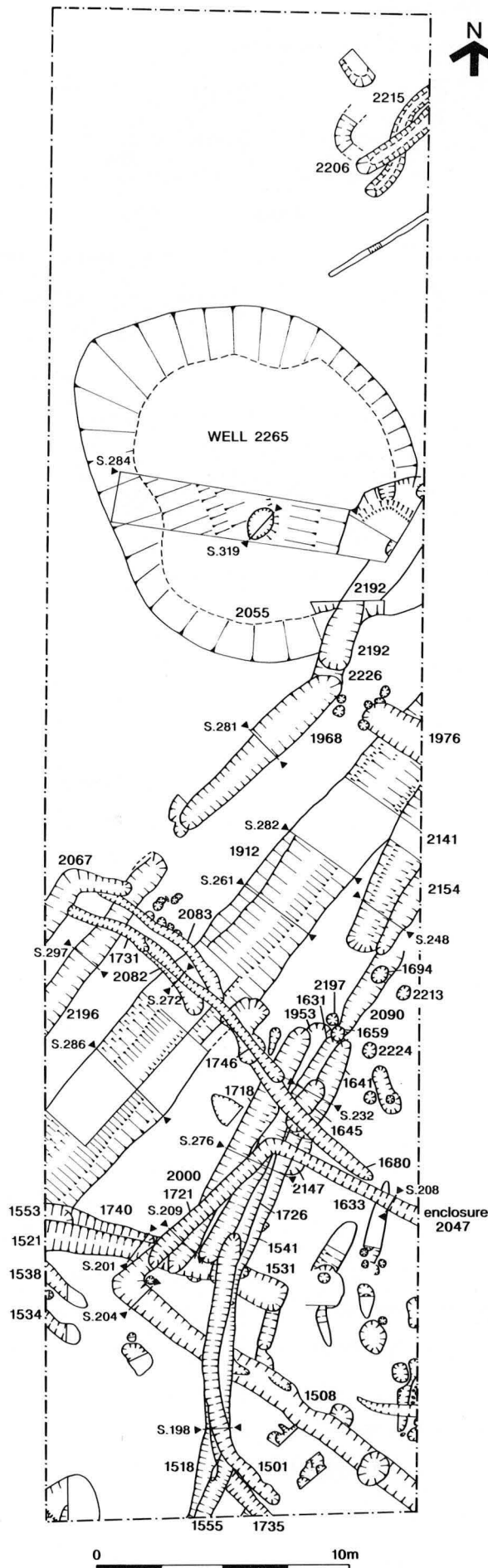


Figure 27 Plan of CEU Area 8

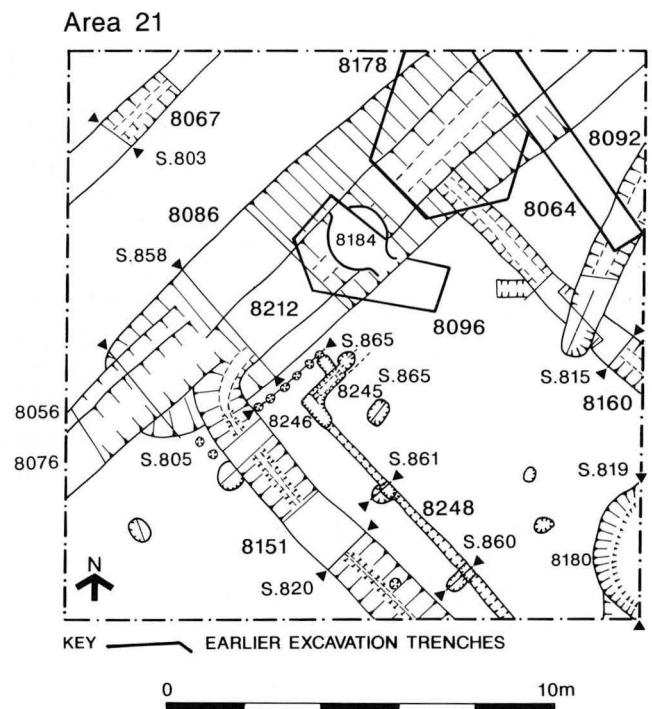


Figure 29 Plan of CEU Area 21

end close to the south-west corner of the trench. The continuous cropmark presumably results from a Roman period recut, bridging the former gap in the Bronze Age ditch (below p.42). The width of this gap is, of course, unknown, although another gap in the ditch excavated within Area 20 (below) was 3.5m wide. The butt end of 8086 (Fig.29) although obscured by the later recut, appears to have been roughly squared off; the width of the ditch was between 3 and 4m and the depth up to 2m. The ditch was U-profiled (Fig.30); the lower fill comprised a deep (c. 0.6m) deposit apparently derived from both sides, the upper fills comprised silts (Fig.30) interspersed with a sandy deposit, derived from the north-west side. The final surviving fills comprise layers 8089, 8217, 8215, 8216, and 8218, apparently filling a hollow on the south-west side, in a manner similar to that encountered in Area 8. These upper fills were subsequently cut by later features (below p.58).

Cropmark evidence indicates that ditch C2 was continuous between Area 21 and Area 20 about 35m to the north-east. (Fig.47). In Area 20 the line of ditch C2 includes a 3.5m wide 'entrance' marked by roughly squared off butt ends. The southern arm of the ditch (7847 Fig.31) was markedly smaller than in Areas 8 and 21, being only 2m wide and 0.7-0.8m deep, and had a shallow V profile rather than the U profile seen in the other areas (Fig.32). To the north, 7847 had fairly uniform silt loam fills (Fig.32, S731); to the south the ditch was of rather more irregular profile and had coarse, gravelly lower fills 7842, 7843, 7840, the upper fills being fairly uniform silt loams. These were similar to those revealed to the north and it is possible that 7831 and may represent the fill of a shallow recut (Fig.32, S705). The northern arm of the ditch, 7856, was 2m wide and 0.8m deep to the north (Fig.31), becoming wider and deeper, (up to 3.6m wide and 1.1m deep) towards the butt end, these dimensions being comparable to those of the ditch in Areas 8 and 21.

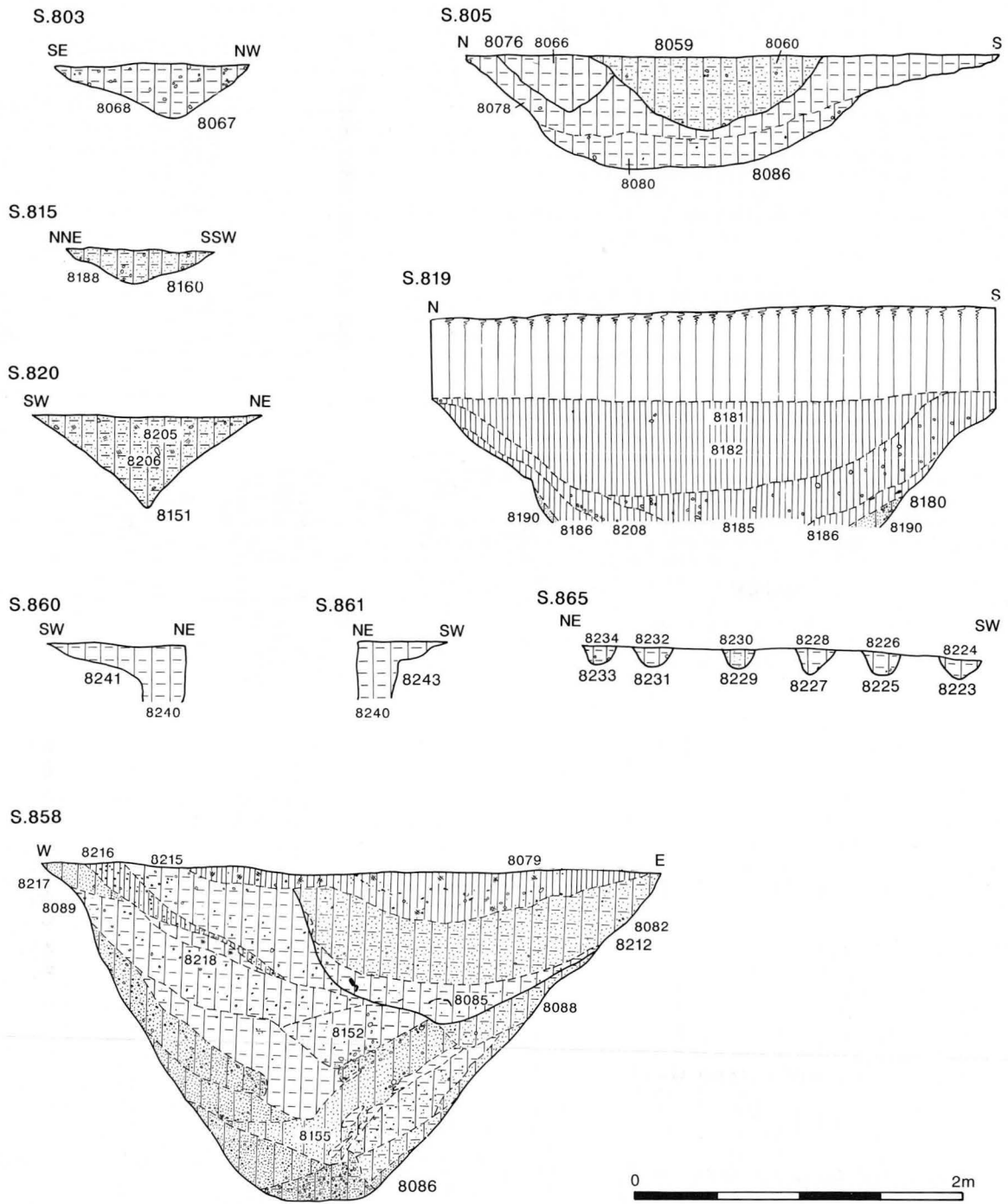


Figure 30 Sections of CEU Area 21

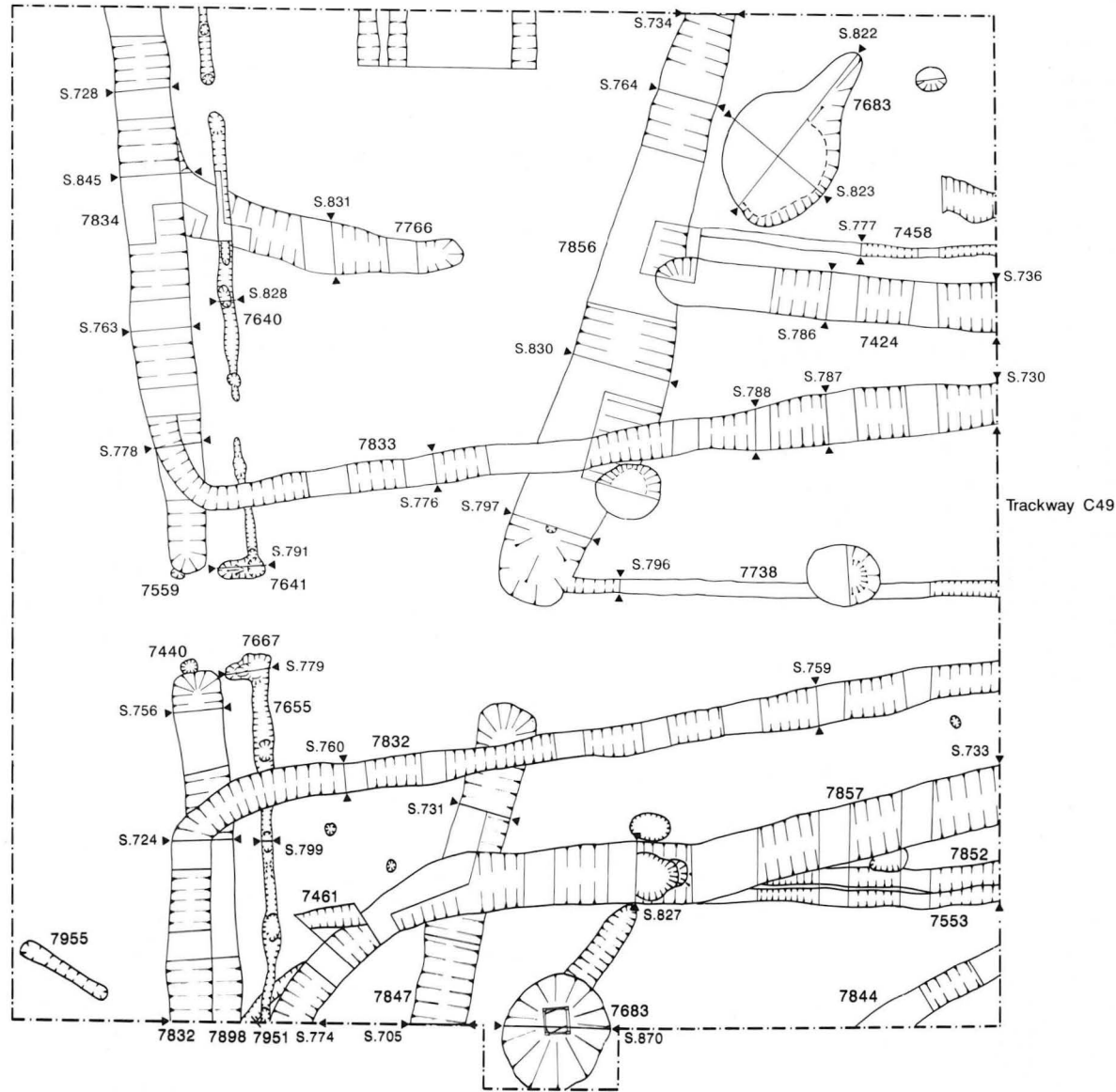


Figure 31 Plan of CEU Area 20

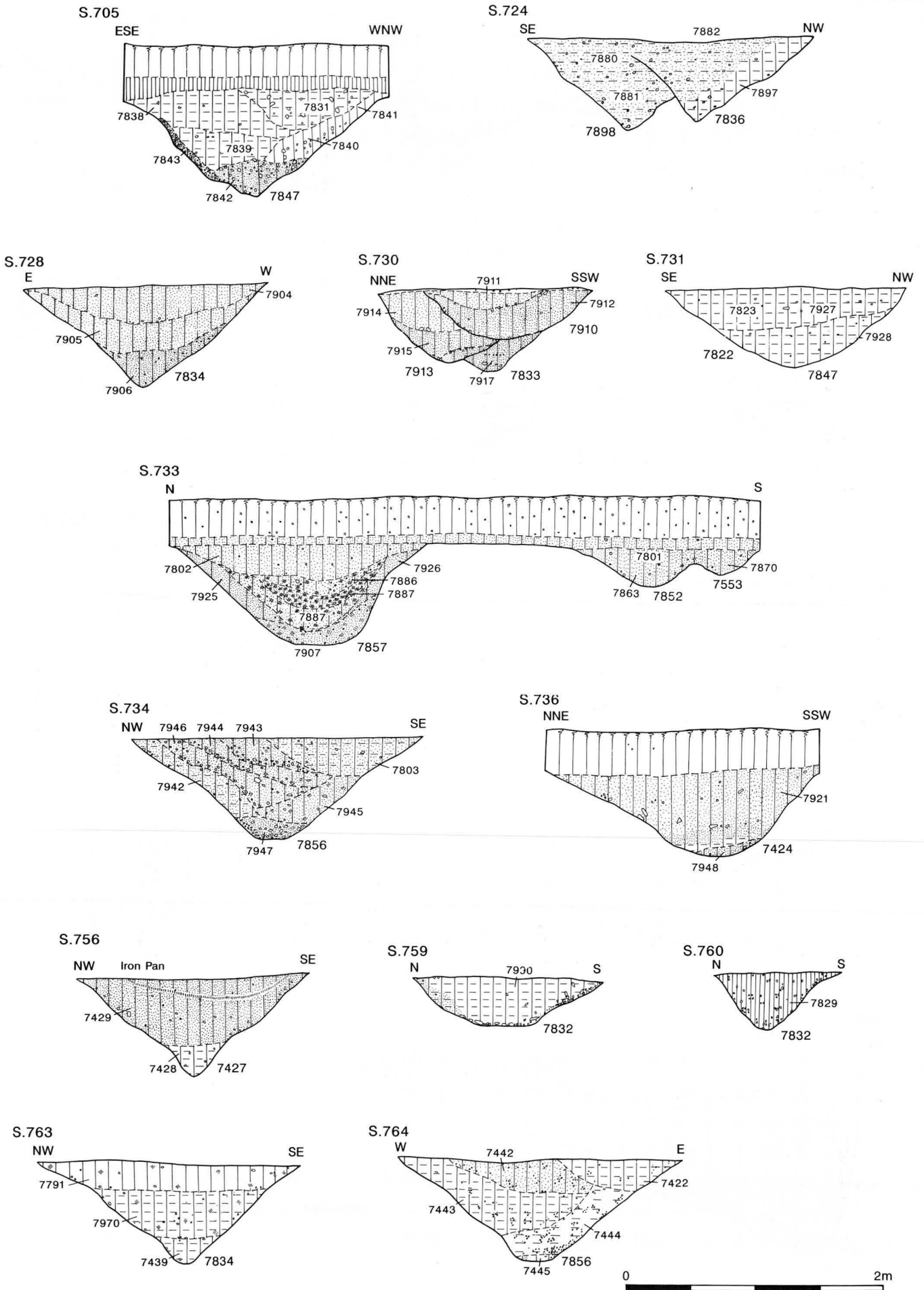


Figure 32 Sections of CEU Area 20

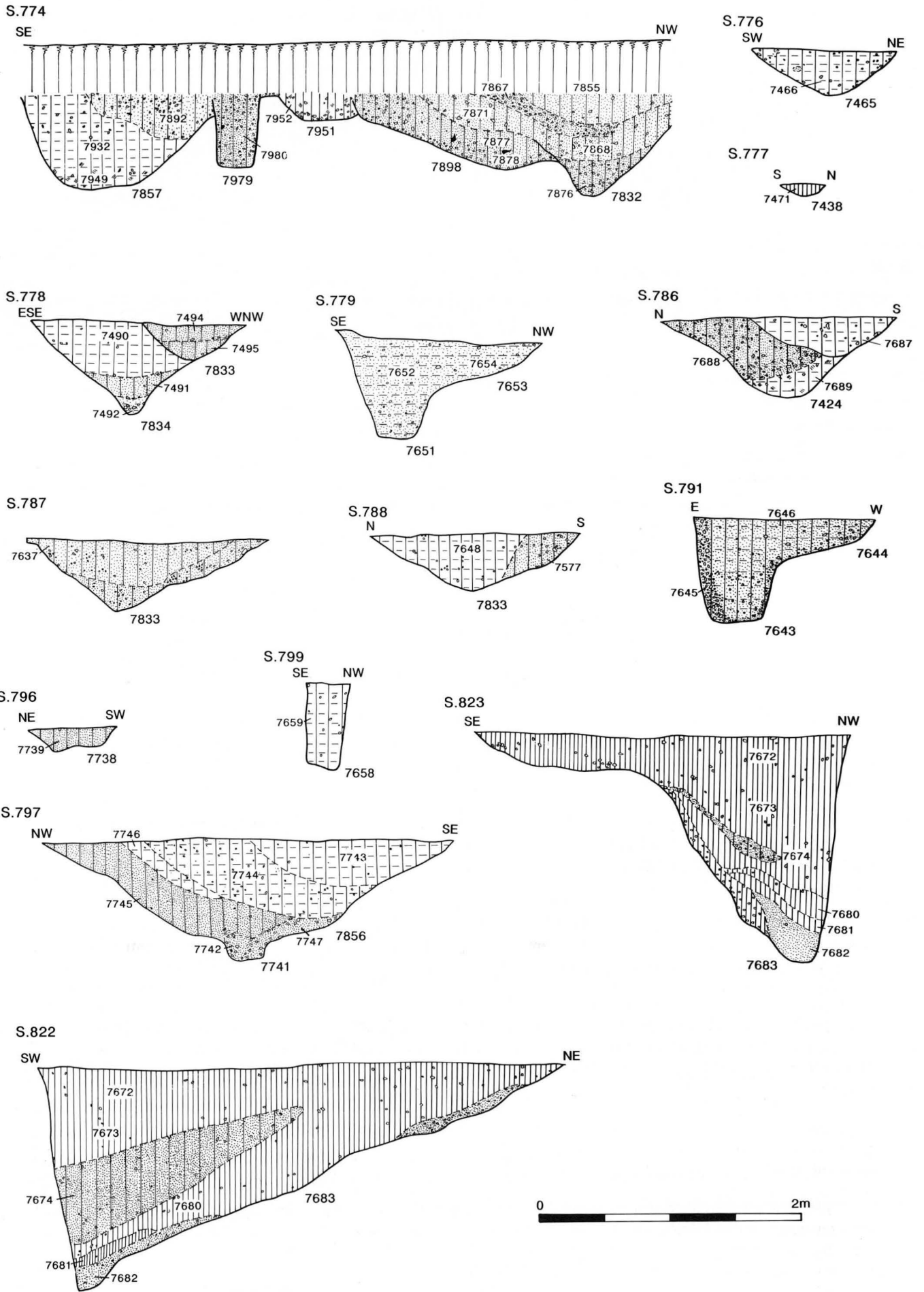


Figure 33 Sections of CEU Area 20

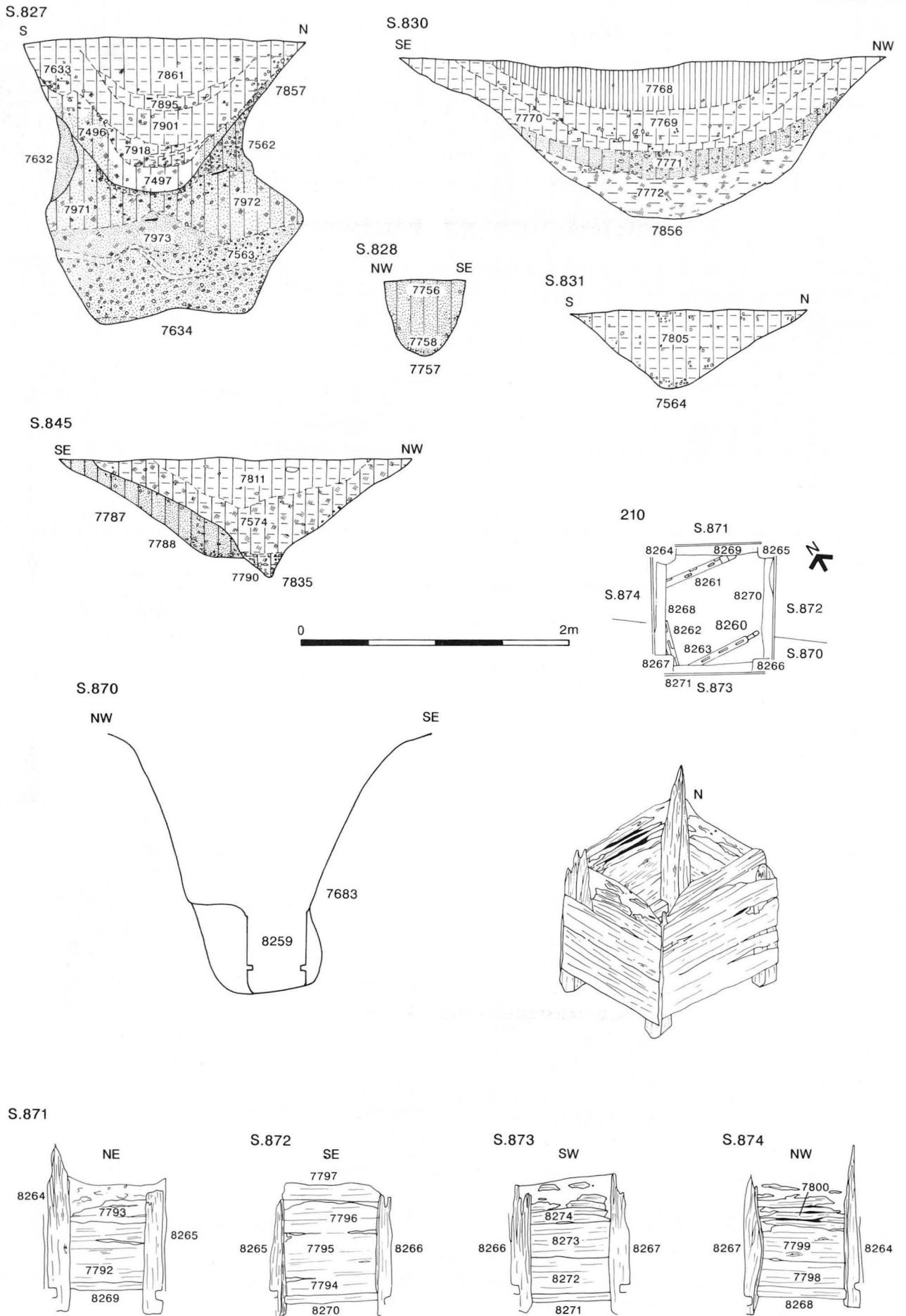


Figure 34 Sections of CEU Area 20

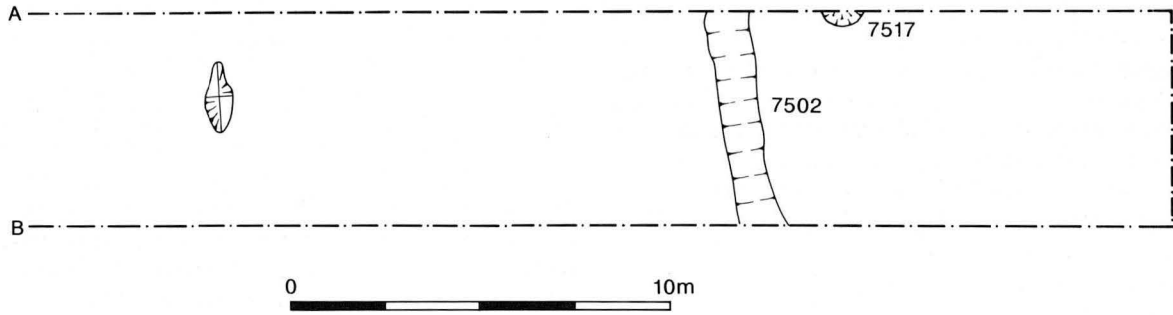
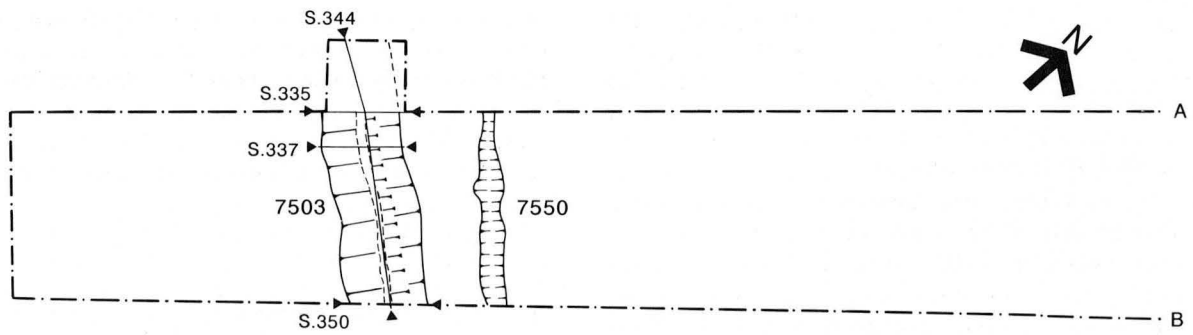


Figure 35 Plan of CEU Area 11

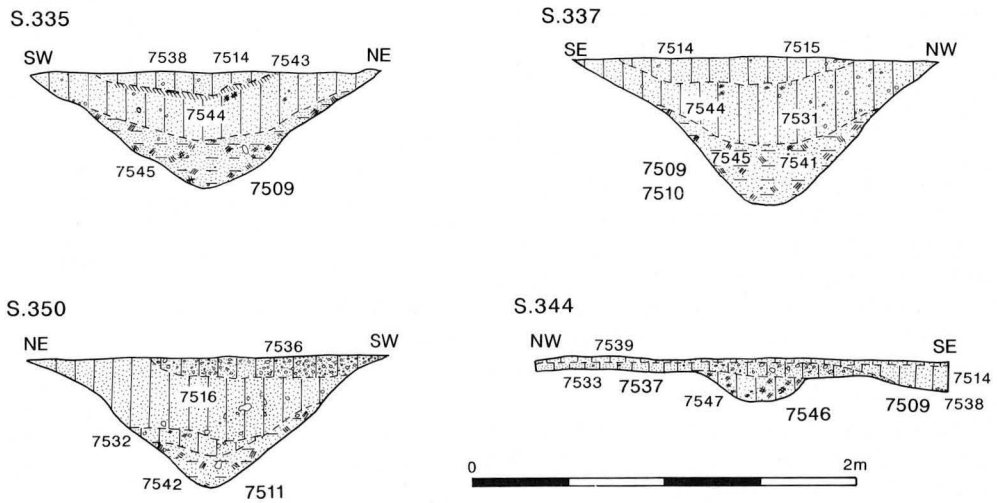


Figure 36 Sections of CEU Area 11

The sequence of fills shows marked differences along the line of the ditch in Area 20. In the north the primary fill 7947 comprised coarse gravely sand 0.2m deep, the remaining fills comprising fairly stony sandy loam or sandy silt loam (Fig.32, S734). Just 5m further south in segment 7421, the fills were predominantly silt or silt loam (Fig.32, S764). Where the ditch widened towards its butt end (Fig.34, S830) the primary fill consisted of a deposit of silt clay (7772) up to 0.3m deep. This layer was sealed by a coarse sandy loam (7771), 0.2m deep. Above this were layers of silty loam, with a deep (c. 0.3m) deposit of loam filling a central hollow at the top of the sequence (Fig.34, S830). In contrast to some of the segments in Areas 8 and 20, there was no sign of differential deposition in segment 7772, instead the layers of fill ran right across the ditch, in a fairly uniform manner (Fig.34). The exception to this general pattern being the butt end which contained a small ?sub-circular steep-sided feature interpreted as a post-hole (Fig.33, S797). This feature extended beyond the edge of the excavated segment; it was filled by a stony sand, partly sealed by a shallow layer 7747 of stony sandy clay. Subsequent fills appear to be derived from the north-west side, the earliest being a deposit of sandy loam 7745, up to 0.3m deep, succeeded by slightly stony silt loam layers 7746 and 7744, the final fill being a silt loam 7743 filling a hollow left on the south-east side (Fig.33). The size and fill sequence of this butt end are, therefore, rather more similar to the ditch as it occurred in Areas 8 and 21, than in the rest of Area 20.

Area 11

(Figs 35 and 36)

This trench, excavated to investigate two parallel linear features thought likely to be contemporary and to represent a Cursus, in fact revealed two ditches quite different in form, size, fill and date (Fig.35). The northern ditch 7502 appeared to be of Roman date (below p.61), the southern ditch 7503 produced Bronze Age pottery and charcoal which yielded a radiocarbon date of 1495–1100 cal BC at 2σ (HAR-5129: 3050±70BP) (Table 1). Ditch 7503 was up to 1.9m wide and 0.8m deep, V-profiled and with a broadly uniform fill sequence throughout its length (Fig.36, S335, 337, 350). A deep (up to 0.3m) clayey, sandy silt, primary fill was succeeded by sandy loam fills. At the western end a small area of dense stones (7538) appeared to be part of a cobbled surface which had sunk into the upper fill of the ditch causing iron pan. 7543 to develop below it (Fig.36, S335). Layer 7538 was traced to the east (7533) in a 2m² extension to Area 11, where it sealed a small oval pit (7546) with a charcoal-rich fill 7547. An extremely shallow (0.01m deep) linear feature, 7550 (Fig.35) ran parallel with ditch 7503. A linear scatter of small ?stake-holes at the base of 7550 may indicate that this feature represents the remains of a fence line possibly associated with ditch 7503.

Late Iron Age and Roman

(Figs 22–45)

Area 4

(Fig.37)

A 1m × 55m trench was placed across the ditches of cropmark trackway C10 (Fig.7). Much of this trench was covered by a considerable depth of topsoil up to 0.5m deep. There was a clear division within the topsoil between an upper 'A' horizon (631) of dark yellow brown loam, with possible traces of

cobbling between the trackway ditches (Fig.37) and a dark yellow brown sandy loam 'B' horizon (532). It proved difficult to identify features cutting 532. However, most of the features to the east of the trackway appeared to be cut through it. The trackway ditches (east ditch 552/555/559, west ditch 550) and a number of features which lay between them appeared to be sealed by 532.

The trackway ditches show considerable evidence of maintenance. The stepped profile of ditch 550 (Fig.37) indicates cleaning/recutting, whilst the eastern boundary shows at least three separate cuts (Fig.37). A further ditch with at least one recut (570/569 Fig.37) running in the centre of the trackway may indicate that the width of the trackway had been altered at some stage. Post-hole 563 and ?pit 561 which lie within the trackway, presumably either pre or post-date it. None of these features produced any datable finds but the trackway is presumed to be of Late Iron Age or Roman origin (below p.181). A complex of linear features (546, 544, 533, 535, 537, 548 Fig.37) east of the trackway, may relate to the small rectilinear ditched cropmark enclosures (Fig.4) which lie to the east of the trackway north of Area 4. No datable finds were recovered from any of these features, with the exception of some sherds of ?Belgic pottery from ditches 537 and 540. A pair of shallow ditch/gully features 540 and 642 may represent a c. 5m wide trackway running roughly parallel to and 16m east of the main track (Fig.37). Feature 542 produced Roman pottery, not closely datable.

Area 5

(Figs 22 and 38)

A series of intercutting ditches and gullies 788, 758, 789, 760, 764 may relate to the northern edge of trackway C9, which skirts the southern edge of ring-ditch 652 (above ..., and Fig.22). Only one of these features 764 produced any pottery, and unfortunately even this was not closely datable within the Roman period. Features 754 and 756, about 5m to the south also produced Roman pottery. These features may also relate to trackway C9 although the alignment appears rather strange.

Cemetery

Within the excavated area eight burials were encountered, seven of them inhumations and one a cremation (Fig.22). One of the inhumations (917) was not seen in plan but only recorded in one of the trench sections.

Cremation Burial 648

(Fig.22)

In a small circular pit 0.4m in diameter a wide-mouthed jar (10231) had been placed upright. The jar contained burnt bones (10263).

Four iron nails were found in association with the burial. Two (10251 and 10252) were in upright positions in the upper filling of the burial pit between the jar and the north-west edge of the pit. The other two nails (10253 and 10254) were found inside the jar, mixed in with the bone. The function of these nails is uncertain but it is possible they are derived from a coffin in which the human remains were cremated. The filling of the pit (649) was of dark brown sandy loam.

Inhumation Burials

Seven graves were identified within the excavated area (Fig.22), all aligned north-south. Six of the graves lay in line across the west-east axis of ring-ditch 652, three within the area enclosed by the ditch, one of which was only seen in section (917 below p.55) and three outside. The seventh grave (702) was found inserted into the ditch on the northern side. Virtually no bone survived in the graves, which were hard to define, especially within the area of the ring-ditch. The depths of the line of graves across the ring-ditch suggest that at the time they were excavated a low mound still existed, as those within the ring were noticeably shallower than those outside.

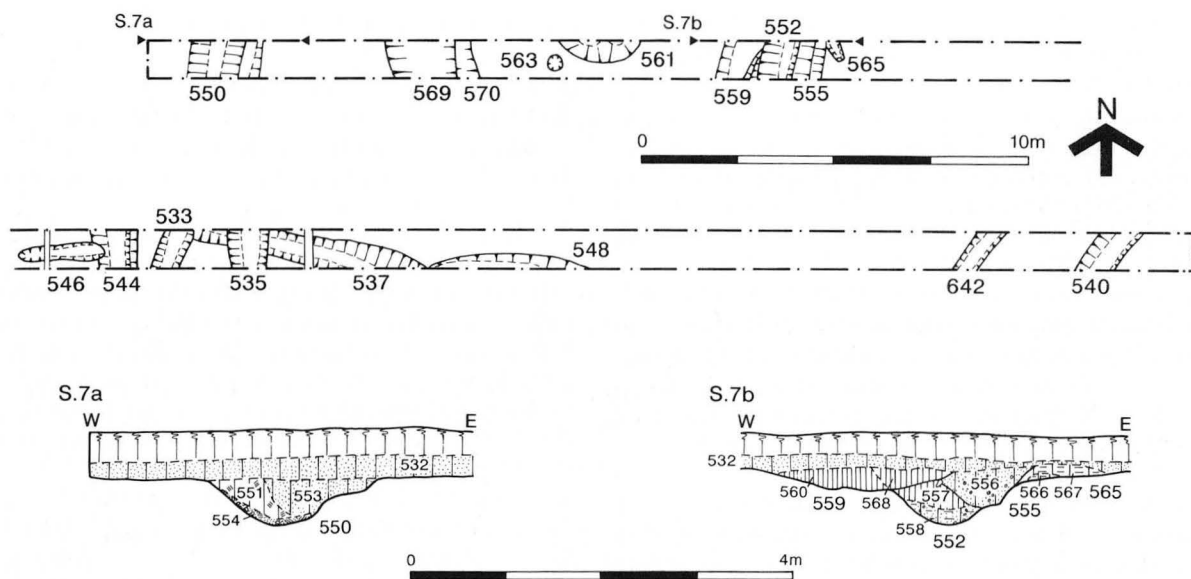


Figure 37 Plan and sections of CEU Area 4

Grave 641
(Fig.38)

The grave was 2.5m long and 0.85m wide, steep-sided with a flat bottom. The filling (642) consisted of dark brown sandy loam and contained no artefacts or traces of bone. However, the position and form of the feature leave little doubt as to its being a grave.

Grave 638
(Fig.38)

The grave was 3m long and 1.5m wide with a somewhat irregular form and a pronounced ledge on the sides where the feature penetrated into the gravel subsoil. It was situated 4m to the east of grave 641. The general filling of the grave (640) was of dark brown sandy loam, although a darker central filling (639) appears to reflect the position of a coffin/body. On the north and western sides of the grave, the division between these two fills was marked by a visible darker line which at one point produced wood fragments (10498). This was presumably the remains of a coffin. A single iron nail (10497) was also recovered from this linear mark at the northern end of the grave (Fig.38)

Scattered on the base of the grave in the centre were twenty-six chalcedony beads (10499; 10500–10525). No pattern could be observed in their disposition and it seems likely that they represent the remains of a necklace which became unstrung before or during the burial. The beads are identical to those found in the next grave to the east, 651.

Grave 651
(Fig.38, Pl.XIV)

The grave was 3m long and 1.2m wide, steep-sided and with an uneven base sloping towards the centre. It was situated just inside ring-ditch 652 some 6m to the east of grave 638. The general filling of the grave (628/673) was of brown sandy loam surrounding, in the lower part, a darker brown loam fill (650/720). The latter was particularly well-defined at the southern end of the grave although and can be confidently regarded as reflecting the position of a coffin and its contents.

At the south end of the grave, at the junction of layers 628 and 650 were four S-shaped iron plates (10291, 10460, 10461, 10462) which had apparently been arranged 'back to back' in two pairs and stood upright in the grave: 10461 had been displaced in antiquity.

Within the area of the 'coffin' no bone survived, apart from the fragmentary remains of teeth (10459). The position of these indicate that the head of the corpse had lain towards the south end of the grave. Immediately to the north of the teeth was a bronze brooch (10455) and three chalcedony beads (10456–8), which were presumably situated on the upper chest of the body. The beads were probably strung around the neck, possibly with other beads of a material which did not survive the acidic soil conditions. It is, however, possible that they were attached directly to a garment or else appended to the brooch. The beads are identical to those from the adjacent grave 638.

In the central part of the grave were four bronze bracelets, three (10453 (i), (ii) and (iii)) on the west side of the 'coffin' filling and one

(10454) on the east. Assuming the body to have been in a supine position with the arms extended down the sides, the three bracelets would have been on the left wrist and the single bracelet on the right. At the northern end of the grave, and presumably outside the coffin, had been placed two pottery vessels (10451 and 10452) which stood upright on the base of the grave: they may originally have contained offerings of food and/or drink.

Grave 636
(Fig.38)

The grave was 2.8m long and 1.1m wide with a flat bottom and sloping sides. It was situated within the area enclosed by ring-ditch 652 and lay 4.5m to the west of the inner lip of the circular ditch on its eastern side. The fill of the grave (637/647) was of yellowish-brown sandy loam. Within this filling, a rectangular outline of dark yellowish-brown sandy loam (721) comprising an area 1.75m by 0.4m was distinguishable. This would appear to represent a coffin. Within the 'coffin,' a further irregular area of dark greyish-brown sandy loam (680) was distinguishable which may reflect the position of the body.

At the northern end of the grave, apparently within the area of the 'coffin' was a dish (10464). Just to the north of this vessel was a small fragment of burnt bone (10468). The presence of this fragment is interesting — it is possible it may derive from a secondary burial in the body of the mound, partly disturbed by the excavation of this grave but since lost through the erosion of the barrow by the plough. In the central area of the grave, within and towards the southern end of the coffin, was an iron brooch (10161). The position of this brooch, which one would expect to be on the chest of the corpse, indicates that the head of the body was to the south. The only other artefact recovered from the grave was an iron object (10281) lying outside the area of the 'coffin' to the east of the brooch.

Grave 634
(Fig.38)

The grave was 2m long and 0.85m wide. The sides of the grave were quite steep, the end sloping. It was situated 9m to the east of grave 636, just outside the outer lip of the ring-ditch. The upper filling of the grave (635) was of yellowish-brown sandy loam which was distinguishable from a horizon of dark yellowish-brown loam (701), which formed the lower filling.

This grave is notable amongst the group in that it was the only one to produce a substantial fragment of bone. Towards the northern end of the grave was a fragment of skull (10492) with which a couple of teeth were associated. Its position within the grave causes some difficulties of interpretation particularly in view of its immediate proximity to a small jar (10496) placed upright on the base of the grave. As this vessel lies to the south of the skull fragment, it seems improbable that an intact body could have extended in this direction. It seems likely that the corpse was mutilated before burial — possibly in the form of decapitation, with the severed head placed, with the jar, alongside the legs.

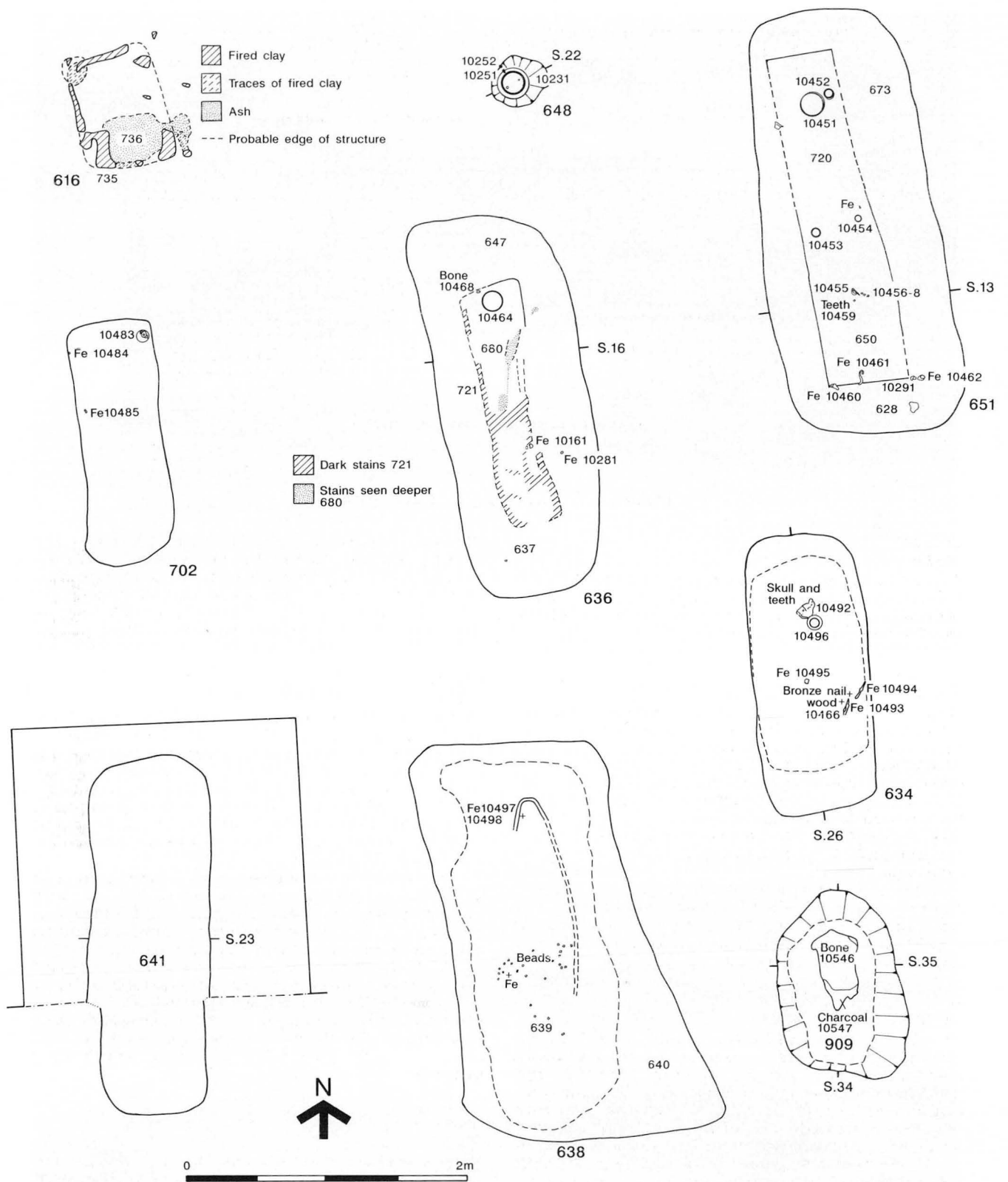


Figure 38 Plans of graves from CEU Area 5. NB Grave 917 was recorded only in section and therefore has no plan

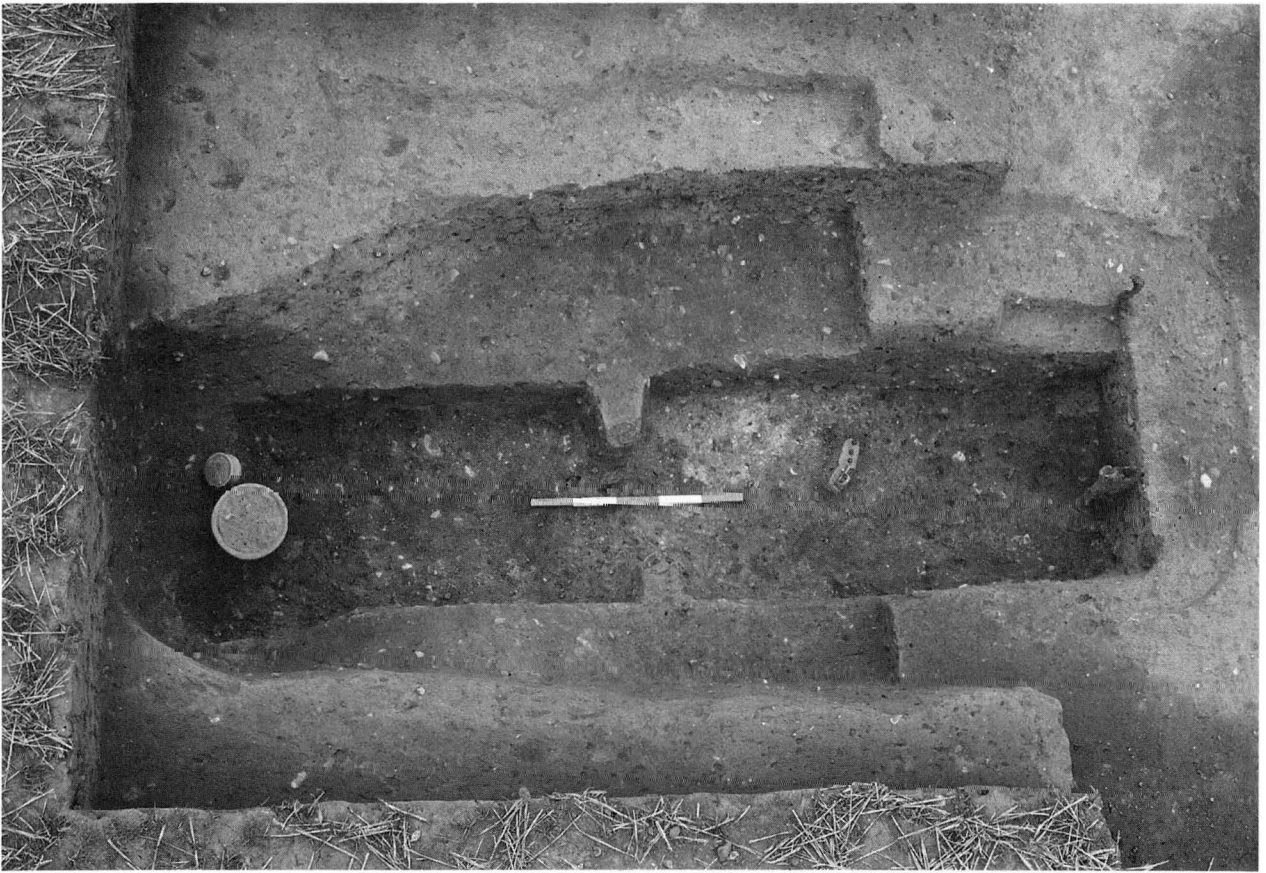


Plate XIV Grave 651 in CEU Area 5 in course of excavation. Metric scale



Plate XV Dump of pottery in upper fill of ditch 7150, CEU Area 7. Metric scale

Directly in the centre of the grave was a D-shaped iron buckle (10495). Almost upright against the eastern side of the grave was an iron bodkin (10494) and to the west of this was an iron knife with the remains of a wooden handle with bronze fittings (10493; 10466) lying at an angle of 45° to the base of the grave. An iron nail (10167) was found nearby.

Grave 702
(Fig.38)

The grave, which measured 1.75m by 0.6m, was dug into the upper filling of the ring-ditch on its northern side. The existence of the grave, which was aligned north-south, was not appreciated until a small flagon (10483) was found. This proved to have been placed upright in the north-east corner of the grave. Two iron nails (10484-5) were found on the west side of the grave and may conceivably derive from a coffin. The filling of the grave, which consisted of dark brown sandy loam (703), contained no other traces of coffin or body.

Grave 917
(Fig.23)

During the excavation of the central area of the ring-ditch, a poorly-defined feature was observed against the western section. The levels in this area had suffered animal disturbance and this feature was regarded as the upper filling of pit 908 (see above p.35). Reconsideration of the section, however, suggests that two layers of dark yellowish-brown loam (917/918) represent the filling of an additional grave. As seen in section they form a feature 2m long and 0.2m deep from the base of the ploughsoil. The position, midway between graves 636 and 651 where a 15m gap exists in the line of inhumations, may reinforce this suggestion.

Feature 616
(Fig.38)

To the south of the ring-ditch was located a hearth or oven-base consisting of a concave platform of fired clay (735) on which was a deposit of ash

and a small piece of burnt bone (736). The feature was rectangular in shape, measuring 85cm by 60cm. The feature is undated, its function is unclear and there were no associated features within the excavated area. However, it is tempting to regard it as part of the cremation process, relating to the deposition of Roman cremation 648 or the Early Bronze Age cremation 906 (below p.171).

Area 6
(Fig.39)

This 10m x 10m trench was placed across the eastern ditch of trackway C10 (Fig.7), with a 1m wide extension to the west to examine the western ditch of the trackway (Fig.39). The western trackway ditch was represented by 839, a round based, sloping-sided feature with an homogeneous fill showing no signs of recutting (Fig.39). By contrast the eastern ditch 805 had a more variable fill and showed at least one major recut (Fig.39). No datable material was recovered from 839, but ditch 805 produced 'Belgic' and Roman sherds not closely datable. A gravelly area between the trackway ditches was interpreted as the remains of metalling for the track surface. This layer was cut by a series of shallow (822, 825, 836), and rather deeper features (810, 812), which presumably post-date the trackway. The gravel layer and features which cut it contained a few Roman sherds not closely datable. A ditch (805) ran north-south across Area 6 and was interpreted by the excavators as a medieval field ditch.

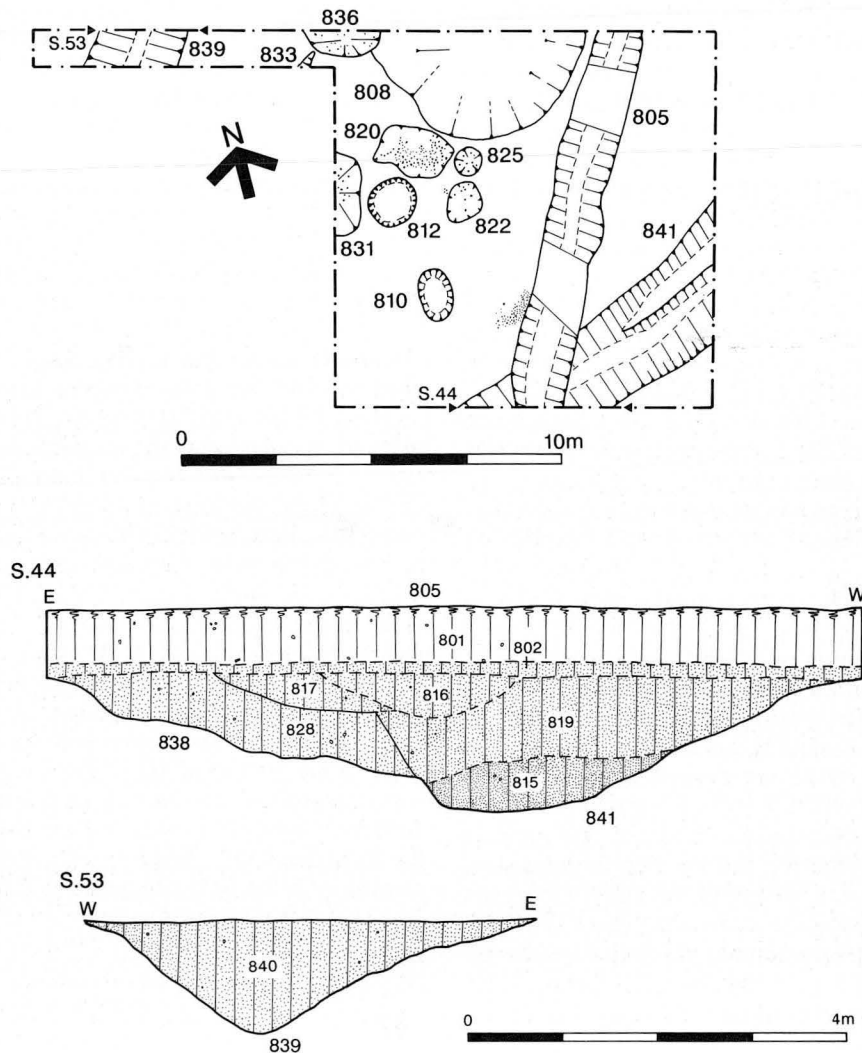


Figure 39 Plan and sections of CEU Area 6

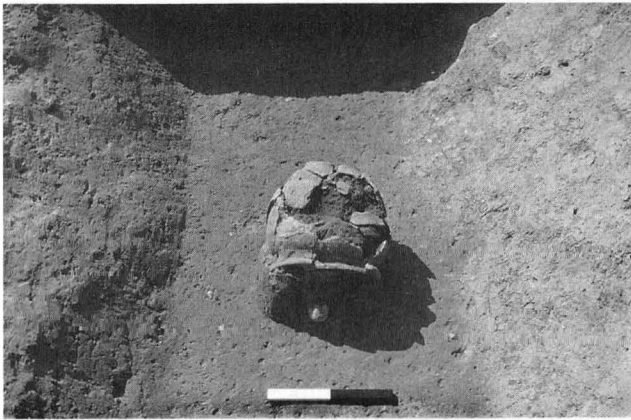


Plate XVI Jar placed at bottom of ditch 7150, CEU Area 7. Metric scale

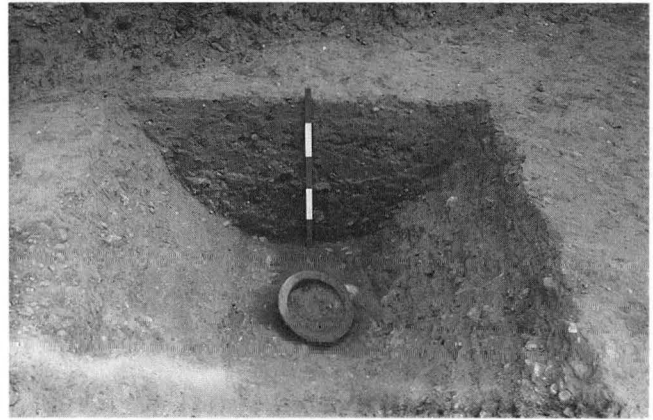


Plate XVII Dish placed at bottom of ditch 7011, CEU Area 7. Metric scale

Area 7

This area 32m by 42m was located to investigate the vicinity from which most of the Bronze Age burials were recovered in the 1950s: a narrow trench was extended to the west to examine trackway C10 (Fig.24).

The western side of the trackway was marked by a double ditch (Fig.24); a broad ditch 7009/7010, with a narrower ditch i, 1.2m to the west. Ditch 7009 appeared to be the earliest feature, and survived to a maximum depth of 0.6m and width of 1.2m the western side having been largely removed by 7010 (Fig.26). The slightly stepped profile of 7009 may indicate periodic cleaning/recutting of the ditch. The fill comprised a primary layer (7061) of clay loam with sandy clay loam upper fill (7028, 7059 Fig.26). By contrast the later ditch 7010 had evenly sloping sides and a uniform sandy loam fill (Fig.26, S126) and appears to represent a major recut of the ditch line slightly offset to the east. Ditch 7010 and the upper fills of 7009 produced Roman sherds not closely datable. Ditch 7011 was a rather narrower feature 1m wide and 0.5m deep with a flat base, quite steeply sloping sides and a fairly uniform fill of sandy loam (Fig.26, S370). Given the rather unstable nature of the sides of features cut into the sand and gravels, the maintenance of such steep sides may imply rapid backfill of this feature. The profile may indicate that 7011 was a slot for a fence along the west side of the trackway, rather than a secondary ditch. Pottery of the 2nd century was recovered from the fills of this feature. The western side of the trackway appears to respect the boundary of the major Bronze Age cemetery (above p.39 and Fig.24).

The eastern side of the trackway was marked by an apparently single ditch which excavation showed to have been substantially recut. The earliest cut 7027 only survived at the eastern side of the ditch alignment (Fig.26, S380), the fill contained a few 'Belgic' sherds. The later cut 7012 ran along the western side of the ditch alignment, and was round-based, sloping-sided on the west but with a markedly stepped profile on the east side. A shallow clay fill (7206) was succeeded by a deep apparently uniform sandy loam fill (7066, Fig.26). However, this apparent uniformity may be illusory, and the step in the eastern profile may represent an episode of recutting/cleaning not visible in the fill. Adjacent to the area where kiln 7375 (Fig.24, below) had been cut into the ditch edge, the fill contained substantial quantities of ash, charcoal, clay lumps, and Roman pottery of the 1st century AD, clearly associated with the kiln.

The cropmark plot (Fig.4) shows a ditch running west from trackway C10, with two further linear features

running north (Fig.4) apparently forming rectilinear fields or enclosures. A 34m stretch (1451) of this cropmark feature was revealed within Area 7.

Ditch 1005, the original cut for 1451, only survived as a shallow sloping edge along the north side of the ditch alignment (Fig.26, S171), filled with loam, silt loam or sandy loam. The main surviving cut of 1451 was 1003, the sides of which sloped quite steeply to a shallow near vertical-sided, flat-based slot (Fig.26). The slot was filled with sandy or silty clay loam, the upper fill comprised loam or silt loam. In the north-east corner of Area 7 a further partial recut, 7347, had removed all trace of 1005 along the south side of 1003 (Fig.26, S465). However, details are unclear as the excavated segments were not fully recorded. Roman pottery of the 1st-early 2nd centuries was recovered from the excavated segments of 1451 (below p.125-141). Unlike trackway C10, ditch 1451 did not respect the Bronze Age ring-ditch cemetery.

Another ditch (7150), running south from and roughly at right angles to 1451, occurred in the western half of Area 7, (Fig.24). Ditch 7150 ran roughly parallel to trackway C10 and appeared to form part of a rectilinear field/enclosure similar to those known from cropmarks north of 1451 (Fig.4). However, ditch 7150 had not appeared on any of the aerial photographs. The ditch came to a butt end adjacent to the southern edge of the last recut (7347) of ditch 1451 (Fig.24), indicating that 7150 was dug at about the same time as 7347, or only shortly afterwards. Feature 7150 was up to 1.4m wide and 0.5m deep, varying from flat-based with a slightly stepped profile in the north to round-based with evenly sloping sides in the south (Fig.25, S392). The fills were fairly uniform silt loam (Fig.26, S392) with a substantial dump of early 2nd-century pottery in the upper fills to the north (Pl.XV). A near complete pottery vessel (Pl.XVI and below p.182) lay on its side with mouth to the north, towards the bottom of fill 7233 in segment 7229. This apparently deliberately deposited pot was matched by a similarly placed vessel (Pl.XVII and below p.182) within the fill of ditch 7011, on the opposite side of the enclosure formed by 7150, 1451 and trackway C10 (Pl.XVI).

Kiln 7375 (Fig.40)

Excavated into the west side of ditch 7012 (and hence projecting into trackway C10) was an oval pit which proved on examination to be the remains of a Roman pottery kiln. This feature post-dated the cutting of the ditch

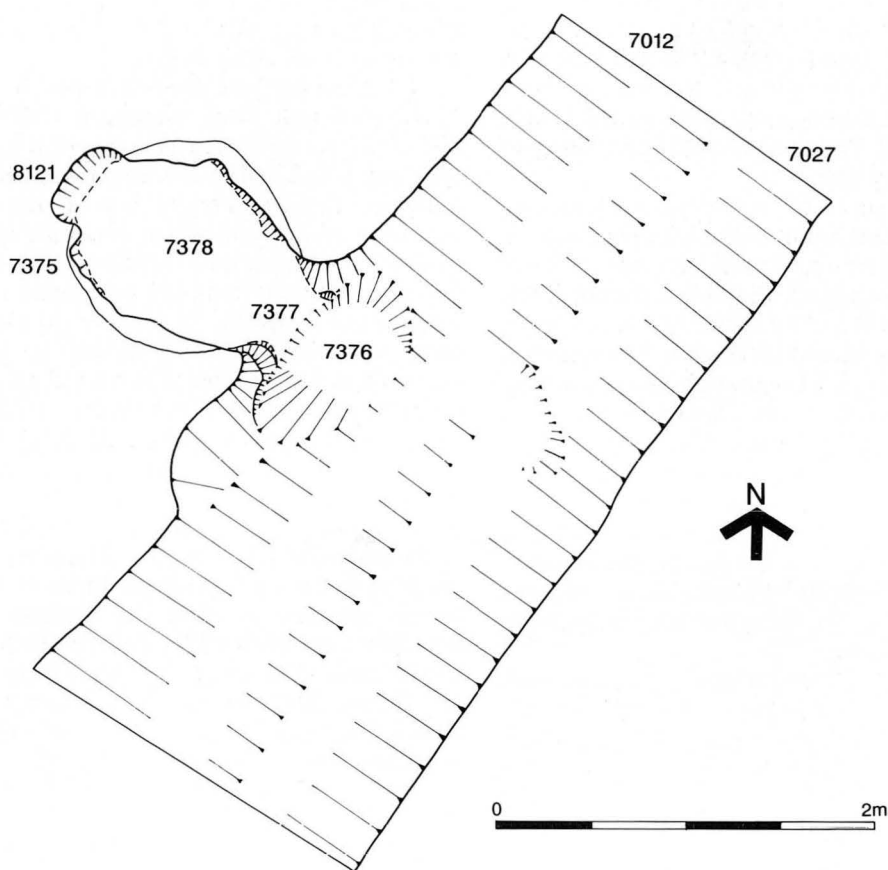


Figure 40 Plan of kiln in CEU Area 7

but had clearly been cut into its side either before there had been any major accumulation of silt or after the ditch had been cleared out. For the purposes of description the kiln may be divided into three elements — oven (7378), flue (7377) and stoking area (7376 Fig.40).

At the base of ploughsoil, the oven (7378) appeared as a feature 1m across projecting 1.5m from the edge of the trackway ditch. Internally it broadened out to a flat base 1.2m across. The walls of the oven and its floor (8125, 8128) were composed of a clay loam which had been fired to a dark red colour. Careful examination of this material indicated that its texture and components closely resembled the adjoining natural subsoil and localised variations in the latter could apparently be traced into the fired material. This, together with the fact that the fired material could not be induced to 'peel' from the adjoining unfired soil would suggest that these two deposits are in fact identical and that the oven was not lined. The 'walls' did however present a smoothed appearance suggesting that they had perhaps been prepared by treatment with water prior to firing. It might also be added that at this point there was a natural dip in the clay loam which, exposed in the ditch side, might have presented a suitable site to the potters.

The walls and floor of the oven exhibited no structural features other than a rectangular slot (8121) in the rear wall, opposite the flue. This had the appearance of a step or ledge whose base was 0.2m above the floor of the oven. It was 0.1m deep and its vertical sides and base, which sloped slightly towards the oven interior, showed no sign of firing. Its most likely function was as the support for

portable kiln furniture though it may conceivably have formed the base of a chimney.

The flue (7377) consisted of a narrowing of the oven walls where these ran into the ditch. The flue had no independent structural element but was simply characterised by the same fired natural clay loam as the oven. At its narrowest, the width of the flue was 0.4m. To a height of some 0.2m above its base the walls of the flue were vertical — above this they presented a more eroded, sloping profile. There was no *in situ* evidence for a flue arch.

Within the flue was a layer (8113) largely composed of sizeable fragments of fired sandy clay loam resembling that forming the wall and floor of the kiln. It seems likely that this material represents the collapsed remains of the flue arch. Beyond the flue and in the base of ditch 7012 was the stoking area (7376). This consisted of an oval depression 1m long and 0.6m wide containing a 40mm thick layer of ash (8116). This layer overlay the initial silting of ditch 7012. Very little pottery was recovered from the filling of the kiln structure. However, the adjacent ditch 7012 contained a substantial localised concentration of pottery which it is fair to assume represent the kiln products (below p.143).

Area 8

This area revealed numerous ditched alignments apparently forming boundaries of small enclosures the full extent of which are often uncertain given the narrowness of the excavated area.

A ditch alignment 1740/1521 (Fig.27) running roughly east-west, cut Bronze Age ditch 1912. Its full extent is unknown as it extends beyond limit of trench to the east,

and apparently the western butt end was removed by pit 1531 (Fig.27). Ditch 1740 was a round-based feature with sloping sides, partly recut towards the west as 1553 (Fig.27) and recut on the south side, along its full length, as ditch 1521 (Fig.28). These features produced pottery of mid to late 1st-century date.

A ditched alignment (2000) consisting of intercutting features, ran north-west from 1740/1521 (Fig.27) for a distance of about 11m, continuing the line of ditch alignment 2141/2154 (below). The earliest feature of this sequence was ?pit 2147, cut by ditch 1541, which was a fairly steep-sided, flat-based ditch (Fig.27). The north butt end of 1541 appears to have been completely removed by feature 1641: to the south the ditch appears to have been extended as 1518 (Fig.27). Feature 1541 produced Late Iron Age pottery and was succeeded by a number of broadly similar lengths of ditch, each cut slightly further to the west (1726, 1953, 1718, Fig.27, 28). The north-east butt ends of these ditches were cut by a shorter length of gully 1641 (Fig.27), itself cut by a steep-sided, flat-based elongated pit 1645 (Fig.27). These features produced mid to late 1st-century pottery.

To the north, 2141/2154 continued the line of ditch alignment 2000. The relationship between 2141 and 2154 was uncertain, both were round-based and sloping-sided. The plan and context details indicate that the relationship between the two was difficult to discern but that 2141 probably cut 2154. However, the section (Fig.28) would appear to indicate the relationship was the other way round, and this seems to be supported by the finds; 2141 produced mid to late 1st-century ceramics whilst 2154 yielded mid 1st to early 2nd-century pottery (below pp 125–157).

Alignments 2000 and 2141/2154 thus seem to form one boundary, maintained by periodic recutting for some time. There was a 3m wide entrance gap separating the two alignments. The entrance appears to have been blocked at some stage by a shallow gully 2090 (Fig.27). This may have been relatively early in the sequence, since a group of five post-holes (1659, 1694, 2197, 2213, 2224), two of which cut 2090, seem to represent a gate structure (Fig.27), presumably in use after 2090 had been backfilled.

A short length of ditch (1976) running west from the eastern edge of the excavated area may have linked with 2141/2154, in which case a small rectilinear enclosure would have been formed by 1521, 2000, 2141/2154 with the western side formed by ditch alignment 2196/1968/2192 (Fig.27). A gap of about 1.3m between the butt end of 1976 and 1968 represents an entrance with a cluster of six post-holes forming a gate structure (Fig.27).

The two lengths of gully 1968 and 2196 run roughly parallel to and about 2m north of Bronze Age ditch 1912 (Fig.27). They were separated by a possible entrance gap of about 1.5m. A further length of ditch, 2192, running north from the butt end of 1968, produced a slight kink in the alignment. This was adjacent to the entrance structure at the butt end of 1976, and the slight change of alignment may be the junction of two linked enclosures. The cropmark plot shows clear indications of the existence of an extensive network of such fields/enclosures.

Ditches 2192, 1968 and 1976 had a broad, shallow, flat-based profile (Fig.28): 2192 and 1976 had two fills, a coarse lower silt and a finer upper fill. The fill of 1968 was more homogeneous (Fig.28). Feature 2196 was more V-profiled and with a largely homogeneous fill (Fig.28).

Ditch 1976 cut 1912, ditch 2192 cut pit 2266, ditch 2196 was cut by 2067, 2082, 2083.

A sub-rectangular enclosure defined by gullies 1633, 1721, 1508, cut ditch alignment 2000 and ditches 1740/1521 and enclosed an area about 8m wide and at least 14m long (Fig.27). The full length was uncertain, as the enclosure clearly extended beyond the edge of the excavated area. Each of the enclosure ditches was a shallow, sloping-sided, flat-based feature (Fig.28). Features within the enclosure were either sub-circular or irregular and elongated. All seemed to be of natural origin: many were considered to be animal burrows. The exception to this appeared to be a small pit 1582 (Fig.27), cut by the southern ditch 1508. A series of curving, uneven shallow narrow gullies, 2076, 2082, 2083, 1680 (Fig.27), appear to have formed a boundary running north-west, possibly contemporary with enclosure 2047, since the southernmost gully 1680 appeared to respect the north side of the enclosure (1633 Fig.27). L-shaped feature 2067, much of which lay beyond the limits of the excavated trench, appeared to mark the northern limit of the boundary, since gullies 2082 and 2083 both terminated at 2067. Feature 2083 was cut by the southern edge of 2067, and feature 2082 just cut the southern edge of 2067. Feature 2083 appeared to be associated with a number of small post-holes (2185, 287, 2189, 2162, 2166 Fig.27). It is conceivable that 1680/2083/1731/2082 formed two sides of an enclosure abutting enclosure 2047. It may be that the short lengths of gully 1538 and 1534, which just occurred within Area 8, marked the southern boundary of such an enclosure (Fig.27).

Enclosure 2047 seems to have been a fairly short-lived feature since a series of intercutting ditches/gullies cut its southern side (1501, 1518, 1553, 1735 Fig.27). These features are very similar to those of ditch system 2000 and certainly continued its alignment, beginning in the same location as the features making up alignment 2000. Indeed all these ditches and gullies, together with the multiplicity of small enclosures they appear to form, maintained broadly similar alignments throughout.

Watering Hole/Well 2055 (Fig.41)

A very large oval feature 2055 14.5m × 12m was recorded north of the complex of linear features in Area 8 (Fig.27). The sides of 2055 sloped down to a flat base about 2m deep, with a small, steep-sided oval pit, 2265, 1.15m × 0.95m and 1m deep at the base (Fig.41). The waterlogged fills of 2265 had preserved a wicker lining 2256. A succession of fills accumulated or were deposited within the feature, leaving a hollow (maximum depth 0.8m) which silted up naturally with a brown, relatively stone-free silt loam (2056, Fig.41). The relationship between ditch 2192 and feature 2055 was uncertain. However, it appeared that ditch 2192 cut pit 2266 and was in turn cut by 2285. The feature produced pottery of the mid 3rd to early 5th century.

Features North of 2265

A small group of features lay north of 2265 in the north-east corner of the excavated area (Fig.27). These comprised a probable plough mark of recent origin (2174), three features of probably natural origin (2233, 2231, 2215) and a short length of narrow shallow gully running north-east from a butt end 3.5m from the edge of the trench.

S.284

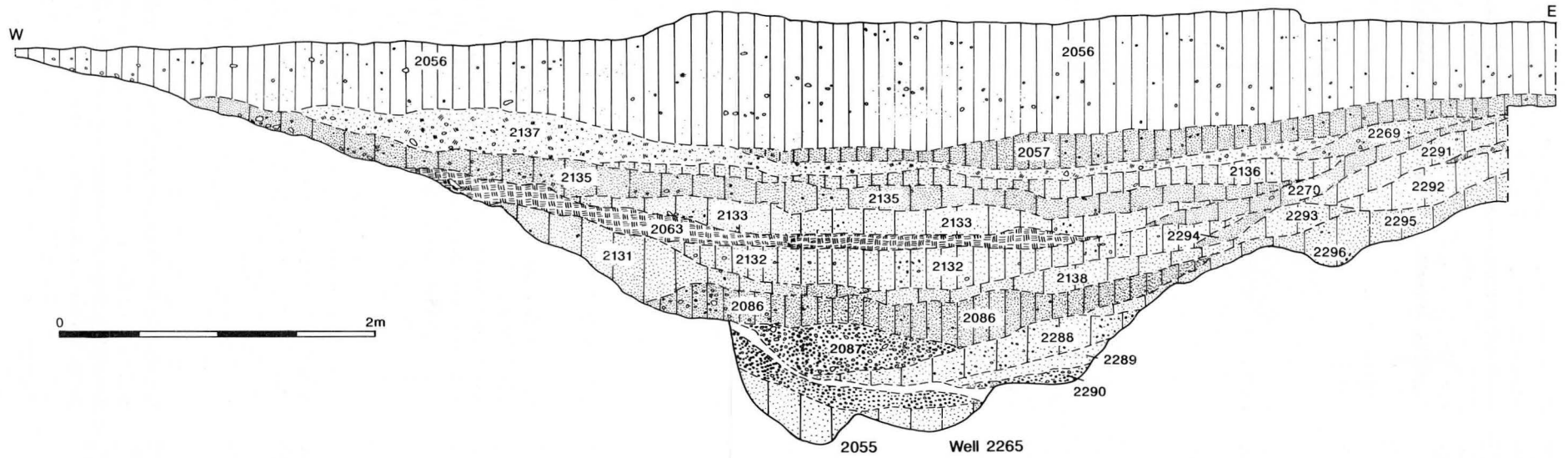


Figure 41 Section of well in CEU Area 8

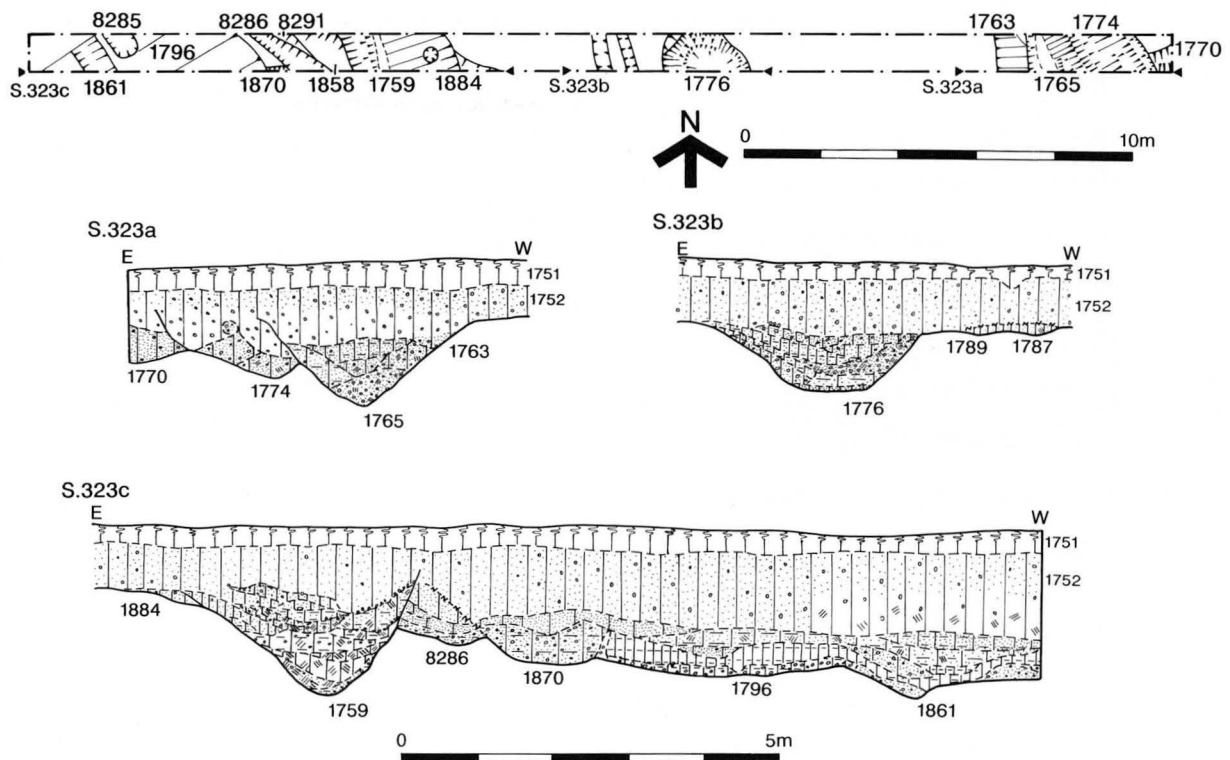


Figure 42 Plan and sections of CEU Area 9

Other Features

A scatter of other features was present in the southern part of the excavated area, the majority being of natural origin. There were also a number of small pits or post-holes of uncertain purpose (Fig.27).

Area 9

(Fig.42)

A 1m x 30m trench placed across the cropmark ditches of trackway C12. The topsoil in this trench was approximately 0.25m deep (1751) and overlay a deep colluvial deposit 0.6m–1.2m deep (1752, Fig.42).

Eastern Trackway Ditch

This ditch was a V-profiled feature (Fig 42), with a number of recuts. The earliest cut 1774 had gently sloping sides, depth 0.8m, surviving width 1.6m; the western side having been completely removed by a later cut (1765). Both cuts produced Roman pottery not closely datable. The latest cut of the trackway ditch, 1765, was a V-profiled feature, depth 1.2m, width 2.4m. The lowest, stony, sandy fill, 1791, appeared to represent collapse of a bank on the western side of the ditch (Fig.42). The alignment of these features was roughly north-west/south-east (Fig.42). A shallow, round-based feature, 1763, depth 0.15m, width 0.7m, may represent a late, partial recut of 1765 (Fig.42). However, besides being a very slight feature, it followed a different north/south alignment (Fig.42). A small part of another feature (1770), possibly a pit (Fig.42) occurred at the extreme east end of the track and was cut by 1774.

Western Trackway Ditch

This ditch was also a V-profiled feature (1759 Fig.42) 1.4m deep, 1.9m wide, with a rapid primary silt (Fig.42)

and no clear sign of any recutting. Feature 1759 cut a shallow narrow ditch 1858/1884 which ran approximately east/west, very little of which survived. It is possible that this feature represents an early phase of the western trackway ditch, although it ran on a very different alignment from 1759. Two similar shallow ditches 8286 and 8291 ran roughly parallel to 1858/1884, most of 8291 having been removed by 8286. A possible pit 1870 cut 8286 on the southern side of the excavated area (Fig.42).

Features West of the Trackway

Part of a large shallow depression 1796 occupied most of the western end of the trench (Fig.42). The bottom of the depression was cut by a shallow V-profiled ditch 1861: a second possible ditch 8285 came to a butt end within depression 1796 which produced Roman pottery not closely datable. These three features were all filled by the same succession of naturally accumulating fills. It is possible that 1796 represents the edge of a pond into which ditches 8285 and 1861 drained.

Features between the Trackway Ditches

Three features were recorded within the trackway; one was a large steep-sided, flat-based pit 1776, 2.5m wide, 0.7m deep, length uncertain as the feature extended beyond the limits of the trench to both north and south (Fig.42). To the west of this feature, two very shallow gullies which run parallel to the two trackway ditches, may be the remains of wheel ruts (Fig.42).

Area 11

The excavated area was sited to cut across, at ninety degrees, two parallel ditches (7502 and 7503) which the cropmarks appeared to indicate formed two sides of a long

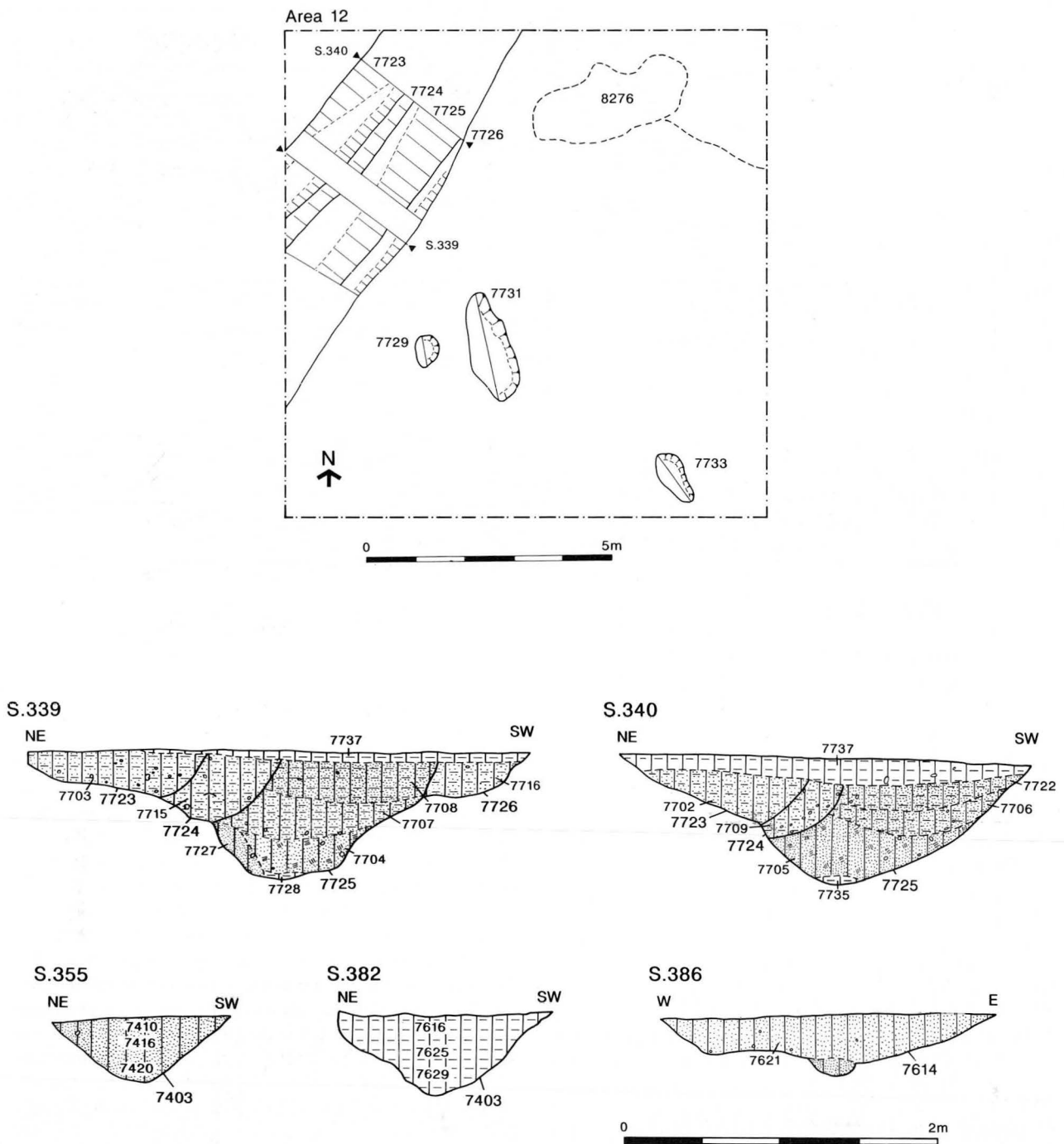


Figure 43 Plan and sections of CEU Area 12

narrow enclosure measuring 400m by 40m. Only the western end of this 'enclosure' appeared well defined by the cropmarks. Here a short length of ditch apparently linked the two longer ditches to form a straight end (Fig.4) to the possible enclosure. The area opened measured 60m in length. The two ditches producing the cropmarks were located but were found to be different in character and date.

Ditch 7502
(Fig.35)

This was a round-bottomed feature 1m wide and 0.4m deep. The filling was a dark yellowish-brown homogenous loam. It contained a mixture of pottery,

predominantly Romano-British but with fragments of Belgic and heavily flint-gritted, presumably Bronze Age, pottery evenly distributed through the filling. Ditch 7503 was of Bronze Age date (above p.51).

Area 12
(Fig.43)

A 10m x 10m box across the eastern ditch of trackway 10 revealed the trackway ditch oriented north-east/ south-west across the corner of the excavated trench. The ditch was 2.6-3.2m wide and 0.8m deep, flat-based and with a stepped profile on the west side (Fig.43). This stepped profile was the result of two recuts of the ditch, each time on a narrower

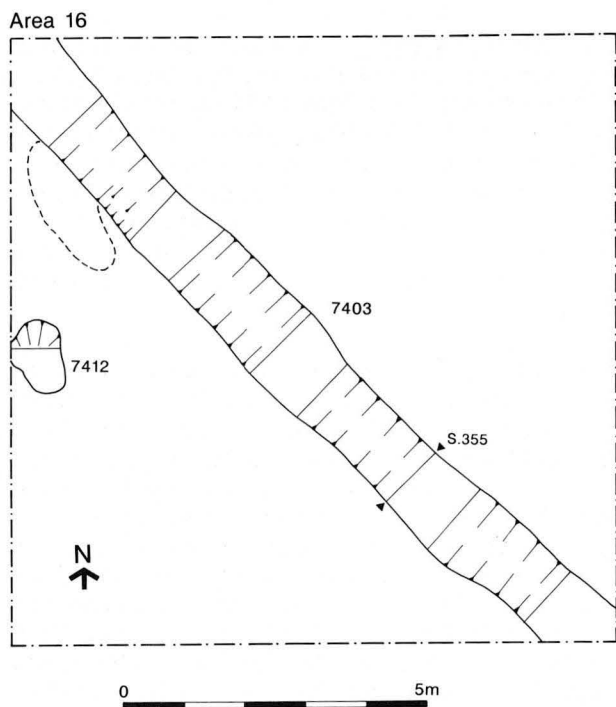


Figure 44 Plan of CEU Area 16

shallower line (7723, 7724, 7725; Fig.43). One of the two excavated segments showed evidence for an early cut of the ditch, 7726 (Fig.43). Pottery of 1st to 2nd-century date was recovered from the excavated segments, the latest recut 7723 producing only 1st-century material. Three irregular shallow scoops probably of natural origin (7729, 7731, 7733 Fig.43) were also recorded.

Area 16 (Fig.44)

A 10 × 10m box, part of a series with 13–15, 17–19, placed to sample concentration of fieldwalking finds and cropmark ditch 7403.

Ditch 7403

This ditch ran diagonally across the excavated area from corner to corner, roughly north-east/south-west; a further length of the same ditch was recorded in Area 19. Ditch 7403 was 1–1.4m wide and 0.45m deep, sloping-sided and round-based. Roman pottery of 1st to 2nd-century date was recovered from this feature.

Other Features

A single irregular hollow (Fig.44), south-west of the ditch, was interpreted as a tree hollow.

Area 19 (Fig.45)

A 10 × 10m box, part of a series with 13–18, placed to sample concentration of fieldwalking finds and cropmark ditch 7403.

Ditch 7403

This ditch ran diagonally corner to corner, roughly north-east/south-west across the excavated area. A further length of the same ditch was recorded in Area 16. Ditch 7403 was 1–1.4m wide and 0.5m deep and of variable profile, sloping-sided and round-based to the north (e.g. Fig.43),

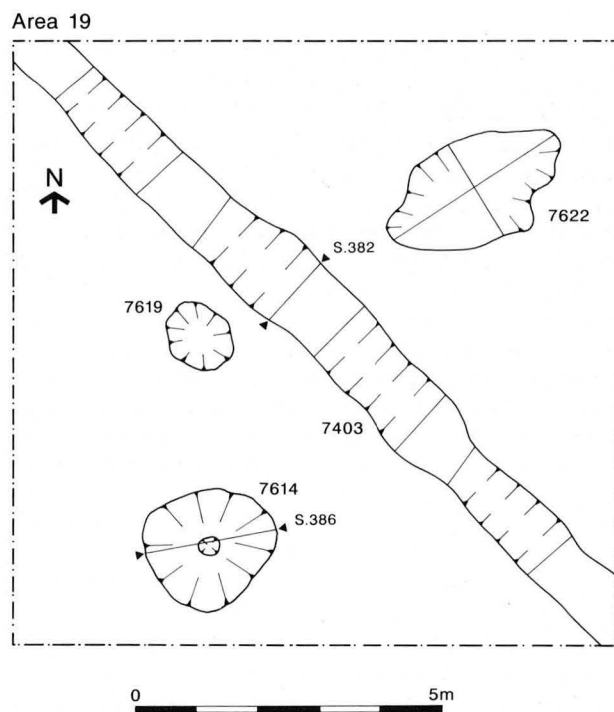


Figure 45 Plan of CEU Area 19

rather more U-shaped to the south. The fill was uniform yellow-brown silt loam, excavated in arbitrary spits.

Other Features

A shallow irregular oval pit 7614 lay south-west of ditch 7403, of length 2.2m, width 2.1m and depth 0.3m. The feature was sloping-sided and flat-based with a roughly circular depression in the centre section. The only other features were two natural hollows, 7619 south-west of the ditch, 7622 north-east of the ditch (Fig.44).

Area 20

The entrance gap in the Bronze Age ditch 7856/7847 (above p.42) seems to have been utilised by trackway C49. The northern side of the trackway was marked in its earliest surviving phase by a narrow shallow gully 7738 (Fig.31). To the south a pair of similar gullies 7852/7853 appear to have defined the southern side of the trackway. These features produced a few sherds of Belgic pottery, and had largely been removed by ditch 7857 (below): a short length of gully (7461 Fig.31) surviving west of 7857 may represent their continuation. A further gully to the north (Fig.31, 7458), hints at the existence of a series of elongated rectilinear enclosures with their eastern boundaries marked by the major Bronze Age ditch 7847/7856. Some indication of the existence of such enclosures to the south can be seen on the cropmark plot (Fig.4).

Subsequently trackway C49 was broadened and extended to the east beyond the line of the Bronze Age ditch. Ditch 7857 (Fig.31) marked the southern side of the trackway; it cut 7847 before turning south, indicating that the boundary had been shifted west. Ditch 7857 was flat-based and fairly steep-sided up to 1m deep and 2m wide (Fig.32 and 34 S827, S733), becoming rather shallower to west (Fig.33, S772). The ditch cut through a large irregular pit 7634 (Fig.34, S827). To the west a short length of ditch 7461 was identified cutting 7857 (Fig.31). This feature could not be traced on the stripped surface and the full extent is therefore uncertain. However, it clearly

did not cut palisade slot 7655 (below). The northern side of the trackway was formed by ditch 7424 (Fig.31), a round-based feature with quite steeply sloping sides, up to 2m wide and 0.7m deep (Fig.33). A large deposit of sandy gravel might represent material from a collapsed bank (Fig.33, S786), for which 7458 might be interpreted as a revetment slot. Following the deposition of this gravelly deposit, the ditch appears to have been recut on a rather shallower line slightly to the south (Fig.31, S786). This recut and possible evidence for bank collapse only occur in the western sections and are not present to the east where the fills are fairly homogenous (Fig.32, S736). The feature came to a butt end within the line of Bronze Age ditch 7856. This may indicate that the western boundary continued to be along the line of the Bronze Age ditch (Fig.31). However, it seems likely that the northern trackway boundary was continued by 7776 (Fig.31). This feature curved north along the line later followed by 7834 (Fig.31), and would provide a good match for the course of 7857 to the south. In this case, the gap of about 7m between the butt ends of 7424 and 7766 (Fig.31) could be an entrance into an enclosure north of the trackway. Following this westward extension and widening of the trackway a dramatic change occurred, in which the settlement was provided with quite substantial and regular defences. The western boundary was marked by a straight ditch (7834 and 7898 Fig.31) backed by a palisade slot, and the width of trackway C49 was narrowed to just 3m to pass through an entrance gap (Pl.XVIII) provided with a fairly elaborate gate structure (Fig.31). Ditches 7834 and

7898 were V-profiled, up to 2m wide and 0.8m deep, with suggestions of a slot at the bottom of the ditch (Fig.32).

The palisade trench 7640/7655 ran parallel to and 1–1.5m east of ditch 7834/7898 (Fig.31). This feature was 0.2–0.4m wide and up to 0.4m deep, although the northern slot (7640) had various gaps where the feature faded out completely (Fig.31). A number of substantial post-holes were present in the base of the palisade slot, spaced 2–2.5m apart. These post-holes were sub-circular or oval in plan and steep-sided (Figs 31, 33–34).

The gate structure included two post-holes (7559, 7440) associated with the butt ends of ditches 7834 and 7898 respectively. Both these post-holes were oval and quite shallow features (Fig.31). Two more substantial post settings 7641 and 7667 were associated with palisade slots 7640, 7655, the post sockets being 0.8m deep (Fig.33) and both had traces of ramps, resulting from post insertion, running at right angles to the line of the palisade (Fig.33).

The defences do not appear to have been long lived, and trackway C49 was again widened to 9m marked by two ditches, 7832 to the south and 7833 to the north. Ditch 7832 cut both palisade slot 7655 and ditch 7898, turning south to run along the line of the western edge of 7898. To the east 7832 was sloping-sided and flat-based, becoming deeper and more steeply sided to the west. Where it ran along the line of 7898 the ditch echoed the deep V profile of the preceding defensive work. The northern ditch shows multiple recuts in the easternmost section (Fig.32, S730), a gravelly deposit on the south side might derive from a bank along the edge of the trackway. Ditch 7833 became



Plate XVIII CEU Area 20 looking south-east. Bronze Age ditch 78847/7856 runs across the centre with entrance gap clearly defined by ditch butts. The successive ditches marking the course of trackway C49, originally aligned on the gap in the Bronze Age ditch, also show clearly. The palisade slot, entrance structure and ditch of the early Roman defences are in the foreground. Metric scale

progressively shallower and narrower towards the west (Fig.33, S776) and the recut along defensive ditch 7834 could only be traced for about 3m, presumably indicating that ditch 7834 was still open to the north.

Wells

Two large wells or watering holes were recorded, one to the south (7683), the other to the north (7671) of trackway 7500. Both features lay close to the eastern edge of Bronze Age ditch 7847/7856 (Fig.31) presumably indicating that these features were constructed during the earliest phase of the Roman settlement when 7847/7856 might still have formed the settlement boundary.

Feature 7671 was roughly pear-shaped, about 7m long and 4m wide with a rounded end to the south west and an elongated 'tail' to the north end. The feature was 8.5m deep at the south-east where the sides were very steep, possibly indicating they had been supported by some form of revetting. By contrast the 'tail' sloped gradually to the surface, possibly allowing access to the waterhole (Fig.33).

Feature 7683 was a sub-circular feature about 4m in diameter and 4m deep with steeply sloping sides (Fig.34). The base of the feature preserved part of a substantial wooden framework (8259, Pl.XIX) about 1m square and surviving to a height of 1.2m. The frame consisted of four uprights linked by horizontal timbers, shaped at the ends and slotted into holes cut into the uprights. The sides of the frame were formed by timber boards nailed to the uprights (Fig.34). A short length of shallow ditch ran north-east from the north side of well 7908.

Area 21

The defensive ditch and palisade recorded in Area 20 also occurred in this area, recorded as ditches 8212, 8151 and palisade slot 8248 (Fig.29). The defensive ditch was a 1.5–2m, wide V-profiled feature and about 1m deep (Fig.38, S820), cut along the top of Bronze Age ditch 8086 (8212, Fig.30, S858) and turning at the butt end of 8086, with a sharp, almost right-angled turn, to run north-east/south-west (8151 Fig.29).

Palisade slot 8248 ran parallel to 8151/8212 about 1m from 8151 and 1.5m from 8212 (Fig.29, Pl.XX). The palisade could only be traced for a short length running parallel with 8212, but showed very clearly as a feature 0.3m wide, with major post-holes parallel to 8151, with ramps resulting from post insertion spaced 3m apart (8243, 8241, Fig.30). The post sockets were rectangular in plan, steep sided and 0.4m deep (Fig.30). The north-west corner of the palisade slot was marked by a pair of double

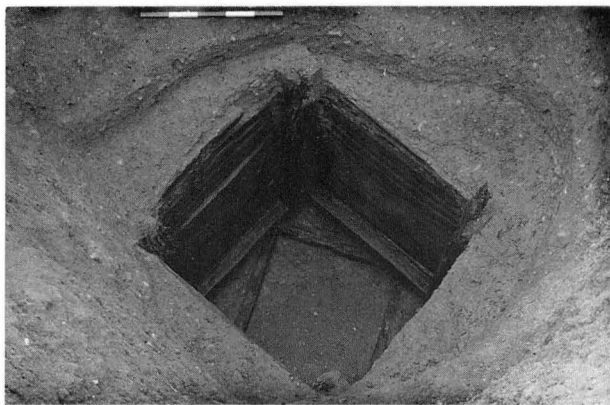


Plate XIX Wooden frame at base of well 7683 CEU
Area 20. Metric scale

post-holes 8245 and 8246 forming a sharp right angle (Fig.29). A line of sub-circular post-holes 0.12–0.16m deep ran parallel to and between 8212 and 8048 (8233, 8231, 8229, 8227, 8225, 8223, Fig.S29 and 30). A pair of similar posts (8219, 8221) were recorded west of 8151 (Fig.29).

The corner of the defensive system seems to have been abandoned, and the line of 8212 extended south west (8056/8076 Fig.29) beyond the butt end of Bronze Age ditch 8086. Ditches 8059/8076 presumably represent a similar phase of development of the western settlement boundary as ditch 7832 in Area 20 to the north. A ditch (8067 Fig.29), running parallel to the western settlement boundary marked by 8086/8212/8059, produced pottery of the 2nd century AD and could represent a slight westward shift of the boundary or the establishment of a trackway along the western boundary. A narrow ditch (8160 Fig.29) parallel to 8151 cut the upper fills of 8086 and was cut by defensive ditch 8212. Ditch 8160 may relate to the series of narrow enclosures which utilised Bronze Age ditch 8086 as their western boundaries and are represented as excavated features in Area 20 (above p.62) and as cropmarks (Fig.4). The feature may be of Late Iron Age date: a narrow ditch 8092 (Fig.29) which cut it, yielded mid to late 1st-century AD ceramics. Also of Late Iron Age date was a large pit in the south-east corner of Area 21 (8180 Fig.29).

Two irregular excavation trenches 8096, 8178 and a narrow trench 8064 dug in the 1960s were located and had revealed a kiln and parts of ditches 8086 and 8212 (Fig.29) immediately adjacent to one of the 1960s excavations 8178 (Fig.29).

The kiln structure 8184 had been set into the upper fill of ditches 8212 and 8086 (Fig.29). The structure had been severely disturbed by the earlier excavation trench (8096 Fig.29). The kiln consisted of a central oval chamber 1.2 × 1.4m, with two flues at the north-west and south-east ends (Fig.29). Very little of the fired clay walls of the structure survived (8193, 8196), the maximum height of the walls being 0.12m. Layer 8194 seems to have provided a floor during an early kiln firing, and was overlain by 8172 which formed the base for a subsequent firing. Little pottery or other kiln debris was recovered, probably as a result of its removal by the excavations of the 1960s. The rather sparse records of this earlier work indicate that firebars and much pottery were recovered from the area.

Area 22

(Fig.46)

An area measuring 15m square was opened, centred on a point where the fieldwalking exercise showed a heavy concentration of pottery in the ploughsoil. The excavation revealed two parallel ditches (8007 and 8008, Fig.45) The former turned within the excavated area and continued at ninety degrees as ditch 8009 cutting 8008. Ditches 8007 and 8008 ran at ninety degrees to, and ditch 8009 parallel with, the alignment of the major Bronze Age ditch 7847/7856 which clearly had a major influence on the orientation of the later settlement features in this area.

The filling of all three ditches was a yellowish-brown sandy loam. In spite of this similarity, the fact that ditch 8009 cut across ditch 8008 was clearly apparent. The contemporaneity of ditches 8007 and 8009 further indicates that ditch 8008 was the earliest of the three features, with the two later ditches apparently defining two sides of an enclosure.

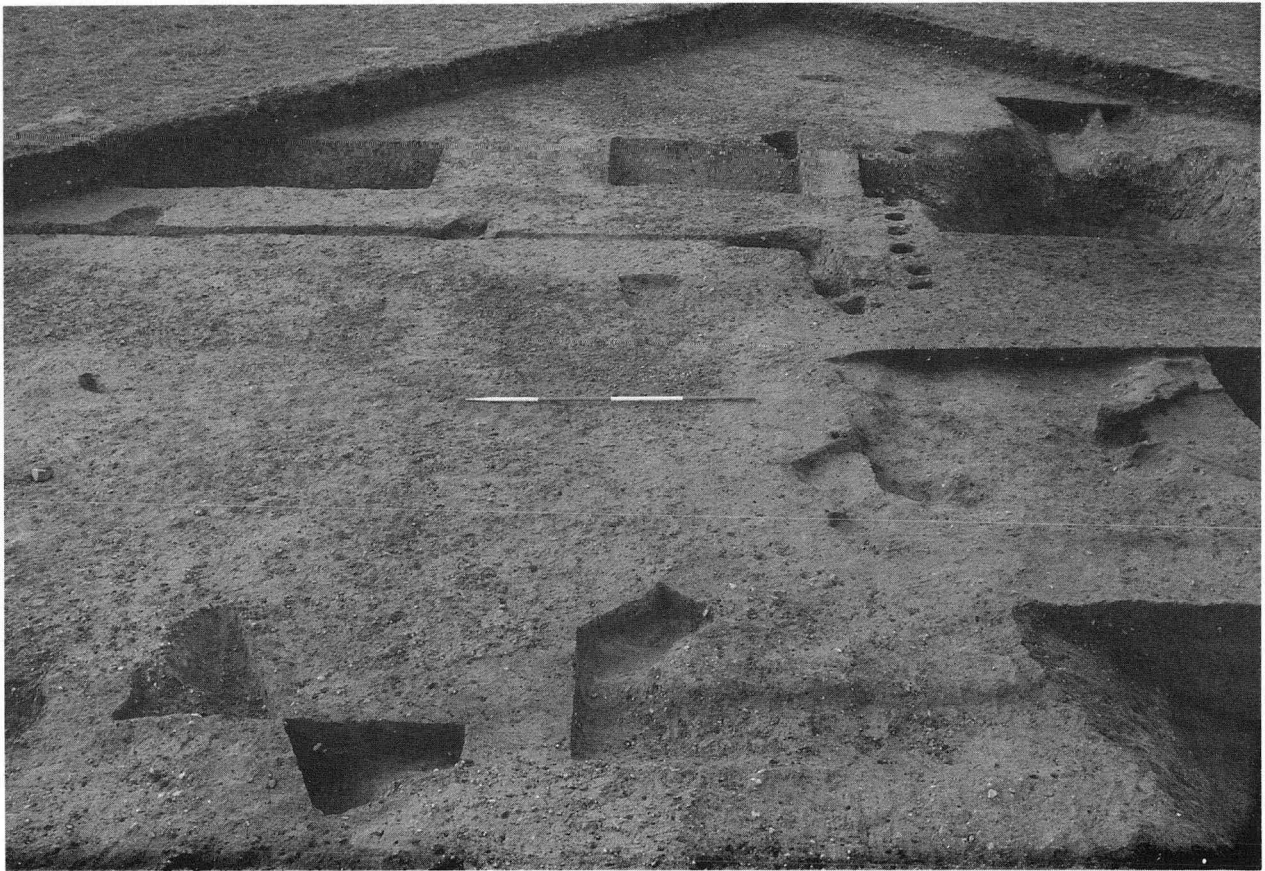
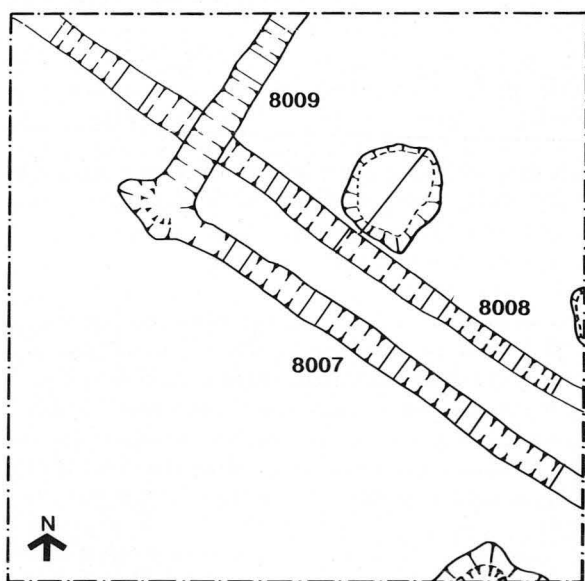


Plate XX CEU Area 21 looking south-west. Butt end of large Bronze Age ditch 8086 is in the top right with shallower Roman recuts (8056, 8076) which extended beyond the butt are visible. Palisade slot and ditch of the early Roman defences are visible at the top of the plate, with row of post-holes possibly associated. The severely truncated remains of the base of kiln 8184 can be seen at the centre right edge of the plate. Metric scale

Area 22



0 10m

Figure 46 Plan of CEU Area 22

Ditch 8009 was 0.25 deep and 0.65 wide and ran parallel to ditch 8008. The space between the ditches was slightly over 1m. The butt end of ditch 8007 projected slightly beyond its junction with the end of ditch 8009, suggesting that although the two ditches appear to be contemporary and may represent the corner of an enclosure they were originally dug separately (Fig.45).

Ditch 8008 was 0.3m deep and 0.6m wide with a V-shaped profile. It had the appearance of having been deliberately back-filled with material containing a substantial quantity of charcoal and a large quantity of pottery. The pottery was particularly concentrated in the central part of the ditch's length within the excavated area and was broadly of 1st-century AD date.

A large irregular pit and parts of two others were also recorded (Fig.45), all undatable.

Saxon

Little unequivocal evidence of Saxon date has been recovered from the excavations at Ardleigh. However, some features in Area 7 appear likely to belong to this period. Three inhumation graves 1269, 1098, 1158, (Figs 24 and 47) were recorded, orientated roughly east-west. These burials lay within the area of the Bronze Age barrow cemetery, and either lacked grave goods or contained a simple iron knife.

47

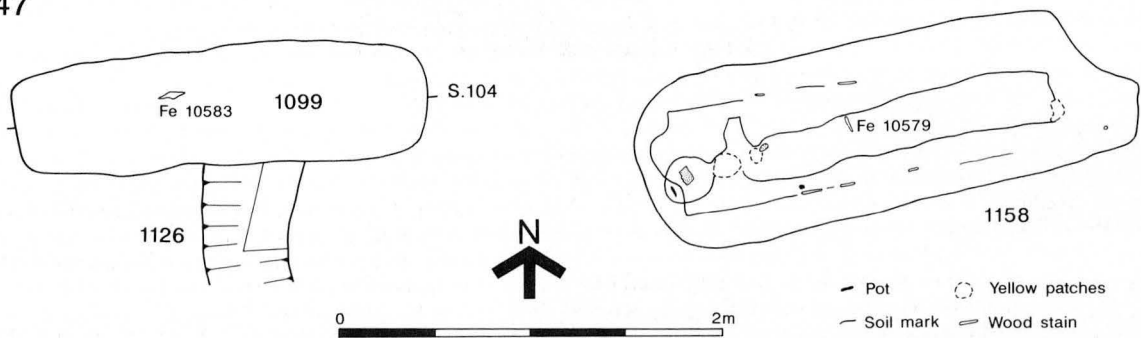


Figure 47 Grave plan of Saxon graves in CEU Area 7

Grave 1260
(Figs 24 and 47)

This feature lay south of ring-ditch 1030 and east of 1320. It was 2.15m long and 0.62m wide, with a sub-circular depression at the east end. The fill, a yellow brown sandy silt loam, contained no grave goods or trace of coffin/body stain.

Grave 1099
(Figs 24 and 47)

This feature cut the ditch of ring-ditch 1021. It was 2.12m long and 0.62m wide. The fill of yellow brown sandy loam was notably more stony towards the base of the feature. There was no trace of coffin or body stain, but an iron knife was present, resting on the natural gravel at the bottom of the feature.

Grave 1158
(Fig.47)

This feature cut the ditch of ring-ditch 1158 and an undated gully 1068, and was 2.8m long by 1.05m wide. The fill of yellow brown sandy loam contained clear coffin and body stains (Fig.47). An iron knife blade lay within the fill. Grave 1158 lay at the centre of a discontinuous circular gully i.

Gully 1056
(Fig.24)

This feature comprised a narrow, shallow circular gully with three gaps. The eastern and north-western gaps in the circle appear to be the result of plough erosion but the south-western gap, 3m across, may be rather different; three small post-holes (1343, 1438, 1444) lay at the centre of the gap. 1056 cut the ditches of Bronze Age rings 1024, 1030 and 1052. Even where best preserved, gully 1056 was no more than 0.10m deep and survived only as a shallow-sided feature up to 0.55m wide. The form of the ditch would not suggest a construction trench. It seems possible that 1056 surrounded a barrow mound covering grave 1158.

Ditch/gullies 1217/1059 and 1123
(Fig.24)

Irregular gully 1217/1059 appears to be aligned on the edge of the presumed barrow mound within 1056. The gully cut the ditches of 1056, but was broken by a 5m wide gap within 1056. This could be the result of shallow ditch 1217/1059 being cut through the edge of a barrow mound, subsequently removed by ploughing.

A second narrow shallow gully, 1123, also appears to have been aligned on 1056; 1123 curves around the north side of 1056 to join with 1217/1059. Assuming that the western side of trackway C10 was still extant, these features would have formed an irregular triangular field with 1056 at its apex. If the assumption that the graves are Early/Middle Saxon is correct, then gullies 1217/1059 and 1123 would presumably be Middle/Late Saxon.

The major difficulty with such dating is the recorded stratigraphic relationship with ditch 1451 which is clearly of Roman origin (above p.56). Plans and context records clearly depict ring 1056 and gullies 1123/1217/1059 cutting numerous Bronze Age ring-ditches, and themselves being cut by 1451. However, given the difficulties likely to be encountered in discerning shallow features cut into the upper fills of larger ditches, it may be that the relationships were mistakenly recorded. This is particularly likely since the fills of all the features concerned appear to derive from weathering of the surrounding natural, and were therefore very similar. These difficulties are likely to have been compounded by the dry, sunny weather, which the colour slides clearly show to have produced a pale bleached appearance on features and natural gravel alike.

Only two sherds of Saxon pottery were recovered from the excavations. A single sherd was recovered from the fill of 546, a small feature east of trackway C10 in Area 4. The second sherd derived from the fill of ditch 679 in Area 5. This feature cut, and came to a butt end within, the fill of ring-ditch 652, and could be traced as a slightly sinuous linear cropmark running north broadly parallel to the road leading to the crossroads at the centre of Ardleigh village (Fig.4).

Part III. The Finds

I. Introduction

The nature of the early excavations at Ardleigh, and the long period of time which elapsed between the CEU work and the preparation of this report, have led to a number of problems and gaps in the finds record. There are no records of any flints from the CAG excavations and it appears that flintwork was not collected, and perhaps not recognised. Complete or near complete urns from CAG ring-ditch excavations have been located, but most of the sherd material has proved elusive. Cremated bone from the original urnfield cremations was not reported on, and most of it cannot now be located. Certain of the CAG ring-ditch excavations have bone reports, although others do not. The coins from CEU work cannot be located despite diligent searches at English Heritage and Colchester Museum, and enquiries to various specialists. The Roman pottery report contains comments on coins from some contexts based on information obtained before the coins were mislaid. Much of the illustrated prehistoric pottery from the CEU excavations is also missing.

II. Metal Objects

by H.J. Major

Finds from Graves

For details of illustrated pottery see below (p.140).

Grave 651

(Figs 48 and 49)

Four **S-shaped iron strips**; three are complete, and the fourth is damaged. They are described as being found 'back to back' and upright outside the two southern corners of the coffin, 10462 and 10291 being one pair, and 10460 and 10461 the other. All have mineralised wood on both faces at one end, with the grain across the width of the objects. On the three which have been most fully cleaned, the wood is in a band along one edge, 14–20mm wide, and appears to stop c. 58–70mm from the end. The object (10291) which has not been fully cleaned may have wood across the whole width. The lumps on the surface which resemble rivets appear to be fortuitous corrosion.

The purpose of these objects is unknown. They may be part of a piece of furniture, perhaps a folding stool.

1. L105mm, W34mm. Slight damage to the edge. Mineralised wood survives in a strip 14mm wide on one edge at one end, and on both faces, including the curved part. There is a roughly rectangular lump towards one end; this may just be corrosion. No.10462.
2. L120mm, W28mm. Incomplete, one end missing. This strip appears slightly longer than the others, but this may be due to the surviving end having been glued back on at the wrong angle. There is mineralised wood at the broken end, on both faces, possibly not across the whole width, and possibly stopping c. 70mm from the end. There is a lump on the surface towards one end, but this may just be corrosion. No.10291.
3. L113mm, W28mm. The surface has not been cleaned to the same extent as the other objects, and there is mineralised wood on both surfaces at one end. There does not appear to be a lump on the surface. No.10460.
4. L104mm, W27mm. There is mineralised wood on the surface at one end, in a strip 20mm wide along the edge, and on both sides. The wood may extend c. 58mm from the end. There is a lump near one end, possibly just corrosion. No.10461.
5. **Copper-alloy brooch**. A P-shaped brooch with a nine-coil spring with the chord under the bow, and an iron axis bar. The

head end of the bow is simply wrapped round the axis bar, and projects along the underside of the bow. The rectangular-sectioned bow has a line down each edge, and the foot has transverse lines and cut-out edges. The catchplate is semi-tubular. L59mm. No.10455.

This type of P-shaped brooch, with a long, open spring, is of continental origin and is rare in Britain. The shape itself is more common, but with either a hinged bow, or an enclosed spring.

6. **Copper-alloy bracelet** in two joining pieces, surface poor in places. Rectangular section of constant width, hook-and-eye fastening. Diam c. 56mm. It has panels of ring and dot decoration, lines down each edge and notches along the edge. No.A3305.
7. **Copper-alloy bracelet**, very similar, but not quite identical to A3305. The 'eye' end is longer on this one, and has a slightly different pattern. It is possible that the end of A3305 was damaged, and a new hole punched. No.A3305b.
8. **Copper-alloy bracelet**. Strip bracelet with multiple motifs, in poor condition. Hook-and-eye fastening, both ends damaged. Diam 57mm. No.A3305b.
9. **Copper-alloy bracelet**. Three fragments from an incomplete strip bracelet with a notched edge. No.A3305b.

Grave 634

(Fig.48)

1. **Iron knife** in poor condition, badly cracked. Tanged, with a leaf-shaped blade and traces of a ?wooden handle. No.10493.
2. **Iron bodkin** with rectangular section, and large rectangular eye. L165mm. No.10494.
3. **Iron buckle**, D-shaped, possibly with a constriction for the tongue. The cross bar may be slightly thickened, although this is possibly just corrosion. W35mm. No.10495.
- n.ill. **Copper-alloy sheet** fragment. Rectangular fragment with a corrugated edge, second corrugation 8mm in.No. 10466.

Grave 636

(Fig.48)

1. **Iron brooch**. A P-shaped brooch with a nine or ten-coil spring with the chord under the bow, and an iron axis bar; the pin is damaged. The strip bow terminates in a slightly tapering foot with a semi-tubular catch plate. The bow has been attached to the axis pin by wrapping the end round it. L55mm. No.10161.

This brooch is virtually identical to the copper-alloy brooch from grave 651, but is in iron. The style is so similar that it seems likely that it has a common source.

Burial 638

- n.ill. **Iron hobnail**, with fragments of ?mineralised leather. Context 639. No.10497.

Burial 646

- n.ill. **Iron pan** (natural). Context 637. No.10281.

Grave 702

- n.ill. **Iron pan** (natural). Context 703. No.10484.
- n.ill. **Iron fragment** with a circular section, curved). Possibly part of a ring with an internal diameter of c. 20mm; also another fragment, possibly from the same object. No.10485.
- n.ill. **Iron nail shaft**. No.10485.
- n.ill. **Iron nail shaft**. No.10533.

Grave 1099

(Fig.49)

1. **Iron knife**. Tanged, with a straight back, curving at the point, and a straight cutting edge. There are traces of a handle, probably bone or horn. L139mm. No.10583.

Grave 1158

(Fig.49)

1. **Iron knife**. No.10579.

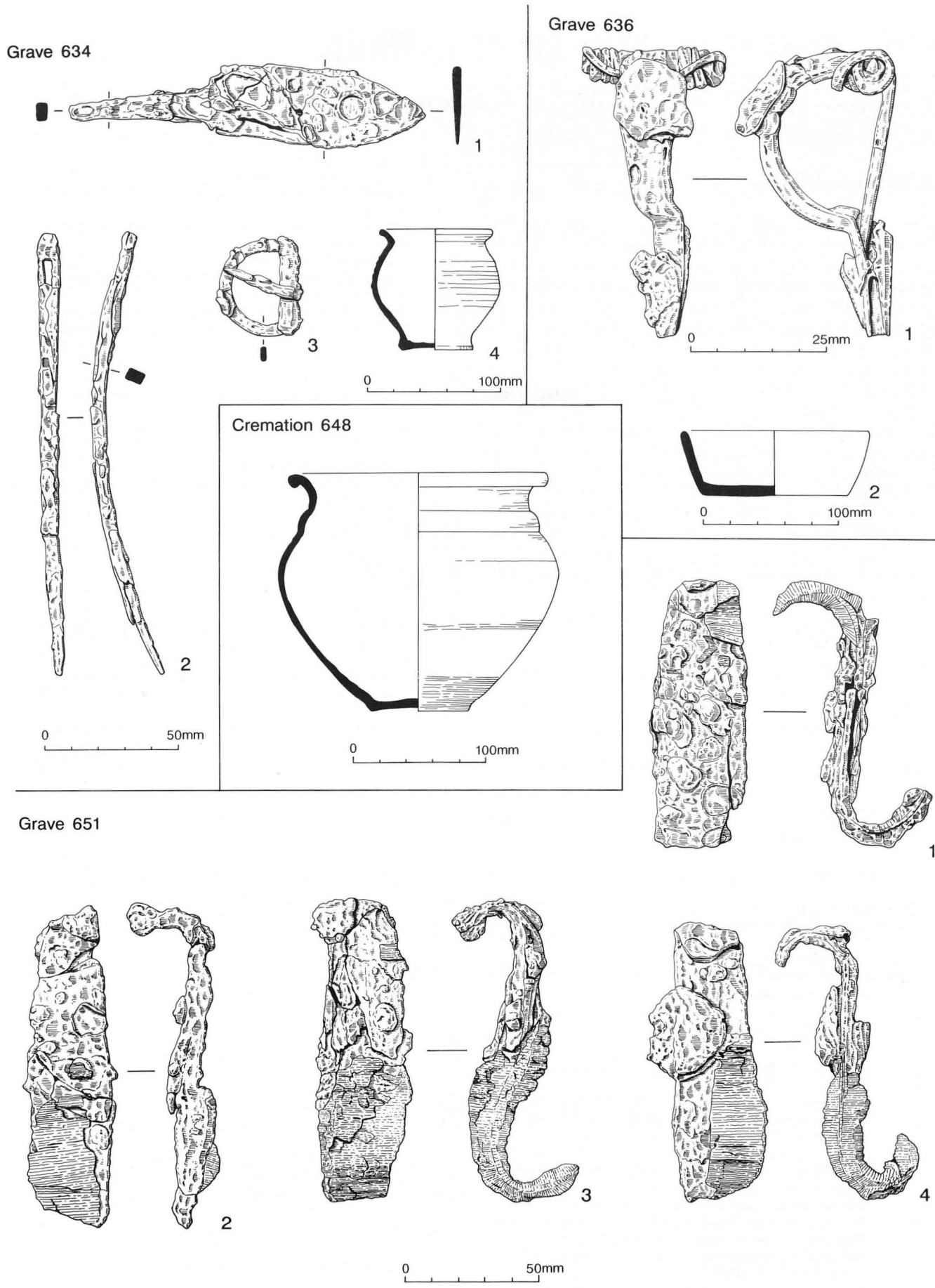
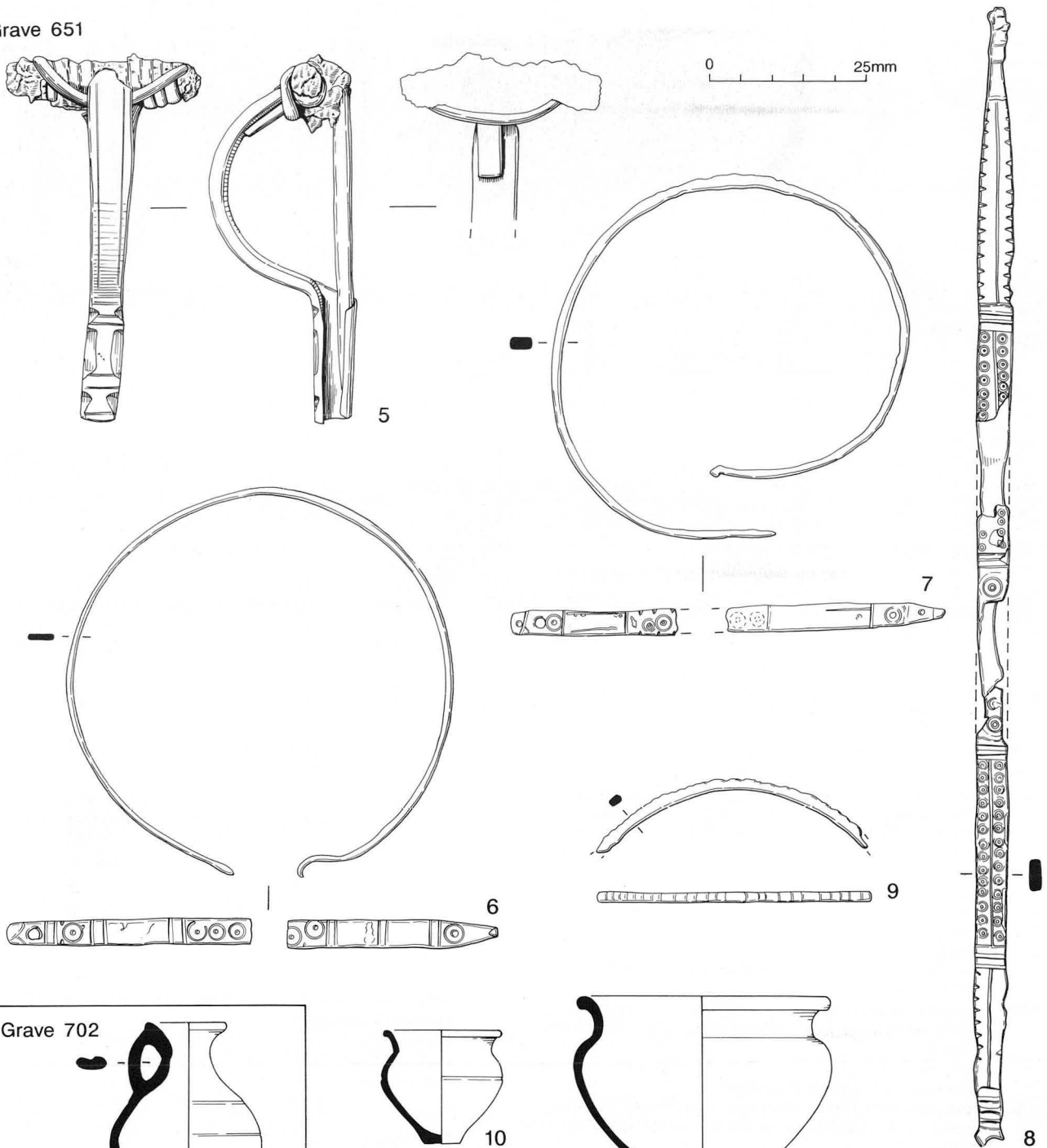
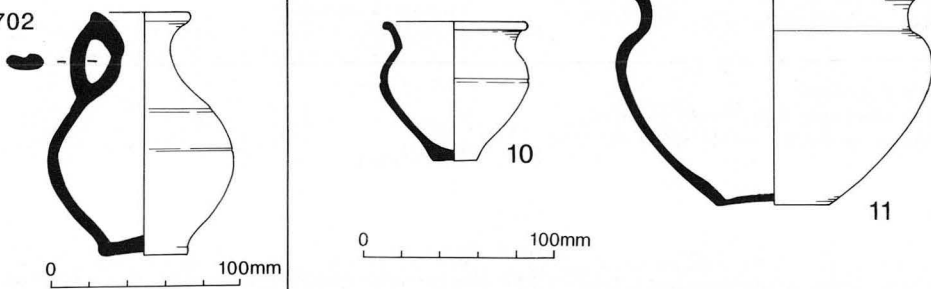


Figure 48 Grave goods: CEU Area 5 Roman burial cremation 648 graves 634, 636 and 651 (part)

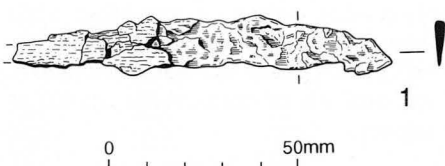
Grave 651



Grave 702



Grave 1158



Grave 1099



Figure 49 Grave goods: CEU Area 5 Roman burials graves 651 (part) and 702; Area 7 Saxon burials graves 1099 and 1158

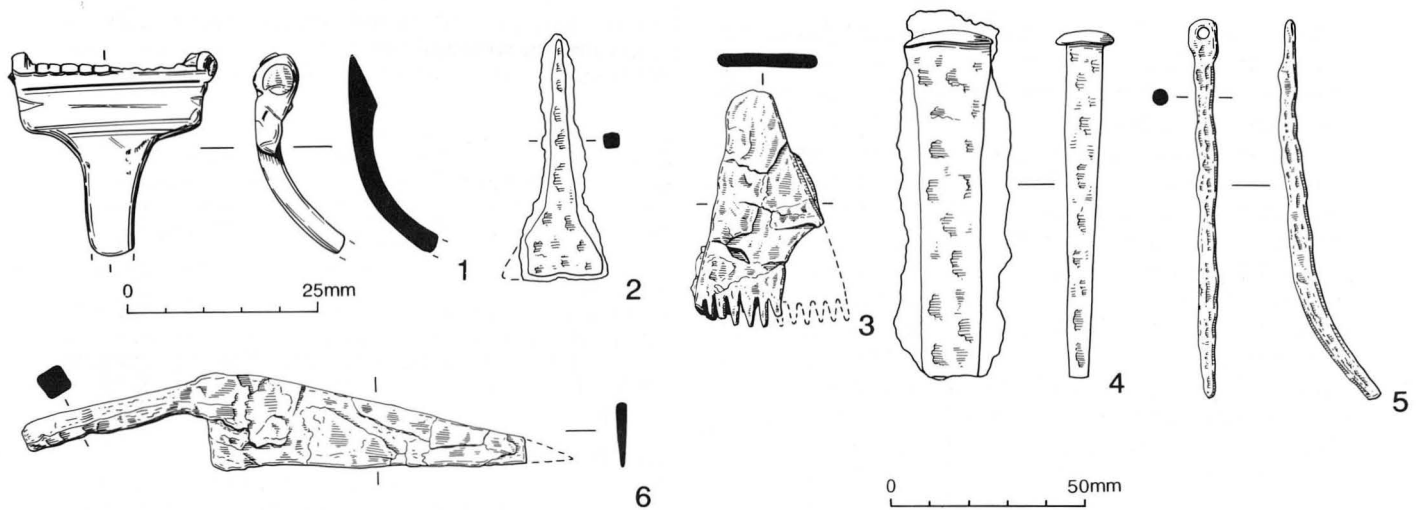


Figure 50 Metal small finds

Finds not associated with burials (Fig.50)

Copper-alloy brooches

- n.ill. **Colchester brooch** in poor condition, half of bow missing. Short side wings, undecorated. (1157, ditch 1003, Late Flavian/Hadrianic).
- n.ill. Small **Colchester brooch** in poor condition, with a long chord hook and a sharply angled bow, now distorted and incomplete. (7750, ditch 7857, Neronian/Flavian).
- 50.1 Head from an early Saxon **supporting-arm brooch** with a flat rectangular head decorated with transverse lines, and shallow notches along the front edge. The spring is missing. The type is rare in Britain, but two others are known from Essex, from Springfield (Tyler 1990) and Henham (Tyler 1995). (lower ploughsoil).

Other copper-alloy objects

The other copper-alloy objects from Roman contexts were all fragmentary; none are illustrated.

- n.ill. **Rod** fragment, possibly a brooch pin or hairpin shaft. L22mm. The context also contained some small, broken, sheet fragments (1716, ditch 1721).
- n.ill. **Bracelet** fragment, with a D-shaped section. The surface is in poor condition, but it is probably plain. (2161, well 2055, Roman).
- n.ill. **Strip** fragment, broken at one end, the other end curled over and perforated. W 15mm (7621, pit 7614).
- n.ill. **Rod**, made from a tightly rolled strip, with a flattened terminal, curved in the same plane as the rod. (7886, ditch 7857, Neronian/Flavian).
- n.ill. **Mirror** fragment, with one straight, chamfered edge. (7991, well 7683, Neronian/Flavian).

Iron objects

The iron objects from the site were somewhat undistinguished. They included assorted horseshoe fragments and other post-Roman material from the topsoil, and the usual small sheet scraps and bar fragments from Roman contexts. There is a full list in the archive.

There were sixty-one nails and forty-seven nail shafts. This includes fourteen hobnails, all from Area 1. Only three are from stratified contexts, the remainder are probably post-medieval. The majority of the nails are the standard Roman type with a flat, round or sub-rectangular head. Two nails have domed heads (from 531 and 7991) and one has a large square head. The latter is probably post-Roman.

- n.ill. Four fragments, probably parts of a **latch lifter** with a flat handle. (7049, ditch 7012).
- n.ill. **Strip** terminal with rounded end. W20mm, L25mm (7439, ditch 7843).
- 50.2 Possible small **chisel**, with a square sectioned tang and roughly triangular blade, possibly incomplete. The edge may be slightly turned over, although the apparent curve at one corner is due to corrosion. (7468, ditch 7857).

- n.ill. **Rod**, section uncertain. It is pointed at one end, and broken at the other. This may be a stylus with a broken eraser, although it could just be a nail shaft. L107mm (7483, ditch 7857).
- 50.3 A triangular **plate tool** with a rounded butt. One corner is missing. The wide end is toothed, and originally had about twelve teeth. Some teeth survive to their original length. The object was presumably set in a handle, as it is too small to be held comfortably on its own. This is probably a type of leather working tool, known as a stabbing pricker, or prick iron, used for marking out a series of holes to guide the awl before sewing (Salaman 1986, 164). Parallels from other sites can be in iron (Buildings Farm, Dunmow, Major in prep.), or copper alloy; (Ivy Chimneys, Webster in prep., and Caister-on-Sea, Darling and Gurney 1993, 115), the latter citing examples from Silchester, Chalton, Portchester, Verulamium and Chedworth. L61mm. (7678, ditch 7766).
- 50.4 **Wedge** or small cold chisel. The head is slightly thickened, and it has a rectangular section of constant width, tapering gently to the point. L90mm, max. section 22 × c.13mm (7818, ditch 7832).
- n.ill. **Ring**, circular section, diam. 4mm. Int. diam. 55mm (8016, ditch 8008).
- 50.5 Curved **rod** with circular section, end broken, flattened perforated terminal. L106mm, diam. 5mm (8098, ditch 8092, mid-late 1st century).
- 50.6 **Knife**. Tanged, angled between the tang and the blade, triangular blade. L130mm (8186, ditch or pit 8180, Late Iron Age/1st century).

III. The Stone

Flint

by P. Berridge

572 flints were recovered during the excavations at Ardleigh. Only a very small number can be linked with possible contemporaneous features with the vast majority coming from clearly residual contexts. For this reason and the lack of any evidence for spatial patterning, see below, it has been decided to treat the assemblage as a whole (a full breakdown and analysis of material by context is available in the archive).

Raw Material

The assemblage is entirely composed of flint. 330 pieces retain areas of cortex, though in the case of 68 (20%) this is of uncertain type. The majority, 223 (68%), have cortex which is consistent with a gravel or beach source. Given that surface gravels occur at the site, these are the most

likely source. Such a source would also be consistent with the use of relatively small lumps of raw material which is one of the possible explanations for the relatively high proportion of pieces retaining areas of cortex (58% of the total assemblage). A more distant source is suggested by the apparent unaltered nodular cortex found on the remaining thirty-nine pieces (12%). A limited amount of collection from surface gravels, conducted by the author, in the Colchester area has not so far produced pieces with comparable cortex. This may imply that this type of raw material was directly derived from a primary chalk source. The nearest surface outcrop of chalk is some 20km to the north of Ardleigh. A chalk source should however be regarded as tentative until greater knowledge regarding the range of cortex types that can be found amongst secondary deposits in the area has been obtained.

Condition

Of material presented for study only a small amount shows signs of burning, nine pieces (less than 2%). This seems likely to be due to selective recovery during excavation rather than a true reflection of prehistoric activity. The bulk of the flint ranges from grey-black to black in colour. There are however a small number which display a greater colour range and various degrees of patination. Some of the latter also show technological features which suggest that the difference is chronological, as will be discussed later. There are also a small number of apparently struck pieces that are rolled through post-depositional agencies.

Composition

The assemblage can be broken down into three broad categories: the parent waste (7%); product waste (59%); and the utilised and retouched pieces (34%). Each of these categories is discussed below.

Parent Waste

40 pieces (7% of the assemblage) can be placed in the category of parent waste. Parent waste comprises cores, core fragments, rough flaked lumps and pebbles or nodules. Of these pieces twenty can be categorised as formal cores and the other twenty as core fragments and lumps. Of the cores: ten have only one striking platform; six have two, two have three or more; and one is keeled (that is flakes are struck in alternate directions along a single edge). Most of the cores are relatively irregular, have clearly mainly produced flakes, and have limited evidence of platform preparation. There are several instances of no preparation at all with the outer cortical surface forming the striking platform. Only four cores reveal a regular pattern of removals. Of these three are further distinctive in that two have clearly predominantly produced blades while the third, as well as showing controlled flaking from three platforms, is patinated blue-grey. It seems probable that some or all of these four cores pre-date the bulk of the assemblage and are likely to be Mesolithic or Neolithic in date.

Product Waste

338 pieces (59% of the assemblage) can be placed in the category of product waste. This term covers material, apparently unused, that is struck from the parent blocks or is created as by-products of tool manufacture. As is normal this is the largest part of the assemblage. The 338 pieces can be broadly be divided into four types: 229 complete flakes and blades; 103 broken flakes and blades; 5 core preparation and rejuvenation flakes, and 1 microburin.

Flakes and blades

Though no detailed length breadth analysis was done, all the 229 complete flakes and blades were classified into one of three categories; length twice or more greater than the width (28–12%); length greater than width but less than twice (59–26%); and width greater than length (142 – 62%). This clearly shows that the assemblage is dominated by flakes, which has clear implications for the dating of the bulk of the material, as will be discussed later. There are however a small group of well-formed blades and blade fragments among the collection. These seem likely to

relate to an earlier period of activity than the majority of the collection and given the presence of a microburin and microlithic form among the collection (see below) these seem most likely to relate to the Mesolithic.

Core preparation and rejuvenation flakes

There are four flakes and blades that have crested, suggesting that they formed part of core preparation, though in no instance is this particularly pronounced and it is possible that in some cases the feature is incidental. There is a single piece, a core tablet, which indicates core rejuvenation.

Microburin

There is a single microburin among the assemblage. It is a mid-blade segment with a straight snap at the proximal end and the classic microburin break, with a retouched notch and oblique snap, at the distal end. A microburin is a waste product created during the manufacture of a microlith.

Utilised and retouched

195 pieces, 34% of the assemblage, can be categorised as utilised and retouched. This is an unusually high percentage. More typically this component represents less than 10% (often considerably less) of an assemblage. An explanation for this may lie in the fact that the majority of the pieces come from residual contexts with a significant quantity coming from plough soil. They will therefore have been subjected to a considerable amount of post-depositional disturbance. It is increasingly apparent that utilisation and retouch traces can be caused by a wide range of post-depositional occurrences (*e.g.* Tringham *et al.* 1974) and this is likely to have been a significant factor in relation to the Ardleigh assemblage.

Another more general point to consider, which applies to all assemblages, is that a range of factors can be involved in producing apparent utilisation damage and retouch. Post-depositional processes, as already mentioned, are the major factor but other things may be involved, for instance apparently deliberate and well-formed retouch can be produced spontaneously during the knapping process (Newcomer 1975). All this means that this general category of utilised and, to a lesser degree, retouched pieces can be problematic in that they may not have been formed as part of deliberate human use or manufacture. Microwear analysis clearly offers the way forward in this area though recently, after initial high hopes, this technique has fallen under a cloud in this country. This period of disillusionment appears to be ending and it is to be hoped that there be wider application of microwear analysis applied to British lithic assemblages (Barton 1994; Donahue 1994).

Utilised retouched

There are ninety-eight pieces in this category: thirty-eight with macroscopic traces of edge damage which would seem to be consistent with use damage; twelve pieces which have apparent utilisation damage that is beginning to merge into retouch; and forty-nine pieces that have retouch which is further unclassifiable either because it does not form a distinct tool type or that it occurs on a broken fragment.

Notches

There are fourteen pieces which have areas of regular retouch forming distinct concave areas. When considering these pieces however it should be born in mind that this is a particular form that is very susceptible to being produced through post-depositional or other incidental processes (*e.g.* Newcomer 1975).

Denticulates and knives

There are four pieces with retouch forming a rough serrated edge that could be classified as denticulates, though this is admittedly a relatively subjective category. There are two pieces which have regular well-formed retouch down one edge and so can be classified as knives. One of these, a broken piece, has fairly well-developed scale flaking. This piece is suggestive of a Neolithic or Early Bronze Age date.

Fabricators

There are six pieces that can be classified as fabricators. None is particularly elaborately formed. Four of them display heavily battered areas, the characteristic use wear patterns associated with this tool type. Ideas about the precise use of fabricators vary though clearly it was heavily percussive.

Piercers/awls

There are nineteen pieces that can be classified as piercers or awls. There are no particularly well-formed pieces.

Scrapers

There are thirty-seven scrapers and these form by far the largest element among the classifiable retouched pieces. Only a few of the scrapers are well-formed. They can be divided into: twenty-two endscrapers; six endscrapers with additional scraping edges down one or both sides; six side scrapers; and three unclassifiable broken fragments. In the case of the simple endscrapers thirteen have rounded retouched edges and nine have relatively straight edges. Dumont (1989) has suggested that edge curvature may be a reflection of function, with rounded scrapers predominantly being used to work hide and those with straighter edges being used in bone and antler working.

Combination

There is single piece that combines the elements of two tool types, a scraper and an awl.

Microlithic form

There is one that may be a microlith or related form. It is a mid-blade segment of grey-white flint. The proximal end has nibbling retouch forming a slightly concave base. The left long edge displays utilisation traces while the right edge has nibbling retouch forming a slightly serrated edge, though this is not quite pronounced enough to earn the piece the classification of a microdentulate. The distal end is broken but there is a surviving area of retouch on the left edge which may indicate that the piece was obliquely blunted, though this retouch may be damage that occurred when the piece was broken. The piece is almost certainly Mesolithic in date.

Gunflints

There are nine classic gunflints represented in the assemblage. A considerable size range is displayed in these pieces with the smallest measuring 20mm × 22mm and the largest 42mm × 46mm. In addition there are three more irregular pieces which may be gunflints.

Discussion

Given that the majority of pieces came from clearly residual contexts, the assemblage has been treated as a whole, as stated above. The assemblage must however represent a number of activity areas and, though it seems likely that the majority belongs to broadly the same chronological period, there are clearly elements of more than one date. With this in mind it was hoped that spatial patterning related to chronological or activity differences could have been preserved in the residual contexts. Attempts were therefore made to identify any surviving patterns, looking at such things as raw material types or technological features. The result, however, was that no patterns were discernible.

In dating terms the assemblage contains four diagnostic types: the twelve gunflints; the single microburin; the microlith or related form; and the scale flaked knife. The gunflints, though forming an interesting little group in themselves, can add nothing to any consideration of a date for the bulk of the assemblage. The same applies to the next two for though they can be broadly attributed to the Mesolithic it is quite clear that apart from a few other pieces which have been discussed above, they are unrelated to the bulk of the assemblage. The scale flaked knife can probably be dated to broadly the Neolithic and Early Bronze Age and certainly, based on the ceramic evidence, it would seem probable that at least a small amount of lithic material is of this period. A likely context for the main body of the assemblage is of course provided by the Middle Bronze Age funerary activity in the area. Such a date is certainly supported by the broad technological features of the assemblage, the relative lack of core preparation and the dominance of flake production. Comparisons with other assemblages are also supportive of this view. In particular the Ardleigh material shows some distinct differences from the Later Neolithic assemblage from Tye Field (Healy 1985) especially in

relation to numbers of broad flakes. At Tye Field the percentage of waste flakes with width greater than length is 34.6%, compared with 62% for Ardleigh. The chronological trend from the production of blades to increasingly broad flakes is a well-established feature of British post-glacial lithic assemblages (Pitts 1978), and on this basis Ardleigh is later than Tye Field. A late date is also suggested by similarities with the Late Bronze Age element among the Lofts Farm assemblage in particular in regard to limited core preparation (Holgate 1988).

Conclusion

It seems likely that the bulk of the assemblage represents broadly the Middle Bronze Age. In addition there are slight traces of Mesolithic activity, clear indications of more modern activity involving the use of flint in the form of gunflints, and the possibility of a small Neolithic element.

Chalcedony Beads

by M.E. Hutchinson

Twenty-nine beads, identified as chalcedony and described below, were recovered from two of the Roman graves in CEU Area 5 (above p.51). A full report including individual descriptions of each bead is available in the archive (AM Lab Report 84/92).

The material

Examination by low-powered microscope identified these beads as chalcedony, a micro-crystalline quartz, and this was confirmed by energy dispersive X-ray fluorescence spectroscopy (ED-XRF) and by X-ray analysis in the scanning electron microscope (SEM-EDX). When viewed in the hand, they look orange-brown to very dark brown, but when viewed by strong transmitted light, or when held up to the sun, most become translucent crimson, with one or two looking orange. Some of the beads have a red gleam in reflected sunlight, and this must have looked very attractive when they were worn. These beads are too dark in colour to be described as cornelian, although they could possibly be described as sard. However, modern thinking in gemmology is to move away from descriptions which, though hallowed by antiquity, only really describe a colour.

All the beads have dark inclusions of some different material which SEM-EDX analysis suggests is probably iron. These are sometimes spherical or irregular rounded shapes, but usually they are dendritic and range from radiating out from a centre, giving the appearance of a black snowflake, to looking more like moss (Pl.XXI). In one bead, AML 7910523, the dendritic inclusions bear a strong resemblance to water-weed. These inclusions look black by transmitted light but in bead AML 7910500, where there is a substantial conchoidal chip missing and the dendritic inclusions break the surface, the colour is grey and metallic. There are also colourless and white areas in the beads: occasionally, the latter may be secondary fillings of voids. In some beads, e.g. AML 7910456, there are narrow veins of colourless or cloudy chalcedony (see Pl.XXI). Sometimes they cut dendritic inclusions in two, so they must post-date the formation of the chalcedony and its inclusions. This probably indicates that at some time in the past the chalcedony has been shattered and fresh, colourless silica has been available to fill the gaps across the breaks.

The shape and arrangement of the inclusions in one or two of the beads would allow them to be described as moss agates if their colour was paler, but the 'moss' and the variations in colour can only be seen by powerful transmitted light.

The Cut

(Fig 51, Pl.XXI)

The beads are basically rectangular in section but the surface has been cut into flat triangular and diamond shaped facets. Each face has a diamond shaped facet in the centre surrounded by four triangular facets, but these triangular facets are shared by adjoining faces. The maker probably took a pre-shaped rectangular piece of chalcedony and abraded off the eight corners, holding the rectangles at a low angle so that most material was removed along the long edges. This was continued until the points of the resulting triangles more or less touched each other, leaving a large diamond-shaped facet in the centre of each side. The bead was then polished. Usually, only the large diamond facets on the front and

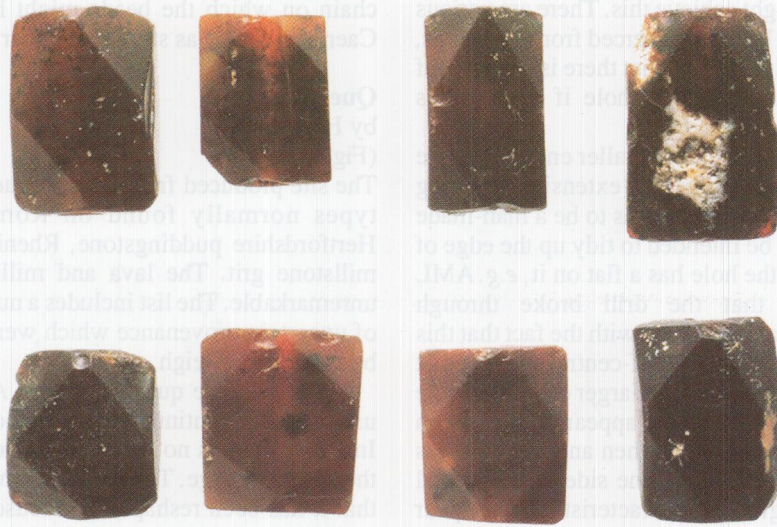
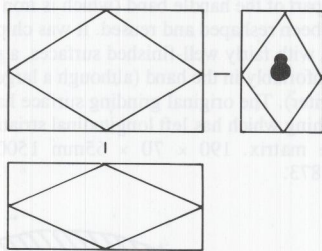


Plate XXI Selection of chalcedony beads (X2) showing variation of colour, texture, cut and size



Plan view of the cut, (idealised).

Figure 51 Idealised view of the cut and perforation of the chalcedony beads

back of the bead were properly polished, and grinding/abrasion lines can be seen on all the other facets apart from the ends.

It was impossible to decide whether the holes in the beads were bored from one or both ends, as the evidence is conflicting (below p.74). The hole is always much larger at one end than the other and almost invariably there are the remains of a small hole at the larger end which was drilled first, to one side of the present hole (Fig.51), and then almost destroyed by a hole made with a drill of greater diameter. The smaller end of the hole is always chipped round the edge. Some of the holes contain a soft white material, like chalk in texture. This does not come from the burial surroundings as the barrow was a soft loam, not chalk. No attempt was made to clear obstructed holes so as not to prejudice any future investigation as to what the beads might have been strung on. Examples are known strung on gold and silver wire. Most of the beads are chipped on at least the four main edges and on some beads the edges of the chips are worn and rounded.

Discussion

Chalcedony beads of this type have been found on other sites, but they are not common and are usually described as cornelian. One was found at Caerleon, Wales, in the excavation of the Legionary Fortress Baths, and Zienkiewicz (1986, 154) cites a necklace of eight faceted beads and one different found in a late Roman grave in the Lankhills Cemetery, Winchester (Clarke 1979, 294–5, fig.70); and a gold necklace decorated with similar faceted beads, (Marshall 1911, no.2743, pl.LVI) in the British Museum, supposedly found near the temple of Apollo at Curium, Cyprus. (Marshall identified the beads as garnet, but they are now described as cornelian). However, the

fact that they were thought to be garnet, popularly always considered to be red, suggests that these beads are made of the same, or similar material to the Ardleigh beads.

There are further examples in the Beck Collection, housed in the Museum of Archaeology and Anthropology at Cambridge, from the National Museum of Hungary, 'thought to be Migration Period' and another single example from Kerch, in the Crimea. These beads are virtually identical in material and cut to the Ardleigh beads.

In the Lankhills Cemetery report, Clarke (1979, 295) reviews the distribution of cornelian beads of this type. It appears that although they are rare or non-existent in most of Europe, both types of bead found on the Lankhills necklace occur in Romania, 'but they are above all typical of Sarmatian-period cemeteries in Hungary, where they might almost be described as a type fossil'. This statement, taken along with the fact that the beads in the Beck Collection from the National Museum of Hungary are so very similar to the Ardleigh beads, strongly suggests that these beads come from Hungary and are very likely to have been made there. It is possible that the Ardleigh beads are the largest properly provenanced collection of this type of bead in north-west Europe.

The marks seen on some of the beads which look like beach battering are interesting. One suggestion is that they are indeed percussion marks, and that they came from the beads being tumble-polished in a stream. If this is so, it is difficult to see why the marks do not cover the entire surface, and to explain how the facet edges were not destroyed, as the force needed to produce the percussion marks must be considerable. The obvious explanation is that the marks are indeed percussion marks caused by beach or wave battering, and that the raw material has at some time formed part of an ancient beach. However, another, more likely explanation is that they were made by pounding the raw material to shape when the bead was roughed out, prior to cutting and polishing. Perhaps these marks would repay further investigation into their origin.

Traditionally, hard stone beads have their holes bored from both ends and this is still the practice in India. Piercing from both ends frequently means that there is a sharp ridge where the holes do not meet exactly, and this ridge cuts the string of a necklace very quickly unless the beads can be immobilised in some way. Threading the

beads on metal links might achieve this. There are various reasons why hard stone beads are pierced from both ends, despite the resulting ridge. One is that there is a danger of extensive chipping round the exit hole if the bead is pierced from one end only.

Almost without exception, the smaller end of the hole in the Ardleigh beads has either got extensive chipping round it, or else it is set in what seems to be a man-made depression, which may be intended to tidy up the edge of the hole. Occasionally the hole has a flat on it, *e.g.* AML 7910506, suggesting that the drill broke through incompletely. These characteristics, with the fact that this end of the hole is frequently very off-centre, suggest that this smaller end is the exit hole. The larger end of the hole is even more puzzling. A small hole appears to have been drilled part-way into the bead and then another hole has been drilled with a larger drill to one side of this initial hole, cutting into it to give the characteristic egg or pear shape. If the small hole was not intended as a starter hole for the drill, what was its purpose? It is sometimes better centred than the wider hole. The larger drill hole is wider than the hole at the other end of the bead, so unless it wore very badly it cannot have gone right through the bead. If these beads were all drilled from both ends it was done with exceptional skill, as there is only occasionally a trace of a ridge.

Finally, if casts are taken of the insides of the holes to analyse the tool marks, the casts should be examined by ED-XRF, or similar, to see if traces remain of any metal

chain on which the beads might have been strung: the Caerleon bead was strung on silver.

Querns

by H.J. Major
(Fig.52)

The site produced fragments of querns in the three stone types normally found on Roman sites in Essex: Hertfordshire puddingstone, Rhenish lava, and Pennine millstone grit. The lava and millstone grit querns are unremarkable. The list includes a number of pieces of lava of uncertain provenance which were labelled as possibly being from Ardleigh.

Puddingstone querns are Iron Age in form, but their use probably continued to the end of the 1st century AD. In Essex there is no certain evidence for their use during the Late Iron Age. The fragment from 2036 is unusual in that it has been reshaped and reused as a rubber. Where puddingstone is reused, it is usually only as building rubble.

Puddingstone

52.1 Fragment from an upper stone, with part of the hopper and a small part of the handle band (which is iron stained) surviving. It has been reshaped and reused. It was chipped into a sausage shape, with fairly well-finished surfaces, a shape which would fit comfortably in the hand (although a larger hand than that of the writer). The original grinding surface has been used to rub something which has left longitudinal striations on the pebbles in the matrix. 190 × 70 × 65mm 1500g. Context 2036, No.10873.

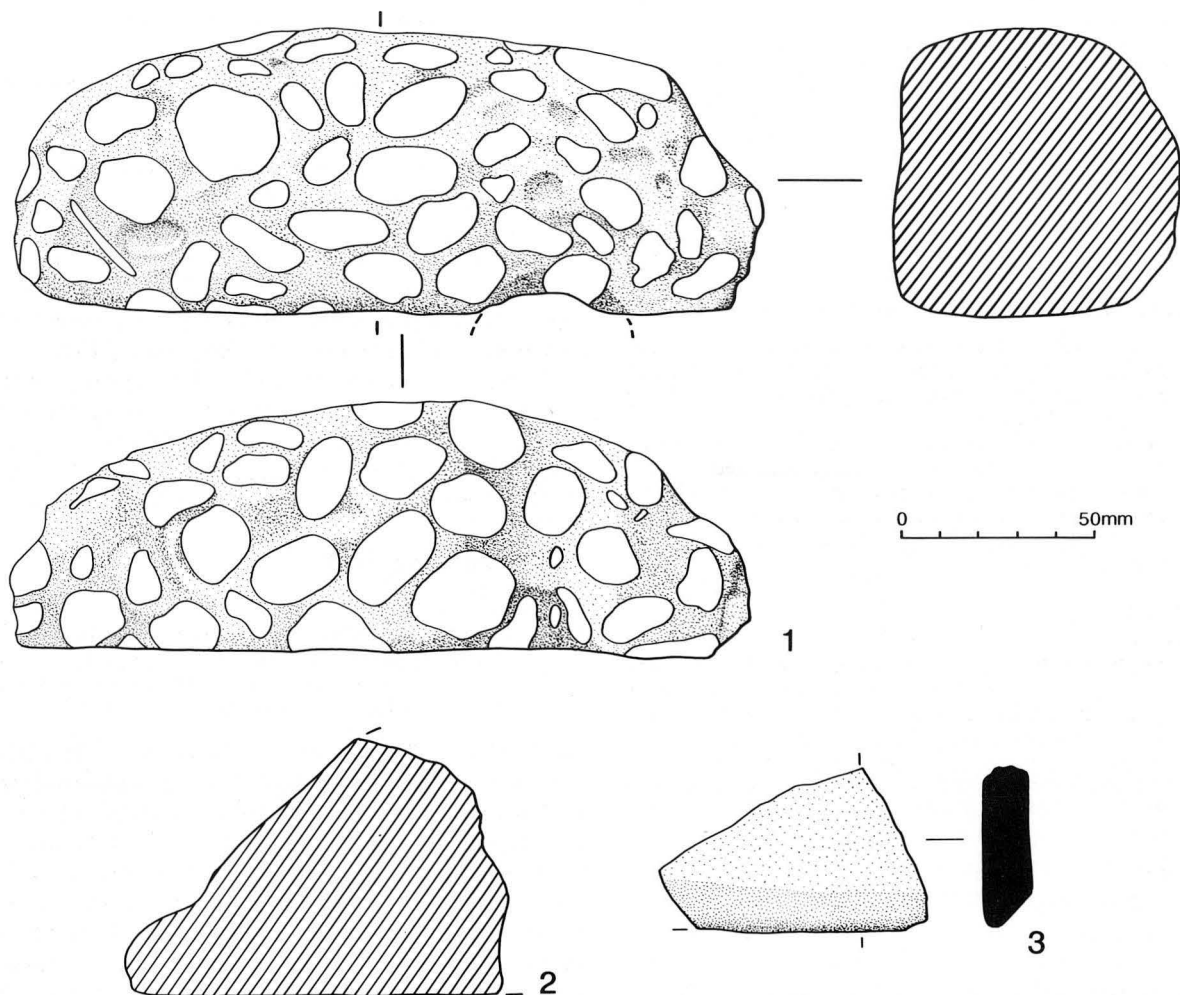


Figure 52 Stone objects

- 52.2 Upper stone fragment. The edge has a very pronounced flange, with staining from an iron handle band above. D not measurable. 572g. Context 2062, No. 10904.
- n.ill. Fragment of upper or lower stone. There are possible traces of mortar, so this may have been reused as building rubble. 546g. Context 2062, No.10896.

Lava

Scraps of lava also came from contexts 2057, 2058, 2086, 39267, 8047 and U/S.

- n.ill. Fragment with grooved grinding surface, other surface irregular. T35mm. 210g. Context 2077, No.10885.
- n.ill. Upper stone, c. 15%, with a worn, grooved grinding surface, pattern uncertain. Vertical grooves on the edge, oblique grooves on the top, probably the standard four panel dressing. Shallow kerf, W 50mm, ht. c. 5mm, T at edge 48mm. 1300g. Context 2087, No.10881.
- n.ill. Upper stone fragment, probably burnt. Worn grinding surface, vertical grooves on edge, grooves on the top. Max. T50mm. Also, a chip of lava from a different quern, with wide grooves, no full thickness. 308g. Context 2236, No. 10923.
- n.ill. Fragment of a lower stone with a smooth grinding surface. T27mm. Also, another fragment of upper or lower, T33mm. (Possible Ardleigh find).
- n.ill. Fragment of upper stone. The top surface is eroded, and there is no definite kerf. It has a smooth grinding surface. T at edge 42mm. Diam. 420mm. (Possible Ardleigh find).
- n.ill. Upper stone, c. 20%, with eroded surfaces. There is a low kerf 40mm wide. T at edge 48mm. Diam. 410mm (Possible Ardleigh find).

Millstone Grit

- n.ill. Lower stone fragment, outer edge missing. The central hole perforates. The grinding surface is worn rather irregularly, and is unpolished, and the underside has been smoothed in patches. T at centre 85mm, min. T58mm. Hole Diam. 98mm. 3275g. Context 1511, No.10773.
- n.ill. Lower stone fragment, probably from the same stone as context 1511, as the treatment of the underside is identical. Max. T74mm. 1325g. Context 1512, No.10771.
- n.ill. Lower stone edge fragment. The edge and grinding surface are fairly well finished, and the grinding surface is worn. T at edge 32mm, max T50mm. D540mm. 1225g. Context 1906, No.10843.

Other Stone objects

by H.J. Major

The unworked stone included fragments of septaria.

- 52.3 Slab fragment, with a chamfered edge. The stone is uncertain, but it looks as though it would have polished well. The surface is now crusted. This is either part of a palette, or a piece of facing stone. 57g. Context 1957, No.10863.
- n.ill. Sarsen pebble fragment, burnt. It is roughly a quarter of a 'bun' shape, with the outer surface naturally weathered. The two broken faces have traces of smoothing, which is probably not natural, and it is likely that this pebble fragment was used as a rubber or sharpening stone. T62mm, radius c. 75mm. 704g. Context 2236, No.10919.

Stone ?bead

by N. Brown

- 53.1 Small oval flint pebble with natural perforation, grey, heat crazed, with spalled surfaces. This pebble has clearly been burnt, perhaps having passed through the pyre, possibly having been worn as a pendant. Only two other grave goods have been recovered from the Ardleigh cremations; a small fragment of a copper-alloy bracelet, and a perforated animal tooth (Couchman 1975). Wt. 5g. Context 7291, No.7911044.

IV. Glass

by N.P. Wickenden
(not illustrated)

The vast bulk of the glass from Ardleigh comprises fragments of 19th/20th-century window glass and colourless, green and amber bottles. There is a small

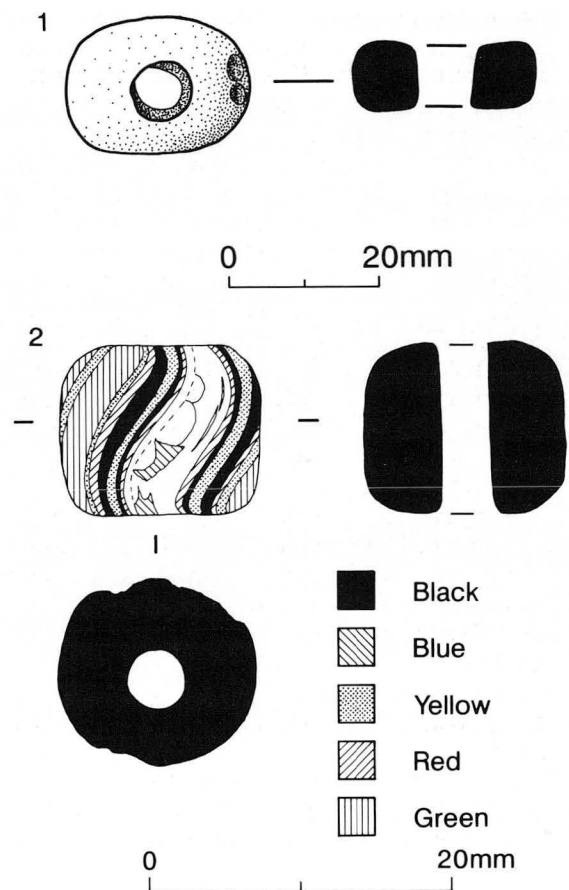


Figure 53 Possible stone bead/pendant and polychrome glass bead

number of iridescent post-medieval bottle fragments, notably from lower subsoil spits such as 432. The archive contains a full list.

Two later fragments are intrusive in Roman features (1004, 1998). The plough soil yielded residual Roman pieces, especially a folded hollow rim, commonly found on several bowl and jar forms (1001, 1825, 1830).

Three Roman contexts (1080, 1577, 1635) produced contemporary Roman glass sherds, of which the most notable is a small rim from a mould-pressed pillar-moulded bowl of the 1st century AD (Isings 1957, form 3). None of the fragments was suitable for illustration.

Polychrome glass bead

by S. Tyler

- 53.2 Barrel-shaped, translucent olive green glass with marvered, diagonally swirling lines. Two sets of opaque yellow, black and rust red glass, either side of inset translucent blue glass (most of which is missing). Length 11mm, diameter 12mm.

The bead exhibits an unusual combination of decoration for which few parallels can be found in Britain. The closest in form and decoration comes from Newstead, Roxburghshire (Guido 1978, 101, fig.38.2). Guido saw these beads as imports to Britain via the Roman army. The form, size and colours of the Ardleigh bead resemble Germanic beads of the 4th to 5th centuries. However, the swirling pattern recalls native pre-Roman decoration. Given the Germanic appearance of the bead, it is possible that it dates to the 4th century and came to Britain with soldiers of Teutonic origin.

V. Prehistoric Pottery

by N. Brown

This report is in two parts, the first part briefly describes pottery from the CEU excavations, the second part presents a corpus of Ardleigh style Bronze Age pottery from north-east Essex.

Pottery from CEU excavations

A small quantity of pottery was recovered from the CEU excavations; 1022 sherds weighing 7.638kg, the great majority 615 sherds weighing 6.034kg. These figures obviously exclude the small group of illustrated sherds not located in the collection at Colchester Museum (above p.67). The illustrations are all contained in the archive, and mostly comprise small sherds which are clearly fragments of Bronze Age urns together with a few which may be of Late Bronze Age date. There are also three drawings which clearly depict vessels of Middle Iron Age date. Some of these drawings are reproduced here (Fig.54); the base of an urn from Area 7 is the only illustrated piece found at Colchester Museum (Fig.54.7), the rim of a second urn (Fig.54.6) may reasonably be assumed to be a second urn from Area 7. The third drawing is of a rim apparently of Peterborough Ware (Fig.54.3). This last sherd cannot be confidently attributed to a particular context, but represents a pottery style which is not otherwise known at Ardleigh. The material has been recorded using a system devised for prehistoric pottery in Essex (Brown 1988a), details are contained in the archive. The following definitions have been used:-

Size of inclusions	S	- less than 1mm diameter
	M	- 1-2mm diameter
	L	- more than 2mm diameter
Density of inclusions	1	- less than 6 per cm ²
	2	- 6-10 per cm ²
	3	- more than 10 per cm ²

Fabric

- A Flint, S 2 well sorted.
- B Flint, S-M 2.
- C Flint, S-M with occasional L 2.
- D Flint, S-L 2 poorly sorted.
- E Flint and sand, S-M 2.
- F Sand, S-M 2-3 with addition of occasional L flint.
- H Sand, S2.
- I Sand, S-M 2-3.
- J Sand, S-2 with vegetable voids particularly on surfaces.
- M Grog, often with some sand or flint and occasional small rounded or sub-angular voids.
- O Quartz and flint and some sand S-L 2 poorly sorted.
- P Sparse very fine sand may have occasional M-L flint or sparse irregular voids.
- Q Flint S-L, Grog S-M 2.
- R Shell M-L 2, soft fabric.
- V Flint S-M 1.
- Z Unclassifiable.

The earliest material present may be of Early Neolithic date, two rounded rims of bowls (Fig.54 1 and 2) recovered from surface cleaning before excavation of ring-ditch 652 in Area 5 may be of this date, although it is possible that both may be of Late Bronze Age date. Five very small Beaker sherds (none illustrated) were recovered from Area 7, three from the west

ditch of ring 7112 and two from the south-east of ring 1033, all decorated with comb-impressed or incised decoration. Not enough survives to give any idea of the decorative scheme, however, despite their very small size the sherds are unabraded.

The majority of the remaining material, including most of that from Area 7, comprises mostly small fragments of Middle Bronze Age urns. Some of these small sherds have decorative features, parts of applied cordons, finger impressions *etc.* but are not illustrated since all are better represented on complete or near complete vessels from the site. The exceptions are a body sherd with finger-pinched 'crows foot' decoration from pit 7165, and two sherds from pit 7240. These two sherds are closely similar in fabric, finish and decoration to globular urn E3 of the 1960 (Erith and Longworth) report. Approximately two thirds of this pot survive and include the stump of a single lug/handle, a large part of the vessel opposite this surviving lug is missing. It seems reasonable to suggest that the two sherds from pit 7240 derive from urn E3 though they do not join. One sherd has the stump of a lug which may be from the missing portion of E3: these sherds may thus provide some clue as to the location of Erith's original urn discoveries (below p.165).

Whilst some of the body sherds in flint or flint-tempered fabrics may be of Late Bronze Age or Early Iron Age date, only two small sherds can be confidently attributed to this period. Both are in a fabric (E) which is typical of the Early Iron Age (Brown 1988a), decorated with horizontal grooved lines or a corrugated exterior, and were recovered residual in a trackway ditch in Area 6. The unlocated drawn pottery clearly contained reconstructable profiles of three Middle Iron Age vessels of Little Waltham forms 3 and 4 (Drury 1978). Sherds in fabrics typical of the Middle Iron Age (H, I, J, Brown 1991) were recovered from ditches in Area 16, and it is tempting to suggest that the missing illustrated sherds came from this Area.

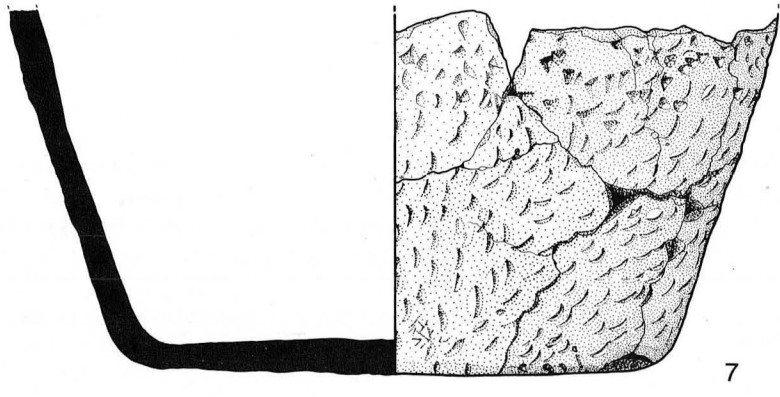
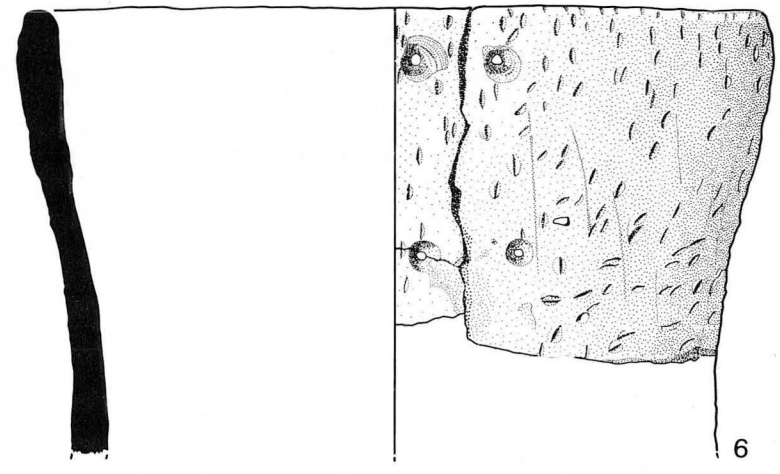
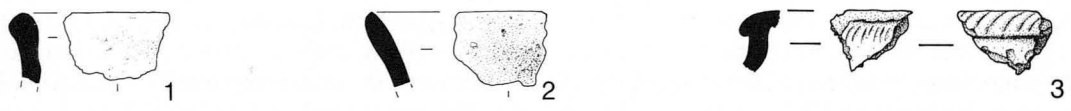
Catalogue of illustrated sherds (Fig.54)

- 54.1 Slightly expanded rounded rim, abraded particularly on interior. Surface cleaning of ring-ditch. Area 5. Fabric D.
- 54.2 Flared rounded rim. Surface clearing of ring-ditch. Area 5. Fabric C.
- 54.3 ?Incised lines on top of rim and interior below rim. Inside edge of rim apparently missing. Row of impressions on exterior below rim. ?Mortlake style Peterborough Ware. Illustrated by CEU sherd not located.
- 54.4 Thick walled body sherd with paired finger-tip impressions on the exterior. Pit 7165. Area 7. Fabric Q.
- 54.5 Smoothed surfaces, rather crudely incised decoration, one sherd has stump of lug/handle. Pit 7240. Area 7. Fabric Q.
- 54.6 Finger-nail impressions on exterior, two pairs of apparently post-firing perforations either side of crack. Not present at Colchester Museum, this is presumably the vessel from the central burial within ring 1320, which the object record describes as 'Urn with finger-nail decoration'. Area ?7.
- 54.7 Base and lower walls with dense random finger-nail rustication. Pit 7160. Area 7. Fabric M.

Corpus of Ardleigh style pottery from north-east Essex

'For prehistory corpora and catalogues are few. ...To the making of corpora there is no end: British prehistory, in its stage of eclectic improvement, has need of them' (Kinnes 1992, 3)

A letter of February 1958 from Rex Hull to Christopher Hawkes, preserved at Colchester Museum, concerns the publication of the pottery from Ardleigh, and raises '...the question of whether to publish this particular cemetery on



0 100mm

Figure 54 Prehistoric pottery from CEU excavations

its own or to make the paper an omnibus one on the unpublished stuff of this date from Essex and Suffolk.' By this time Hawkes and Hull had of course been working together for some years on aspects of the archaeology of Colchester, and it is clear from his letter that Hull hoped Hawkes would undertake the publication of the Ardleigh pottery. In the event this was not to be (above p.4), and the report of 1960 (Erith and Longworth) published just the pottery from Ardleigh. However, the Ardleigh pottery was discussed in the light of other local material, which appeared on the accompanying distribution map, and briefly tabulated in an appendix (Erith and Longworth 1960, fig.3 and table II).

By the early 1980s, in addition to the 1960 article, published pottery from Ardleigh was scattered through numerous editions of the *Colchester Archaeological Group Bulletin* and *Essex Archaeology and History*. As part of the initial post-excavation programme following the CEU excavations, a series of figures were produced which collated all of the published pottery from Ardleigh, with a view to republishing this material in a single volume. This series of figures is reproduced below with a few additions (Figs 55–67). As a logical extension of this process, previously unpublished pottery from other sites in north-east Essex has been illustrated for this report. An account of the Deverel-Rimbury pottery of Essex, with a tabulated gazetteer (but with only six pots illustrated) has recently been published (Brown 1995). A number of vessels from sites in north-east Essex listed there are not included in the illustrated corpus presented here either because they are highly fragmentary, or plain base sherds, whose features are adequately represented on other vessels. A few pots overlooked during preparation of the 1995 publication are included here. The pottery was discussed at some length in Brown 1995, and only the salient points and some additional comments are described and discussed below.

The Ardleigh Group pottery forms a distinctive regional ceramic of the Early/Middle Bronze Age in north-east Essex and south-east Suffolk, which can be quite closely defined by the frequent presence of two of the major traits used to describe it in 1960 (Erith and Longworth, 187–8), finger-tip rustication and 'horseshoe handles' (Brown 1995, table 12.1 and fig.12.5), augmented by frequent use of grog-tempered fabrics (Brown 1995, table 12.2).

A series of radiocarbon dates associated with Ardleigh style pottery from the cemetery at Brightlingsea range from 2199–1510 cal BC (GU-5102) to 1510–1270 cal BC (GU-5100) (Brown 1995, 128), and the radiocarbon dates for unurned cremations at Ardleigh (above p.16) fall within this range. Comparisons have long been made (Erith and Longworth 1960, 189; Longworth *et al.* 1988, 108) between certain incised motifs used on Globular urns at Ardleigh and decoration on Beaker ceramics (*e.g.* Fig. 57.20, 47, 60, 62, 64 and particularly Fig.58.34). The vessel from Wix may also be relevant here. The extraordinary decoration on this vessel includes frequent use of rather random round-toothed comb impressions: however, in one area, within one of the applied 'horseshoes', these are resolved into a pattern (Fig.81.185) reminiscent of the floating lozenges employed on certain late style Beakers. The profuse use of finger-tip impressions so characteristic of Ardleigh style pottery almost inevitably invites comparison with the rusticated

Beakers which form a prominent part of many Beaker assemblages from East Anglia (Brown 1995). However, Tomalin (1983, 158) has drawn attention to the marked differences in finger-impressed techniques between Ardleigh style vessels and rusticated Beakers, particularly the absence of finger-pinched, especially 'crows foot,' impressions on Ardleigh style pots. Finger-pinched decoration does in fact occur, albeit rarely, on vessels of the Ardleigh group (*e.g.* Fig.70.122), sometimes taking the form of elaborate pinched ridges or raised knobs (Fig.58.27, 32 Pls XXV and XXVI; Brown 1995 fig.12.4). 'Crows foot' impressions are also represented, as short vertical lines on one of Erith's urns (Fig.56.13) and on a body sherd recovered during the CEU excavations (Fig.55.4). The proposition that Grooved Ware ceramics contributed to the development of Deverel-Rimbury pottery has long been an attractive one (Brown 1995), and seems particularly appropriate for the highly decorated Ardleigh pottery. Many of the grog-tempered Ardleigh fabrics are certainly visually similar to some of the local Grooved Ware pottery from Lawford (Shennan *et al.* 1985) and Colchester (Crummy 1992a). It might be suggested that the undulating lines of finger impressions on one of the vessels from White Colne (Fig.71.128) provide a parallel for similar decoration which commonly occurs on Grooved Ware vessels (*e.g.* Longworth *et al.* 1971, P2 and P47). An early origin for the highly decorated Ardleigh urns well within the first half of the 2nd millennium BC appears likely, and the almost mutual exclusivity of the distribution of Ardleigh style vessels and Biconical urns within East Anglia is striking (Longworth *et al.* 1988, 48).

Given the large quantity and variety of ceramics recovered from the Ardleigh cemetery and the apparently similar site at White Colne, it seems likely that the material covers a considerable time span. The complex nature of the Ardleigh cemetery itself would also suggest a considerable duration for its period of use (below pp 171–77). It is possible to suggest a developmental sequence for Ardleigh style pottery. The secondary urns from Ardleigh ring 3 are rather plain, and have long been regarded as of relatively late date (Couchman 1975; Brown 1995). The ring 3 pottery is comparable to material from Grimes Graves associated with quite late radiocarbon dates (Longworth *et al.* 1988, 48). Since there is less grog-tempered pottery from Ardleigh ring 3 it may be suggested that grog tempering along with profuse decoration is an early feature of the Ardleigh group. The identification of one of the accessory vessels from ring 3 as of *deckseldoos* form may lend support to a late date for this assemblage (O'Connor 1980, 286). Elaborated rims, expanded externally or internally or T-shaped are overwhelmingly associated with more or less elaborately decorated pots, often of large size (*e.g.* Figs 55.6, 7; 56.13, 16; 57.25; 60.45; 63.78; 72.135; 73.136; 74.140, 141; 75.143, 146; 76.147; 77.159, 163; 79.174; 81.185). Such rims may also therefore be regarded as an early feature which only rarely occurs on putatively late relatively plain pots (*e.g.* Fig.63.79; 66.101, 104; 70.124; 78.171; 80.182). These elaborate rims may have provided a means of securing leather or fabric lids, a function fulfilled on the later pottery by rows of perforations below the rim. Such perforations commonly occur on vessels from ring 3, and Grimes Graves.

It may be that certain fairly plain vessels from the Ardleigh cemetery and other sites in north-east Essex date from within the second half of the 2nd millennium BC. In particular a pot from Colchester (Fig.78.171) provides a

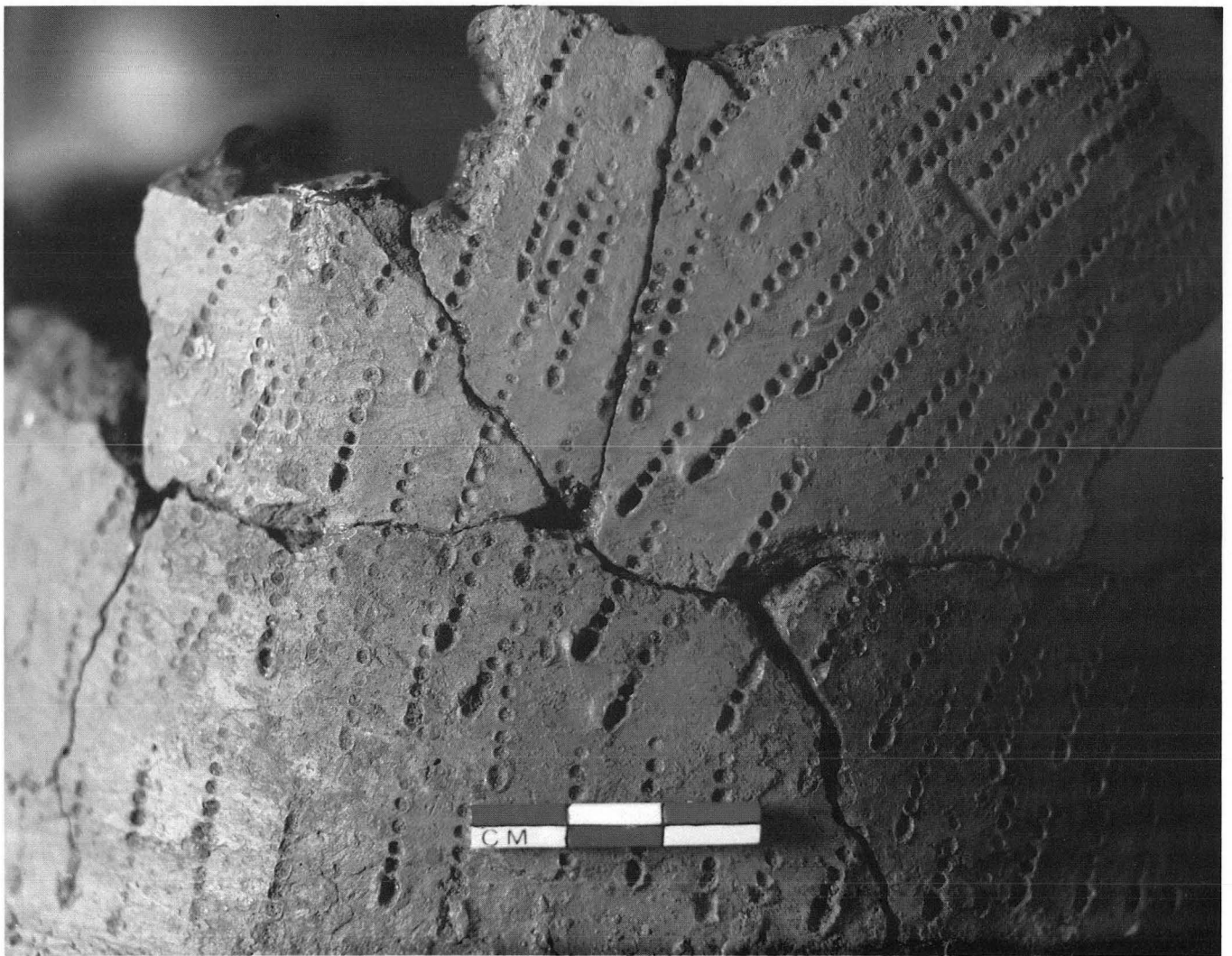


Plate XXII Detail of urn from White Colne (Fig.73.137) showing comb impressions in a very smooth slipped surface. The clay was clearly still quite wet when the impressions were made.
NB The top of the pot is at the bottom of the plate

very close parallel for a rather distinctive vessel from Chigborough Farm which was associated with a date of 1420–950 cal BC, at 2σ (HAR-6397). Some vessels (*e.g.* Fig.60.46; 61, 61; 69.116; 71.129) are so similar to the plain jars of early post-Deverel-Rimbury type (Barrett, 1980), in particular a number of hook rimmed forms (*e.g.* Fig.69.120; 71.131; 72.134; 80.178–180) that it is clearly tempting to regard these as dating from around 1000 BC. The latest pottery represented in the Ardleigh cemetery is the jar from ring 5, which is a classic post-Deverel-Rimbury type of the early 1st millennium BC (Brown 1995; Needham 1995).

Manufacture and Use

The pottery is predominantly tempered with flint, grog or grog and flint; other tempering materials such as shell are only very rarely used, and are largely confined to a few of the globular urns. Perhaps these unusual tempering materials were chosen for globular urns since they suited production of vessels with the desired appearance and/or functional properties. Thickened and T-shaped rims were frequently produced by adding a separate strip of clay to the top of the pot (*e.g.* Fig.74.140; 75.143, 146; 78.169). Many

of the vessels show a distinctive rectangular fracture pattern perhaps indicative of slab building. Others show coil joins in wall fractures or undulating interiors (*e.g.* Fig.69.118–119) resulting from unsmoothed coil joins. Whilst some pots are very crudely formed or distorted (*e.g.* Fig.70.122, 124; 78.170), the majority show a range of more or less elaborate surface finishing (*e.g.* Pls XXII and XXIII).

This is obviously most apparent in the globular urns, with their often thin walls and well smoothed and burnished surfaces (Erith and Longworth 1960). However, the bucket urns often display a high level of potting competence, achieving a variety of quite elegant forms (*e.g.* Fig.55.5; 56.18; 58.31; 70.123; 77.158) often in very large pots (*e.g.* Fig.71.131; 73.136, 138; 74.141; 75.142; 76.148). Surface finishing involved scraping, finger-wiping or wiping with cloth or pad of grass/straw, almost invariably, it seems, carried out differentially on exterior and interior (*e.g.* Fig.68.109; 69.116, 117, 118, 120; 70.122). In some cases surface treatment may be vertical on the interior, lower part of the pot and horizontal on the upper (*e.g.* Fig.76.148; 79.174), and this may indicate that

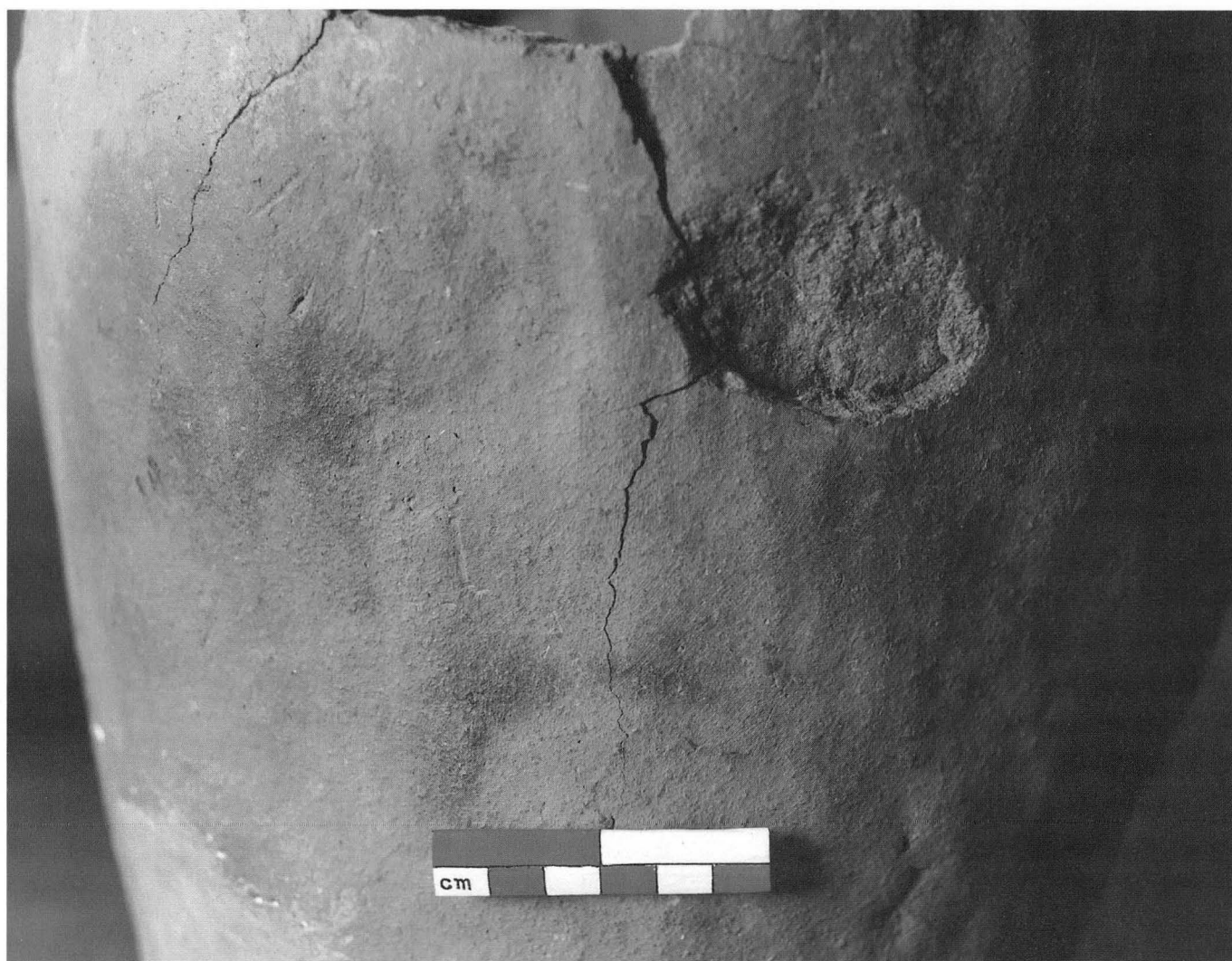


Plate XXIII Detail of urn from White Colne (Fig.69.120) showing firing spall and slight vertical ridging left by drawing the clay upwards with the fingers. The surface is well smoothed with faint marks left from ?wiping or beating the exterior

in some cases the upper part of the vessel was added to the already formed lower portion. This is occasionally demonstrated by a marked kink in the vessel wall, sometimes accompanied by a clear join visible in the fracture (*e.g.* Fig.72.133; 79.174). In some vessels no attempt appears to have been made to produce a smooth exterior and the vessel retains a distinctly lumpy appearance with large fragments of temper protruding (*e.g.* Pl.XXIV, XXVII). In others surfaces are well smoothed, in some cases apparently burnished (*e.g.* Pl.XXII). A few pots have a clear difference in the occurrence of temper, dense in the core of the wall and virtually absent on the surfaces, perhaps indicative of the application of a slip (*e.g.* Fig.73.137, Pl.XXII).

The applied cordons and 'horseshoe handles' have long been regarded as skeuomorphic representations of rope carrying attachments, certain patterns of fingertipping may also represent rope carrying nets of some kind (*e.g.* Figs 55.1; 57.22; 63.73; 68.113; 72.133; 75.143, 145). Various flaws resulting from poor control of firing and subsequent cooling are common, perhaps unsurprisingly in pottery which was presumably all fired

in bonfire 'kilns'. Star shaped patterns of fine 'fire cracks' around large lumps of temper (Rye 1981, 114) are fairly common (Pls XXIV, XXVII), spalls occasionally occur (Pl.XXIII), and 'dunting' cracks resulting from rapid cooling (Rye 1981, 114) are the most obvious flaw. These cracks often take the classic form running from the rim, and being wider at the top than the bottom. Almost invariably the cracks are accompanied by pairs of holes drilled presumably to allow binding with thongs (*e.g.* Fig.56.9; 58.35; 61.60; 62.72; 65.92; 66.100; 69.117, 118; 70.121; 71.128, 130; 73.137). Holes were drilled from one side only, giving a cone shaped profile (*e.g.* Fig.68.114, 115; 69.117; 70.121; 71.130) or drilled from both sides giving an hour glass profile (*e.g.* Fig.71.128; 70.121; 71.130), occasionally both occur on a single pot. Scars where holes were begun and then abandoned are also present (*e.g.* Fig.74.140A; 78.169). Lug handles on globular urns show the method of fixing — one end plugged through the vessel wall, the other simply luted to the exterior (*e.g.* Fig.78.172) — familiar on Late Bronze Age pots (Brown 1988a). Rows of pre-firing perforations below the rim are generally assumed to provide a means

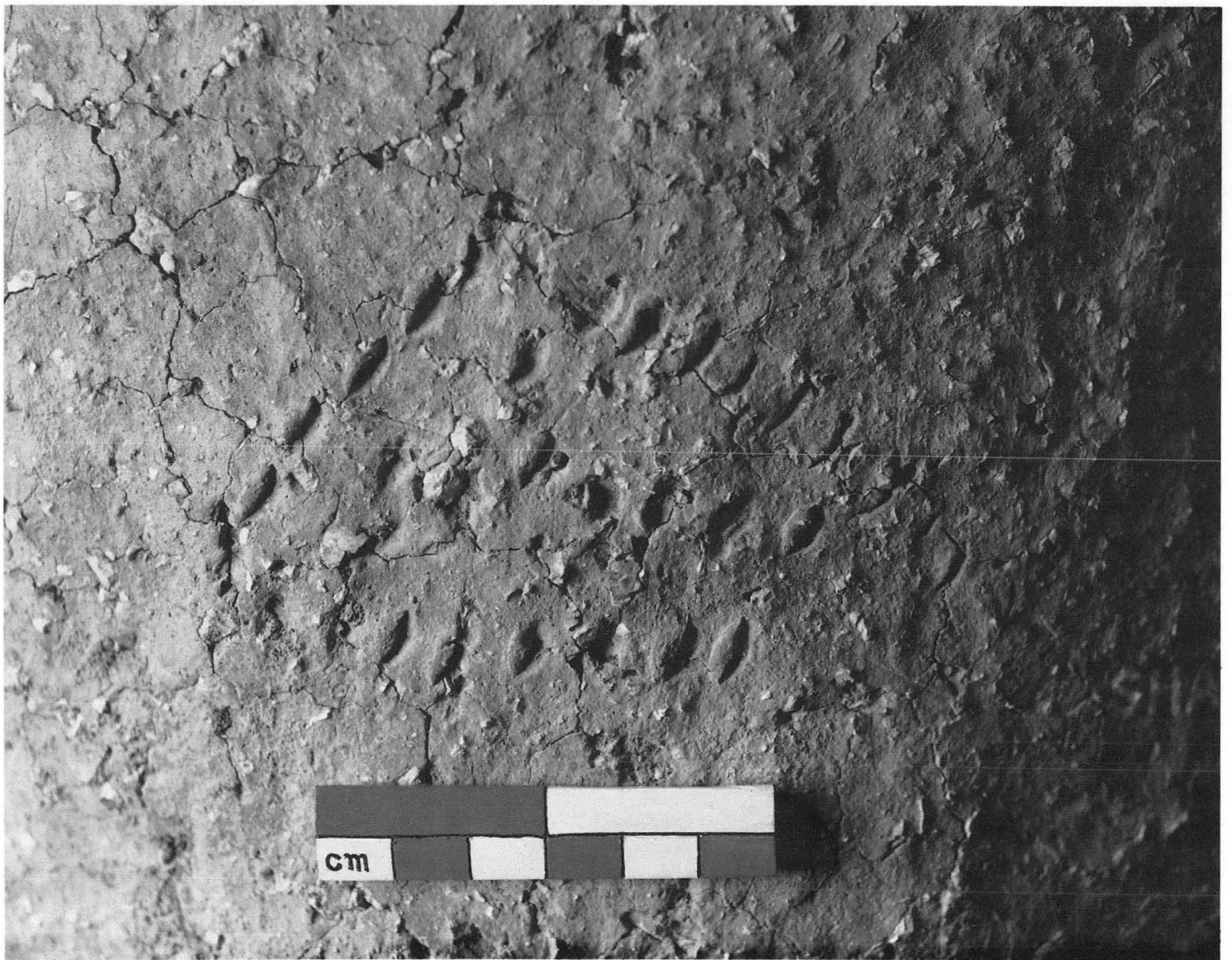


Plate XXIV Detail of urn from Shalford (Fig.81.184) showing triangular patch of finger nail impressions. Typical star like shrinkage cracks radiating from large lumps of burnt flint temper are also visible

of attachment for leather or fabric lids. These holes commonly occur on putatively late pottery such as that from ring 3 (above p.78). The expanded and T-shaped rims, together with applied cordons and 'horseshoes', characteristic of earlier vessels may have provided means by which lids could be tied on.

It is very noticeable that the impressed decoration so characteristic of Ardleigh style pottery is overwhelmingly dominated by finger impressions. Round comb-point impressions also occasionally occur, as they do on a variety of pottery styles and other fired clay artefacts (Brown 1995, 128). Other kinds of impressions using tools occur in only few cases (Fig.57.22; 72.135; 78.169; 79.174).

The manner in which the decoration on some pots was confined to one side of the vessel, and a number of instances where pots or parts of pots seem to have been deliberately deposited with vessels displaying an 'opposite' form of decoration, has been described elsewhere (Brown 1995, 126–127). The clearest example of this at Ardleigh is the central burial of ring 1 which contained two pots 'just gently touching' (Erith 1960a) one of which had a rusticated exterior and plain rim, the other a plain exterior and finger-impressed rim. This

would imply that the decoration, and the pots it adorned, were imbued with symbolic meaning, and this has been linked to the use of grog temper (Brown 1995). Many of the vessels of the Ardleigh group have grog temper where the grog fragments are still recognisable as pieces of pot.

This occurs in pots which are purely grog-tempered or tempered with a mixture of flint and grog: occasionally pots which seem to be entirely tempered with flint have one or two grog inclusions. One of the vessels from White Colne (Fig.71.128) is the best example of this, a large sherd is apparently entirely flint-tempered with the addition of a single large grog fragment on the interior, clearly still recognisable as a part of another pot (Pl.XXVIII). The grog tempering may symbolise the transformation of one pot into another, or indeed the continuation of one pot by another in the manner observed ethnographically by Sterner (1989, 458). Symbolism inherent in the manufacture, form decoration and use of one pot could thus be transferred to another, and there are hints that this could be achieved through several 'generations' of vessel (Brown 1995, 127).

As noted above, the decorative techniques employed on Ardleigh style pottery are very limited, and a glance at

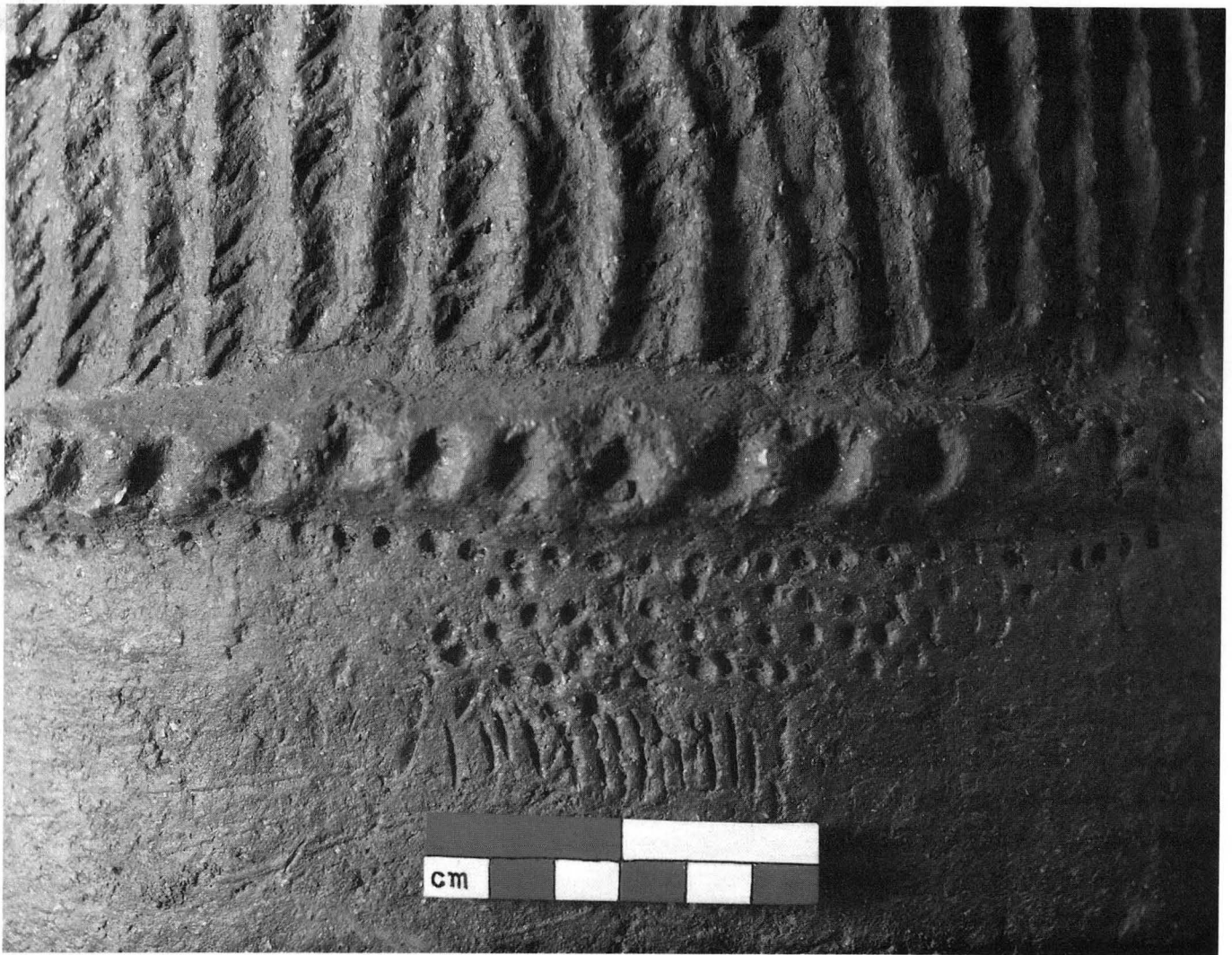


Plate XXV Detail of um from Ardleigh (Fig.58.27) showing finger pinching producing vertical ridges, with patch of comb impressions above cordon and row of short incised ?finger nail lines.
NB the top of the pot is at the bottom of the plate

the illustrated corpus presented here reveals a fairly restricted range of motifs. In terms of the pattern forming abilities used by Tomalin (1995) to examine the decoration on Collared and Biconical Urns, the patterns on Ardleigh urns are by no means complex. Indeed in some cases the ability and/or desire to execute even simple patterns seems to be lacking. For instance the quite neatly executed pendant chevrons of finger impressions (perhaps in imitation of a carrying net) below the cordon on one of the Ardleigh urns (Fig.57.22), is not sustained on the upper part of the pot. In many pots the sole aim seems to be to cover the surface of the vessel, without even any attempt to arrange the decoration in simple rows (*e.g.* Fig.68.111, 114; 69.118; 75.144; 79–80.174–6). One of the vessels in which the decoration is most profuse and apparently random, is the pot from Wix (Fig.81.185) which has rather crude applied 'horseshoe bands', which do not spring from an applied horizontal cordon as is the case in almost all other examples, instead they float some distance above a row of finger impressions which departs markedly from the horizontal. The surface of the vessel carries random

comb-point impressions, cut across on part of the upper surface by patches of finger-tip and nail impressions. The 'random' nature of the decoration on this vessel throws into sharp relief the lozenge patterns formed by the comb impressions within one of the 'horseshoes' (above p.78).

Given that, as suggested above, the decoration on these vessels appears to have encoded meaning, it is difficult in some cases to ascertain whether variation is deliberate or simply a failure to sustain a particular pattern. The finger impressions on one of the urns from White Colne provide an example of this (Fig.74.140A and B). Dense finger impressions executed horizontally round most of the pot (Fig.74.140A) are placed vertically at one point (Fig.74.140B). Whatever the significance of this, the contrast between the dense decoration on the upper part above the applied cordon and the plain lower portion is striking, and appears to echo the opposition of decorative scheme often found on pots placed together (Brown 1995). This contrast can be clearly seen on many of the pots illustrated here, and is perhaps most striking on a vessel from Ardleigh and another from White Colne. The



Plate XXVI Detail of urn from Ardleigh (Fig.58.32) showing pinched up knobs

Ardleigh pot (Fig.68.111) has finger-nail, finger-tip and comb-point decoration, occasionally in rows but mostly randomly placed with many blank zones above the cordon, whilst below decoration appears to be confined to finger impressions quite densely spaced and arranged in horizontal rows. The vessel from White Colne (Fig.73.137) has horizontal rows of finger-tip impressions above the cordon and random comb-point impressions below. The latter were clearly executed when the clay surface was quite wet and designed to rusticate a well smoothed and slipped, possibly burnished surface (Pl.XXXII).

Tomalin (1995, 104–8) has also drawn attention to the existence of small ideograms and patches of finger-nail impressions on some Biconical and Collared Urns. These also occur on some Ardleigh urns. It is noticeable that the rather more sophisticated geometrical ideograms characteristic of Biconical urns are most uncommon, occurring only once (Fig.80.183, Pl.XXXIII), where finger-nail impressions are arranged in a neat lozenge pattern. The same pot has small patches of finger-nail impressions, and such patches are the form of 'potters marks' which most commonly occur on Collared Urns (Tomalin 1995, 106). Most striking of the urns marked in

this way is one of the pots from White Colne (Fig.73.139); here an otherwise plain pot has a patch of finger-nail impressions arranged in rough vertical and horizontal rows, accompanied by two clear oval thumb impressions. Short lengths of finger impressions occur on a number of other urns (Fig.80.178, 185, 112, 67) and it is possible the short lengths of finger-pinched decoration on one of the Ardleigh urns (Fig.56.13) may have served a similar purpose to many small patches of comb-point impressions and incisions on two other urns (Fig.55.1; 58.27). It is noticeable that in a number of instances these small patches of impressions cut across more formal decorative schemes (Fig.55.1; 66, 67 and possibly Fig.81.185). Small patches of finger-nail impressions overlying more formal decorative schemes also occur on East Anglian style Beakers at Brandon, Suffolk (Clarke 1970) and Orsett Cock (Brown 1984–5). The presence of these marks on Ardleigh urns providing links with similar markings on Collared urns and East Anglian Beakers, may, following Tomalin (1995), suggest a primarily insular origin for the distinctive cultural entity which developed in south-east Suffolk and north-east Essex in the Middle Bronze Age (below pp 171–74).

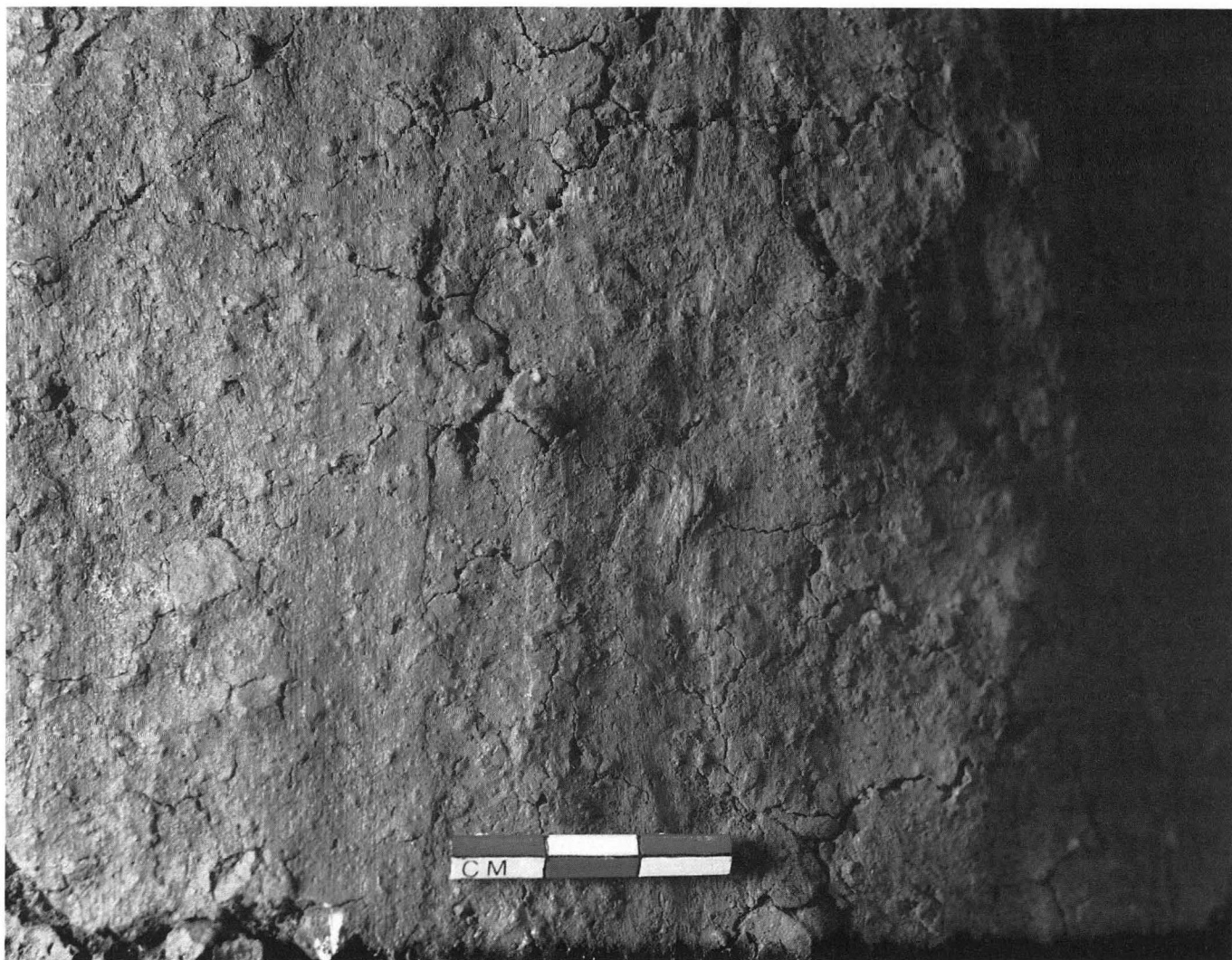


Plate XXVII Detail of urn from White Colne (Fig.69.119). Showing uneven surface and typical star like shrinkage cracks around large lumps of grog, some of which (e.g. the fragment below the right of the scale) are still recognisable as fragment of pottery. NB Top of the pot is at the bottom of the plate

Catalogue of illustrated pottery

(Figs 55–81)

NB Gazetteer number refers to the tabulated gazetteer published in Brown 1995. All vessels are from Ardeleigh unless otherwise stated.

- 55.1 Gaz. no.90. Near complete rim and large part of upper body. Horizontal and vertical finger-tip rows arranged in rectilinear pattern. Several small patches of vertical finger-nail impressions on exterior, in one case, these are overlain by a dense random round-toothed comb impressions stretching between two rows of finger-tip impressions and not stopping as in the illustration. Fabric Q.
- 55.2 Gaz. no.5. Well smoothed surfaces, rather slight finger-impressed ? applied cordon. Most of rim survives and about one third of vessel's original height. Fabric B.
- 55.3 Gaz. no.84. Rustication arranged in rough horizontal lines above, slight ? pinched up cordon, random below. Pair of ?pre-firing perforations below rim, not shown in illustration. Fabric M.
- 55.4 Gaz. no.2. Smoothed surfaces, four rows of horizontal finger impressions below rim, above blank zone, above three rows of horizontal finger impressions, remainder of vessel missing. About three quarters of rim survive. Fabric Q.
- 55.5 Gaz. no.3. Surfaces smoothed, slab-like fracture pattern, most of flat base missing. Fabric M.
- 55.6 Gaz. no.14. Complete rim diameter and upper ?one third of pot survives. Most of the applied 'horseshoe handles' are missing. There were originally three 'horseshoes', enclosing blank areas.
- 55.7 Adjacent to the 'horseshoe' shown in the illustration is a roughly rectangular panel, defined by a row of impressions below the rim another, adjacent to the 'horseshoe' and the applied horizontal cordon. The lower part of the rectangular panel has been filled with finger-tip impressions. A similar panel adjacent to another of the 'horseshoes' has been left blank. Fabric C.
- 55.8 Gaz. no.10. Complete rim, and ?a quarter of vessel height survives, from rim to applied cordon. Illustration shows random rustication below cordon, but this part of the vessel no longer survives. Cordon and rim are linked by ten groups of between two and six rows of vertical finger impressions. On about half the circumference of the vessel, these vertical rows are linked by groups of either four or five horizontal rows of finger impressions, placed about midway between cordon and rim. Not shown on the drawing is a single post-firing conical perforation drilled from the exterior. On the interior adjacent to this perforation are scars where holes have been started but not completed. Fabric M.
- 55.9 Gaz. no.15. Smoothed surfaces, complete rim and ?two thirds of vessel height survives. Rows of vertical finger impressions below applied, finger-impressed cordon. Above cordon rows are slightly curved and for about a quarter of the circumference, are finger-nail rather than tip impressions. Some flat base sherds also survive. Fabric M.
- 56.9 Gaz. no.11. Complete rim and most of base survives. Rectangular feature pattern. Pair of 'hour-glass' post-firing perforations, either side of crack. Fabric Y.

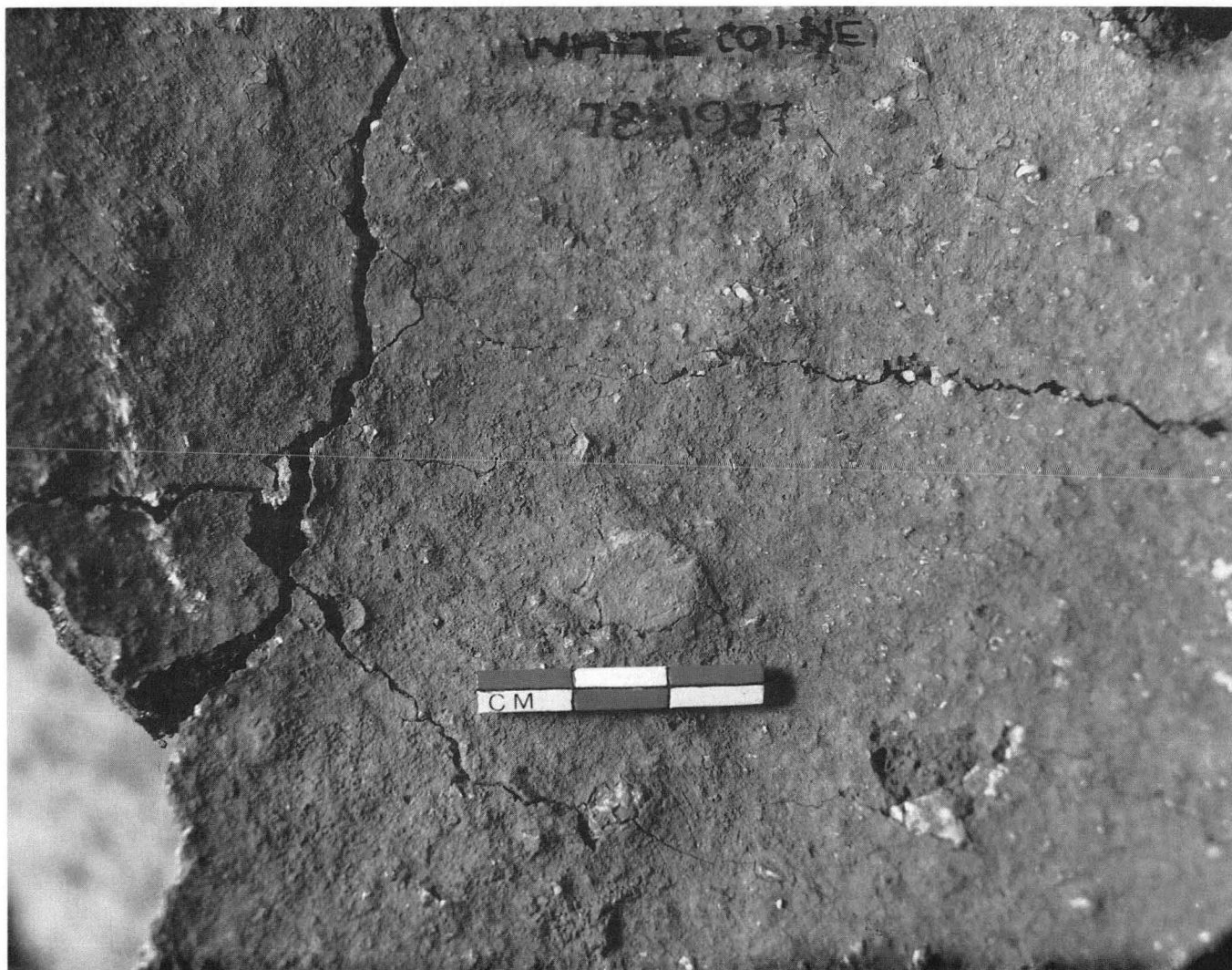


Plate XXVIII Detail of interior of urn from White Colne showing large lump of grog (immediately above scale) still recognisable as a piece of pottery, in a pot otherwise tempered with crushed burnt flint

- 56.10 Gaz. no.20. Very smooth burnished surfaces. Near complete rim and ?half vessel height survives. Fabric E.
- 56.11 Unlocated at Colchester Museum.
- 56.12 Unlocated at Colchester Museum.
- 56.13 Gaz. no.80. Vertical rows of paired 'crows foot' finger impressions between rim and pinched up cordon. Part of applied 'horseshoe handle' flaked off. Paired finger impressions below cordon. Large part of flat base. Fabric Q.
- 56.14 Gaz. no.17. Near complete rim and ?one third of vessel height survives. Fabric M.
- 56.15 Gaz. no.18. Fragmentary. Rustication appears to be confined to area above shoulder. One small, plain rim sherd present, one sherd of flat base. Erith and Longworth (1960) indicate finger impressions on exterior of rim.
- 56.16 Gaz. no.132. Row of finger-impressions below rim. Applied finger impressed cordon 13cm below rim. Four 'upside down' applied finger-impressed 'horseshoes', link row of finger impressions below rim with horizontal cordon. The 'horseshoe handles' are not evenly distributed around the vessel; there are three on one 'side' with a single 'horseshoe' on the opposite 'side'. This differential arrangement of the decoration is reinforced by the presence of a double row of finger-tip impressions below the cordon on the 'side' of the vessel with three 'horseshoes', but not around the full circumference of the pot. There are one or two large pieces of grog but these are not obviously still recognisable as fragments of other pots. Fabric M.
- 56.17 Gaz. no.82. Large part of rim and upper walls survive. Three rather slight applied finger-impressed 'horseshoe bands' survive. Parts of the horizontal applied finger-impressed cordon are missing. Rustication ordered into rough vertical rows. A pair of post-firing 'hour-glass' perforations lie either side of a crack within one of the 'horseshoe handles', and one other perforation is present. Fabric D.
- 56.18 Gaz. no.34. Complete rim and nearly all of vessel height survives. The flat base does not quite join the lowest part of the surviving walls. Surfaces smoothed with some traces of finger wiping. Rectangular fracture pattern. Pinched up cordon. Little visible temper. Fabric V.
- 57.19 Gaz. no.25. Flat-topped, finger-impressed rim. Row of finger impressions below rim. Horizontal applied finger-impressed cordon. Fabric M.
- 57.20 Gaz. no.31. Complete rim of Globular urn. Horizontal thumb groove with five small lugs of which three are broken. Incised arcading above groove. Slab-like fracture pattern. Fabric A.
- 57.21 Gaz. no.32. Complete base of globular urn. Unattached sherds include parts of a plain pinched up cordon with two lugs, (one broken) attached. At Colchester Museum, rim sherd, not joining, said to be from this vessel. Fabric P.
- 57.22 Gaz. no.71. Flat-topped rim with row of finger-tip impressions below on exterior. Slight pinched up finger-impressed girth cordon. About two-thirds of area above girth cordon blank, one patch of dense finger-tip rustication adjacent to an area of sparse finger impressions. Rough finger-tip arcade pattern below girth cordon, rather more infilled with finger impressions than the drawing shows. Traces of horizontal wiping on exterior. Fabric Q.

- 57.23 Gaz. no.29. Flat-topped rim, quite well smoothed surfaces, applied finger-impressed cordon. Fabric Q.
- 57.24 Gaz. no.27. Applied finger-impressed cordon and three applied finger-impressed, rather rectangular 'horseshoe handles'. Random finger-tip rustication. Rectangular fracture pattern. Fabric M.
- 57.25 Not found at Colchester Museum.
- 57.26 Gaz. no.33. Slight pinched up finger-impressed cordon and three applied finger-impressed 'horseshoe handles'. Rustication not accurately depicted in drawing: below cordon it is arranged in rough vertical rows, above cordon it is rather denser and more random. Fabric Q.
- 58.27 Gaz no.91. Flat-topped rim, applied finger-impressed cordon, most of area between blank, except for one patch of finger-tip rustication and a small zone of large round-toothed comb impressions above which is a row of vertical incised? combed lines. Below cordon, pinched up vertical ridges, see illustration in Brown 1995. Fabric C.
- 58.28 Gaz. no.40. This vessel now much more fragmentary than shown in drawing. Almost all of the rim survives but no base. Applied finger-impressed cordon: part of post-firing perforation not shown in drawing. Fabric D.
- 58.29 Gaz no.42. Complete rim, maximum of 16cm of vessel height survives. Double row of finger impressions 8cm below rim. Wiped exterior. Pair of post-firing perforations 3cm below rim placed each side of a crack. Traces of sooting/black deposit on surfaces. Fabric Q.
- 58.30 Gaz. no.79. Part of rim with abraded 'horseshoe handle' which may have finger impressions. Remains of a pair of post-firing perforations within 'horseshoe'. Loose sherds at Colchester Museum include one with a row of finger impressions, a rim from a different vessel and a ?Beaker base.
- 58.31 Gaz.no.28. Complete rim and about half the vessel height survives. Smoothed surfaces, with sloping striations below three horizontal bands of finger-tip impressions, pinched up, and separated by horizontal roughly grooved lines giving appearance of cordons. Four 'horseshoe handles'. Fabric Y.
- 58.32 Gaz. no.88. Complete base and lower part of vessel. All over rustication in form of pinched up knobs below horizontal row of finger-tip impressions. Blank zone immediately below rim. Four sherds of plain rim undecorated preserved at Colchester museum indicate plain zone between rim and horizontal finger-tip row, assuming they come from same pot. Fabric M.
- 58.33 Gaz. no.41. Almost complete rim. Two 'horseshoe'/arc handles each bisected by a vertical cordon. One has flaked off surface of vessel, leaving a clear mark. Fabric D.
- 58.34 Gaz. no.39. Complete rim of globular urn, complex incised/combed decoration. Five horizontal lines at shoulder, above which are a row of cross-hatched triangles. These are separated by a blank zone from large enclosing triangles of five lines a side. The blank zones are occasionally cut across by finger-nail impressions. These large triangles are linked by bands of horizontal lines in the area above the lug handles. Fabric P.
- 59.35 Gaz. no.37. Horizontal applied cordon, finger-tip rustications. Four post-firing perforations. Fabric D.
- 59.36 Gaz. no.83. Large part of vessel survives. Three applied 'horseshoe handles', one with a pair of pre-firing perforations within handle. One applied, vertical, finger-impressed cordon between two of the 'horseshoes'. Fabric M.
- 59.37 Gaz. no.74. Globular urn, four small lugs set at slight shoulder cordon. Exterior well smoothed and burnished, sloping wipe marks on one part of interior. Patch of pitting on interior surface just above shoulder. Fabric P.
- 59.38 Gaz. no.38. Base only and lower walls survive, vertical rows of finger-tip impressions. Well smoothed surfaces with occasional large fragments of grog still recognisable as potsherds showing through. Fabric Q.
- 59.39 Gaz. no.86. Complete rim, finger impressions on top exterior and interior of rim, row of finger impressions immediately below rim on interior, with some irregular finger-nail impressions. Pinched up finger-impressed cordon. Illustration makes rustication appear random: in fact between cordon and rim it is organised in rough horizontal rows interspersed by clear single vertical rows. Horizontal wipe marks on interior, exterior well smoothed prior to rustication. Large part of flat base also survives. Fabric M.
- 59.40 Gaz. no.47. Complete rim of globular urn. Zone of rather irregular horizontal incised lines at girth, stump of single lug handle survives with vertical horizontal incised lines beside. Smoothed and burnished surfaces. Fabric B.
- 59.41 Gaz. no.46. Neat flat-topped rim with finger impressions on interior and exterior. Smoothed surfaces with traces of horizontal wiping on interior and vertical on exterior. Rectangular fracture pattern. Fabric Q.
- 59.42 Gaz. no.130. Row of finger impressions on exterior below rim, pinched up cordon, finger-impressed. Slab-like fracture pattern. Horizontal wiping above cordon, vertical below. Horizontal wiping on interior. Fabric has small grog inclusions, sparse small flint and some small voids. Occasional vegetable voids including one clear ?straw impression on exterior. Upper half of vessel survives.
- 59.43 Gaz. no.49. Base and lower walls only survive, horizontal wiping on interior. Fabric P.
- 59.44 Gaz. no.51. Complete rim and part of body of globular rim. Slight girth cordon. Burnished. Fabric P.
- 60.45 Gaz. no.133. Externally expanded rim, rustication below cordon, above cordon rustication appears to be ordered in inverted 'horseshoes' linked by rows of finger impressions. Horizontal row of finger impressions above cordon. Fabric Q.
- 60.46 Gaz. no.52. Plain, dense flint grit on base with little attempt to smooth surfaces. Single post-firing perforation not shown on drawing. Fabric D.
- 60.47 Gaz. no.75. Burnished, slight horizontal cordon bifurcated by incised line. Two small lugs attached to cordon. Prominent applied vertical cordon decorated with incised chevron. Cordon bordered by vertical incised lines not shown on drawing. Incised triangles on either side of vertical cordon bordered by zone of vertical incised lines. Patch of differential abrasion where two cordons bisect. Fabric P.
- 60.48 Gaz. no.81. Complete rim. Three applied finger-impressed 'horseshoe handles'. Finger-impressed rustication arranged in vertical rows between rim and cordon. Slight pinched up cordon 10cm below rim. Rest of vessel missing. Fabric C.
- 60.49 Gaz. no.53. Complete rim. Three applied finger-impressed 'horseshoe handles' spring from a single applied horizontal cordon. All over finger-tip rustication, base sherds also present. Horizontal wiping on interior. Fabric M.
- 60.50 Gaz. no.55. Near complete globular urn, surface considerably damaged. Fabric P.
- 60.51 Gaz. no.76. Complete base and lower walls. Fabric M.
- 60.52 Gaz. no.57. Row of finger impressions below rim, second row of ? finger impressions runs for a short distance below the applied finger-impressed cordon. Paired post-firing perforations below rim either side of crack. Two further post-firing perforations one below, the other above the cordon. Fabric M.
- 60.53 Gaz. no.56. Near complete rim, row of finger impressions below rim with a second row on the body. Fabric M.
- 61.54 Gaz. no.59. Three applied finger-impressed 'horseshoe handles', spring from an applied finger-impressed cordon. All over rustication. Two widely separated large post-firing perforations, one 4 the other 6cm below rim: one has the scar of an unfinished perforation close by. Fabric D.
- 61.55 Gaz. no.62. Complete rim, maximum of 21cm of vessel height survives. Above shoulder cordon, rustication arranged in vertical arc-like rows. Below, arranged in roughly vertical rows with occasional blank areas. Non-joining sherds include one with a post-firing perforation. Horizontal row of finger-tip impressions below rim. Fabric C.
- 61.56 Gaz. no.63. Complete rim, maximum of 20cm of vessel height surviving. Horizontal rows of finger-tip impressions, immediately below rim, and 17cm below rim. Horizontal finger wiping on interior below rim. Fabric M.
- 61.57 Not located at Colchester Museum.
- 61.58 Gaz. no.70. Rustication below shoulder consists of vertical lines. Above cordon rough cross shape. Three applied finger-impressed 'horseshoes' with rough finger-impressed cross shapes between. Fabric D.
- 61.59 Gaz. no.61. Complete base and rim to base profile. Triple horizontal row of finger-tip impressions 13cm below rim. Rustication rather more sparse above finger-tip rows. Black deposit/sooting on interior and below rim on exterior. Fabric D.
- 61.60 Gaz. no.72. Complete small vessel, pair of repair holes either side of crack. Fabric V.
- 61.61 Gaz. no.66. Post-firing perforations. Horizontal wiping on interior vertical on exterior. Rectangular fracture pattern. Patch of sooting/black deposit on interior. Fabric C.

- 62.62 Gaz. no.64. Complete rim, multiple horizontal rows of finger-tip impressions, pair of post-firing perforations. Fabric C.
- 62.63 Gaz. no.67. Exterior rough with some sooting, rim added as a separate strip, and clear evidence in fractures indicate that pot was coil built. Fabric V.
- 62.64 Gaz. no.135. Globular urn, rim and base missing, slight cordon with bosses, incised pendant chevron below. Pair of post-firing perforations.
- 62.65 Gaz. no.68. Highly fragmentary. Most of rim survives, but little else. Fabric V.
- 62.66 Gaz. no.58. Complete globular urn with four small perforated lug handles applied horizontally, below very slight pinched up cordon. Well smoothed surfaces ?originally burnished. Fabric P.
- 62.67 Gaz. no.9. Fragmentary — some sherds indicate blank zone or zones within the decoration. Fabric P.
- 62.68 Gaz. no.43. Fragmentary Globular Urn, burnished interior plain cordon. Single post-firing perforation not on drawing. Fabric P.
- 62.69 Not located at Colchester Museum.
- 62.70 Not located at Colchester Museum.
- 62.71 Gaz. no.99. Small cup with pinched up knobs below rim found in fragments, inside and outside vessel Fig.72, Gaz. no.98. Fabric C.
- 62.72 Gaz. no.98. Near complete vessel, slab-like fracture pattern, grass-wiped exterior. Patches of sooting/black deposit on exterior below rim, similar patches on interior. Part of exterior appears burnt or overfired. Base has slightly protruding foot. Fabric C.
- 63.73 Gaz. no.100. Row of pre-firing perforations below rim, applied cordon at widest part of vessel mostly flaked off. Vertical, slightly bowed rows of finger-tip impressions. Fabric C.
- 63.74 Gaz. no.103. Row of pre-firing perforations below the rim, applied finger-impressed cordon. Slightly bulbous convex sides, profile similar to Fig.63.75, Gaz. no.105. Fabric C.
- 63.75 Gaz. no.105. Row of pre-firing perforations, applied slashed cordon. Slightly bulbous convex sides, profile similar to Fig.63.74, Gaz. no.103. Fabric D.
- 63.76 Gaz. no.107. Row of pre-firing perforations, large part of rim and base survives. Some finger wiping on exterior, fragmentary. Fabric D.
- 63.77 Gaz. no.108. Applied finger-impressed cordon. Recorded from publication only. Fabric ?C.
- 63.78 Gaz. no.110. Complete rim. Row of pre-firing perforations. Six vertical cordons link rim to horizontal cordon below. All cordons finger-nail-impressed. Fabric C.
- 63.79 Gaz. no.111. Row of pre-firing perforations below rim. Wipe marks on surface. Fabric D.
- 63.80 Gaz. no.112. Row of pre-firing perforations below rim, applied finger-impressed cordon. Fabric D.
- 64.81 Gaz. no.113. Near complete, small straight sided pot, slab like fracture pattern. Random finger-tip and nail rustication on exterior. Fabric D.
- 64.82 Gaz. no.115. Complete vessel. Upright horizontal pierced lugs at rim. Light finger wiping on exterior. Some random finger-nail impressions on base near exterior. 'Deckseldoos,' according to O'Connor (1980). One piece of grog recognisable as a piece of pot. Fabric Q.
- 64.83 Gaz. no.116. Slashed decoration on rim and applied cordon, only small sherd with cordon could be located at Colchester Museum.
- 64.84 Gaz. no.117. Row of pre-firing perforations below rim, applied horizontal finger-impressed cordon, rim internally thickened. Fragmentary. Fabric D.
- 64.85 Gaz. no.119. Complete rim, distorted oval shape row of pre-firing perforations below rim. Fabric D.
- 64.86 Gaz. no.120. Complete pot, vertical wiping on exterior, very neatly made despite very coarse temper, protruding foot on part of base. Fabric D.
- 64.87 Gaz. no.123. Row of pre-firing perforations below rim. Fabric D.
- 64.88 Gaz. no.124. Rim sherd and body sherd of vessel apparently of biconical form. Two neat rounded lugs/knobs survive above shoulder. Row of pre-firing perforations below rim. Sooting/black deposit on interior. Fabric D.
- 64.89 Gaz. no.121. Complete rim and large part of base and most of body survives. Slightly expanded rim.. Two applied, finger-impressed cordons, one 4cm below rim, other half way down body. Rustication ordered in vertical rows, closely spaced between lower cordon and base, wider between the two cordons. A roughly rectangular sherd has been removed, probably deliberately, after firing, 3cm above lower cordon leaving a hole about 4cm x 3.5cm. Applied finger-impressed cordons forming a cross inside base. Strip between upper cordon and rim plain apart from row of pre-firing perforations. This strip appears to have been applied separately during vessel construction. Fabric C.
- 65.90 Gaz. no.125. Row of pre-firing perforations below rim, heavy finger wiping on exterior. Fabric D.
- 65.91 Gaz. no.126. Highly fragmentary, several rim and many body sherds. Two of the body sherds have part of a plain cordon, some have a few finger impressions on the exterior: there are also one or two sherds of flat base.
- 65.92 Gaz. no.94. Rim and upper wall survive, finger- impressed rim, pair of post-firing repair holes. Fabric Q.
- 65.93 Gaz. no.93. Rim and upper walls survive, plain rim, applied, finger-impressed cordon, finger impressions on exterior. Fabric C.
- 65.94 Gaz. no.96. Fragmentary globular urn. Near complete base survives, plain shoulder cordon with grooved line above. Two ?post-firing perforations survive.
- 65.95 Gaz. no.95. Complete rim, and walls to just below applied finger-impressed cordon. Regular rows of vertical finger-tip impressions above cordon ?same below. Fabric D.
- 65.96 Unlocated at Colchester Museum.
- 65.97 Unlocated at Colchester Museum.
- 65.98 Gaz. no.97. Highly fragmentary. Fabric D.
- 65.99 Gaz. no.86. Complete rim and upper body. Pinched up finger-impressed cordon. Finger-impressed rim and exterior: small patch of finger-nail impressions on interior. Fabric B.
- 66.100 Gaz. no.92. Near complete, finger-nail impressions on interior and exterior of rim. Row of finger-nail impressions below rim. Impressions on the pinched up cordon are also nail rather than finger-tip as indicated on the drawing. Pair of post-firing repair holes either side of crack. Exterior appears to have been burnt or scorched. Fabric M.
- 66.101 Gaz. no.78. Thick walled, finger-impressed rim. Vertical wiping on exterior, horizontal on interior. Fabric D.
- 66.102 Large part of lower wall and part of flat base. Applied finger-impressed, horizontal cordon. Non-joining rim sherd with row of pre-firing perforations below rim, and finger impressions on top of rim. Recorded from publication only. Fabric C.
- 66.103 Gaz. no.114. Bottom of base missing, smoothed surfaces. Drawing shows full vessel profile and rounded rim. However no rim sherds are currently with the vessel at Colchester Museum. Fabric C.
- 66.104 Gaz. no.118. Large part of base with thumb groove on exterior. Large rim sherd with row of pre-firing perforations and one post-firing repair hole. Fabric C.
- 67.105 Finger impressed rim, double row of horizontal finger impressions below. Applied finger-impressed cordon; single row of finger impressions above and below. Fabric Q.
- 67.106 T-shaped, flat-topped rim with finger impressions on exterior. Fabric M.
- 67.107 Finger-impressed flat-topped rim, all over finger-tip rustication arranged in horizontal rows. Single irregular applied finger-impressed cordon. Fabric Q.
- 67.108 Finger-impressed rim and applied finger-impressed cordon. Fabric M.
- 68.109 Gaz. no.9. Coarse vertical wiping on exterior, roughly horizontal on interior. Fabric M.
- 68.110 Gaz. no.19. Plain, flat-topped rim with thumb groove in interior and exterior. Horizontal wiping on interior and exterior plain applied cordon. Fabric D.
- 68.111 Gaz. no.26. Rounded rim, applied finger-impressed cordon. Below cordon horizontal rows of finger-tip rustication. Above cordon, varied and 'uncontrolled' decoration including horizontal row of finger impressions, patches of finger-nail impressions and round-toothed comb impressions. The comb impressions are mainly close to the rim and in some cases run across the top of the rim. Fabric M.
- 68.112 Gaz. no.35. Vertical wiping on interior and exterior, horizontal immediately below applied finger-impressed cordon. Single patch of finger-tip impressions below cordon, arranged in curving vertical rows. Fabric M.
- 68.113 Gaz. no.37. Flat-topped rim, finger impressions on top of rim only run for about one third of circumference. Horizontal row of finger impressions below rim, with groups of three or four vertical rows of finger impressions separated by blank zones. Area of rim with finger impressions on top appears to have been scorched or burnt. Fabric D.
- 68.114 Gaz. no.65. Applied horizontal finger-impressed cordon. Finger-impressed rustication below. Post-firing perforations adjacent to crack. Fabric C.

- 68.115 Gaz. no.227. Flat-topped rim, oval in plan, row of finger-tip impressions on interior and exterior of rim, with second horizontal row below on exterior. Triple rather irregular band of horizontal finger-impressions on body. Post-firing repair holes arranged along crack. Vertical finger wiping on exterior. White Colne. Fabric V.
- 69.116 Gaz. no.231. Flat-topped rim, roughly vertical wiping on exterior giving cross-hatched effect. Horizontal finger wiping on interior. White Colne. Fabric C.
- 69.117 Gaz. no.235. Flat-topped, finger-impressed rim, with double row of horizontal finger impressions on exterior below rim. Vertical finger wiping on exterior, horizontal on interior. Pair of post-firing perforations either side of crack. White Colne. Fabric Q.
- 69.118 Gaz. no.236. Rounded rim with finger impressions on top. Rather sparse finger-tip rustication on exterior. Vertical finger wiping on exterior and interior, with traces of unsmoothed coil joins showing on interior. Pair of small post-firing perforations either side of crack. White Colne. Fabric D.
- 69.119 Gaz. no.240. Slightly inturned, flat, finger-impressed rim. Vertical finger wiping on very rough and uneven exterior, which includes many very large lumps of grog often still recognisable as pieces of pottery. White Colne. Fabric M.
- 69.120 Gaz. no.241. Inturned rounded rim giving hooked rim profile. Traces of vertical finger wiping on smoothed exterior. Finger wiping on interior. Single large firing spall on exterior. White Colne. Fabric M.
- 70.121 Gaz. no.242. Slightly inturned, flat-topped rim. Double row of horizontal finger-tip impressions below rim, which become finger-nail impressions for about half vessel circumference. Traces of wiping on exterior. Pairs of post-firing repair holes adjacent to crack. White Colne. Fabric M.
- 70.122 Gaz. no.244. Flat-topped rim, oval in plan, row of finger-pinched impressions on exterior. Vertical finger wiping on exterior, horizontal on interior. White Colne. Fabric Q.
- 70.123 Gaz. no.245. Uneven exterior with vertical finger wiping and large lumps of grog temper protruding through surface, many still clearly recognisable as pieces of pottery. White Colne. Fabric M.
- 70.124 Gaz. no.246. Irregular T-shaped rim. Pinched up finger-nail-impressed cordon. Horizontal finger wiping on interior. White Colne. Fabric C.
- 70.125 Gaz. no.248. Slightly biconical pot, flat-topped rim with horizontal row of oval impressions made with rounded tool, similar impressions on slight pinched up cordon. White Colne. Fabric Q.
- 71.126 Gaz. no.254. Rounded rim with vertical rows of finger-tip impressions, two of which are joined at the top by an arc of finger-tip/nail impressions. White Colne. Fabric C.
- 71.127 Gaz. no.255. Flat oval base and lower walls. White Colne. Fabric D.
- 71.128 Gaz. no.258. Flat-topped, finger-impressed rim. Undulating horizontal rows of finger impressions. Coarse flint temper with single large lump of grog on interior still clearly recognisable as a piece of pottery. Pair of post-firing perforations survive close to sherd edge. White Colne. Fabric D.
- 71.129 Gaz. no.264. Flat-topped rim, some vertical finger wiping on exterior. Vertical finger wiping on interior with horizontal wiping above. Large part of flat base survives, not illustrated. White Colne. Fabric D.
- 71.130 Gaz. no.266. Flat-topped, finger-impressed rim. Single patch of finger-nail impressions below rim. Post-firing repair holes adjacent to crack. Clear coil joins showing in fracture. White Colne. Fabric M.
- 71.131 Gaz. no.285. Inturned, flat-topped rim, vertical wiping on exterior. Small patch of sooting on exterior below rim. White Colne. Fabric C.
- 72.132 Gaz. no.287. Flat-topped, finger-impressed rim. Two horizontal rows of finger impressions below rim with marked break in profile where separate strip of clay forming rim joined to rest of body. Vertical rows of finger-tip impressions broken by one horizontal row which is in places finger-pinched. The flint-tempered fabric has at least one large lump of grog still recognisable as a fragment of pottery which is itself flint-tempered. ?Slipped. White Colne. Fabric D.
- 72.133 Gaz. no.292. Flat-topped rim with horizontal row of finger impressions on exterior. About half vessel's circumference survives with at least three groups of three rows of vertical finger impressions. Some fragments of grog still recognisable as pieces of pottery. White Colne. Fabric M.
- 72.134 Gaz. no.293. Slightly inturned flat-topped rim giving hooked rim profile. Vertical finger wiping on exterior. One part of interior of rim thickened by additional patch of clay. White Colne. Fabric M.
- 72.135 Gaz. no.224. Flat-topped rim in places slightly thickened internally. Applied horizontal cordon with pair of opposed applied 'horseshoes' above. Finger-tip decoration on 'horseshoes', slashed decoration on rim and applied cordon. Slashing of the cordon has been carried out with sufficient vigour that faint lines have been cut in the vessel wall within one of the 'horseshoes'. Horizontal wiping on interior, smoothing and wiping next to 'horseshoes' resulting from attachment. Some grog fragments still recognisable as pieces of pottery. White Colne. Fabric M.
- 73.136 Gaz. no.226. Flat-topped in places rather T-shaped rim with finger impressions on exterior. Applied horizontal, finger-impressed cordon, with horizontal rows of finger impressions above and below, blank zone above base. Vertical wiping of exterior. Some grog fragments still recognisable as pieces of pottery. White Colne. Fabric Q.
- 73.137 Gaz. no.228. Flat-topped, finger-impressed rim, applied finger-impressed cordon, finger-tip rustication arranged in horizontal lines above and round-toothed comb-point impressions arranged in sloping lines below. Pair of post-firing perforations either side of crack. Interior and exterior very well smoothed. White Colne. Fabric M.
- 73.138 Gaz. no.230. Flat-topped rim. Slight pinched up cordon, with pair of applied, finger-impressed 'horseshoes' above. Vertical finger wiping on exterior, finger grooves/smoothing lines adjacent to 'horseshoes' as result of application. White Colne. Fabric C.
- 73.139 Gaz. no.232. Flat-topped rim. Patch of finger-nail-impressions on one part of exterior only, together with two large oval thumb impressions. Very marked vertical finger wiping on exterior. Some grog fragments still recognisable as pieces of pottery. White Colne. Fabric M.
- 74.140 Gaz. no.234. Flat-topped, finger-impressed rim externally thickened with applied finger-impressed strip. Applied horizontal finger-impressed cordons, dense finger impressions: above, in two places the alignment is reversed, shown in the two views of the pot. Five post-firing perforations, and part of another surviving at break. One of the perforations is adjacent to a scar where a hole was begun but not completed. White Colne. Fabric M.
- 74.141 Gaz. no.237. T-shaped rim with finger impressions on top, exterior and interior. Applied finger-impressed cordon with horizontal finger impressions above and below. Short row of very faint finger impressions below rim on interior. Horizontal wiping above cordon, vertical and horizontal below. White Colne. Fabric D.
- 75.142 Gaz. no.238. T-shaped rim, finger-impressed exterior and interior. Applied finger-impressed cordon and four applied finger impressed 'horseshoes'. Finger-tip rustication dense above cordon, rather more sparse below. White Colne. Fabric C.
- 75.143 Gaz. no.239. Flat-topped rim with finger impressions on interior and exterior. Applied finger-impressed cordon with finger-impressed 'horseshoes', between cordon and rim. Uneven exterior with numerous, large fragments of grog still recognisable as pieces of pottery. White Colne. Fabric M.
- 75.144 Gaz. no.243. Flat-topped, finger-impressed rim, with row of finger impressions on exterior. Applied horizontal finger-impressed cordon with row of finger impressions above, random finger-tip rustication above this row, and below cordon, with one irregular vertical blank zone. Traces of horizontal and vertical wiping. White Colne. Fabric V.
- 75.145 Gaz. no.250. Flat-topped, finger-impressed rim with discontinuous row of finger impressions below rim, linked by vertical rows of finger impressions to an applied horizontal cordon. White Colne. Fabric Q.
- 75.146 Gaz. no.257. T-shaped, internally bevelled, finger-impressed rim, externally thickened by applied finger-impressed strip of clay. Applied finger-impressed cordon linked to rim with groups of finger-impressed lines mostly vertical, but in one case curving to form an arc. Many fragments of grog still recognisable as pieces of pot. Vertical wiping on exterior, horizontal below cordon, as result of attachment, and on interior. White Colne. Fabric M.
- 76.147 Gaz. no.283. Flat-topped, externally thickened rim, pinched up finger-impressed cordon, with two applied finger-impressed 'horseshoes' above, one of which is flanked by two short rows

- of finger-nail impressions. Single post-firing perforation survives. Horizontal wiping on interior, finger wiping parallel to 'horseshoes' as result of attachment. White Colne. Fabric D.
- 76.148** Gaz. no.284. Plain, flat-topped rim, applied finger-impressed cordon. Dense finger-impressed exterior, elaborate and very distinct wiping on interior. White Colne. Fabric Q.
- 76.149** Gaz. no.252. Flat-topped rim with finger-impressed interior and exterior. Double row of finger-tip impressions below. White Colne. Fabric M.
- 76.150** Gaz. no.253. Flat-topped rim, with row of finger impressions below on interior and exterior. Single finger impression on surviving part of exterior. White Colne. Fabric M.
- 76.151** Gaz. no.272. Flat-topped rim internally expanded by application of an extra strip of clay. Finger impressions on exterior of rim. One finger-impression on surviving part of exterior. White Colne. Fabric M.
- 76.152** Gaz. no.274. Flat-topped, finger-impressed rim. Double row of finger impressions below rim. Single post-firing perforation on surviving part of exterior. White Colne. Fabric M.
- 76.153** Gaz. no.279. Internally bevelled rim of hook-rimmed vessel. White Colne. Fabric C.
- 76.154** Gaz. no.278. Flat-topped finger-impressed rim. Sloping finger wiping on exterior. White Colne. Fabric M.
- 76.155** Gaz. no.280. T-shaped rim with finger impressions on interior and exterior. Finger-tip rustication on exterior. White Colne. Fabric B.
- 76.156** Gaz. no.281. Flat-topped, finger-impressed rim, with part of applied finger-impressed 'horseshoe'. White Colne. Fabric M.
- 76.157** Gaz. no.282. Flat-topped rim finger-impressed on exterior and interior. Part of row of finger impressions on surviving part of exterior. White Colne. Fabric C.
- 77.158** Gaz. no.233. Well finished pot of biconical form, with slight pinched up finger-impressed cordon at shoulder. About half rim survives with two very rectangular 'horseshoes' of finger impressions: parts of two others survive. Large post-firing perforations, one above, the other below, the cordon. White Colne.
- 77.159** Gaz. no.259. Externally expanded flat rim with finger impressions on exterior. White Colne. Fabric C.
- 77.160** Gaz. no.260. T-shaped rim with finger impressions on interior and exterior. White Colne. Fabric D.
- 77.161** Gaz. no.261. Flat-topped rim with finger-nail impressions. Random rustication on exterior, with horizontal wiping. White Colne. Fabric M.
- 77.162** Gaz. no.262. Rounded rim, with horizontal row of finger impressions where rim joined to rest of body. Some random finger-nail impressions on exterior below. White Colne. Fabric M.
- 77.163** Gaz. no.265. Externally bevelled T-shaped rim. Rows of finger-tip impressions on exterior. Horizontal wiping on interior. White Colne. Fabric M.
- 77.164** Gaz. no.251. Rounded rim with finger-impressed exterior, with sloping row of finger impressions below. Two vertical rows survive on exterior of sherd. White Colne. Fabric M.
- 77.165** Gaz. no.288. Flat-topped, finger-impressed rim with thumb groove below. Finger-tip rustication on exterior. White Colne. Fabric M.
- 77.166** Gaz. no.289. Triple row of oval stabbed impressions at base angle. White Colne. Fabric M.
- 77.167** Gaz. no.290. Non-joining base and lower wall sherd; finger-tip rustication on inside and outside of base and exterior wall. White Colne. Fabric D.
- 77.168** Collar of Collared Urn. Internal rim bevel decorated with cord impressions. Horizontal rows of cord impressions in exterior. White Colne. Fabric M.
- 78.169** Gaz. no.1. Flat-topped rim expanded internally by addition of an extra strip of clay: finger impressions on top. Exterior of rim has row of elongated oval impressions not made with finger-tip. Two pairs of post-firing perforations, three of which have beside them marks on the interior where perforations have been begun and then abandoned. Wiped surface. Rectangular fracture pattern. Alresford. Fabric B.
- 78.170** Gaz. no.186. Rounded plain rim. Rough surface with clear vertical finger wiping. Many fragments of grog still recognisable as pieces of pottery. Gt Bentley. Fabric M.
- 78.171** Gaz. no.161. Flat-topped, plain externally expanded rim, with row of pre-firing perforations below. Applied finger-impressed cordon. Vertical wiping on interior. Clear join visible in wall fracture below cordon. Colchester, St Clare Road. Fabric D.
- 78.172** Gaz. no.162. Globular urn, flat-topped plain rim. Plain applied girth cordon mostly missing. Four small lug-handles, lower ends plugged into vessel wall, upper simply luted to wall. Abraded surfaces but where finish survives well smoothed, probably originally burnished. Colchester, Shakespeare Road. Fabric R.
- 78.173** Gaz. no.164. Flat finger-impressed rim. Finger-tip rustication ordered in vertical rows on exterior. Horizontal wiping on interior. Colchester, Water Lane. Fabric V.
- 79.174** Gaz. no.163. Flat-topped rim with oval impressions on interior and exterior. Dense random oval impressions on exterior. Slashed decoration on slight shoulder. The shoulder effect appears to be the result of joining the upper part of the pot to the lower as a separate strip of clay. All decoration executed with a tool rather than a finger. Vertical finger wiping below shoulder on exterior. On interior upper part of vessel has horizontal finger wiping sloping below. Colchester, Water Lane. Fabric V.
- 79.175** Gaz. no.169. Flat-topped rim. Dense finger-tip rustication on exterior, pinched up, finger-impressed cordon. Traces of horizontal wiping on interior. Colchester Water Lane. Fabric D.
- 79.176** Gaz. no.167. Body sherd with very marked vertical finger wiping on ?slipped surface. Random finger-tip rustication on exterior. Horizontal wiping on interior. ?Coil join visible in broken edge at top of sherd. Colchester, Water Lane. Fabric C.
- 79.177** Gaz. no.168. Flat-topped, finger-impressed rim. Traces of wiping to surfaces. Colchester Water Lane. Fabric D.
- 80.178** Gaz. no.157. Flat finger-impressed rim. Vertical wiping on exterior, row of three finger-tip impressions survives on one part of exterior just above break. Colchester, Lexden Road. Fabric V.
- 80.179** Gaz. no.158. Slightly inturned, flat-topped rim. Some grog inclusions still recognisable as pieces of pottery. Colchester, Lexden Road. Fabric M.
- 80.180** Gaz. no.172. Rim missing, vertical finger wiping on exterior. Bottom of base well smoothed with abrasion around outer edge as a result of use. Interior of base has coarse flint grit exposed, uncertain if this is the result of use or poor surface finish. Colchester, Abbey Field. Fabric C.
- 80.181** Biconical Urn, about half pot survives (Brown 1995, 134). Internally bevelled rim with finger-impressed exterior, added as separate strip of clay. Two horizontal, slightly pinched up, finger-impressed cordons, linked to rim by two vertical finger-impressed strips. One part of exterior has neat vertical striations apparently the result of combing. Horizontal fracture patterns may indicate coil building, and a detached sherd shows a clear coil join, where the pot above the upper horizontal cordon has been joined to the rest of the vessel. Colchester, Duggard Avenue. Fabric D.
- 80.182** Gaz. no.156. Flat-topped rim, slightly expanded on exterior, row of pre-firing perforations below rim. Colchester, Duggard Avenue. Fabric D.
- 80.183** Gaz. no.189. Flat-topped, finger-impressed rim. Vertical wiping on exterior, sloping on interior. Shalford. Fabric D.
- 81.184** Gaz. no.190. Flat-topped plain rim, most of base missing, Triangular patch of finger-nail impressions; row of four finger-nail impressions below rim, patch of random finger-nail, together with a few isolated finger-nail impressions, all on one 'side' of the vessel. Shalford. Fabric D.
- 81.185** Gaz. no.197. Flat-topped rim with finger impressions on exterior. Four applied finger-impressed 'horseshoes' with thumb grooves and faint finger impressions adjacent as a result of attachment. Vertical finger wiping on exterior, horizontal on interior. Finger-tip and nail rustication on part of the upper vessel wall, overlain by comb-point impressions which in places are resolved into a pattern of floating lozenges. Comb-point decoration is overlain by a sloping line of finger-tip impressions. Wix. Fabric C.

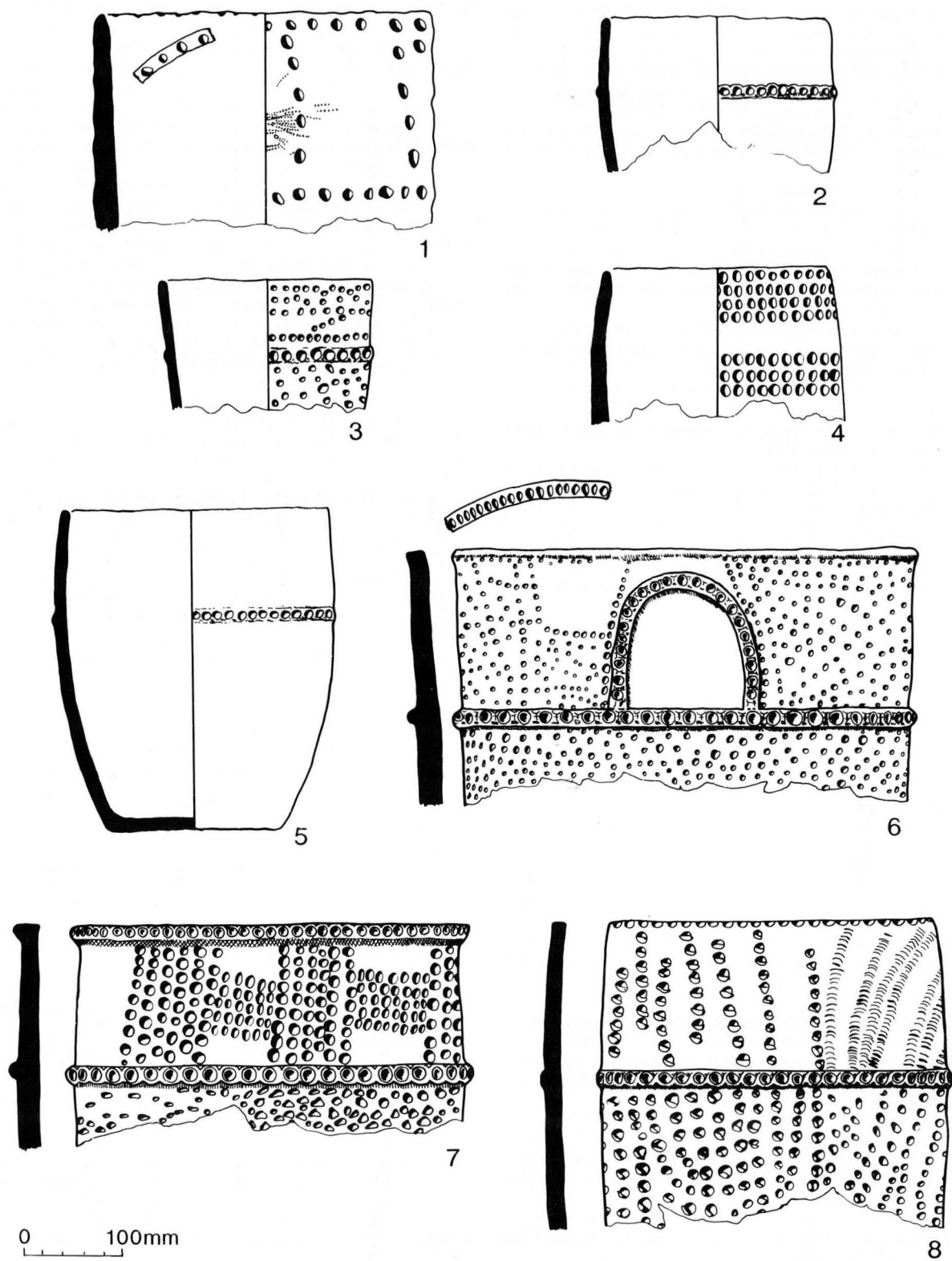


Figure 55 Bronze Age pottery from Ardleigh

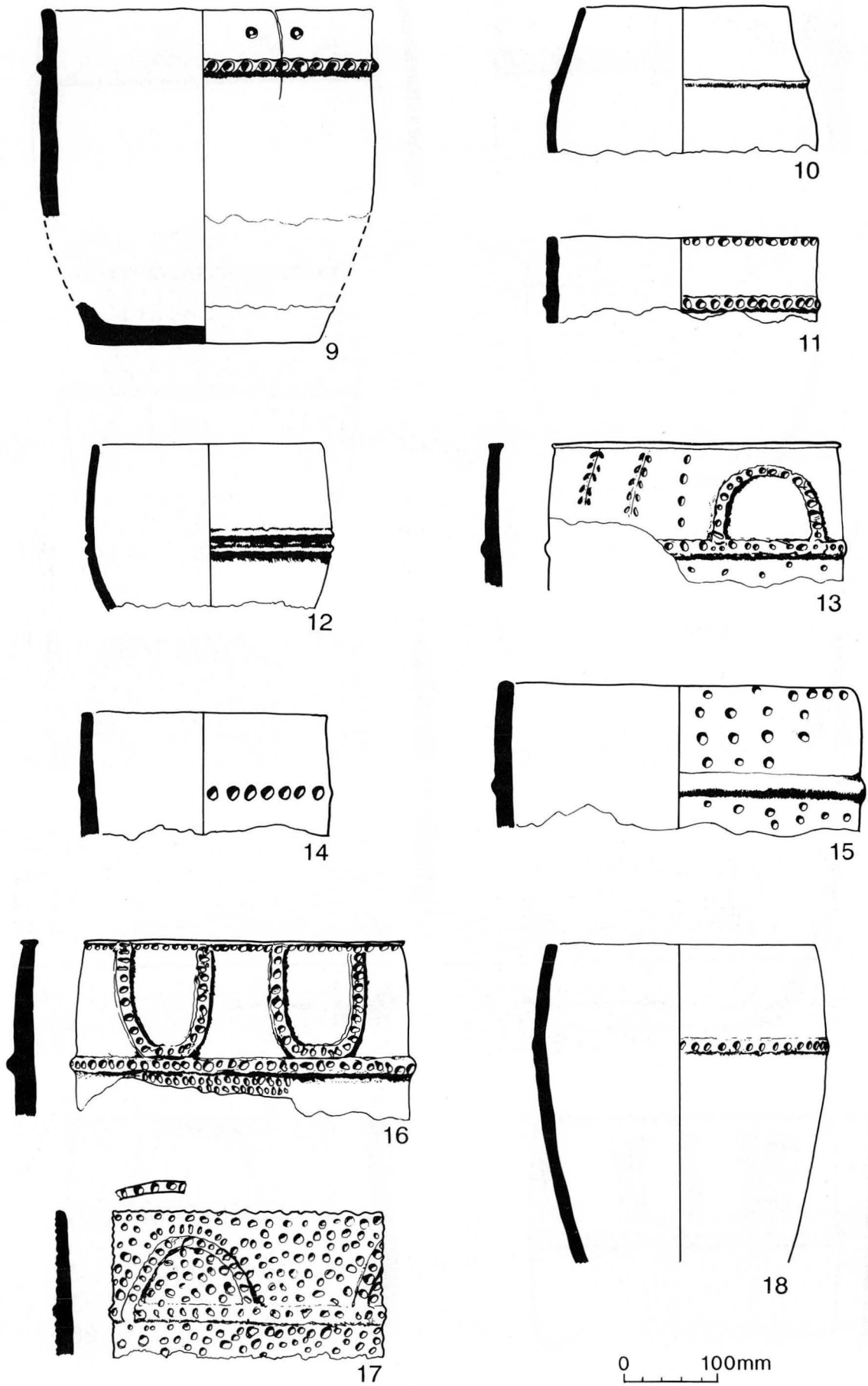
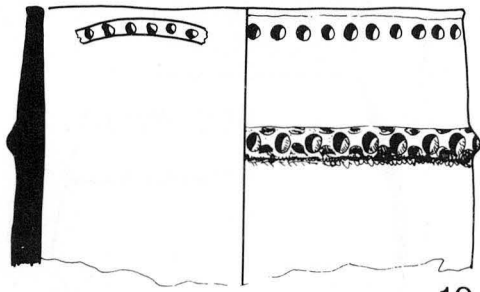
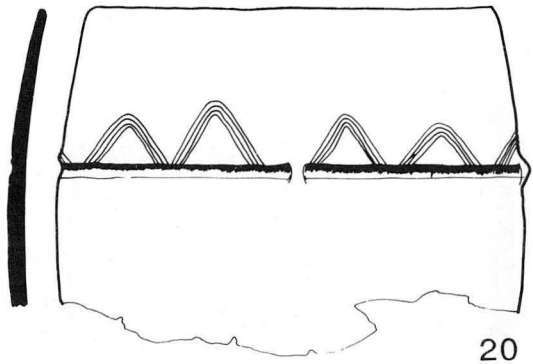


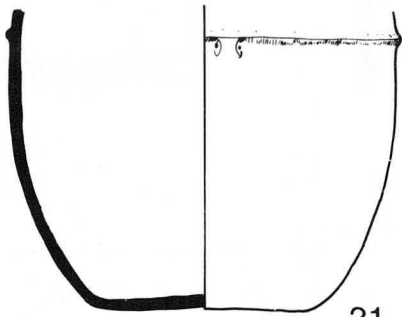
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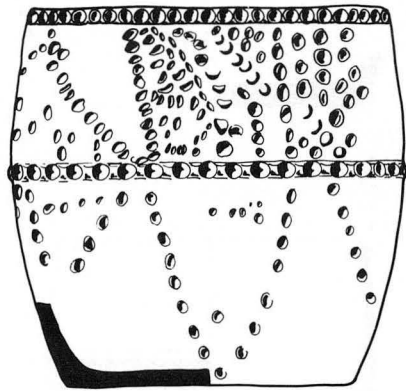
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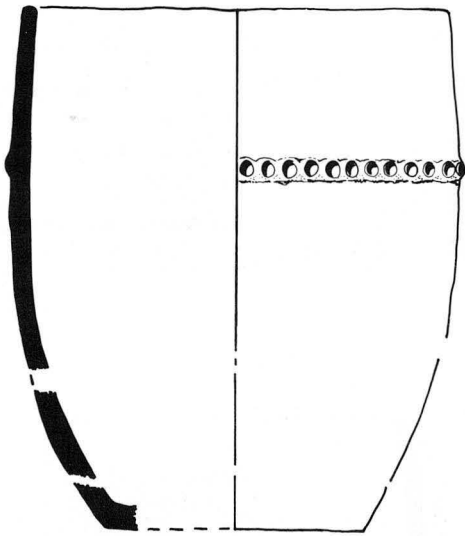
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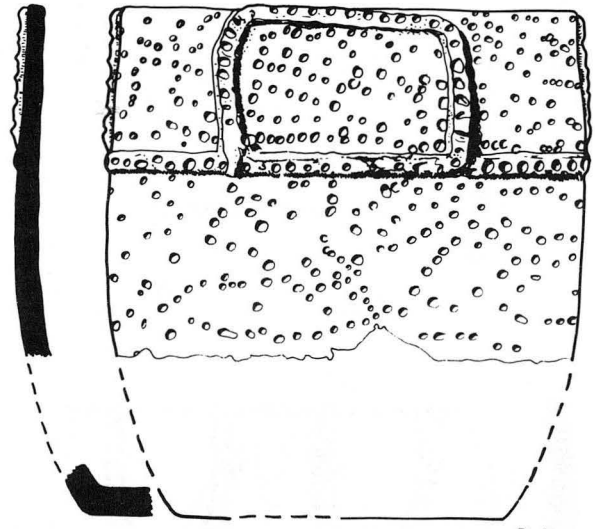
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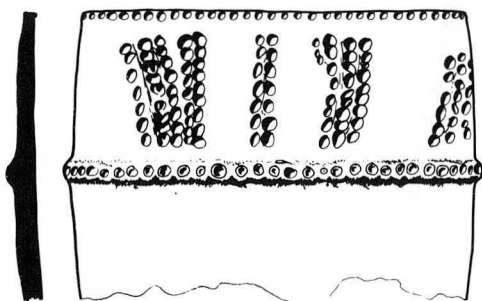
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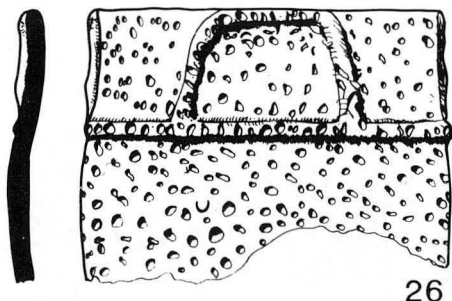
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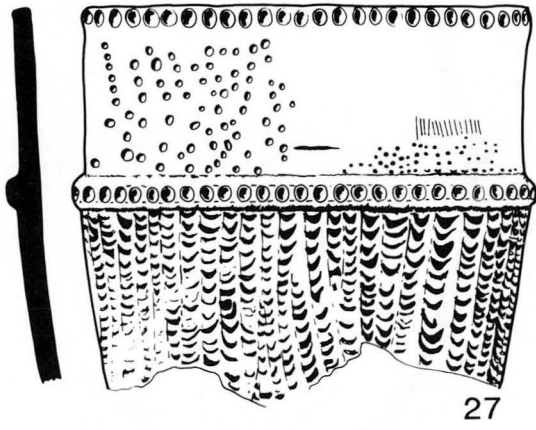
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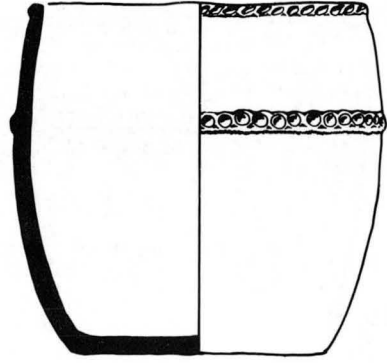
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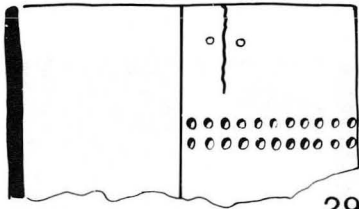
Figure 57 Bronze Age pottery from Ardleigh



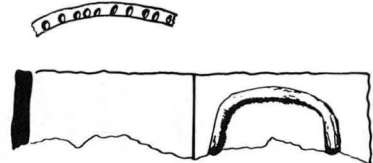
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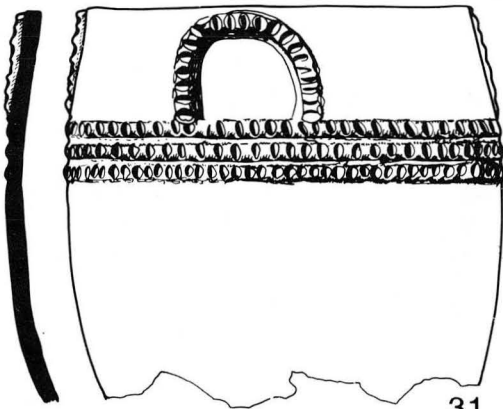
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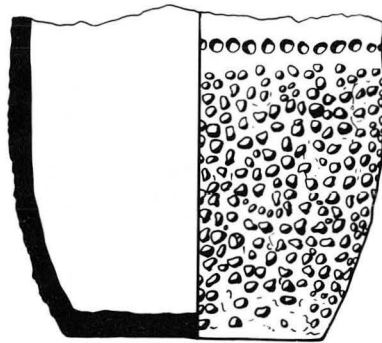
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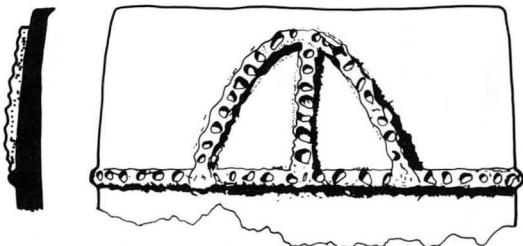
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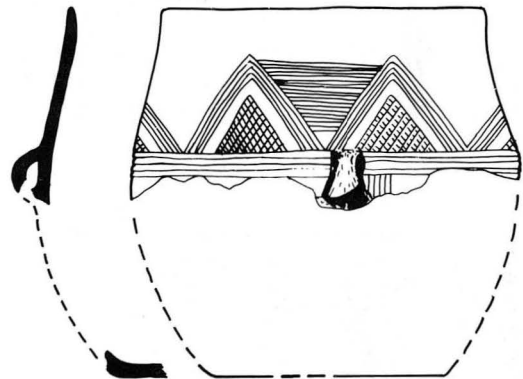
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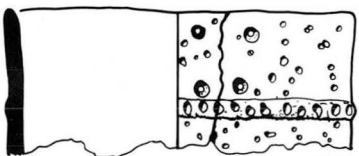
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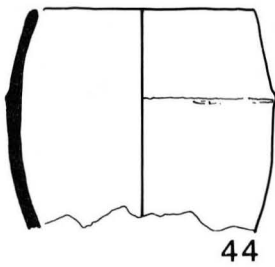
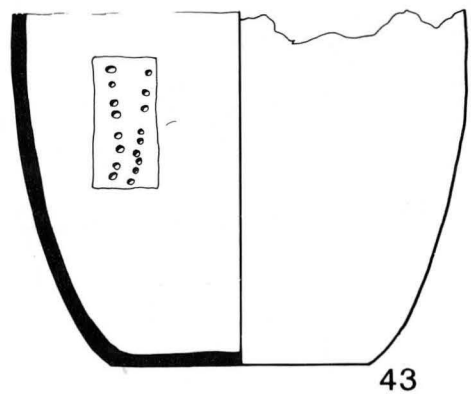
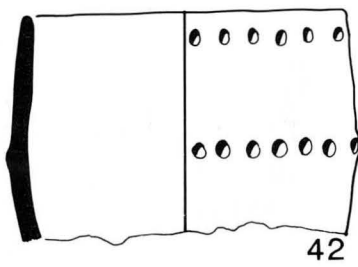
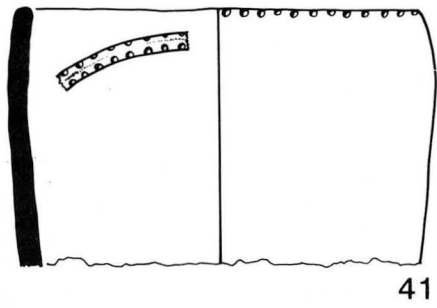
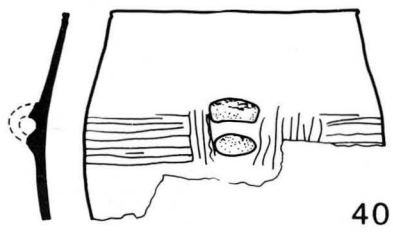
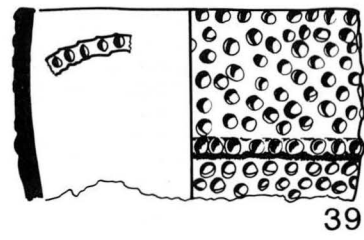
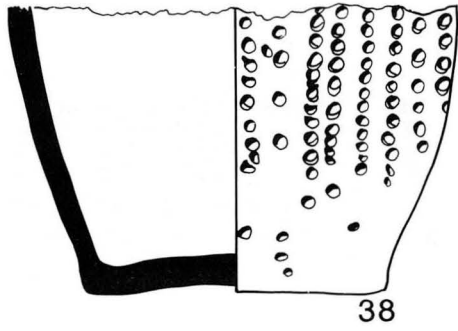
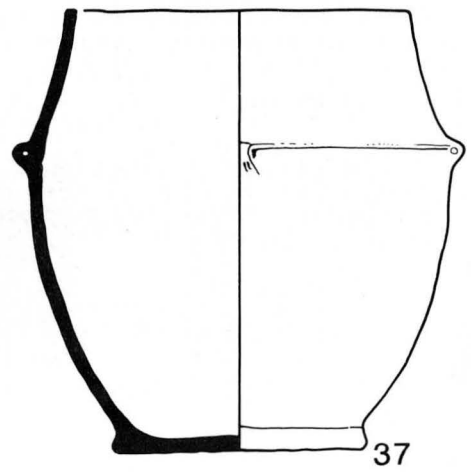
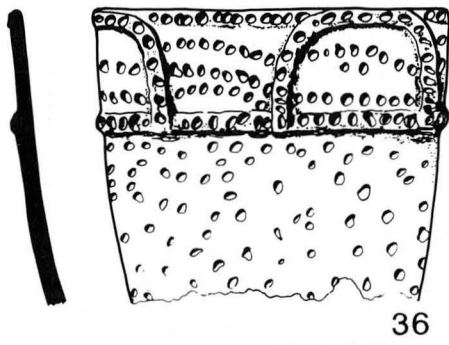
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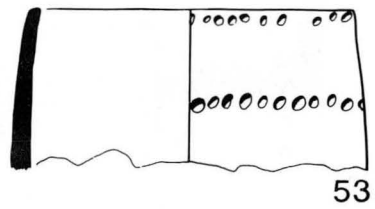
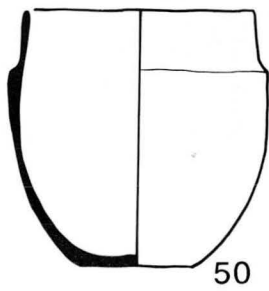
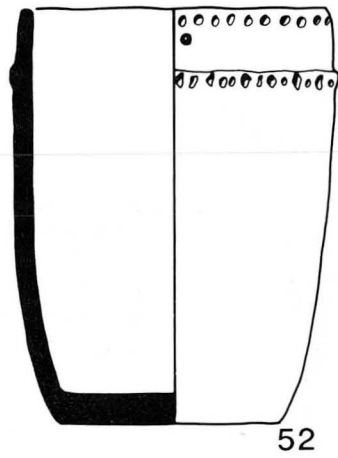
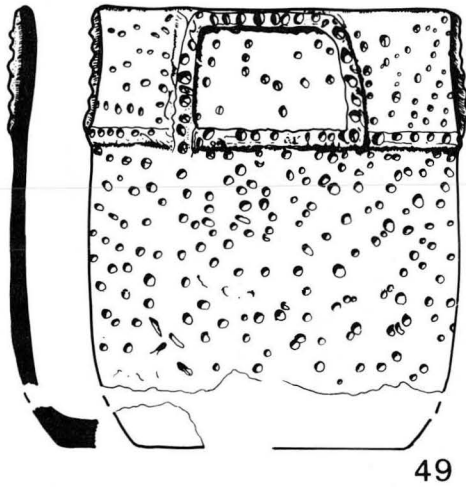
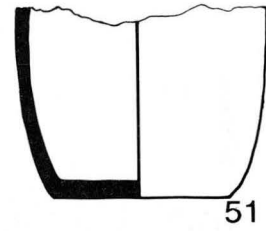
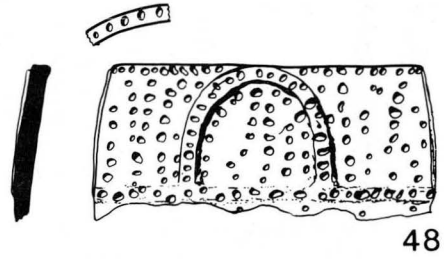
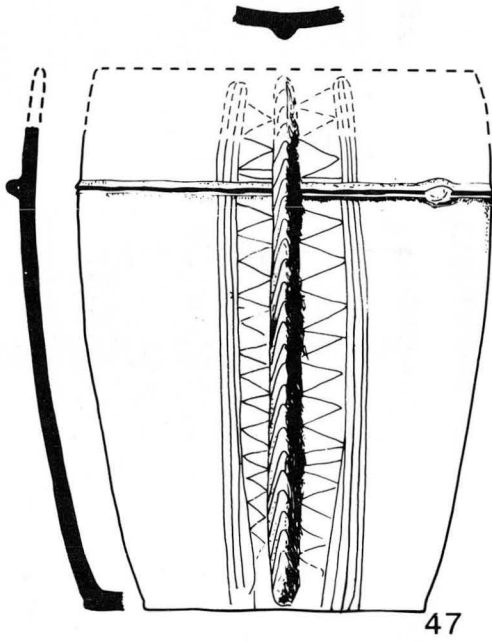
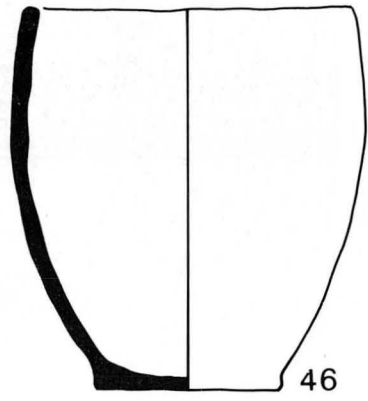
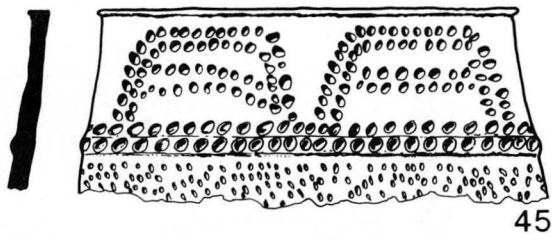
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Figure 58 Bronze Age pottery from Ardleigh



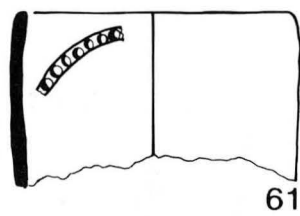
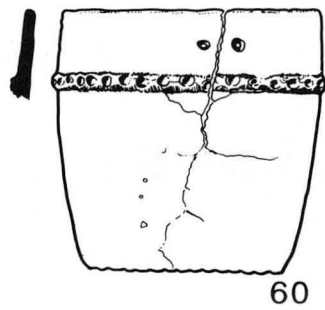
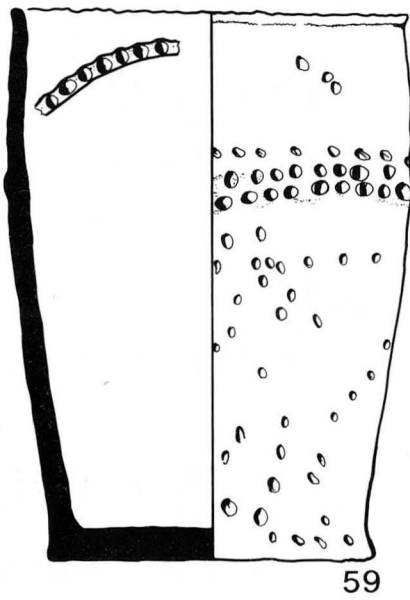
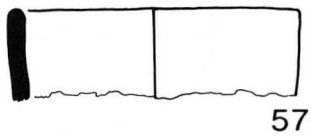
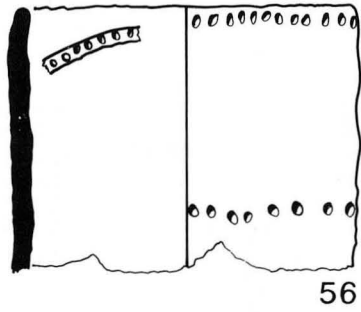
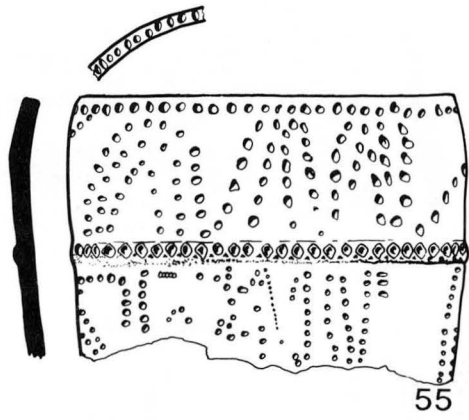
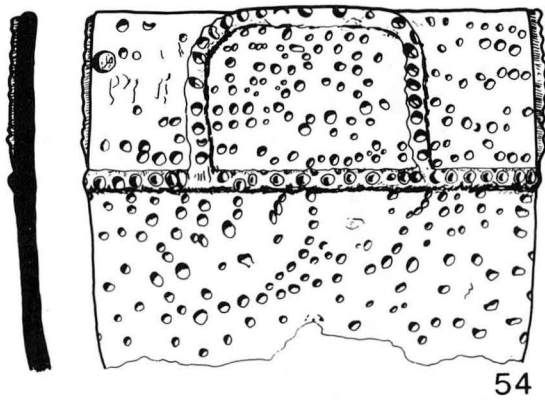
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Figure 59 Bronze Age pottery from Ardleigh



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Figure 60 Bronze Age pottery from Ardleigh



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Figure 61 Bronze Age pottery from Ardleigh

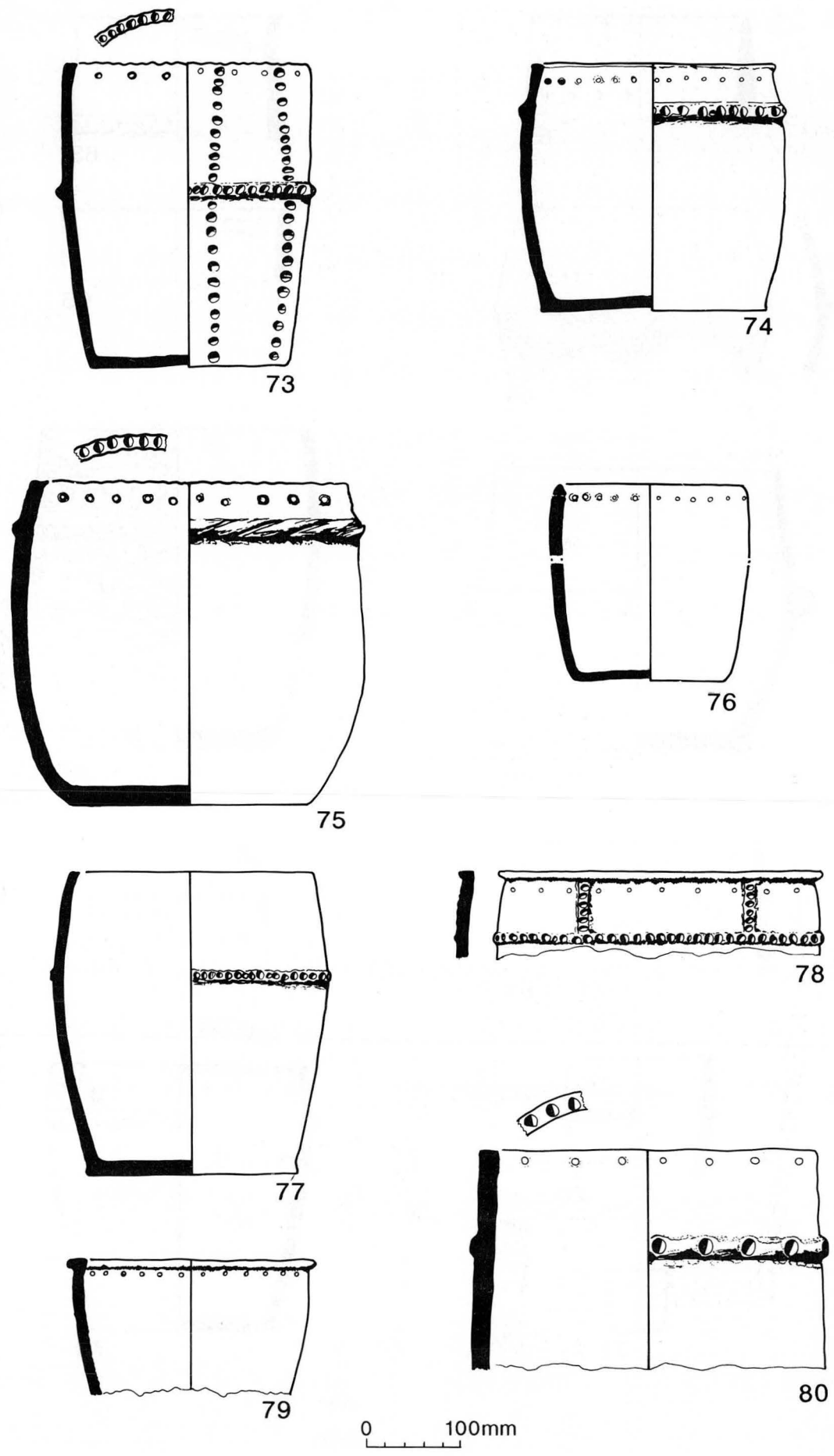


Figure 62 Bronze Age pottery from Ardleigh

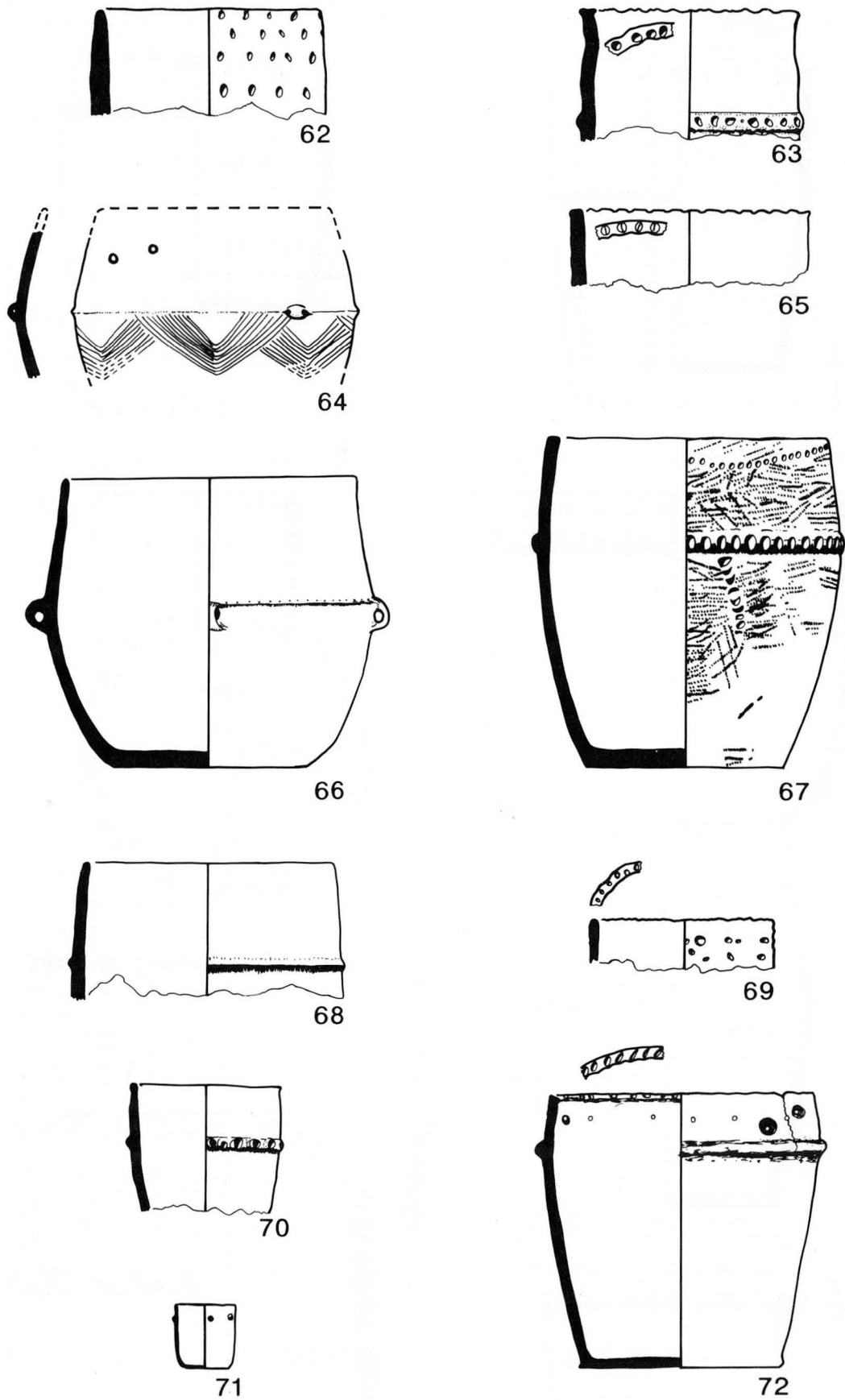


Figure 63 Bronze Age pottery from Ardleigh

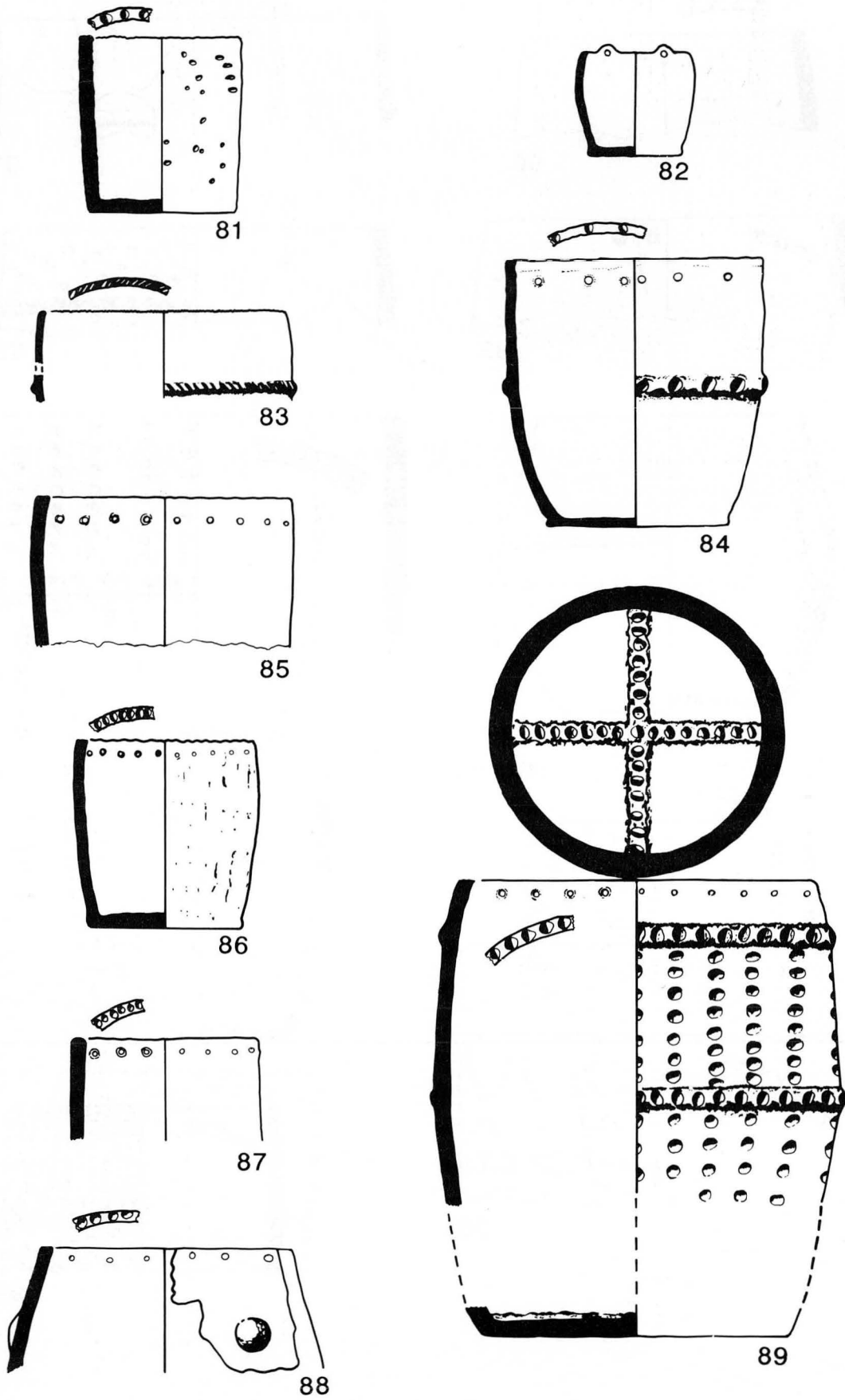


Figure 64 Bronze Age pottery from Ardleigh

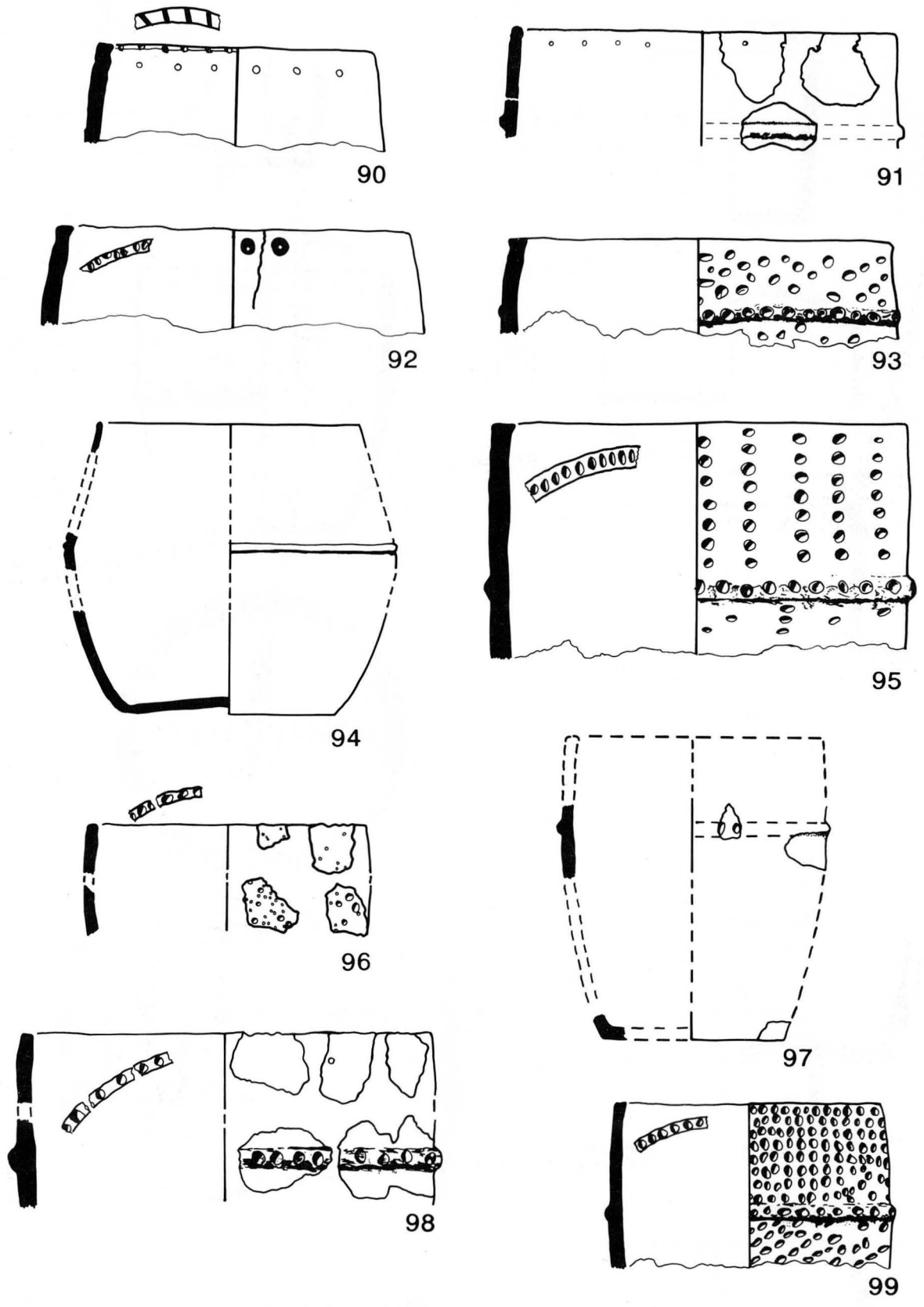
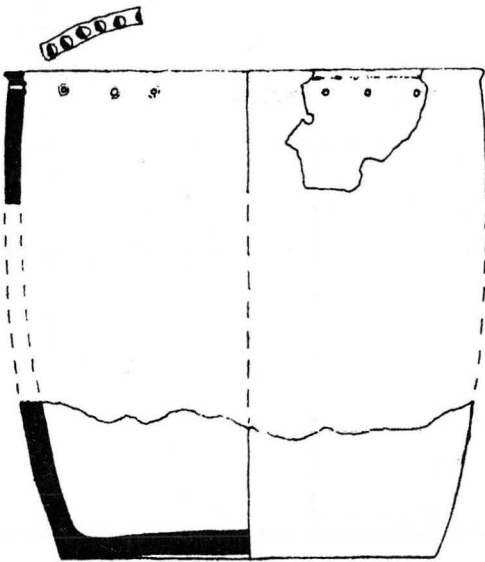
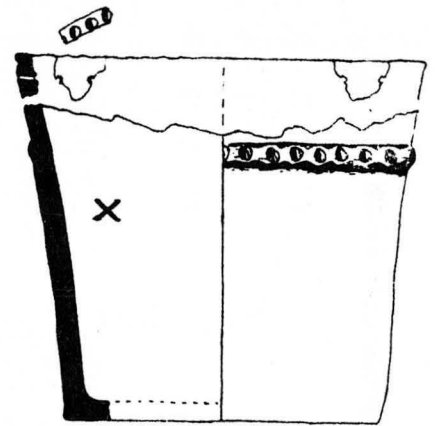
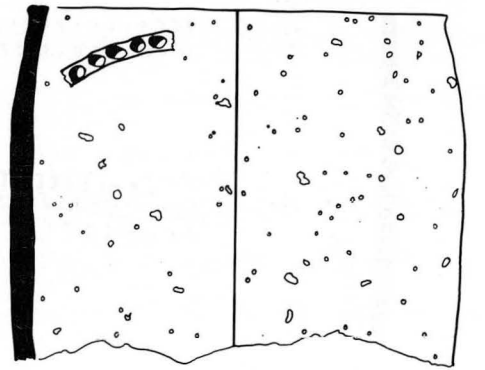
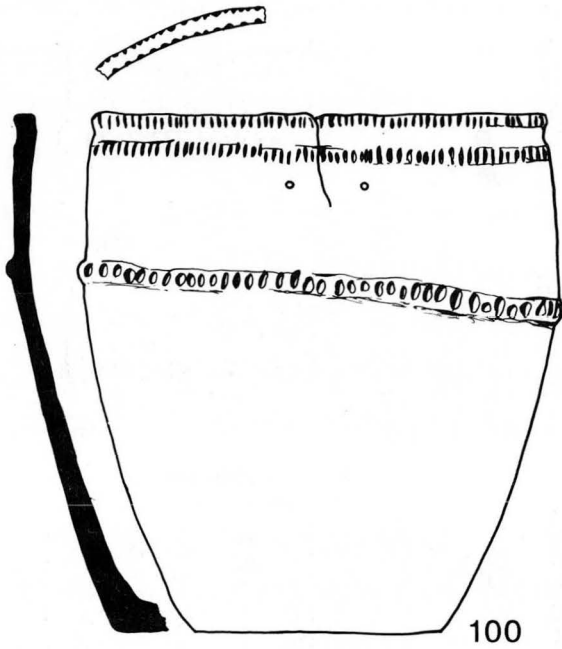


Figure 65 Bronze Age pottery from Ardleigh



0 100mm

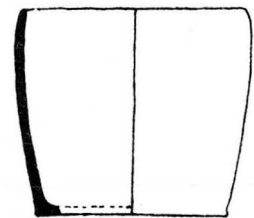
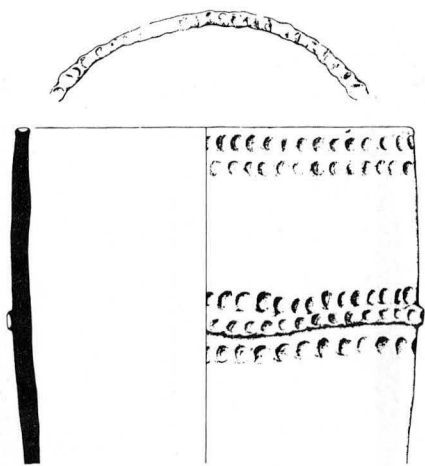
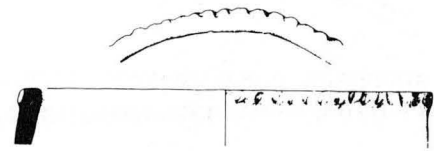


Figure 66 Bronze Age pottery from Ardleigh

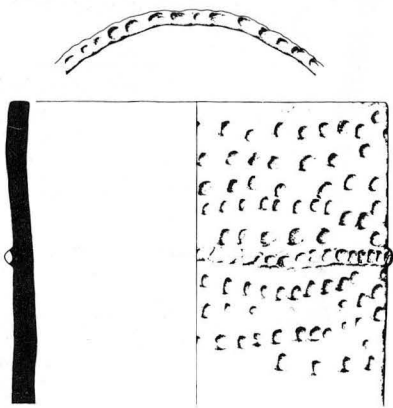


105

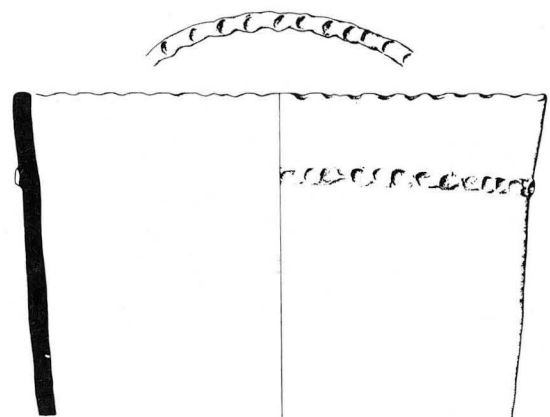


106

0 100mm



107



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Figure 67 Bronze Age pottery from Ardleigh

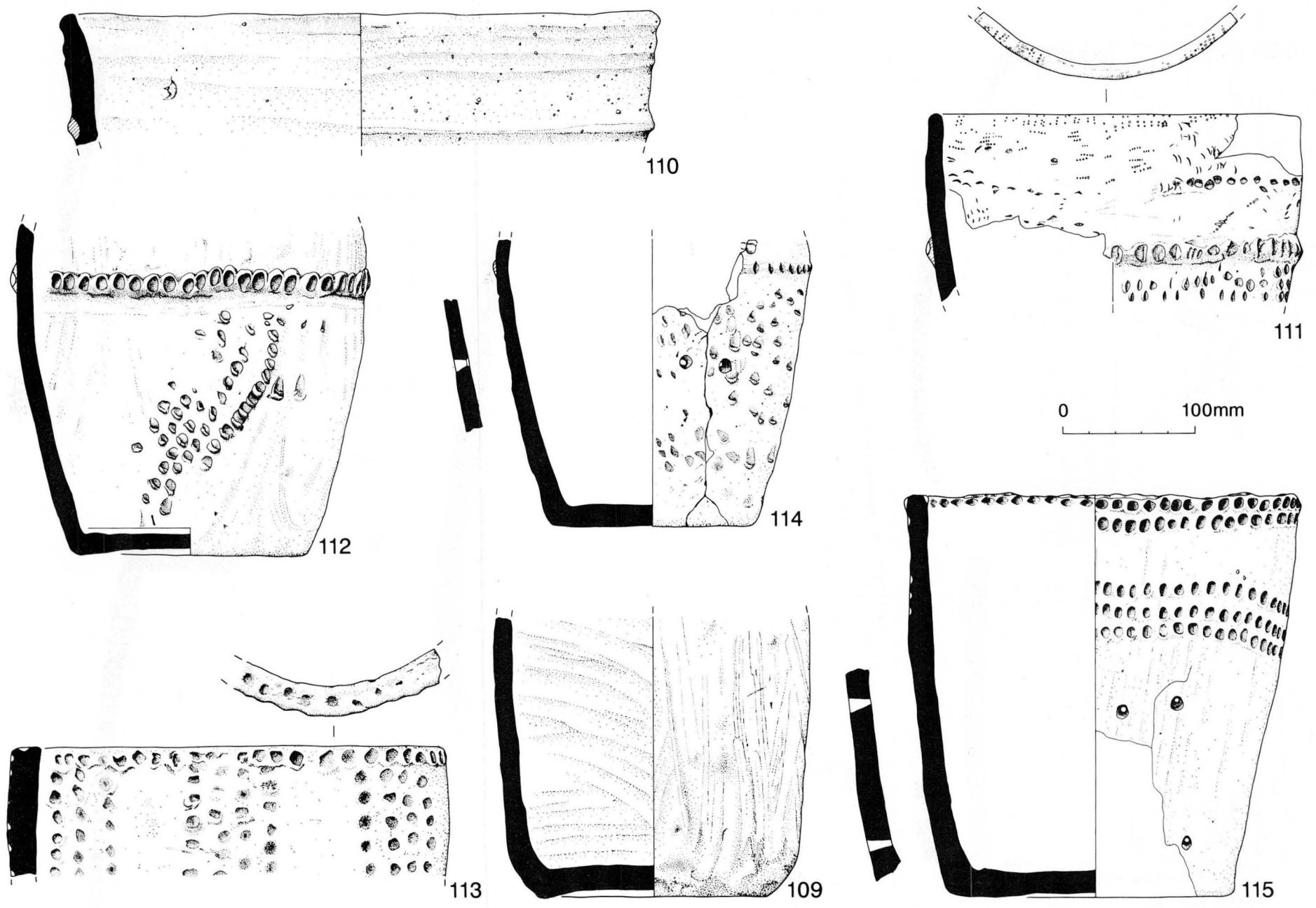


Figure 68 Bronze Age pottery from Ardleigh

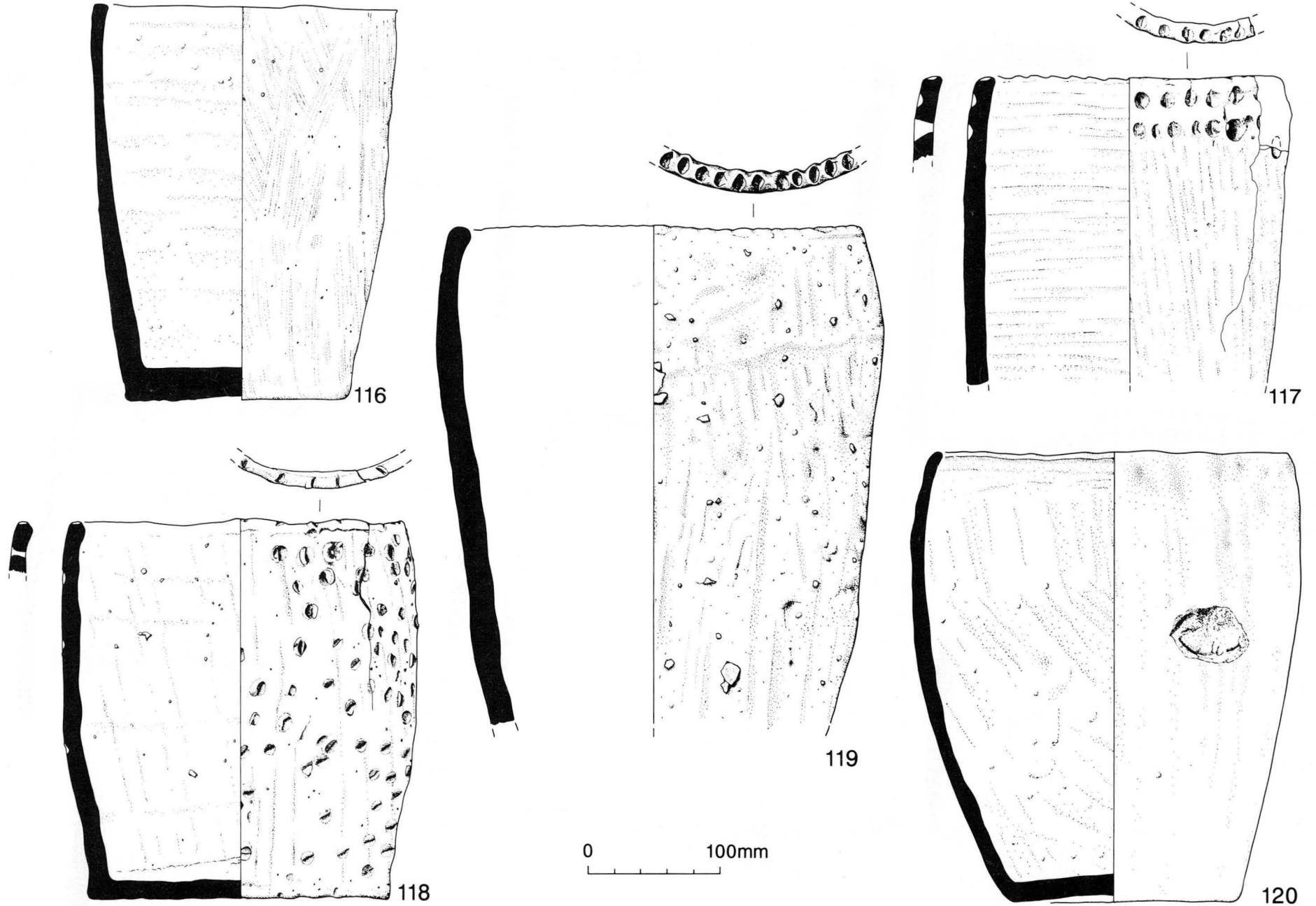
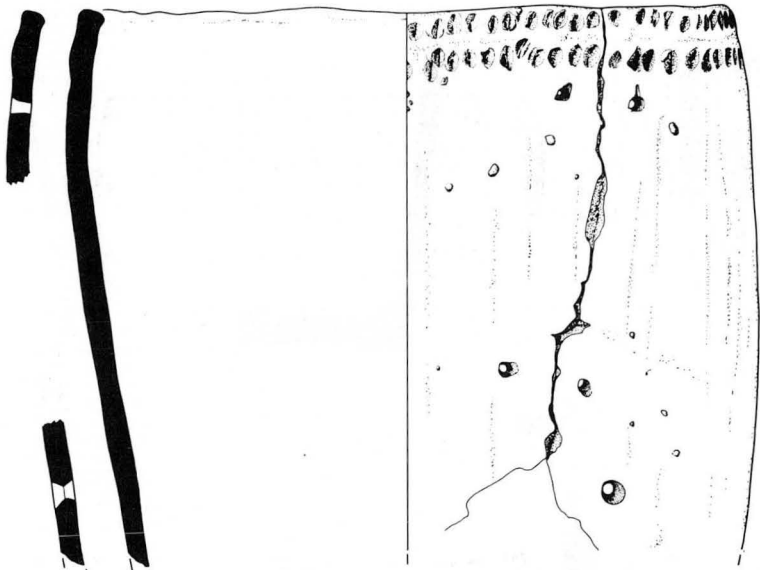


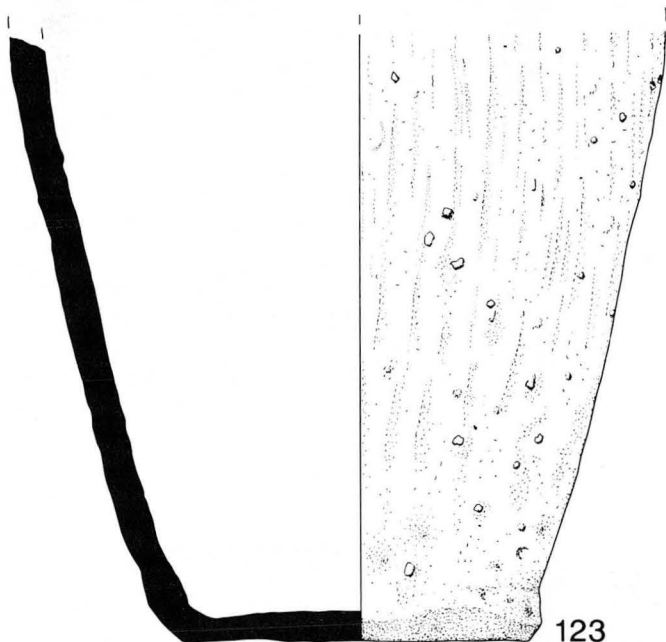
Figure 69 Bronze Age pottery from White Colne



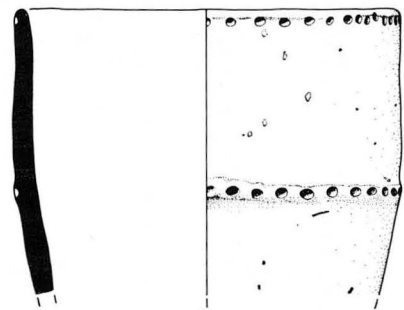
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122

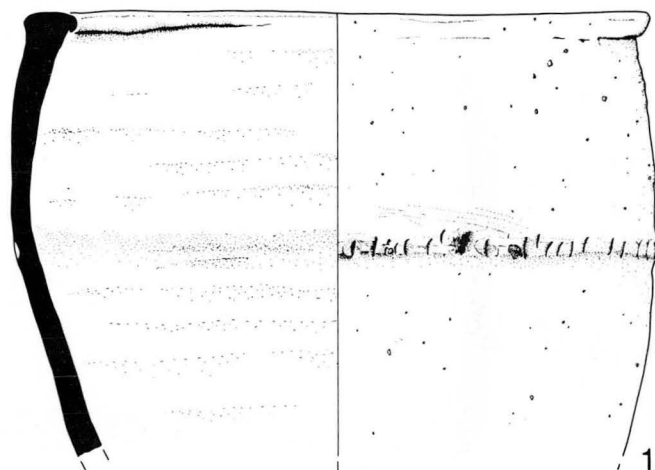


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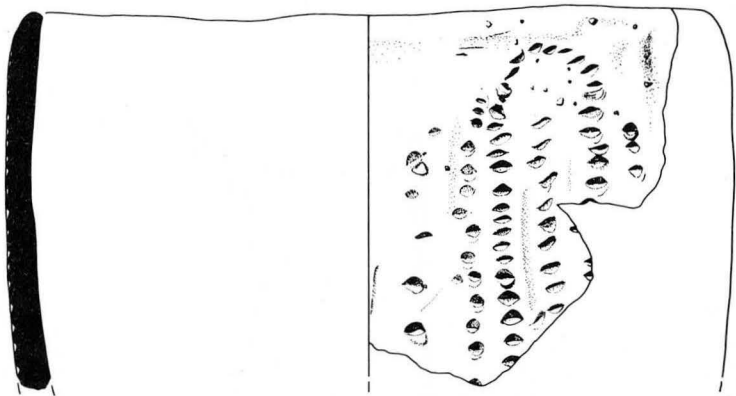
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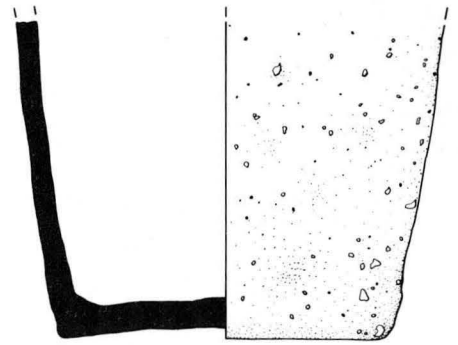


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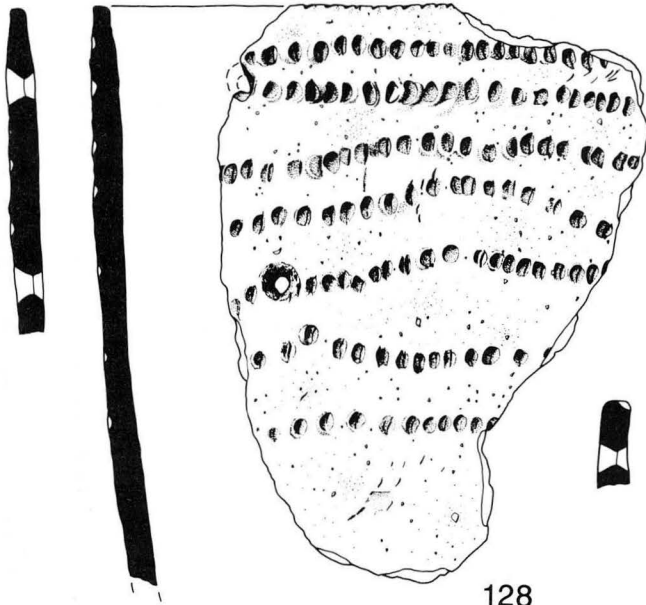
Figure 70 Bronze Age pottery from White Colne



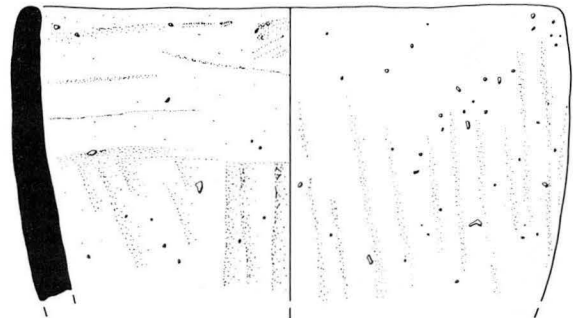
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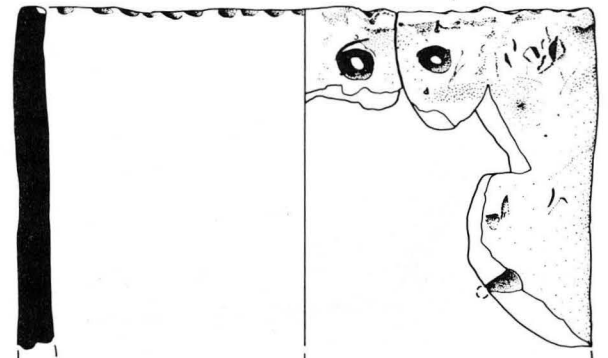
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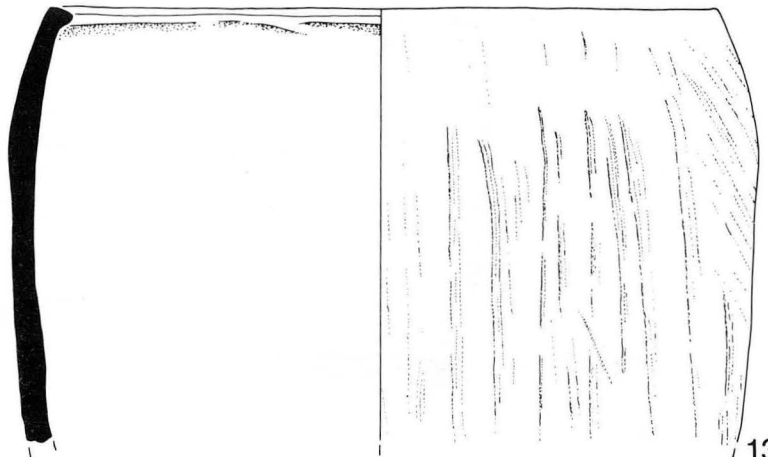


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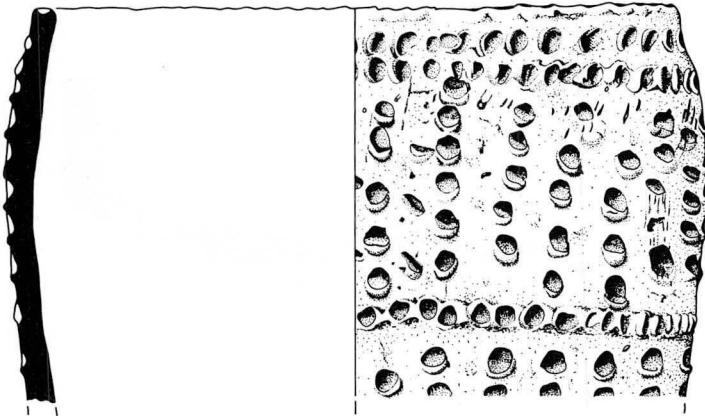
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0 100mm

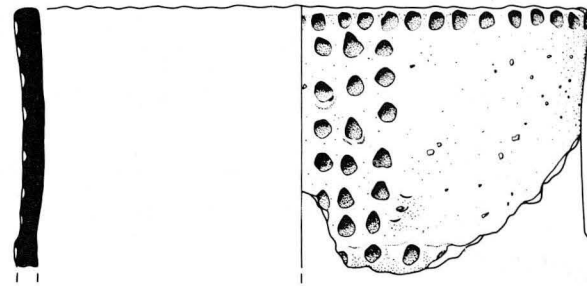


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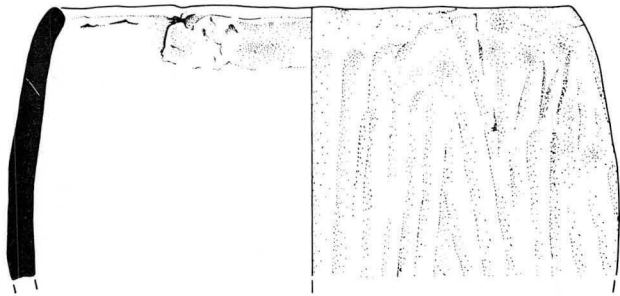
Figure 71 Bronze Age pottery from White Colne



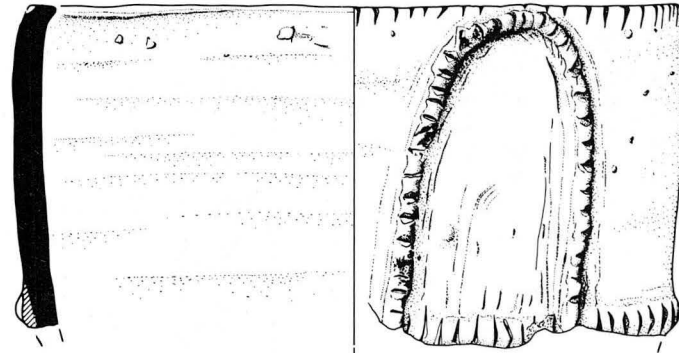
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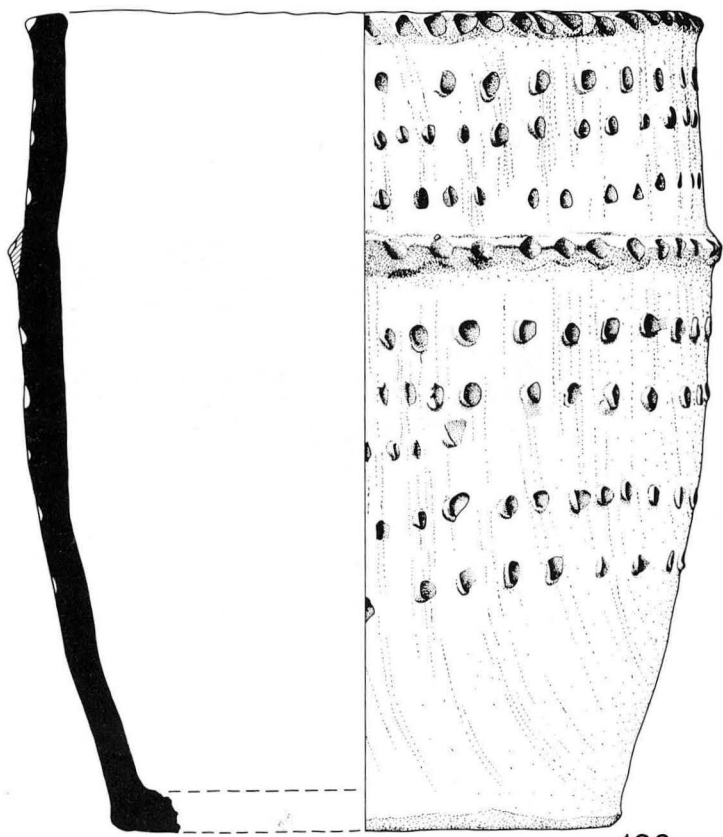
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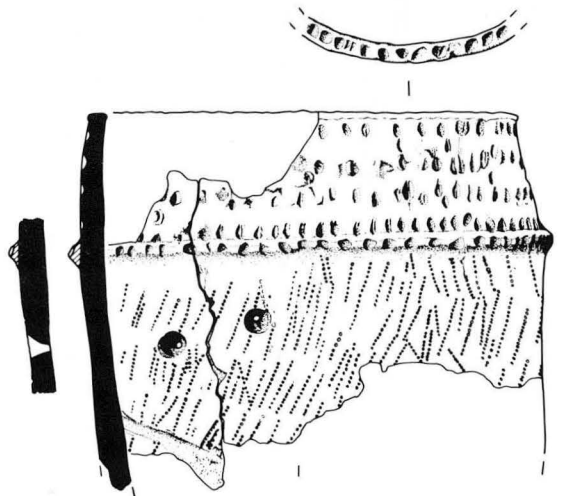
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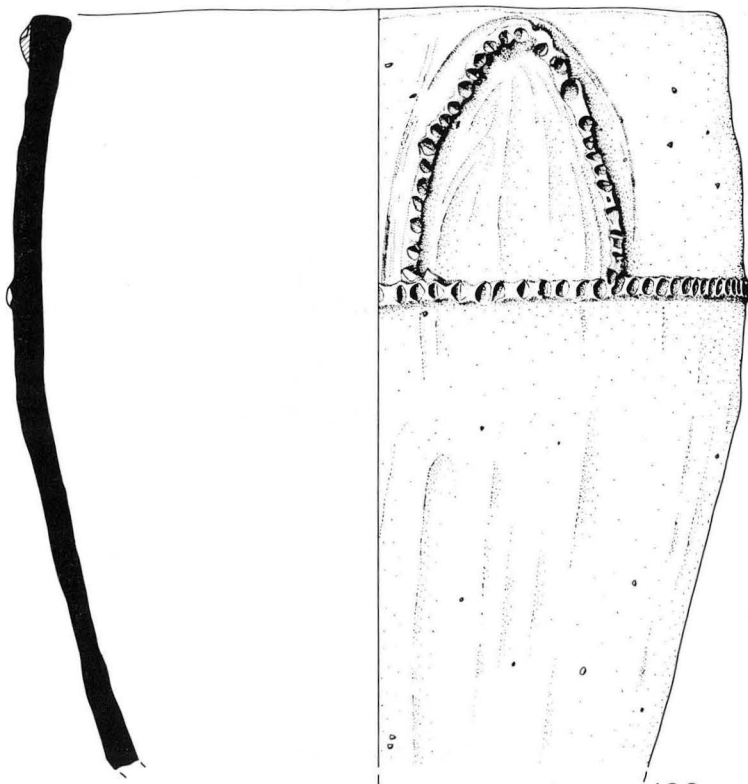
Figure 72 Bronze Age pottery from White Colne



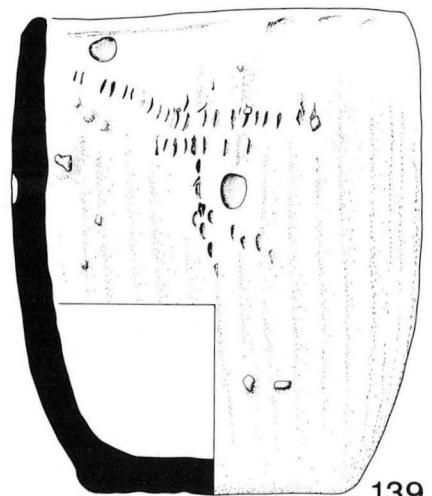
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0 100mm

Figure 73 Bronze Age pottery from White Colne

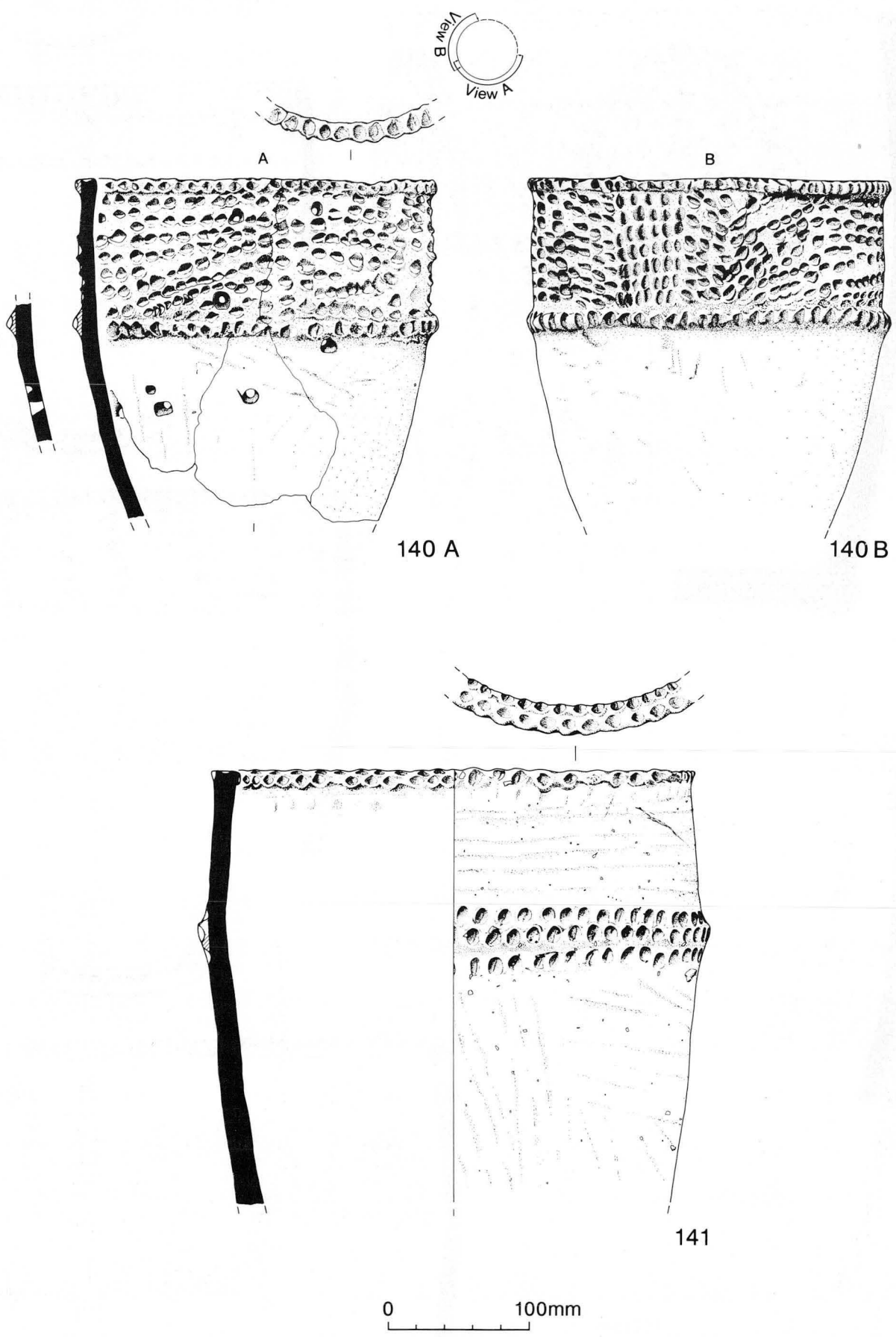
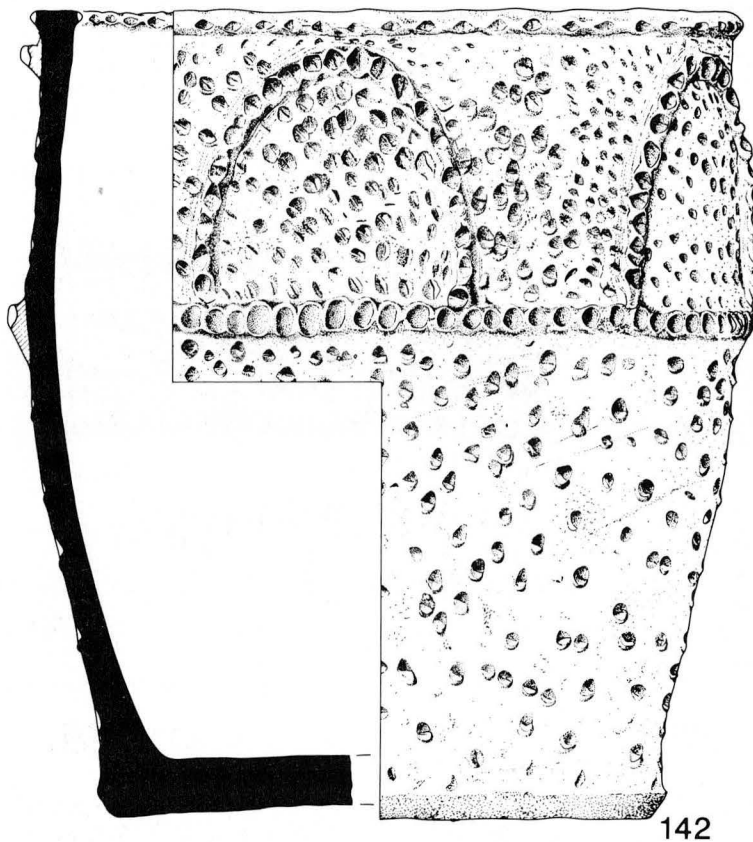
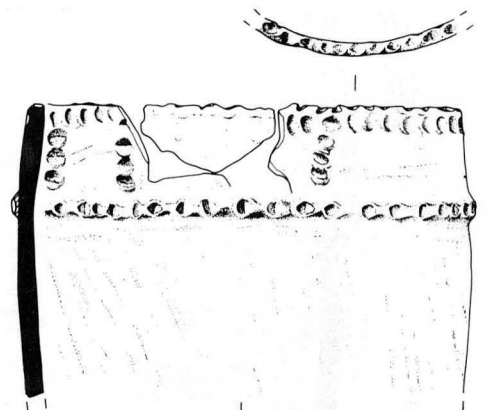


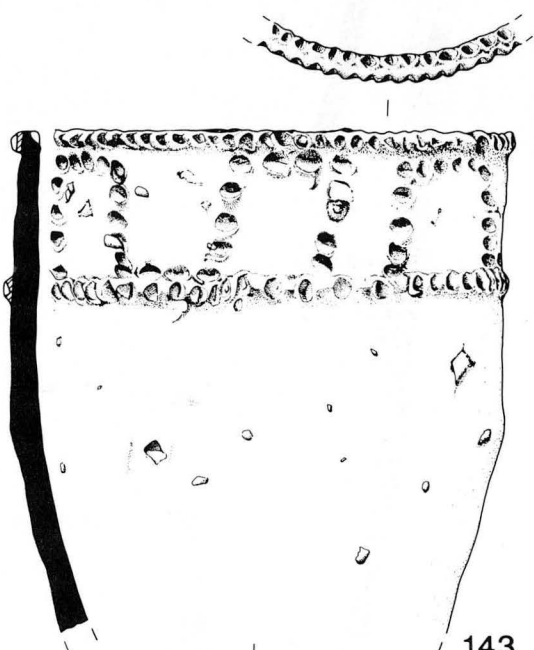
Figure 74 Bronze Age pottery from White Colne



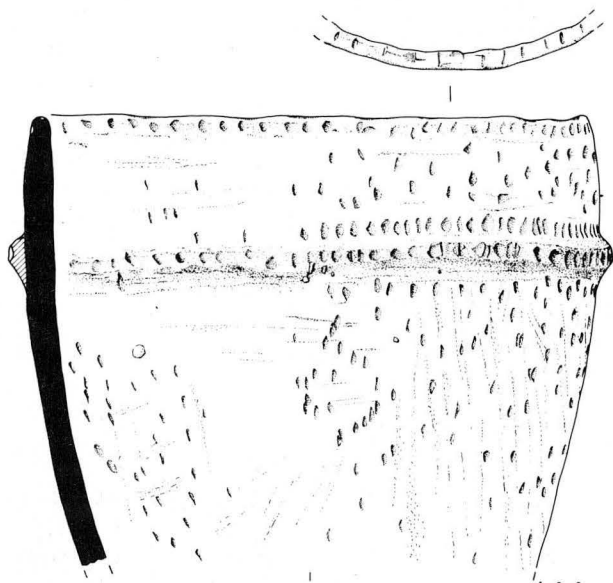
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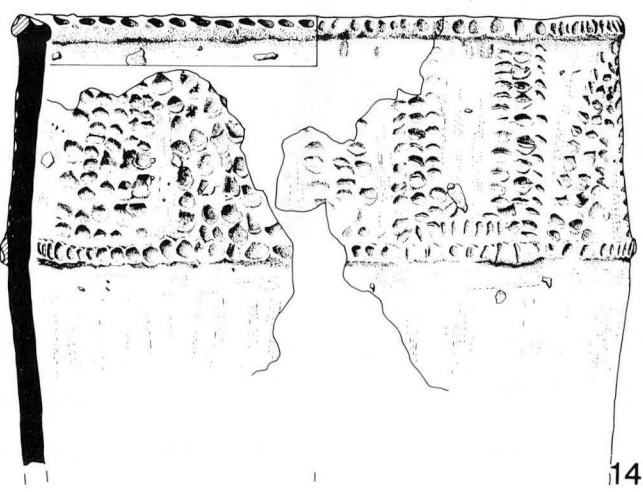
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0 100mm

Figure 75 Bronze Age pottery from White Colne

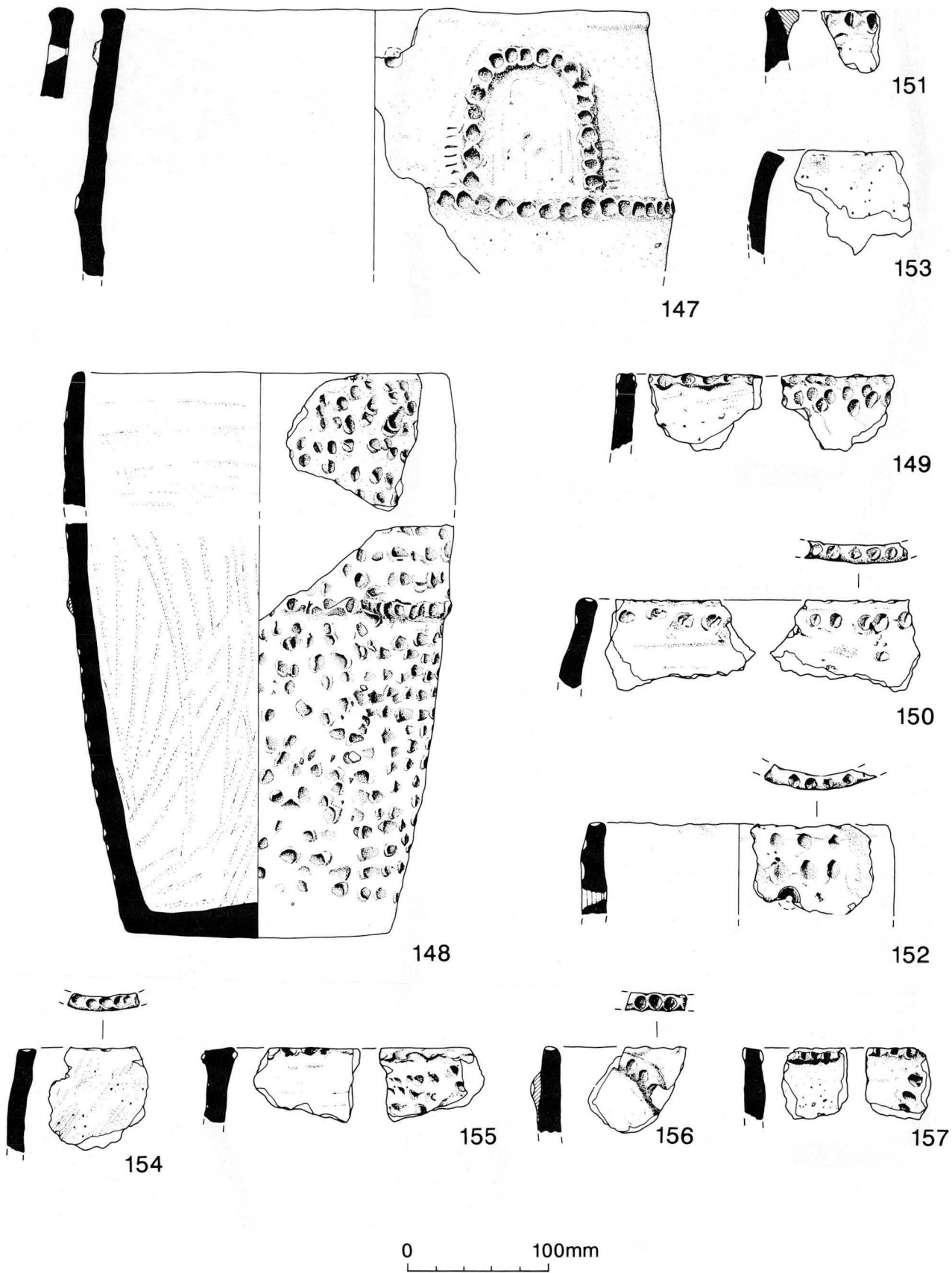


Figure 76 Bronze Age pottery from White Colne

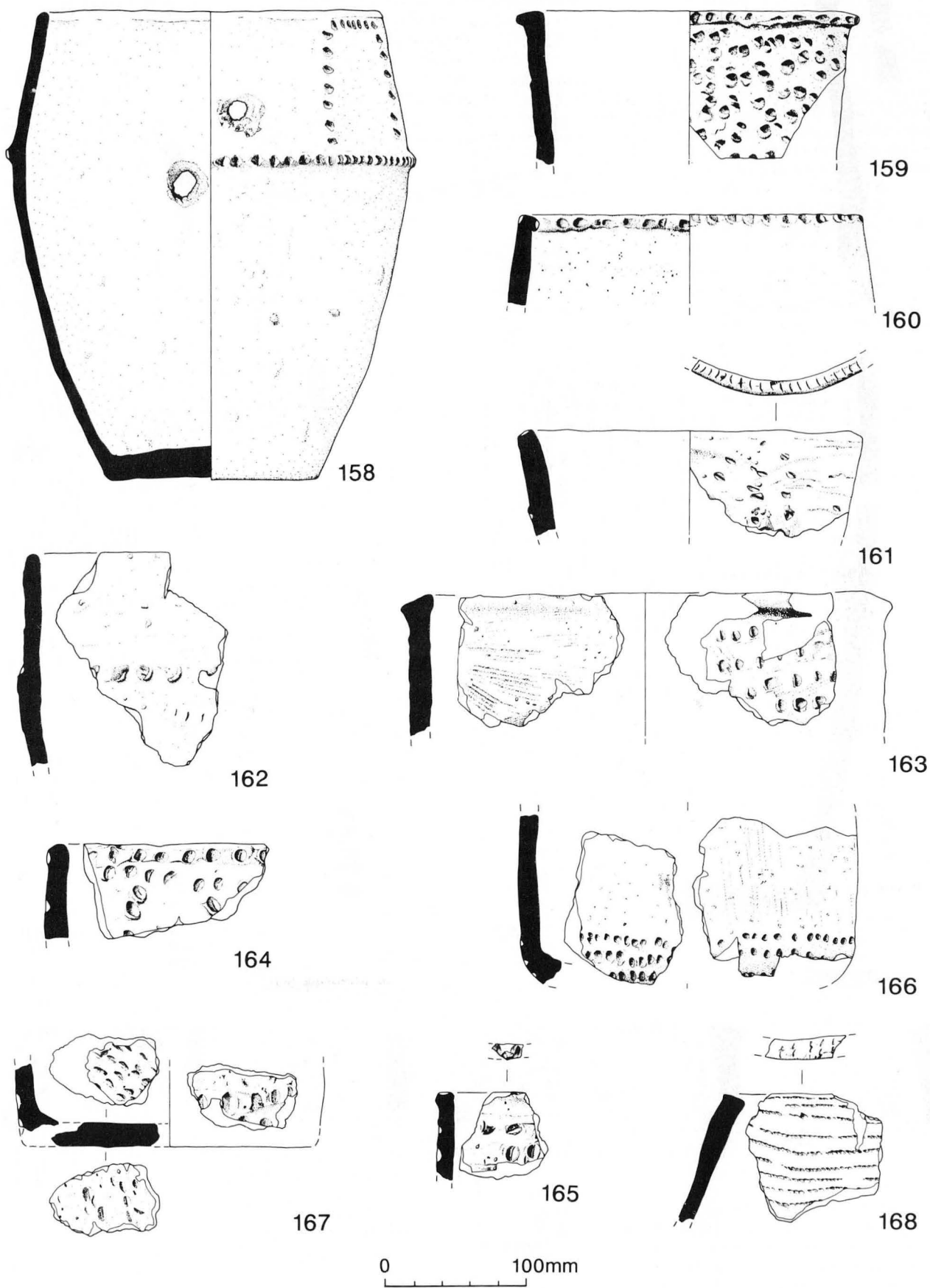
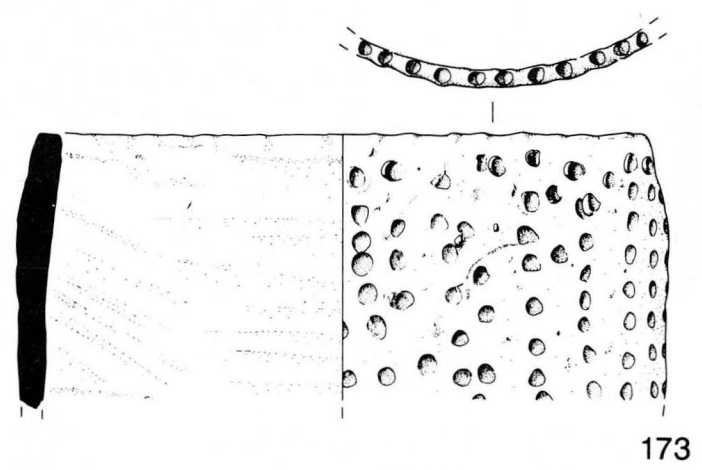
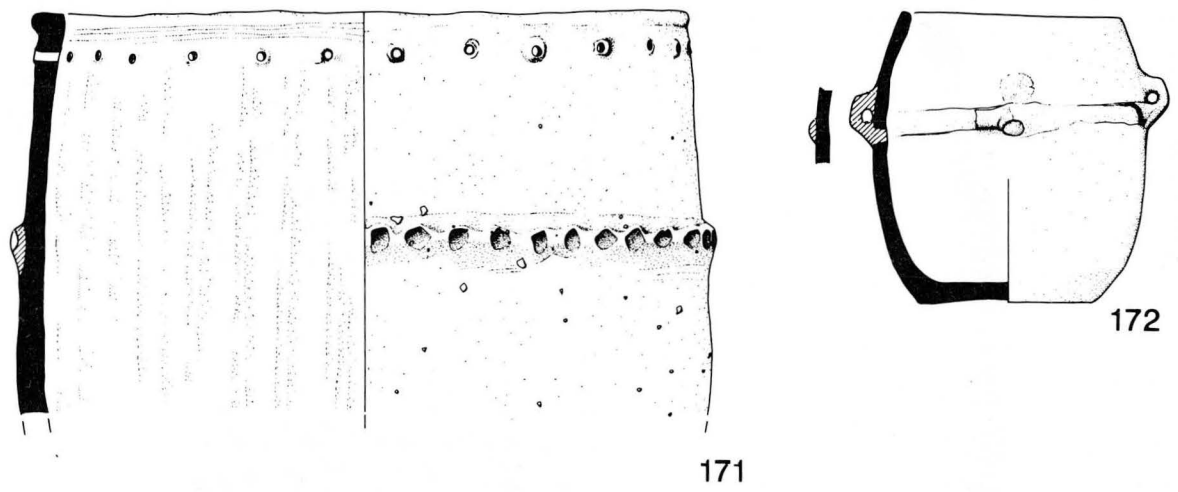
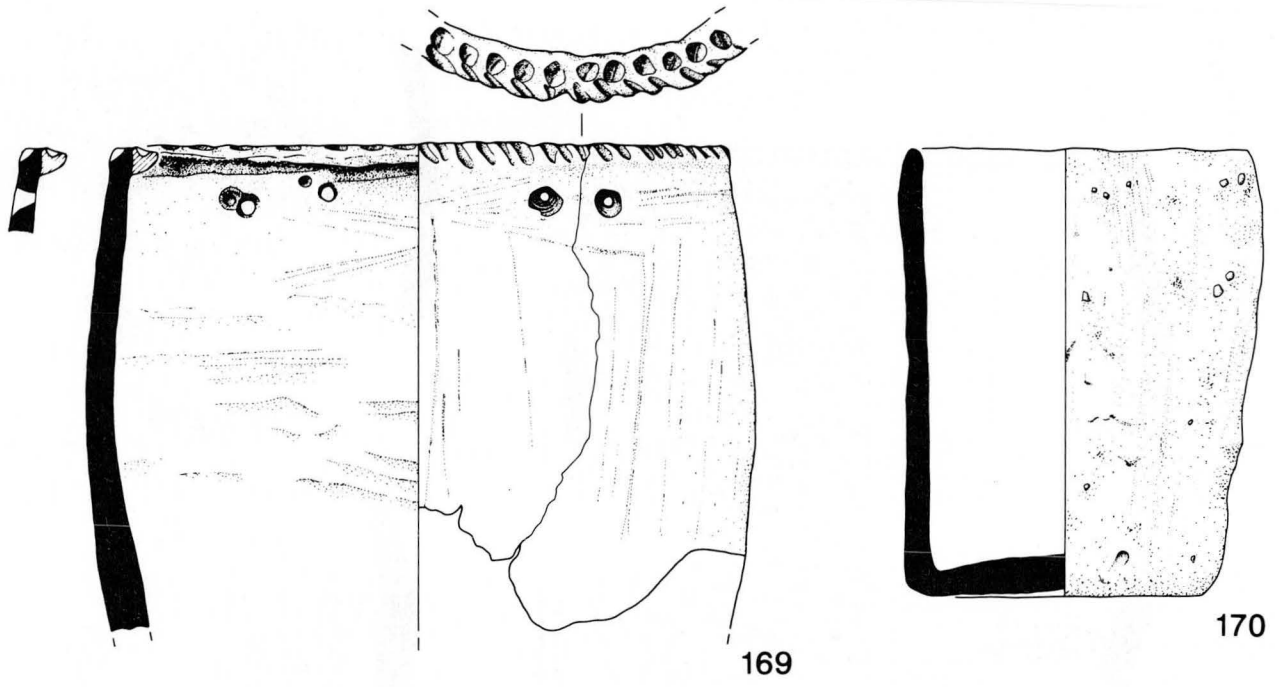


Figure 77 Bronze Age pottery from White Colne



0 100mm

Figure 78 Bronze Age pottery from Alresford and Colchester

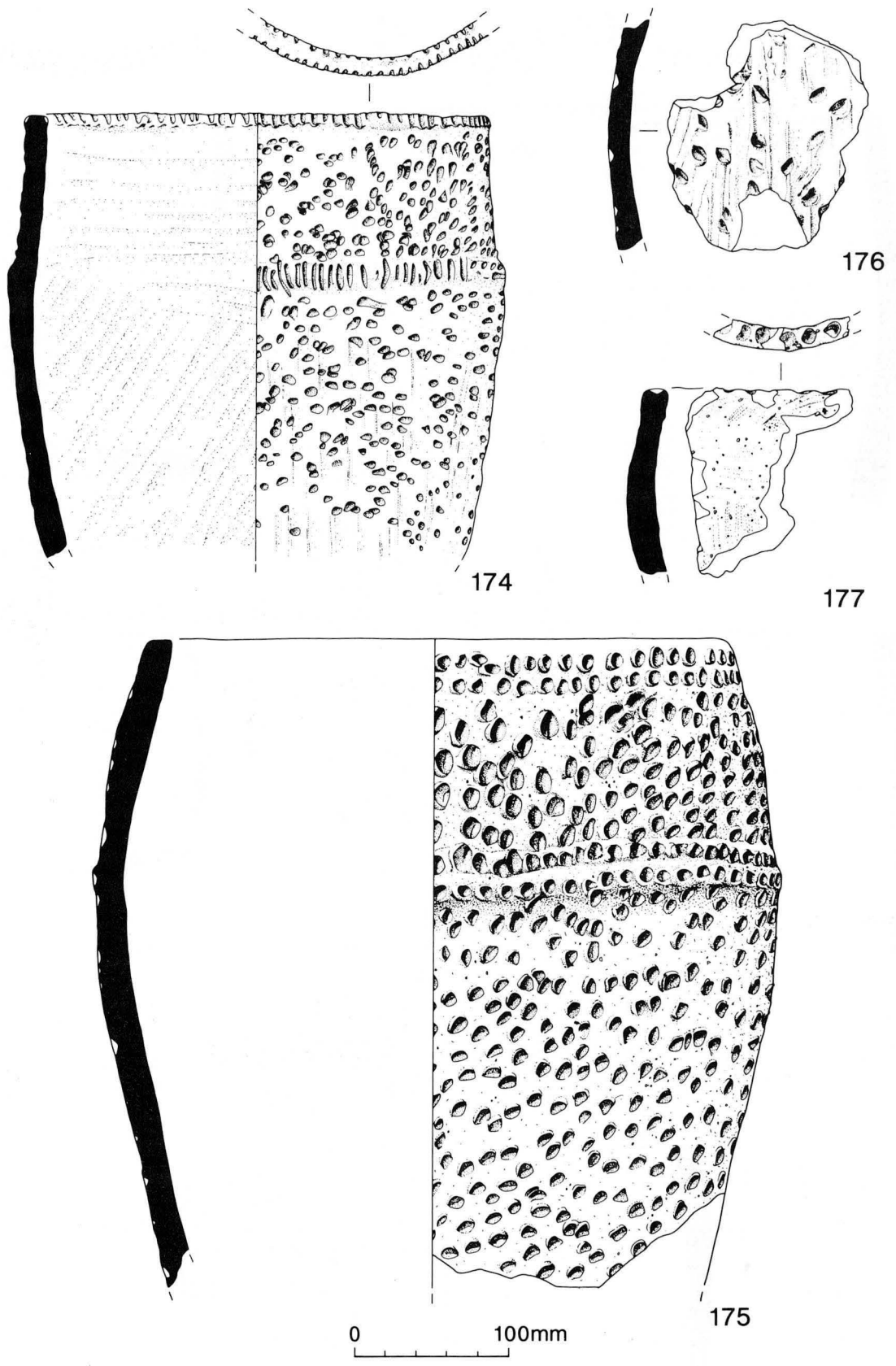
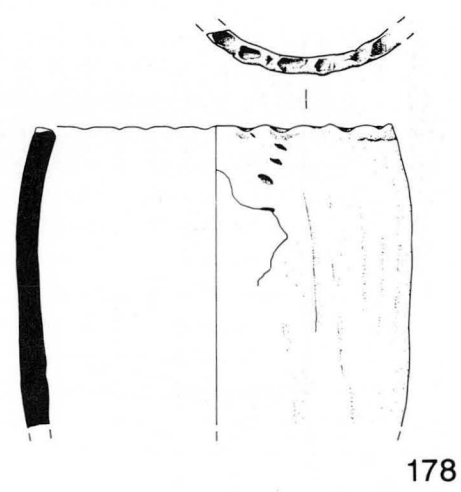
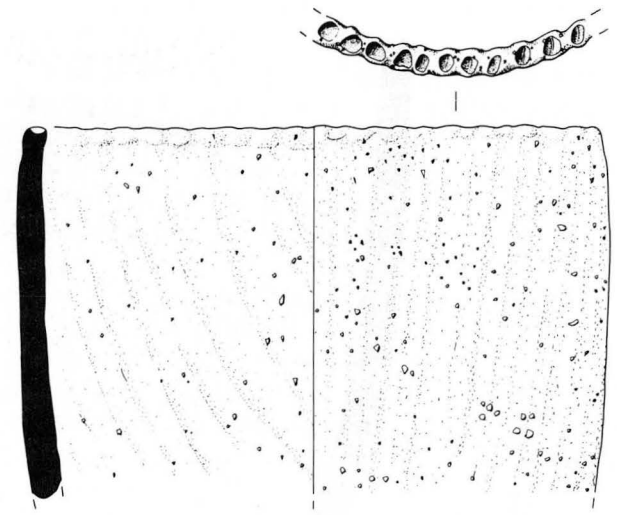


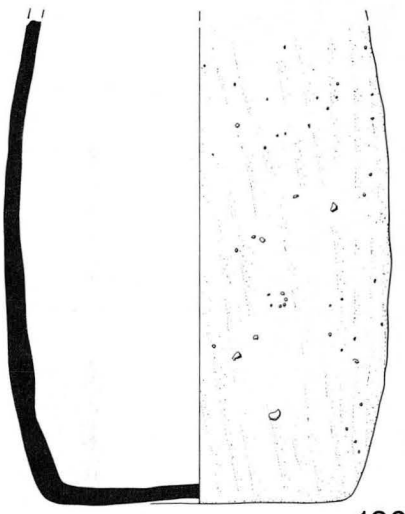
Figure 79 Bronze Age pottery from Colchester



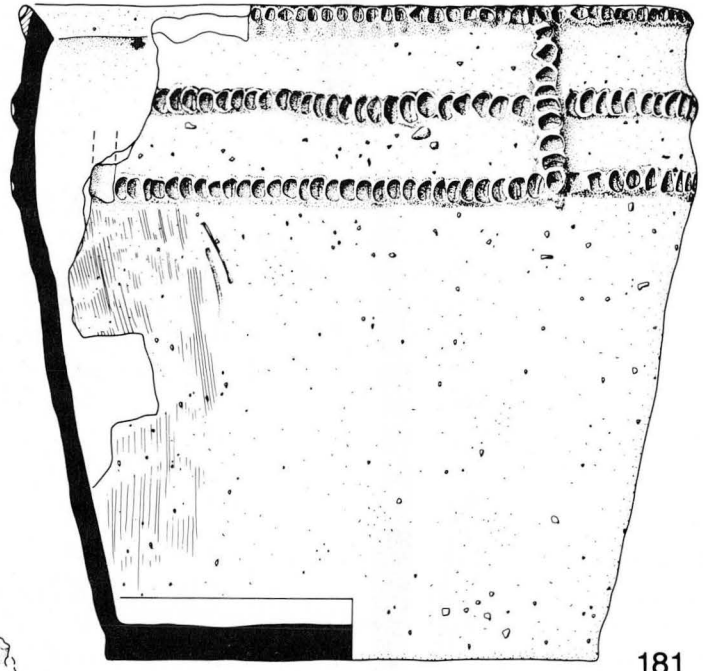
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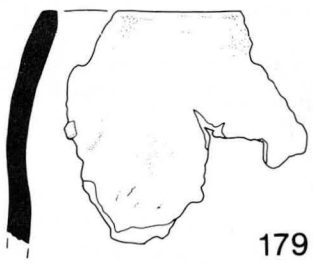
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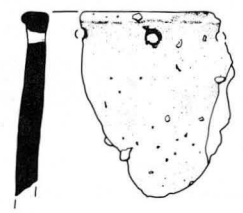
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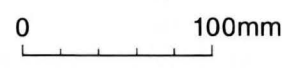
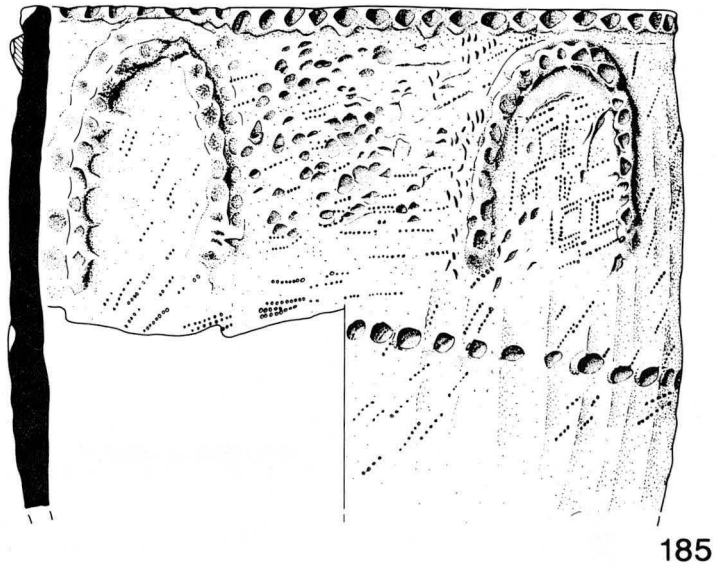
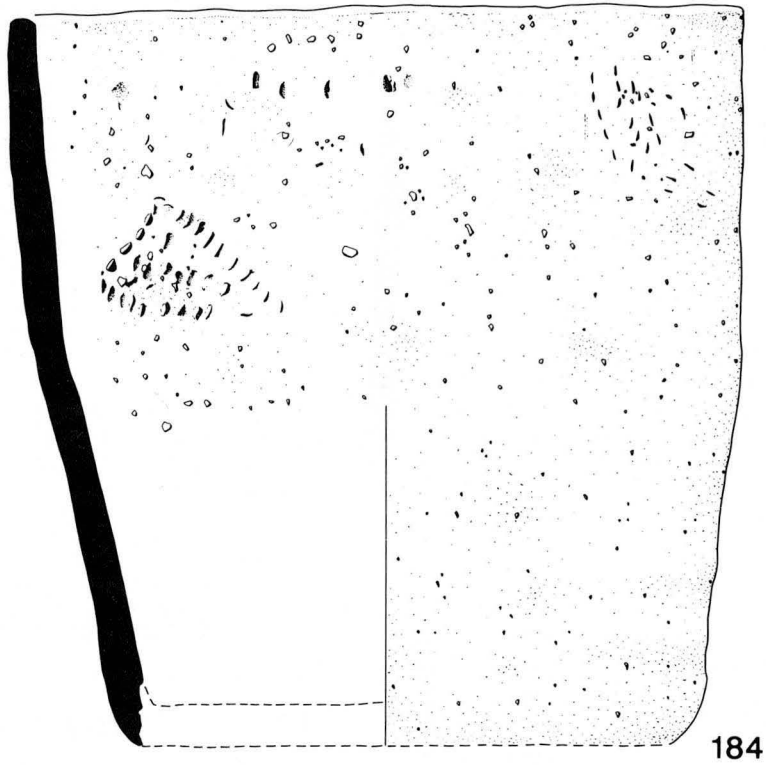


Figure 80 Bronze Age pottery from Colchester, Bentley, Shalford etc.



0 100mm

Figure 81 Bronze Age pottery from Shalford and Wix

VI. Finds from the Cauldron Pit

by P.R. Sealey

All the pottery from the pit for which a stratigraphic context is given, and which was illustrated by Erith and Holbert (1974), is republished here (with the exception of one missing sherd), in its reassembled stratified groups. Each group is described in turn, starting with the lowest; numbers in brackets after the pot number are those of the original publication. Where a vessel is assigned to several contexts, it has been restored from joining sherds from more than one level.

The fabric of the bulk of the pottery is Belgic, a convenient term for the grog-tempered wheel-thrown wares of Essex and neighbouring counties in the Late Iron Age and Early Roman period. Full descriptions of the fabric have been published elsewhere (Thompson 1982a, 4, 20; Stead and Rigby 1989, 145–6; Freestone 1989, 265).

The Primary Fill

Layer M

82.1 (9) **Jar** with a short curved neck below an everted rim. At the top of the shoulder is a cordon, below which there is horizontal rilling. Belgic fabric, burnt after firing to a light red (Munsell 10R 6/8).

Such pots — the so-called Braughing jar — are a common Hertfordshire form introduced to Essex, where they are always rare. Skeleton Green (Hertfordshire) shows such vessels assumed their characteristic rilled surface between c. 10 BC and AD 20 (Partridge 1981, fig. 24 nos 111–15); variants of the type were still current in the 4th century (Thompson 1982a, 272–81; Going 1987, 25 form G21).

82.2 (17) **Beaker** with an everted rim above a grooved zone; below is a band with vertical lines, resting on another grooved zone. Belgic fabric. Such vessels are local copies of Gallo-Belgic girth beakers, current from before c. AD 10 until c. AD 50. At King Harry Lane (Hertfordshire), local copies had gone out of production by c. AD 40 (Hawkes and Hull 1947, 232–4, pl. 55 nos 82–5; Stead and Rigby 1989, 132, 164).

82.3 (18) A single sherd representing a pouring lip for a vessel as above, a most unusual typological departure for the girth beaker. Belgic fabric.

The Spouted Strainer Bowls from Layers M to J

82.4 (21) **Biconical carinated bowl**, standing on a low footing. On the shoulder there is a rectangular dished panel with six rows of six or seven tiny holes, typically about 1mm in aperture. Luted to this perforated panel was a (missing) spout; although the perforated panels on bowls 5 and 6 are rectangular, the actual spouts will have been circular, as one from the Colchester Sheepen site shows (Niblett 1985, fig. 33 no. 2, microfiche 1:D4). At the top, the shoulder is everted and supports a circular ledge, the inner edge of which terminates in a thickened rim with three grooves on its upper surface. Belgic fabric.

82.5 (22) As 4, but a taller vessel with a groove inside the exterior base instead of a regular footing, and with seven or eight perforations to each of the six rows of holes, in the rectangular shoulder panel. Belgic fabric.

82.6 (23) **Carinated strainer bowl** with a circular spout, the end of which is missing. Its perforated panel was made from a separate slab of clay luted to the interior of the bowl, with a spread of holes typically some 7.5mm apart. Prick marks on the wall of the bowl show the panel was perforated after it had been fitted inside the pot. There is a prominent cordon at the top of the shoulder, inside which a grooved ledge terminates in a plain rounded upright rim. Belgic fabric.

82.7 **Footing bowl**. Two sherds with a straight wall rising at a shallow angle from a footing base might well represent a fourth strainer bowl. Despite their identity of fabric and similarity of typology to No. 4, it is clear they come from a different vessel. Another possibility is a local copy of an imported dish or platter. Belgic fabric.

The significance of the strainer bowls is explored below (see pp 119, 121–4). It may be pointed out here that there were no amphoras in the pit and this supports the thesis that such strainers played no part in the serving of wine.

Layer L

82.8 (24) **Pedestal urn** with trumpet base, Cam 204b. Belgic fabric. This is the classic Essex pedestal urn of the 1st century AD (Hawkes and Hull 1947, 257–8, pl. 74 nos 201–4; Thompson 1982a, 33–81; Stead and Rigby 1989, fig. 63, 175–8).

Layers K to I

82.9 (8) **Jar** with an everted rim and internal ledge. A south Essex form with many variations of typology; it emerged at the time of the Roman invasion and lasted until the Flavian period and beyond (Drury and Rodwell 1973, fig. 16 nos 89–100, 82; Jones and Rodwell 1973, 22–4 type F; Going 1987, 23 form G5, figs 7–8). Belgic fabric, burnt after firing to a light red (Munsell 10R 6/8). In south Essex the form is invariably shell-tempered, and the grog of the Ardleigh vessel shows it to be a local copy.

Layer J

The only stratified find from this context is a copper-alloy nail-cleaner (Erith and Holbert 1974, fig. 9 no. 9b, 18). It is 54mm long, 7mm wide and 2mm deep; weight 1.98g. The thin flat shaft tapers towards the pick end; at the top there is an offset, beyond which an oval suspension loop extends in the same plane. The outer edge of the suspension loop has worn through at the top. It was originally part of a toilet set of tweezers, ear-scoop and nail-cleaner; such sets were common in Roman Britain and are found in Iron Age contexts as well (Thompson 1979, 174–5). The Ardleigh nail-cleaner (Fig. 84.1) is Crummy Type 1b (Crummy 1983, 58).

Pit Infill Material

Layer I

82.10 (35) **Pottery cauldron**, not wheel thrown. At two points below the rounded and undercut rim are circular holes in the wall of the vessel, masked on the exterior by cupped lugs, evidently an arrangement to protect the suspension thongs from the fire over which the cauldron would have been suspended. Enough of the rim survives to show there were only two, and not three lugs. The straight sides of the vessel flare outwards towards a waist, above which there is a cordon clumsily decorated with circular stab marks. Professor C.F.C. Hawkes kindly pointed out to me that the stab marks are copies of the dome-shaped rivet heads on a metal version. Below the waist the pot curves in sharply towards the (missing) base.

The fabric is grey (2.5YR N4–5) with a rough and vesicular surface, marked with a cloth where it had been wiped before firing. Although none of the temper in the original pot is apparent on the surface (and a fresh fracture cannot now be taken because of the restoration), it is clear that one is dealing with the shell-tempered ware of the Essex Iron Age and Early Roman periods.

Pottery cauldrons were a speciality of the south Essex Thameside industry that used shell-tempered ware, but such vessels are always rare (Going 1987, 10, 34) and the unique typology of the Ardleigh cauldron makes it an interesting addition to our knowledge of the repertoire of these potters. In Late Iron Age Britain there were two kinds of cauldron: a globular or hemispherical vessel — the Battersea type — and a rarer form with a steep upper wall and rounded projecting belly, called the Santon type by MacGregor (1976, 150–1, 170–1), but defined first by Hawkes as his Emmendigen cauldron (1951, 178–81). The straight upper walls of the Ardleigh cauldron and its rounded base show that the prototype was the latter form. It would be misconceived to suppose that the rendering of a cauldron in pottery necessarily involved a reduction in scale. Although our rim diameter is only 235mm, there are bronze cauldrons not much larger: Stead has measured the diameter of a Battersea type cauldron from Spettisbury Rings (Dorset) as 260mm (Stead and Rigby 1986, 59 citing Gresham 1940, 120, 122, pl. 3). True miniature cauldrons in bronze are also known (MacGregor 1976, no. 292). Some of the later pottery cauldrons also have diameters below 15 cm and may likewise be seen as miniatures (Knowles 1977, fig. 5 no. 3, 219 for a 2nd-century example from Norfolk).

Shell-tempered vessels were occasionally traded to the north of the county, and the Ardleigh cauldron is a reminder of those local exchange networks at the time of the Roman invasion that are overshadowed by the much more important trade in imported Roman ceramics. Another vessel from the pit (No. 8) was inspired by this south Essex industry and serves as a further illustration of its connections with Ardleigh.

82.11 (4) **Carinated bowl** with a bulge between shoulder cordons. Belgic fabric. Ubiquitous on the Sheepen site at Colchester as Cam 217–18, a typical 1st century AD Essex form (Hawkes and Hull 1947, 25–61, pls 75 and 77).

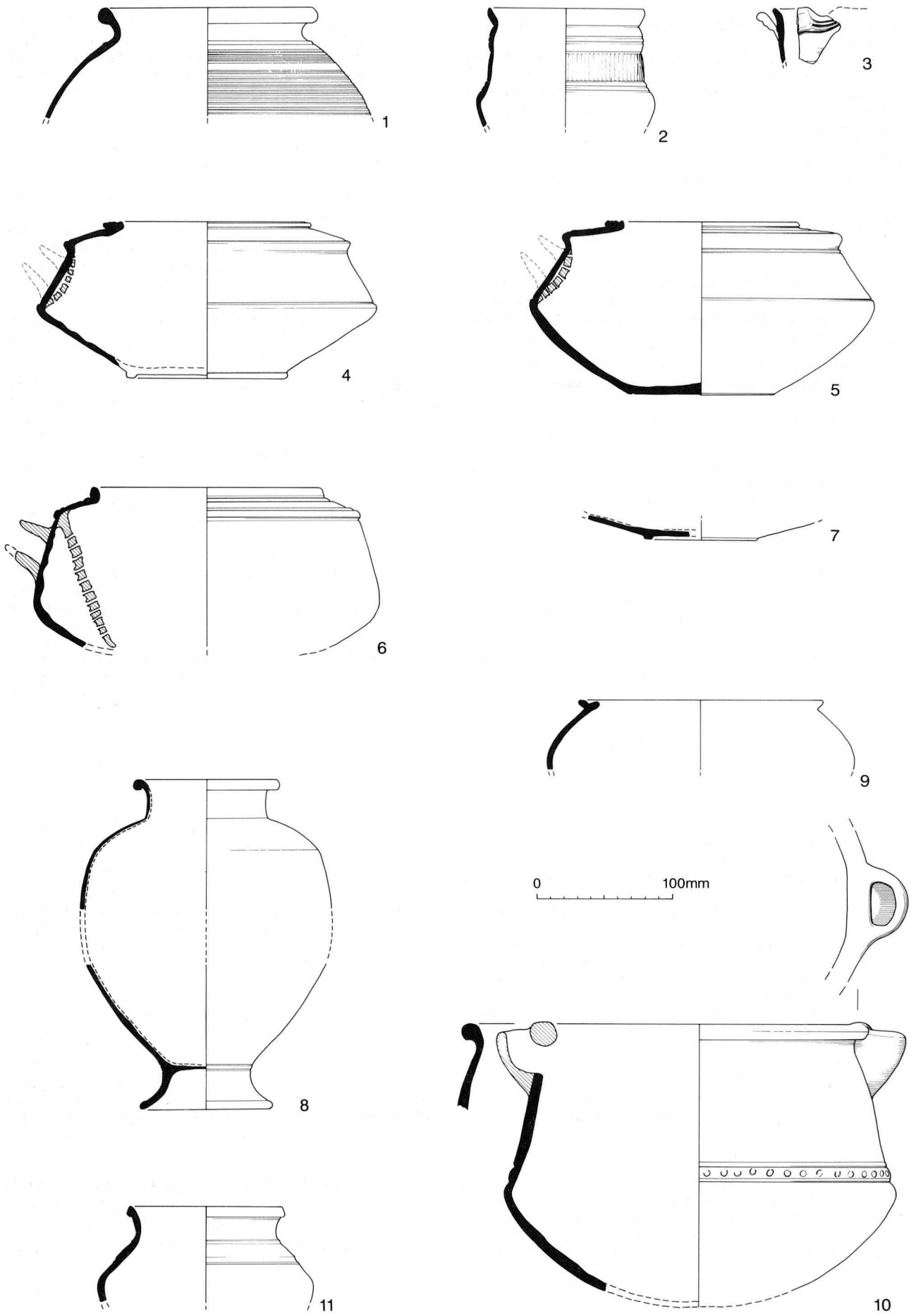


Figure 82 Pottery from the Cauldron Pit

Layer I included a (lost) sherd from a beaker (Erith and Holbert 1974, fig.8 no.1, 16). It is apparently a local copy of *terra rubra*, decorated with stamped fronds. Decoration that takes the form of a series of discrete frond or fern motifs is rare on imported Gaulish pottery (Rigby 1985, microfiche 2:B7) and it is curious that local copies are occasionally found in Britain (Stead and Rigby 1989, fig.143 grave 276 no.2; Thompson 1982b, fig.1 no.4 from West Mersea).

Layer I also had a complete iron adze, now lost (Erith and Holbert 1974, fig.9 no.9a, 18). Its typology suggests a true adze, rather than a hoe, although both tools have in fact been used for hoeing (Manning 1985, 16).

The Recut of the Pit

Layer H

83.12 (37). **Butt beaker** with two zones of rouletted decoration set in plain grooved borders. The inner face of the everted rim is dished and there is a cordon at the rim base on the exterior. Belgic fabric. Not paralleled in the Camulodunum form series and no close imported prototype can be found for these local copies, variants of which are present at King Harry Lane c.AD 1–60, and at Colchester Sheepen before AD 43 (Stead and Rigby 1986, fig.60 types 1C3 and 1L13, 168, fig.139 grave 256 no.2, fig.143 grave 276 no.2; Niblett 1985, fig.22 no.10, microfiche 1:B5).

83.13 (28) **Storage jar** with a thick rim and a horizontal row of finger-tip impressions beneath the shoulder ledge. Belgic fabric, burnt pink after firing (10R 6/6). Large storage jars of Cam 270–1 and variants are ubiquitous, and the Cauldron Pit was no exception (Erith and Holbert 1974, fig.7 nos 26–34, 14). They remained in production until the end of the 1st century AD (Thompson 1982a, 259).

83.14 Gallo-Belgic **pedestal cup**, Cam 74b to judge by the base diameter of only 45mm (Erith and Holbert 1974, fig.8 no.3; Hawkes and Hull 1947, 231, pl.54). Fine sandy fabric with a light red (10R 6/8) slip, applied to the inside and outside of the pedestal base but not to the actual interior of the cup. The fabric is apparently TR1(C) and this form of cup was in production c.AD 10–35 (Stead and Rigby 1989, fig.54 form GB20, 126, 132).

83.15 Sherd of *terra rubra* in a fine off-white (5YR 8/1) fabric with sparse red grog up to 0.25mm across (Erith and Holbert 1974, fig.8 no.2, 16). The red slip has all but entirely disappeared and is only clearly perceptible on the inner surfaces where patches of it survive as a thin pink wash. The wall is 4mm thick and the exterior diameter is some 18cm. On the exterior there are two wavy lines above a plain zone, below which are narrow bands with small panels of incised vertical lines. No parallel for the vessel can be cited but both motifs are present on imported wares from Gallia Belgica in the c.AD 1–60 cemetery at King Harry Lane (Stead and Rigby 1989, fig.54 forms GB21, GB22 and GB23B).

Layer H also had a complete copper-alloy terret (Fig.84.3; Erith and Holbert 1974, fig.9 no.9c, 18). The ring is an oval 54mm wide, with a straight bar 24mm long and 4mm thick. There are two plain cylindrical collars 10mm high. The terret weighs 22.58g. Opposite the bar the ring is subcircular in section; towards the collars it becomes increasingly lentoid or d-shaped. There is conspicuous wear on one side of the inner face at the widest point, showing it had only taken one rein and that it had therefore come from a set of terrets harnessed to a pair of horses pulling a chariot or cart (Joep and Cunliffe 1984, 345). Terrets are not uncommon, but few come from defined contexts and this stratified find of c.AD 55 from Ardeleigh is a useful addition to the corpus. Plain and simple terrets such as these are Leeds Group I (Leeds 1933, 118–19, 124), with a long history from the Middle Iron Age until the 2nd century AD (MacGregor 1976, 38–9, 41–2, 60–2).

Layer G

83.16 (12) Lop-sided **Braughing jar** (see No.1 above) with bands of horizontal and diagonal rilling extending from the neck to below the maximum girth of the pot. In the centre of the base is a small oval hole cut after firing. Belgic fabric.

83.17 (38) **Grooved butt beaker**. The rim is everted with two exterior grooves and a dished inner face. On the body there are bands decorated with vertical marks separated by grooves. Belgic fabric. It is difficult to find close prototypes for these copies of grooved butt beakers and their lack of standardisation suggests widespread local production (Stead and Rigby 1989, 168)

83.18 Globular **jar** in a fine sandy light grey fabric (5YR 7/1) with a dark red-grey (5YR 4/2) slip on the exterior (Erith and Holbert

1974, fig.8 no.4, 16). The wall is 3mm thick and the exterior diameter is some 14cm. On the exterior there are two horizontal bands of rouletted decoration. Research has failed to explain the vessel in terms of contemporary fine wares and it must be viewed as distinctly anomalous, but twelve sherds are present and it is unlikely to be intrusive.

Layer G also had a complete copper-alloy brooch (Fig.84.2; Erith and Holbert 1974, fig.9 no.9D, 18). It is 42mm long, 20mm wide and 19mm high; weight 5.19g. I am most grateful to N. Crummy for identifying it as a Colchester derivative Type B brooch. There is a curved bow with concave outer sides and it is this cavetto moulding that establishes it as the B type. The top of the bow is decorated with a continuous chevron pattern. Both side wings are short and semicylindrical. At the head are the remains of the two circular holes that secured the axial bar of the spring and its external chord. Since excavation the rear of the brooch has lost its open-work catchplate. The tip of the pin is missing and there is some corrosion to the edges of the side wings.

There is no evidence these brooches had developed by AD 43, and c.AD 50 is taken as the starting point for the series (Crummy 1983, 12; Olivier 1988, 46; Stead and Rigby 1989, 101 *pace* Mackreth 1981, 137–8). Crummy (1983,12) puts the terminal date of the B series at c.AD 70. This may be a conservative assessment: it has been claimed that Colchester derivatives were current throughout the Flavian period (Olivier 1988, 46; Stead and Rigby 1986, 123–4), as the evidence from Richborough (Hull 1968, 80) seems to suggest. The Cauldron Pit brooch should be seen therefore as a product of the period c.AD 50–100.

The 1957 Strainer Bowl Spout

83.19 The spout was brought to light by the plough in 1957, at TM 0566 2869, some 50m south of the Cauldron Pit and inside the boundary ditch of the Late Iron Age and Early Roman settlement. The find comes from a carinated strainer bowl in Belgic fabric; both spout and bowl are burnished. The spout itself points upward and is positioned just above the carination; its internal diameter is 15mm. As the end is abraded, it is unclear how much of the spout has been lost since antiquity.

An unpublished report at Colchester Museum by M.R. Hull and F.H. Erith on the 1955–57 Ardeleigh discoveries says it was found with a concentration of pottery of mainly Late Iron Age type, including Cam forms 115–16, 119, 210–12, 218, 266 and 271. Briquetage and burnt daub was present; no amphora sherds were reported. Roman material included two tegulae fragments, a sherd from a 2nd-century samian bowl (Drag.37) and "about a dozen pieces of Roman grey ware". The finds centred on TM 0569 2869 were designated Site C9 of field 675.

The Spouted Strainer Bowls

The spouted strainer bowls from the c.AD 45 Phase I of the Cauldron Pit are its most interesting components and the largest group of such vessels from a single excavated context in Britain. An attempt is made here to review our knowledge of strainer bowls. The suggestion is made that they were used for the serving of Celtic beer, both the practice and the drink owing nothing to the Roman world.

The Typology of Spouted Strainer Bowls

We may start with pottery strainer bowls. There are two basic forms, distinguished by their profile: one is carinated (Cam 323), the other (Cam 322) rounded (Hull 1958, fig.121, 288; 1963b, fig.105, 187). Although there is some variation in detail within Cam forms 322 and 323, the broad categories are useful because they derive from quite different *metal* prototypes, a rounded and a carinated form respectively.

The carinated form of the Ardeleigh vessels assigns them to the Cam 323 family, but as an ensemble the three most complete strainers are unique. Only a footing sherd from a fourth vessel survives and so its typological analysis cannot be taken far. Such is the similarity of two of these strainers (Nos 4 and 5) that they must be viewed as a pair; the third has a less carinated profile and a different strainer panel arrangement. Their Belgic fabric in no way differs from that of other native pottery from the pit, and it is reasonable to regard them as local products.

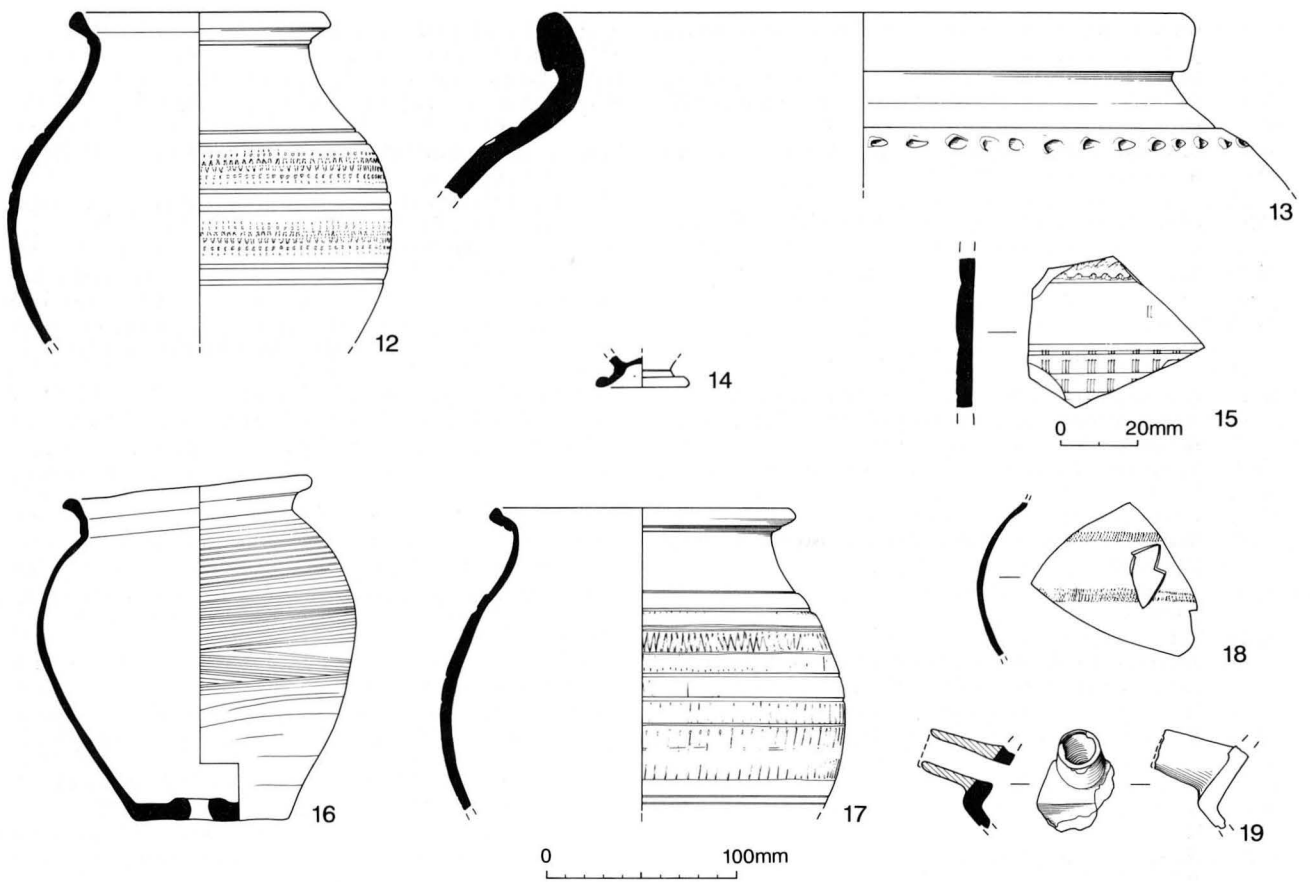


Figure 83 Pottery from the Cauldron Pit

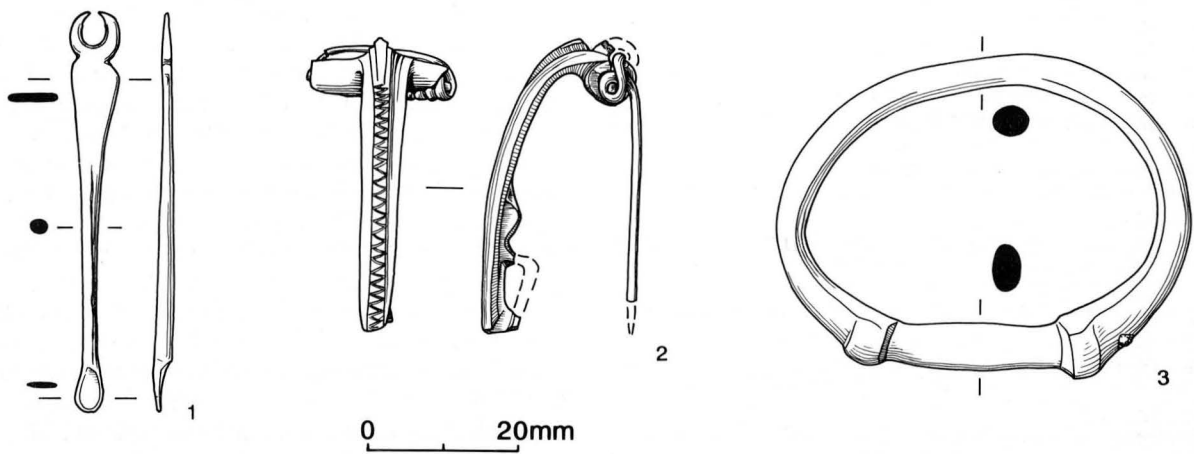


Figure 84 Copper alloy objects from Cauldron Pit

The elaborate rims of the Ardleigh vessels were designed to prevent spillage when the contents were decanted. On other Cam 323 strainer bowls, at rim level behind and above the spout, there is instead a flat segmental cover that served as a spill-plate. The spouts themselves are generally plain and round, but at Colchester Sheepen, two unpublished bowls from the 1930–39 excavations have the eyes of an animal modelled behind the spout. Cam 323 strainers have a deep carinated biconical body, with straight sides to both the upper and lower halves; a few have a rounded lower half (Hawkes and Hull 1947, fig.50 no.8, 273–4; Niblett 1985, fig.33, microfiche 1:D3–4). Cam 323 remained current until the early 2nd century AD. There were two dated *c.* AD 90–130 from a pit in London, at Southwark (Marsh 1978, fig.6.20 no.46.2, fig.6.21 no.46.16, 182, 184, 199, fig.6.25; Hinton 1988, 246–7, 279, fig.121 nos 1025–6). More (unstratified) examples from City sites housed in the Museum of London amplify details of the typology (Marsh 1978, fig.6.20 nos 46.1–5, 181–184), but the form is always rare (Davies *et al.* 1994, 139).

The angular carinated profile of the Cam 323 strainer bowls is not a form intrinsic to pottery, particularly in a tradition in which throwing on the wheel was standard practice. One should therefore expect prototypes in metalwork and it is gratifying to report that there are two complete bronze spouted strainer bowls which have a carinated biconical form close to the pottery versions. Both of these unpublished strainers are components of metalwork hoards of early Roman date from Icenian country, from Brandon (Suffolk) (Grew 1980, 376) and Crownthorpe (Norfolk) (Henig 1995, 35, pl.17), in Moyses Hall Museum at Bury St Edmunds and in Norwich Castle Museum respectively. The bronze castings from the Sheepen site at Colchester published by Hawkes and Hull (1947, 336, pl.102, no.1) as crest-holders from Roman military helmets can now — through comparison with Brandon — be recognised as the spouts of two more native metal strainer bowls. Pottery strainer bowls of the kind found at Ardleigh are the skeuomorphs of bronze vessels; understandably the copies are more common than the prototypes because of the differential survival of ceramic and metal utensils.

The Development and Chronology of Spouted Strainer Bowls

In Britain the history of the spouted strainer bowl can be traced back to the last decades BC. The earliest is bronze and was part of the furniture of the rich grave at Welwyn Garden City (Hertfordshire) (Stead 1967, 23–5), dated *c.* 25–15 BC (Strong 1967, 22; Stead 1967, 47; Rigby and Freestone 1986, 16). Its actual bowl might be a Roman import, but the ingenious if clumsily executed modifications that turned it into a spouted strainer are the work of an inventive local metalworker: this aspect of the finished product is an important statement about the origins of the whole spouted strainer bowl phenomenon. There have been desperate attempts to find parallels for these vessels among Roman metalwork (Kennett 1976), but none exists and the bronze spouted strainer bowl is a British product (Megaw 1971, 300; 1978). Welwyn Garden City is the only spouted strainer of 1st-century BC date.

From these artless beginnings at Welwyn Garden City emerged the bronze strainer bowls of 1st-century AD date with their accomplished zoomorphic spouts. At Felmersham (Bedfordshire), the spout is a fish head

(Watson 1949, pl.5a–b, 41–2; Kennett 1970; Megaw 1970, 162 no.276) and at Leg Piekarski (Poland), a boar (Megaw 1963; 1970, 162–3 no.277). Associated with the Felmersham bronzes is an assemblage of pottery assigned to the Early Roman period by the copies of the Rushden-style platters, for which a date of *c.* AD 45–60 may be proposed (Thompson 1982a, 700–1; Rigby 1984; Brown 1984, fig. 9.1–3). There is a similar fish spout to Felmersham from Ingoldisthorpe (Norfolk) in Kings Lynn Museum. The Leg Piekarski grave is dated *c.* AD 50–100.

B.R.K. Niblett kindly drew my attention to what might be a link between the 1st-century BC Welwyn Garden City strainer and the later bronze strainers of Claudio-Neronian date described here. It comes from the King Harry Lane cemetery (Hertfordshire) where the *c.* AD 1–40 cremation grave 325 had heat-distorted fragments of a bronze perforated panel, presumably from a strainer bowl (Stead and Rigby 1989, 11 no.16, 354, 358, fig.157).

The bronze strainers from Welwyn Garden City, Felmersham and Leg Piekarski all have shallow bowls with rounded profiles. It is these metal vessels that provided the prototypes for the rounded pottery versions, Cam 322. The only Cam 322 from a Late Iron Age context is an unpublished vessel kindly drawn to my attention by C.R. Wallace, from the 1993–94 Heybridge Elms Farm excavations in Essex. Two more early Cam 322 strainers (also unpublished) from another Essex excavation, the 1971 campaign at Wickford, were made available for study through the good offices of N.P. Wickenden; both came from contexts dated AD 43–60/61. The Wickford and Heybridge strainers are in Belgic ware. These Essex pottery copies of metal strainers are important because they stand at the head of the whole Cam 322 series. Like Cam 323, the type lasted until the early 2nd century AD but its geographical distribution is more widespread. Both forms are always rare.

The earliest pottery strainer of the carinated Cam 323 form comes from a context dated *c.* AD 30–50 at Prae Wood (Hertfordshire) (Wheeler and Wheeler 1936, 171–3, fig.22 no.1; Thompson 1982a, 567 no.C2, 913–4, 928–9). Neither the Brandon or Crownthorpe hoard can be securely dated but there is every likelihood that both are Boudican because there were so many hoards of Icenian coins buried in the AD 60/61 revolt (Allen 1970, 16–19; Chadburn 1992, 80 *pace* Creighton 1992, 84, 86, 92). One of the spouts from a Brandon-type strainer on the Sheepen site at Colchester came from Pit A6, dated *c.* AD 49–65 (Hawkes and Hull 1947, 336, 357, pl.102 no.1) and this strengthens the case for a Boudican date for Brandon itself. The dog spout on the Crownthorpe strainer finds a close parallel in a bronze spout from Brentford (Middlesex), apparently stratified in a context dated *c.* AD 60 to the early 2nd century (Megaw 1978; Canham 1978, 29, 53–4, 78–9, 123–4). Stead (1967, 25) identified a bronze fitting in the Santon (Norfolk) hoard as the spill-plate from a strainer bowl (Smith 1909, 154–5); this too is another Boudican metalwork hoard, datable to the revolt by its brooches (Spratling 1975). The strainers from Brandon and Crownthorpe are a generation later than the first pottery copies and one concludes that similar carinated vessels were current in bronze earlier in the century, from (let us say) *c.* AD 25. Bronze spouted strainer bowls are not found after Nero in Britain.

It is suggested below that spouted strainer bowls were used to serve a native drink, Celtic beer; any connection

with imported wine was secondary and peripheral. After the Boudican revolt these bronze vessels passed out of fashion. They disappeared from the repertoire of local smiths as the adoption of Roman *mores* became more widespread. This led to the eclipse of traditional styles of serving local drinks among the wealthier classes of the province. Elaborate bronze strainer bowls belonged to the world of the Celtic aristocratic feast, a world that ended with the Roman invasion. But the practice they represented survived on a lower social plane for at least another hundred years, exemplified by strainers made in pottery as copies of the vanished bronze strainers of the past.

The Geography of Spouted Strainer Bowls

Late Iron Age and pre-Flavian spouted strainer bowls are found in eastern England between the Thames and the Wash, with an outlying group from north Lincolnshire represented by the bronze spout from Kirmington (May 1971; 1976, 169–71) and a pottery strainer from Dragonby, kindly drawn to my attention by S.M. Elsdon. There is a concentration in the south of the region, centred on Essex and Hertfordshire where trade with the Roman world was conspicuous in the late Iron Age. An important group of bronze strainers has been recovered from hoards in Norfolk and Suffolk.

East Anglia

The bronze strainers from East Anglia include finds from the Brandon, Santon and Crownthorpe hoards, all of which lie in Icenian territory. There was no tradition of wine consumption in East Anglia among the Iceni. In the Iron Age the kingdom had only limited commercial links with the Roman world and the Dressel 1 wine amphoras common in neighbouring counties are hardly ever found there (Clarke 1940, 58; Peacock 1971, figs 36 and 38; Fitzpatrick 1985, fig.4). An absence of early wine amphoras in general has been used to define the extent of the kingdom (Martin 1988, 68, fig.61; Moore *et al.* 1988, 12, 14). There were kingdoms in Gaul and Germany that prohibited wine imports (Caesar *De Bello Gallico* 2.15; 4.2). The Iceni may have adopted the same posture and prohibited all dealings with Roman wine and other imports, at least until after AD 43 (Sealey 1979, 173–4). This was not a milieu in which insular vessels presumed to have connections with wine would have developed.

The European Mainland

Bronze spouted strainer bowls of the period c.50BC–AD 50+ extend on the European mainland from southern Sweden, south through northern Germany and Poland, to the Danube and the Rhine. It is clear they belong to Free Germany and their peripheral relationship with the Roman world shows they are not Roman products. The closest find to Britain is the rich Tiberio-Claudian cremation burial of Helliggen B in Luxembourg (Reinert 1995, 41–3, Abb.8.50).

Looked at from a European perspective, it emerges that no part of the continent in the period c.50BC–AD 50+ has such a concentration of spouted strainer bowls as south-eastern England. There we have twelve bronze specimens from the east of the country, between the lower Thames and the Wash, with an outlier in Lincolnshire. Reinert (1995) gives details of another twelve from the European mainland, with the immense geographical

spread described above. One of these of course — the most easterly find, at Leg Pirkarski — is a British product. The whole phenomenon is a reminder of the links between Britain and Free Germany at a time when the most conspicuous axis of contact between this country and the continent was with Gaul and the Roman world. It is not beyond the realms of possibility that the practice represented by these strainers began in Britain and spread across the North Sea, but more research needs to be done on chronology before this can be substantiated.

The Function of Spouted Strainer Bowls

It was Megaw (1963, 35; 1970, 162) who proposed that spouted strainer bowls were wine strainers: they were (he says) designed "to cope with the Celtic partiality for additives" and "to strain out some of the additives such as lumps of resin which northern barbarians no less than Greeks considered an essential part of civilised drinking". Pliny is cited as evidence (*Naturalis Historia* 14.24.120–1).

Links with Wine Refuted

In fact Pliny nowhere credits the Celts with an interest in wine additives. Moreover the long and varied list of substances discussed by Pliny relates to the production of wine, and not to its serving or consumption at table. They include flavouring agents, finers, colorants and preservatives (Pliny *Naturalis Historia* 14.15.92–3; 14.24.120–1; 14.25.124–6 and 129–30). Finers are added to wine to clear haziness; many of those listed by Pliny are still in use today. They settled out of the wine as it was fermenting and would not have reached the consumer. The resin singled out by Megaw was a flavouring agent; it is soluble in alcohol and the instructions given by Cato (*De Agri Cultura* 26.3) for adding it to fermenting wine show that no lumps would have been present in the finished product. The resinated wines described by Pliny and others are the ancestors of modern wines like the Greek *retsina* and none of these need to be drunk in conjunction with a strainer, any more than did their ancient forerunners.

Nevertheless the Megaw view of spouted strainer bowls remains entrenched in the archaeological literature and these local vessels are somehow regarded as integral parts of wine services (Rigby and Freestone 1986, 15–16; Trow 1990, 103), despite the lack of any prototypes for them in the Roman world. The only dissenting voice to be heard is Tomalin (1989, 57, 59). In fact silver strainers of any sort are rare in the late Republic and early Empire (Strong 1966, 144–5); silver or bronze strainers were not regular components of a Roman wine service. One may cite as evidence the comprehensive set of silver plate shown on a wall painting in the tomb of Vestorius Priscus at Pompeii; no strainer is present, even though many of the utensils are connected with wine and dining (Dunbabin 1993, fig.3 and *passim*). The straining of wine to remove any dregs was a regular feature of Roman life but it was done with a linen bag, a *saccus* (Horace *Satires* 2.4.53–4; Columella *De Agri Cultura* 2.2.20; Pliny *Naturalis Historia* 14.28.138; 15.37.124; 19.19.53; 20.72.185; Martial *Epigrams* 8.45; 12.60.9; 14.103–4). The metal strainers of the last two Martial texts cited were used for the straining of wine through snow to cool it, a practice confined to the grandest Italian households and which can have no bearing on how wine was consumed in Iron Age Britain. Reliance on linen bags to filter the dregs explains

why the Latin words for utensils of straining or filtering seldom make reference to wine (Hilgers 1969 *s.v. colatorium, colum, cribrum, incerniculum, liquatorium and setaceum*).

Celtic Beer

If the drink served from spouted strainer bowls was not imported wine, then what was it? There are many references in the Greek and Roman sources to an alcoholic beverage prepared from grain in northern and western Europe among the Celts and Germans and their neighbours; sometimes it was treated with honey (Diodorus Siculus *World History* 5.26; Dionysius of Halicarnassus *Roman Antiquities* 13.10–11; Strabo *Geographia* 4.5.5 citing Pytheas; Dioscorides *De Materia Medica* 2.110; Pliny *Naturalis Historia* 14.29.149; 22.82.164; Tacitus *Germania* 23; Athenaeus *Deipnosophistae* 4.36.152C citing Posidonius). This drink is the so-called Celtic beer; we know it was alcoholic because our sources say it was the equivalent of wine. Although there are ambiguities in the use of the word *Celtic*, and the drink in question was actually ale (there was no beer until the introduction of the hop in the Middle Ages), the term Celtic beer is retained here for convenience.

Herbal Tea

Spouted strainers can bear more than a passing resemblance to tea pots and the possibility has indeed been raised that they were used for a local concoction made by pouring boiling water on herbs to make a refreshing or medicinal drink. This would explain why strainers are sometimes associated with utensils connected with the heating of fluids (Reinert 1995, 49). Curle (1932, 311–12) mentions a hoard from Filzen on the Moselle that may be relevant here. It included a cauldron, gridiron, ladles and colanders, together with a scythe-hammer and whetstones. It was suggested that the find had belonged to folk who gathered herbs to prepare some kind of herbal infusion in the cauldron, but one can find no references in the Greek and Roman sources to any kind of infused drink like tea and the artistry and care invested in the strainer bowls seems more in keeping with a prestigious alcoholic brew.

Archaeological Evidence for Celtic Beer

In Britain the earliest possible hint of the drink comes from a Bronze Age food vessel from a grave in the North Mains (Perthshire) henge monument. Pollen analysis of the contents suggested either porridge or a fermented drink made from cereals (Bohncke 1983), although this has been questioned on the grounds that the meagre quantities of grain pollen present may have been incorporated in the grave accidentally in a floral tribute of meadowsweet (Tipping 1994, 138). Across the North Sea in north Germany, two drinking horns of the 1st century AD from a peat bog at Skudstrup (Hadersleben) each had their own drink: one was ale made from emmer wheat, and the other the honey-based drink, mead (Grüss 1932). The find with the most relevance to our insular strainer bowls comes from the grave of a woman at Juellinge in Denmark dated c. AD 150–250. A bronze cauldron of Eggers type 40 (Eggers 1951, Taf.6) in the grave contained the residues of a drink made from barley, flavoured with cranberries, bilberries and leaves of the bog-myrtle. Soot on the outside of the cauldron shows the drink had been mulled before it

was served. In her right hand, the deceased held an imported Roman bronze colander strainer; it formed a matching set with a ladle from the same grave. With such a drink, a colander would have been essential. The irony of the use of an imported Roman bronze ladle and colander to serve a local drink should not be overlooked (Müller 1911, 47–9, 53–4; Curle 1932, 307). It is Juellinge that gives the most vocal hint as to the character of the drink served in the pottery and bronze strainer bowls found in eastern England north of the Thames.

Archaeological Evidence for Mead

It is puzzling that the documentary sources cited above make only the most oblique references to honey-based alcoholic drinks of the mead family in northern Europe. We have already encountered mead in one of the Skudstrup drinking horns. In Britain, analytical work on the pollen from the residues of a drink in an Early Bronze Age grave at Ashgrove (Fife) suggested the presence of mead. Comparable finds from the Bronze Age of Denmark suggest its presence there too (Dickson 1978). The most striking evidence of all comes from the residues in the base of an imported Greek bronze cauldron from the c. 530–490 BC Hallstatt D2 grave at Eberdingen-Hochdorf (Baden-Württemberg), which contained pollen from local honey; it is clear that mead had been prepared in the cauldron itself. Had it been poured into the cauldron from a separate fermentation vat, pollen would not have been present in such quantities (Körber-Grohne 1980, 250; 1985, 121–2; Pare 1992, 154 for the chronology). Clearly Celtic beer was not the only alcoholic drink brewed in northern Europe and one should allow the possibility that mead was also served in spouted strainer bowls.

Spouted Strainer Bowls and Cauldrons

All this explains the connection between spouted strainer bowls and cauldrons, because it was in cauldrons that Celtic beer would have been prepared (Curle 1932, 312–13; Hawkes 1951, 177–8). It is apparent from the Eberdingen-Hochdorf grave that mead was also prepared in cauldrons. There are four instances of this association of spouted strainer bowl and cauldron: Ardleigh itself, Brandon, Santon and Felmersham. The Ardleigh strainers and cauldron are not of course bronze but pottery, and they constitute a remarkable ensemble of vessels inspired by the metal sets found elsewhere. The Brandon, Santon and Felmersham strainers have already been mentioned; it only remains to comment on their cauldrons. In the Brandon hoard the cauldron is a large Emmendigen-type vessel which had been inverted over the strainer bowl and other finds. At Santon a smaller vessel of the same type was the receptacle for the hoard (Smith 1909, 146–8); the Felmersham cauldron is lost, but was reported by an eye witness of the discovery (Kuhlicke 1969).

Summary and Conclusions

Things are not always what they seem. In the Welwyn Garden City grave the association of an insular spouted strainer with five wine amphoras (Stead 1967, 7–8, 23–4, pl.5, 25) seemed to vindicate the view that strainers were used for wine. But Reinert (1995, 50) has stressed how Welwyn Garden City is the only instance where we have the direct linkage of a strainer bowl with wine consumption; on the European mainland, there is no evidence for such a connection at all. At Welwyn Garden

City we may instead have an isolated attempt to treat imported wine in the same way as local drinks for which the strainers primarily catered, a unique experiment that was apparently not repeated.

The evidence presented here suggests that spouted strainer bowls were used for the serving of beer. It was prepared in cauldrons, flavoured with vegetable additives in strainer bowls and drunk out of the tankards best known for their bronze handles (Corcoran 1952). One can see now why cauldrons, spouted strainers and tankards are so rare in Welwyn-type graves: the imported amphoras show wine displacing beer as the most prestigious drink of the people laid to rest in these graves. One should envisage cauldrons, spouted strainers and tankards as services of vessels for the preparation and consumption of beer; they have no real links with sets of utensils relating to the consumption of wine. It is unfortunate that strainer bowls should have been incorporated in the uncritical talk of

wine services in later prehistoric Britain still found in the literature.

What exactly the beer was seasoned with to need straining through our bronze and pottery spouted bowls may have to await the discovery of one in a funerary context with its contents *in situ*. One hopes that Britain may eventually produce a counterpart to the Juellinge grave in Denmark, where a local drink had been flavoured with berries and leaves (above p.123). Just such an opportunity arose at Stanway to the east of Colchester in 1996, when a rich grave dated c. AD50 was excavated with a bronze strainer bowl (Crummy 1997a, 67; 1997b, 5-7). The amphora in the grave was a Beltrán I *salazon*, from Spain, which would have held salted fish or fish sauce, not wine. Leaf-like organic residues have been noted around the perforated panel of the strainer, and it is hoped that their study may elucidate the character of the additives.

VII. Roman Pottery

by C.J. Going and J. Belton
with contributions by B. Dickinson, K.F. Hartley and
D.F. Williams

Introduction

The excavations of 1979–80 produced approximately 498kg of pottery. The overwhelming bulk of this material is datable to the 1st and 2nd centuries AD. Contexts of later Roman date were notable for their absence. The material was originally quantified context by context using 'eves', fabric weight and sherd count, the pottery forms being identified in terms of the system developed by Going (1987, 1) for use at the Colchester and Chelmsford Archaeological Trusts.

While most contexts produced little pottery, usually less than 1kg, and the general range of forms and fabrics found — typically of rural sites — was highly restricted, there were a few features which yielded very substantial quantities of pottery indeed. These contexts (such as ditches 7150 and 1003 in Area 7, which produced 25 and 77kgs of material, respectively), were quickly recognised as repositories of production waste from nearby kilns, two of which were also excavated. Unfortunately, there was little pottery directly associated with these two excavated kilns.

Therefore the major stratified groups published here (see p.127 below) have a twofold significance for ceramics specialists. They are a guide to the early Roman ceramics of a part of Essex hitherto not very well represented; and also provide a conspectus of the products manufactured in this little-known production area. From this material, and also from the pottery assemblages recovered during the 1950s by Felix Erith and others of the Colchester Archaeological Group, it has been possible to assemble and publish here a Corpus of Ardleigh production types (Figs 97.1–103.148).

At the same time lengthy efforts were made to unravel the documentation which survives in the Colchester and Essex Museum in order to put together a history of the exploration of the Ardleigh pottery industry, so long in the shadow of its major co-producer at Colchester, and to write on the basis of this an outline account of its development and decline (below pp 154–57).

During work on the archive material it became clear that until he was forestalled by events at Sheepen Rex Hull had been planning to publish a detailed account of the pottery from Ardleigh. His surviving drawings and notes show how his ideas on pottery dating developed in the 1950s and give us a unique glimpse of the Camulodunum typology in evolution.

The Samian

by B. Dickinson

All of the sherds in this assemblage (total sixty-seven in archive catalogue) were eroded to some extent, making accurate dating difficult. It is clear, however, that the bulk

of the material is South Gaulish and pre-Flavian. Most of it is Neronian, although one or two pieces could be earlier.

There is no evidence that any samian reached the site after the mid Antonine period nor, indeed, that there is necessarily any post-Hadrianic material present.

The Mortaria

by K.F. Hartley

Fragments of at least ten different mortaria were recovered, nine of which were probably made at Colchester or elsewhere in Essex, the tenth probably at Much Hadham, Herts. Full descriptions and context details are contained in the archive.

The Amphorae

by D.F. Williams

A total of eighty-eight amphora sherds weighing 5.106kg were recovered and were classified by fabric and form. The types represented are Dressel 20, which represents around 60% of the total amphorae recorded, Camulodunum 185A, Pélichet 47, Camulodunum 186A, Catalan, Southern Spanish and a small number of unassigned types (Table 2). The origins and chronological span of these amphorae are described in archive, together with a list of their contexts on the site.

The Fabrics

97.2% of the total assemblage by weight (490.5kg) was made up of two fabric groups; the 'native' wares, and Roman grey wares. Other fabrics amounted to 2.8% of the assemblage by weight. 'Specialist' wares (samian, amphorae and mortaria) amounted to 1.3% of the assemblage. The remaining 1.5% of material comprised:

The Gallo-Belgic wares	0.3%
Much Hadham ware	
(from the late grave groups)	0.1%
Colchester colour coated ware	0.1%
The Buff wares	0.8%
Miscellaneous oxidised wares	0.1%

The fabric descriptions are based on an examination of fresh breaks both macroscopically, and at $\times 20$ magnification. The conventions used are those given in Peacock (1977, 2, 29).

The following detail is noted: *colour*, expressed as Munsell notations, *hardness*, *visual texture*, *main inclusions* (again using Peacock 1977, 2, 30–2 as a guide), *frequency* expressed using the formula sparse-moderate-abundant, inclusion size (very fine $<0.1\text{mm}$; fine $>0.1- <0.25\text{mm}$; medium $>0.25- <0.5\text{mm}$; coarse $>0.5\text{mm}- <1\text{mm}$, very coarse $>1\text{mm}$), and *surface treatment*.

'Cat' numbers refer to an unpublished catalogue of pottery from Ardleigh prepared by J. Belton, now held by Colchester Museum as part of the Ardleigh archive.

Area	Dr 20		Cam 185A		Pél 47		Cam 186A		Catalan		South Spain		Unassigned	
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
7	18	642	-	-	-	-	1	132g	-	-	-	-	-	-
8	16	876g	1	36	9	248g	-	-	1	810	2	46g	1	39
20	21	1068g	-	-	8	450g	1	33g	-	-	4	326g	1	1g
21	1	356g	-	-	-	-	-	-	-	-	-	-	-	-
22	1	34g	-	-	-	-	-	-	-	-	-	-	2	19g

Table 2 Amphorae types

The Native Wares

'Native Fine Wares' (Fabric B1)

(Symonds and Wade forthcoming, fabric G; Going 1987, fabric 34)

It was found to be impractical to divide this group up further on the basis of paste alone. It is fairly heterogeneous throughout, although the more utilitarian forms were rather less fine and well-finished. The fabric is easily recognisable by the characteristic black carbonaceous inclusions present, and where this fabric seemed to overlap with the finer Roman fabric (R1) the presence or absence of this inclusion was the deciding factor in its attribution.

The fabric is soft to moderately hard, soapy ware with a grey (N4-5) greyish brown (10YR 4/2) or brown (10YR 5/4) core, often red margins (2.5YR 6/6) and light brownish grey (10YR 6/2) to black (5Y 2.5/1) surfaces.

The fabric has a finely irregular fracture, revealing varying amounts of carbonaceous material which is burnt out and invisible in the oxidised margins; also moderate coarse red or grey grog pellets, sparse, fine mica and sparse fine to medium quartz and quartzite. The exposed surfaces are burnished, sometimes to a high polish, except in some plain jar forms mentioned above. The vessels often have a 'porridgey' surface which becomes vesicular when wiped. The clay is generally less well levigated and the inclusions coarser and more abundant than in fabric B1.

Illustrated vessels in Fabric B1

Fig. 85.1-24 [Cat 8008]

Fig. 86.1-6, 7-14 [Cat 1521]

Figs 88. 6-7, 11-20; 89.21, 22, 28, 32, 34-5, 37 [Cat 7857]

Fig. 90.4, 10-14, 17-18. [Cat 8212/8151]

Fig. 91.26, 27 [Cat 7150]

Fig. 93.34, 35, 37-8, 39, 50, 52 [Cat 1003]

Fig. 94.12-17, 22, 23, 25-7 [Cat 1003/1005]

Fig. 96.15-16 [Cat 2055]

Red-surfaced ware (Fabric B2)

(Colchester fabric groups DJ/FZ: Symonds and Wade forthcoming; Chelmsford fabric 34: Going 1987, 7)

Essentially the same fabric as B1. The core is grey (N4 or 5) to (10YR 7/1) to dark greyish brown (10YR 4/2) with red (5YR 6/6) margins and surfaces. Inclusions are as for fabric B1 and exposed surfaces are always burnished.

Usually used for girth-beakers, some beaded-rimmed jars, and occasionally, butt-beakers and platters. These vessels are usually well-made, probably in imitation of imported *Terra Nigra* forms.

Native coarse ware (Fabric B3)

(Colchester fabric group HZ: Symonds and Wade forthcoming; Chelmsford Fabrics 44-5; Going 1987, 9)

Used only for storage jars and other large jars. This fabric differs in colour from the fine ware, being fired in less well controlled conditions. Soft to hard, Patchy greyish-brown (10YR 4/1) or brownish red (2.5 YR 5/6) throughout, with an irregular fracture.

The inclusions are the same as for the fine ware except for the mica, although generally much coarser and more abundant. As with the fine ware, the carbonaceous material is only present when the material is not oxidised. The surfaces are wiped and smoothed, and sometimes vesicular where large inclusions have been dragged across the surface or fallen out. Rims are only occasionally burnished.

The Roman Grey ware

The 238.2kg of 'grey' wares from the excavations were divided into three main fabric groups according to the amount of quartz and quartzite present. 53.6% of the grey wares were classed as fine (fabric R1), 30.3% were classed as medium (fabric R2), and 16.1% were classed as coarse (fabric R3). It is recognised that this tripartite division lumps together some fabrics, but short of total requantification there is no way that these may be fully recorded. However, wherever possible all illustrated vessels are identified by their true fabric. There is some evidence to suggest that the amount of grit tempering which was added was to some extent dependent upon the type of vessel to be produced.

This pottery was produced at Ardleigh, and there are many examples of misfired and distorted sherds. Unless otherwise stated, the description given refers to the fabric as it appears to have been intended.

Fine Reduced wares (Fabric R1)

(Colchester fabric groups GR/UR, Symonds and Wade forthcoming; Chelmsford fabric 39: Going 1987, 8)

Hard, smooth fabric, grey (N4 to N5), to (10YR 5/1) or 6/1 throughout, and a finely irregular fracture. Misfired sherds become very soft and powdery, and the colour then varies from brownish grey (10YR 6/2) to orange (5YR 6/8).

The inclusions are varying amounts of coarse grey grog pellets, sparse medium to coarse quartz and quartzite grains, and sparse fine mica. The surfaces are sometimes burnished but more often lack any form of special treatment. Thin-sectioning has shown this fabric to be closely related to fabric B1 (above), although it lacks the carbonaceous inclusions. Its very different appearance seems to be due to the new Roman firing techniques. The pots were presumably being fired to very much higher temperatures than hitherto.

Illustrated vessels in Fabric R1

Figs 88B.2, 4; 89.27, 29-30, 39 [Cat 7857]

Fig. 90.1-3, 5, 7-9, 15-6 [Cat 8212/8151]

Fig. 91.1-25, 28-9 [Cat 7150]

Figs 92.1-2, 4-6, 9-27; 93.29-32, 41-8, 53, 55-6, 58-9 [Cat 1003]

Fig. 94.1, 3-6, 8-11, 18-21, 24, 28-9, 31-4 [Cat 1003] [Cat 1005]

Fig. 95.5 [Cat 1968]

Fig. 96.6 [Cat 2055]

Medium Reduced wares (Fabric R2)

(Colchester fabric groups KX/GX, (Symonds and Wade forthcoming, Chelmsford fabric 47: Going 1987, 9-10)

Hard, rather harsh, grey (N4) fabric, sometimes with brown (5YR 4/6) margins or core, and brownish-grey (10YR 6/1) surfaces. Fractures are finely irregular, showing a moderate amount of fine to medium sized grains of quartz and quartzite. Surfaces are occasionally decorated with burnished zones, otherwise no special surface treatment is evident. As with fabric R1, there are many misfired and distorted sherds, which when oxidised become soft, powdery brown (10 YR 4/2) to orange (5YR 6/8).

Illustrated vessels in Fabric R2

Fig. 90.6 [Cat 8212/8151]

Figs 88B.3; 89.26, 31, 33 [Cat 7857]

Fig. 93.28, 49, 54 [Cat 1003]

Fig. 94.2, 7, 30 [Cat 1003/1005]

Fig. 95.1-3, 6-9 [Cat 1968]

Fig. 96.1, 2-5, 7-11, 17 [Cat 2055]

Coarse wares (Fabric R3)

(Colchester fabric group GX and allied groups, Symonds and Wade forthcoming; Going 1987, 9-10 Chelmsford fabric 47)

Hard, rough grey (N4 or 5) to (10YR 5/1 or 6/1) throughout, and an irregular, sometimes hackly fracture. The main characteristic of this fabric is the abundance of coarse grains of quartz and quartzite present. Nearly all examples of jar form are in this fabric. These vessels are large and often thin walled. The tempering 'opens' the fabric, allowing water to escape and penetration of gases, reducing the possibility of cracking and shrinkage.

Illustrated vessels in Fabric R3

Fig. 89.38 [Cat 7857]

Fig. 95.4, 10 [Cat 1968]

Fig. 96.12-14 [Cat 2055]

Other fabrics

The Gallo-Belgic wares

0.3% of the assemblage. True '*Terra Nigra*' and '*Terra Rubra*' was extremely scarce, most forms being native copies of platters and drinking vessels in fabrics similar to groups B1 and R1. Rare.

Illustrated vessel in Gallo-Belgic fabric

Fig. 88A.3. *Terra Rubra*. Cf Cam 84A. Pit 7683

Much Hadham ware

(Colchester fabric group CH, Symonds and Wade forthcoming; Chelmsford fabric 4: Going 1987, 3)

0.1% of the site assemblage (1.02kg). The ware is distributed widely across Essex and East Anglia from the later 3rd century AD but is most commonly encountered in the 4th century. It is present at Ardleigh, principally in the graves, and then only as a few vessels.

Illustrated Much Hadham vessel

Fig. 49 Grave 702, [Cat 721]

Colour-coated wares of ?Colchester origin

(Colchester fabric group CB Symonds and Wade forthcoming; Chelmsford fabric 1: Going 1987)

0.1% of the assemblage (191g). Extremely rare on the site despite the proximity of Colchester itself. Forms are restricted to drinking vessels, mainly folded and bag shaped rough cast beakers of Hadrianic-Antonine date. Examples from Cats 7857; 1003, 1521.

Illustrated Colour-coated vessel

Fig 88.5. Roughcast beaker from [Cat 7857]

The Buff wares

(Colchester fabric group FZ, Symonds and Wade forthcoming; Chelmsford fabrics 27 and 31, Going 1987)

Only 0.8% of the site assemblage (3.9kg). The buff ware fabric group is probably overwhelmingly of local manufacture, mostly from potteries in the Colchester area. Forms mostly comprise closed forms such as ring-necked and other flagon types, and also mortaria (K.F. Hartley in archive).

None illustrated

Miscellaneous oxidised wares

(Colchester fabric group CZ; Symonds and Wade forthcoming; Chelmsford fabric 21; Going 1987, 6.)

0.1%. This fabric group is both small and of extremely disparate origins. Forms include closed vessels, mainly flagons, e.g. from Cats 1003 and 7012. Most probably come from the Colchester kilns or from similar provincial production centres.

None illustrated

The Stratified Groups

Instead of presenting *all* of the pottery which could be illustrated from the site the decision was taken to present only substantial stratified groups. These are datable to the 1st and 2nd centuries AD (later ceramic assemblages were rare). Residual material is generally omitted from the illustrated catalogue unless there is some important reason for including it. Some of the pottery from the dumps from (e.g. from ditches 7150 in Area 7 and from ditches 1003, 1003/1005) is also illustrated in the Corpus of kiln products presented below (Figs 97–103). Vessels reproduced in the Corpus are cross-referenced, but duplication has been kept to a minimum.

Contexts dated to the early–mid 1st century AD

Figs 85.1–25; 86A.26–36 Ditch 8008 (Area 22)

Fig. 86.1–12 Ditch 1521 (Area 8)

Fig. 87.1–9 Ditch 2141 (Area 8)

Contexts dated to the 1st century AD

Fig. 87B.1–11 Pit 7671 (Area 20)

Fig. 88B.1–8 Pit 7683 (Area 20)

Figs 88B.1–20; 89.21–35 Ditch 7587 (Area 20)

Fig. 90.1–18 Ditch 8212/8151 (Area 21)

Contexts dated to the later 1st–2nd centuries AD

Fig. 91.1–29, Ditch 7150 (Area 7)

Figs 92.1–27; 93.28–60, Ditch 1003 (Area 7)

Fig. 94.1–34, Ditch 1003/1005 (Area 7)

Fig. 95.1–10, Ditch 1968 (Area 8)

Contexts dated to the 4th century AD

Fig. 95.1–16, Well Cone 2055 (Area 8)

Catalogue of Illustrated Pottery

Contexts dated to the early–mid 1st century AD

Ditch 8008 (Area 22)

The pottery from ditch 8008 comprised a substantial assemblage (over 20kg) ranging in date from the late 1st century BC to the middle of the 1st century AD. The latest pieces from the context included a bowl form of Roman date (Fig. 85.1), suggesting infilling not before the mid 1st century AD. There were no coins.

85.1 Bowl (Marsh 1978) form 34. Fabric B1. [Cat 8004].

85.2 Carinated bowl, Cam 211/1. Fabric B1. [Cat 8039].

85.3 Neckless jar. Fabric B1. [Cat 8001].

85.4 Jar. Cf Cam 257. Fabric B1. [Cat 8016].

85.5 Cf Cam 249. Fabric B10. [Cat 8035].

85.6 Cf Cam 257. Fabric B1. [Cat 8039].

85.7 Jar, Cf Cam 249. Fabric B1. [Cat 8039].

85.8 Cf Cam 204/249. Fabric B1. [Cat 8001].

85.9 Jar. Fabric B10. [Cat 8039].

85.10 Cam 214. Fabric B1. [Cat 8016].

85.11 Cf Cam 229, Thompson D2–4. Fabric B1. [Cat 8016].

85.12 Cf Cam 229, Thompson D2–4. Fabric B1. [Cat 8016].

85.13 Cf Cam 229, Thompson D2–4. Fabric B1. [Cat 8027].

85.14 Cf Cam 229; Thompson D2–4. Fabric B1. [Cats 8016, 8039].

85.15 Fabric B1. [Cat 8039]. CEU 105.

85.16 Cf Cam 229; Thompson D2–4. Fabric B1. [Cat 8016].

85.17 Fabric B1. [Cat 8016].

85.18 Fabric B1. [Cat 8004].

85.19 Jar. Cf Cam 218. Fabric B1. [Cat 8016].

85.20 Jar. Cf Cam 229A. Fabric B1. [Cat 8016].

85.21 Jar. Fabric B1. [Cat 8016].

85.22 Jar. Fabric B1. [Cats 8001/8004].

85.23 Jar with 'rippled' decoration. Fabric B1. [Cat 8016].

85.24 Jar. Elongated form. Fabric B1. [Cat 8016].

85.25 Jar. Fabric B1. [Cat 8016].

86A.26 Jar, elongated form, cf No. 24. Fabric B1. [Cat 8016].

86A.27 Jar, elongated form, probably as No. 24. Fabric B1. [Cat 8016].

86A.28 Jar. Fabric B1. [Cat 8027].

86A.29 Jar. Form uncertain. Fabric B1. [Cat 8016].

86A.30 Jar, elongated form, probably as No. 24. Fabric B1. [Cat 8001].

86A.31 Necked jar. Fabric B1. [Cat 8016].

86A.32 Jar. Ancestral to the Cam 270-2. B1 [Cat 8027].

86A.33 Jar. Ancestral to Cam 270-2. B1. [Cat 8001].

86A.34 Lid. Fabric B1. [Cat 8039].

86A.35 Lid. Fabric B1. [Cat 8016].

86A.36 Uncertain closed form. Fabric B1. [Cat 8016].

Ditch 1521 (Area 8)

This feature produced a small collection of material which included production waste. Although there were no sherds of Samian, or other imports, to refine the dating of the feature the forms are all consistent with a date in the Claudio-Neronian period, c. AD 40–70.

86B.1 Platter. Cam 14 Fabric B1. [Cat 1955].

86B.2 Bowl-Jar. Cam 242. Fabric B1. [Cat 1545].

86B.3 Neckless Jar. Form uncertain. Fabric B1. [Cat 1523].

86B.4 Neckless Jar. Form uncertain. Fabric B10. [Cat 1961].

86B.5 Jar. Fabric B1. [Cat 1961].

86B.6 Jar. Cam 221. Fabric B1. [Cat 1955].

86B.7 Jar. Fabric Q8. [Cat 1545].

86B.8 Jar. Fabric B1. [Cat 1962].

86B.9 Jar. Fabric B1. [Cat 1962].

86B.10 Jar. Fabric B1. [Cat 1545].

86B.11 Jar. Cam 218/220A. Fabric B1. [Cat 1962].

86B.12 Storage jar. Fabric B1. [Cat 1955/1961].

86B.13 Storage jar. Fabric B1. [Cat 1953].

86B.14 Pedestal base. Cf Cam 204C. Fabric B1. [Cat 1961].

Contexts dated to the mid-late 1st century AD

Ditch 2141 (Area 8)

Ditch containing 9kg of pottery (including some production waste of Cam 246 bowls (Corpus 34–42) dating to the Neronian-Hadrianic periods.

87A.1 Neckless bead rimmed jar, Cf Cam 254. Fabric B1.

87A.2 Everted rimmed jar, form not entirely certain. Fabric B1.

87A.3 Necked jar with everted rounded rim. Fabric R10. [Cat 2143].

87A.4 Necked jar with inverted piriform body. Form uncertain. Fabric B1. [Cat 1673].

87A.5 Jar, basic Cam 218. Fabric B1. [Cat 2144].

87A.6 Similar but smaller version of a Cam 218.

87A.7 Hofheim-type flagon with strap handles. Fabric F1. [Cats 1673, 2141].

87A.8 Narrow necked jar, form uncertain. Fabric B1. [Cat 2038].

87A.9 Narrow necked jar, form uncertain. Fabric B1. [Cat 1673].

Pit 7671 (Area 20)

The bulk of the pottery (16.9kg) from this feature were in Romanising fabrics (B1–3) rather than in true grey wares which suggests a date prior to the end of the 1st century AD. Imports included Vespasian-early Flavian Samian (Dickinson in archive), and a Dressel 20 amphora sherd, which while not chronologically diagnostic is probably datable to after the mid-1st century AD.

- 87B.1** Rim of a carinated bowl, *Cf* Cam 212. Fabric B1. [Cat 7681].
87B.2 Carinated bowl-jar. Cam fig 54.32. Fabric B1. [Cat 7578/8275].
87B.3 Jar possibly Cam 218 variant. Fabric B1. [Cat 7578].
87B.4 Neckless jar of Cam 254. Fabric B1. [Cat 7578].
87B.5 Jar, Cam 218. Fabric B1. [Cat 7578].
87B.6 Neckless jar, possibly Cam 204. Fabric B1. [Cat 7680].
87B.7 Necked jar, *cf* Cam 264. Fabric B1. [Cat 7578].
87B.8 Everted rimmed jar. HM, pre-conquest. Fabric B1. [Cat 8275].
87B.9 Storage Jar, *cf* Cam 270–2. Fabric B1. [Cat 8275].
87B.10 Storage jar. *cf* Cam 270–2. Fabric B1. [Cat 8275].
87B.11 Lid. *Cf* Cam pl LXXV.2 for rim. Fabric B1. [Cat 7682].

Pit 7683 (Area 20)

Mostly residual material of the early to mid 1st century AD, but the feature also includes Neronian Samian and Dressel 20 amphora sherds suggesting infilling not before the Flavian period, as does a sherd of a Pélichet 47 amphora, which does not occur in pre-Boudican contexts.

- 88A.1** Platter. *Cf* Cam 12. Fabric B10. [Cat 7785].
88A.2 Bowl, form uncertain. Fabric R2. [Cat 7555].
88A.3 Girth-beaker. in terra rubra. *Cf* Cam 84A for rim. [Cat 7554].
88A.4 Neckless jar. *Cf* Cam 256. Fabric B1. [Cat 7554].
88A.5 Neckless canted rimmed jar. Fabric B1. [Cat 7554].
88A.6 Neckless jar. *Cf* Cam 256. Fabric B1. [Cat 7554].
88A.7 Storage jar. Possibly Cam 204. Fabric B1. [Cat 7685].
88A.8 Butt beaker, post conquest development of Cam 113. Fabric R1. [Cat 8292].

Ditch 7857 (Area 20)

A very good assemblage was recovered from this feature. The coins were residual, and datable to Agrippa, and Claudius (AD 43–64). However there was samian down to AD 60–95, and sherds of Dressel 20 and Pélichet 47 amphorae suggesting a post mid 1st AD century date. The platter forms (Nos 1–2), coupled with the lack of bead-rimmed dishes which are a useful Hadrianic *terminus*, suggest deposition before the end of the 1st century AD.

- 88B.1** Platter. *Cf* Cam 24. Fabric R1. [Cat 7802/7895].
88B.2 Platter. *Cf* Cam 28. Fabric R1. [Cat 7635].
88B.3 Carinated bowl, *cf* Cam 242. Fabric R2. [Cat 7473].
88B.4 Beaker. *Cf* Cam 108 and *Cf* Corpus No. 59. Fabric R1. [Cat 7887].
88B.5 Rough-cast beaker. ?Imported colour-coat. [Cat 7886/7887/7907].
88B.6 Neckless jar. *Cf* Cam 249. Fabric B1. [Cat 7892].
88B.7 Neckless jar. *Cf* Cam 249. Fabric B1. [Cat 7669].
88B.8 Neckless jar. *Cf* Cam 249E. Fabric B10. [Cat 7893].
88B.9 Neckless jar. *Cf* Cam 259. Fabric B10. [Cat 7887].
88B.10 Open form. Fabric Q7. [Cat 7482].
88B.11 Bowl. *Cf* Cam 249B. Fabric B1. [Cat 7918].
88B.12 Bowl. *Cf* Cam 249B. Fabric B1. [Cat 7887].
88B.13 Jar, Cam 218. Corpus No. 89. Fabric B1. [Cat 7887].
88B.14 Jar, *Cf* Cam 218. Fabric B1 and R1. [Cat 7887, 7901].
88B.15 Jar. *Cf* Cam 218. Fabric B1. [Cat 7887].
88B.17 Jar. *Cf* Cam 218. Fabric B1. [Cat 7918].
88B.18 Jar. Fabric B12. [Cat 7669].
88B.19 Jar. Fabric B1. [Cat 7635].
88B.20 Storage jar. *Cf* Cam 270. Fabric B1. [Cat 7857].
89.21 Jar. Fabric B1. [Cat 7866].
89.22 Jar. Fabric B1. [Cat 7483].
89.23 Butt beaker rim. *Cf* Cam 113. Fabric B10. [Cat 7866].
89.24 Jar, possibly Cam 204. Fabric B1? [Cat 7635].
89.25 Jar. Fabric B1. [Cat 7875].
89.26 Jar, *Cf* Cam 256/264. Fabric R2. [Cat 7473].
89.27 Jar. Fabric R1. [Cat 7901].
89.28 Jar. *Cf* Cam 266. Fabric B1. [Cat 7901].
89.29 Jar. *Cf* Cam 266–7. Fabric R1. [Cat 7901].
89.30 Jar. *Cf* Cam 266–7. Fabric R1. [Cat 7901].
89.31 Jar. *Cf* Cam 266–7. Fabric R1. [Cat 7901].
89.32 Jar, similar to Cam 204 if pedestal foot, or 231. Fabric R1. [Cat 7841].
89.33 Jar. *Cf* Cam 256/264. Fabric R2. [Cat 7589/7669/7670].
89.34 Jar. Fabric B1. [Cat 7967].
89.35 Storage jar. *Cf* Cam 273. Fabric B1. [Cat 7930].
89.37 Lid. *Cf* Cam pl LXXV.5,8. Fabric B1. [Cat 7886].
89.38 Lid. *Cf* Cam pl LXXV. 6. Fabric R3. [Cat 7887].
89.39 Closed form. Fabric R1. [Cat 7901].

Ditch 8212/8151 (Area 21)

A Good group. The dishes (Nos 1–4) are consonant with a Flavian date, as are the beakers (Nos 7–9): *cf* the assemblage from Chelmsford site S pit 205, also of Flavian date. The jar types are restricted to the Cam 218 and allied types. There are no signs of 2nd-century forms such as the

bead-rimmed dish (the Cam 37), or of later variants of the Cam 266 or 268 jars. It is suggested that the deposit was closed *c.* 85–100 AD, *i.e.* roughly contemporary with the pit from Colchester insula 7.

- 90.1** Platter, *Cf* Cam 24. Corpus No. 1. Fabric R1. [Cat 8085].
90.2 Platter, *Cf* Cam 24. Corpus No. 2. Fabric R1. [Cat 8085].
90.3 Platter, *Cf* Cam 28. Corpus No. 5. Fabric R1. [Cat 8085].
90.4 Platter, *Cf* Cam 28. Fabric B1. [Cat 8085].
90.5 Platter, *Cf* Cam 16. Corpus No. 10. Fabric R1. [Cat 8085].
90.6 Bowl, Variant of the Cam 242. Fabric R2. [Cat 8196].
90.7 Beaker. *Cf* Cam 108. Corpus No. 59. Fabric R1. [Cat 8085].
90.8 Beaker. *Cf* Cam 108. Fabric R1. [Cat 8207].
90.9 Beaker. *Cf* Cam 108. Corpus No. 67. Fabric R1. [Cat 8085].
90.10 Jar. Possibly Cam 218. Corpus No. 79. Fabric B1. [Cat 8207].
90.11 Cam 218. Fabric B1. [Cat 8196].
90.12 Cam 218. Corpus No. 88. Fabric B1. [Cat 8196].
90.13 Cam 218. Fabric B1. [Cat 8196].
90.14 Jar, Cam 218. Fabric B1. [Cat 8196].
90.15 Cam 218. Fabric R1. [Cat 8196].
90.16 Cam 218. Fabric R1. [Cat 8085].
90.17 Cam 218. Fabric B1. [Cat 8196].
90.18 Cam 270–2. Corpus No. 132. Fabric B1. [Cat 8085].

Contexts dated to the later 1st–2nd centuries AD

Ditch 7150 (Area 7)

Good, with misfired pottery including some severely distorted vessels (Nos 14, 23). No illustrable platter types came from this context which is of some interest. The open forms were for the most part restricted to bowls of the Cam 246. The range of beakers of Cam 108 and allied types is interesting, differing as it does from the angled impressed decoration of the vessels from 8212/8151 — perhaps this is a local production quirk. Jars are more varied, with the Cam 218 being well represented, and the Cam 266 type in small quantity. The latter's successor, the Cam 268, is not in substantial evidence here, although the fabric attribution, which tends more to the R1 group (that is the fully Romanised production indicates that we are probably in the 2nd century. A Flavian-Trajanic date is probable.

- 91.1** Bowl. Cam 246. Corpus No. 42. Fabric R1. [Cat 7238].
91.2 Bowl. Cam 246. Fabric R1. [Cat 7238].
91.3 Bowl. Cam 246. Fabric R1. [Cat 7232].
91.4 Bowl. Cam 246. Corpus No. 40. Fabric R1. [Cat 7237].
91.5 Bowl. Neck only but *Cf* Cam 246. Fabric R1. [Cat 7239].
91.6 Necked bowl form. Fabric R1. [Cat 7237].
91.7 Necked bowl form, similar to No. 6. Fabric R1. [Cat 7238].
91.8 Beaker, *cf* Cam 108. Corpus No. 63. Fabric R1. [Cat 7239].
91.9 Beaker, *cf* Cam 108. Corpus No. 64. Fabric R1. [Cat 7239].
91.10 Beaker. *cf* Cam 108. Corpus No. 65. Fabric R1. [Cat 7239].
91.11 Beaker. Fabric R1. [Cat 7238/7239].
91.12 Beaker. Possibly Cam 108. Fabric R1. [Cat 7239].
91.13 Jar, Cam 218. Corpus No. 82. Fabric R1. [Cat 7238].
91.14 Jar, Cam 218. Corpus No. 87. Fabric R1. [Cat 7238/7239].
91.15 Jar, Cam 218. Fabric R1. [Cat 7238].
91.16 Jar, form not certain, Fabric R1. [Cat 7238].
91.17 Jar, form not certain, Fabric R1. [Cat 7238/7239].
91.18 Jar, Cam 218. Fabric R1. [Cat 7238/7239].
91.19 Jar, form not certain. Fabric R1. [Cat 7238].
91.20 Jar, *Cf* Cam 266. Fabric R1. [Cat 7239].
91.21 Jar, *Cf* Cam 266. Fabric R1. [Cat 7233].
91.22 Large Jar, *Cf* Cam 266. Fabric R1. [Cat 7239].
91.23 Jar, Cam 266. Corpus No. 111. Fabric R1. [Cat 7237].
91.24 Jar, *Cf* Cam 266. Fabric R1. [Cat 7239].
91.25 Jar, form not certain. Fabric R1. [Cat 7238].
91.26 Jar Cam 266. Corpus No. 107. Fabric B1. [Cat 7234].
91.27 Large Jar, Cam 270/2. Fabric B1. [Cat 7237].
91.28 Lid. *Cf* Cam pl. LXXV. Corpus No. 148. Fabric R1. [Cat 7239].
91.29 Lid. *Cf* Cam pl. LXXV. Fabric R1. [Cat 7152].

Ditches 1003, 1003/1005 (Area 7)

A large deposit containing substantial quantities of production waste. Dating is not entirely certain. The platter forms (Nos 1–2) are with us still in developed form, but no bead rimmed dishes, while the various forms produced in imitation of samian types are present, (*e.g.* No. 4, 6). The array of segmental bowls (Nos 11–29) is clearly standardised and developing. Jar forms comprise principally still the Cam 218 in its plain and burnish line decorated forms, also the Cam 266. There are few signs of the Cam 268.

- 92.1** Platter. *Cf* Cam 13. Fabric R1. [Cat 1138].
92.2 Platter. *Cf* Cam 13/14. Fabric R1. [Cat 1142].
92.3 Platter. *Cf* Cam 17. Corpus No. 38. Fabric Q11. [Cat 1142].

- 92.4 Bowl imitating Samian ff 30/37. Corpus No. 55. Fabric R1. [Cat 1142].
- 92.5 Bowl. Marsh 1978, type 34. Corpus No. 12. Fabric R1. [Cat 1138].
- 92.6 Carinated bowl. Cf Cam 74. Corpus No. 51. Fabric R1. [Cat 1156].
- 92.7 Platter. Fabric Q9. [Cat 1142/1207].
- 92.8 Bowl form, Fabric R1. [Cat 1117].
- 92.9 Bowl form, Fabric R1. [Cat 366].
- 92.10 Reeded-rimmed bowl. Fabric R1. [Cat 1141].
- 92.11 Reeded-rimmed bowl. Corpus No. 39. Fabric R1. [Cat 1141].
- 92.12 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.13 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.14 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.15 Reeded-rimmed bowl (Cam 246). Corpus No. 37. Fabric R1. [Cat 1141].
- 92.16 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.17 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.18 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1058].
- 92.19 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1207].
- 92.20 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1202].
- 92.21 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1142].
- 92.22 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.23 Reeded-rimmed bowl (Cam 246). Corpus No. 38. Fabric R1. [Cat 1141].
- 92.24 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.25 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1142].
- 92.26 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1141].
- 92.27 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1138].
- 93.28 Reeded-rimmed bowl. Fabric R1. [Cat 1142].
- 93.29 Reeded-rimmed bowl. Corpus No. 41. Fabric R1. [Cat 1142].
- 93.30 Bowl imitating Loeschke 7–8, Cf Cam 56, Fabric R1. [Cat 1164].
- 93.31 Narrow necked jar. Cf Cam 119. Fabric R1. [Cat 1065].
- 93.32 Necked jar. Possibly Cam 119. Cf No CEU 38. Fabric R1. [Cat 1138].
- 93.33 Necked jar. Elongated version of Cam 221. Fabric not given. [Cat 1164].
- 93.34 Necked jar. Similar to Cam 221. Fabric B1. [Cat 1152].
- 93.35 Jar. Fabric B1. [Cat 1044].
- 93.36 Ped jar. Cf Cam 203. Fabric not given. [Cat 1164?].
- 93.37 Neckless jar. Cam 256. Fabric B1. [Cat 1142].
- 93.38 Neckless jar. Cf Cam 257. Fabric B1. [Cat 1044].
- 93.39 Neckless jar. Fabric B1. [Cat 1044].
- 93.40 Neckless jar. Fabric T3. [Cat 1044].
- 93.41 'Trifid' rimmed Jar. Cf Corpus Nos 122–8. Fabric R1. [Cat 1138].
- 93.42 'Trifid' rimmed Jar. Cf Corpus Nos 122–8. Jar. Fabric R1. [Cat 1141].
- 93.43 'Trifid' rimmed Jar. Cf Corpus Nos 122–8. Jar. Fabric R1. [Cat 1207].
- 93.44 Jar, Cf Cam 218. Fabric B1. [Cat 1141].
- 93.45 Jar, Cf Cam 218. Corpus No. 91. Fabric R1. [Cat 1141].
- 93.46 Jar. Cf Cam 221. Fabric B1. [Cat 1201].
- 93.47 Jar, Cf Cam 221. Fabric R1. [Cat 1141].
- 93.48 Jar. Fabric R1. [Cat 1141].
- 93.49 Jar. Cf Cam 221. Fabric R2. [Cat 1048].
- 93.50 Jar. Similar to Cam 222. Fabric B1. [Cat 1208].
- 93.51 Jar. Cf Cam 221. Fabric B1. [Cat 1048].
- 93.52 Jar. Cf Cam 272–3. Fabric B1. [Cat 1142].
- 93.53 Jar, small version of Cam 272–3. Fabric R1 [Cat 1207].
- 93.54 Lid. Cf Cam pl LXXV. Fabric R2. [Cat 1138].
- 93.55 Lid. Cf Cam pl LXXV. Fabric R1. [Cat 1117].
- 93.56 Lid. Cf Cam pl LXXV. Fabric R1. [Cat 1138].
- 93.57 Lid. Fabric R1. [Cat 1142].
- 93.58 Lid. Cf Cam pl LXXV. Fabric R1. [Cat 1142].
- 93.59 Beaker. Cf Cam 108Bb. Fabric R1. [Cat 1142].
- 93.60 Flagon rim, Hofheim type. Fabric Q5. [Cat 1048].
- 94.15 Neckless jar. Cam 259. Fabric B1. [Cat 1080].
- 94.16 Neckless jar. Cam 259. Fabric B1. [Cat 1036].
- 94.17 Closed form of uncertain shape. Fabric B1. [Cat 1080].
- 94.18 'Trifid' rimmed jar. Cf Cam fig 56.1. Corpus No. 124. Fabric R1. [Cat 1007].
- 94.19 'Trifid' rimmed jar. Cf Cam fig 56.1. Corpus No. 123. Fabric R1. [Cat 1007].
- 94.20 'Trifid' rimmed jar. Cf Cam fig 56.1. Corpus No. 122. Fabric R1. [Cat 1078].
- 94.21 'Trifid' rimmed jar. Cf Cam fig 56.1. Corpus No. 125. Fabric R1. [Cat 1007/1080].
- 94.22 Jar. Fabric B1. [Cat 1147].
- 94.23 Large necked jar. Fabric B1. [Cat 1006].
- 94.24 Large necked jar. Fabric R1. [Cat 1144].
- 94.25 Jar. Fabric B1. [Cat 7278].
- 94.26 Jar form. Fabric B1. [Cat 1090].
- 94.27 Jar. Poss variant of Cam 113. Fabric B1. [Cat 1036].
- 94.28 Necked jar. Fabric R1. [Cat 7278].
- 94.29 Necked jar. Fabric R1. [Cat 1144].
- 94.30 Large jar. Cf Cam 270–2. Fabric R2. [Cat 1080].
- 94.31 Flagon type. Fabric R1. [Cat 1007].
- 94.32 Lid. Fabric R1. [Cat 1142].
- 94.33 Lid. Fabric R1. [Cat 1007].
- 94.34 Pedestal base from a ?jar. Fabric R1. [Cat 1079].

Contexts dated to the period c. AD 140–180

Ditch 1968 (Area 8)

This feature contained a considerable quantity of material including sherds of lattice decorated bead-rimmed dishes (Nos 1–2) datable to the early Antonine period. The deposit also contained samian of Trajanic–early Antonine date (Dickinson in archive). The only coin in the context was an issue of Vespasian (AD 69–79). Residual.

- 95.1 Bead-rimmed dish, Cam 37. Medium grey ware with lattice tooling. Possibly a kiln product, but see the discussion in the Corpus section, below, p.145. Fabric R2. [Cat 2095].
- 95.2 Cam 37. As No 1. Fabric R2. [Cat 2095].
- 95.3 Carinated bowl. Cam 330 sp. Corpus No. 54. See the Corpus for a discussion of London ware manufacture at Ardleigh. Fabric R2. [Cat 2095].
- 95.4 Mortarium. Resembles the Cam 97, but in a reduced ware. Perhaps a local product (Hartley above and in archive), however, there is no evidence for production of Mortaria here yet. Fabric R3. [Cat 2095].
- 95.5 Beaker, cf Cam 108. Fabric R1. [Cat 1970].
- 95.6 Narrow-necked jar, probably a variant of a small storage jar, fabric R2. [Cat 1970].
- 95.7 Everted rimmed jar. Fabric R2. [Cat 2095].
- 95.8 Everted rimmed jar. Fabric R2. [Cat 1970].
- 95.9 Everted rimmed jar. Fabric R2. [Cat 1970].
- 95.10 Lid. Fabric R3. Corpus No. 141.

Contexts dated to the 4th century AD

Well weathering cone 2055 (Area 8)

The weathering cone contained material ranging in date from the later 1st century AD to the 4th century AD. The latest coin in the deposit — a bronze issue of Magnentius — came from [2135]. Samian from the contexts associated with the cone included 1st-century [2269], Hadrianic–Antonine [2236] and undifferentiated 2nd-century material [2170]. An interesting residual sherd from this feature was a spike of an amphora (probably of Type Dressel 2–4) with an illegible stamp. This is in a Catalan fabric, which is uncommon in the British isles. See Amphorae, p.125 above.

- 96.1 Bead rimmed bowl. Cam 37. Fabric R1. [Cat 2086].
- 96.2 Cam 37. Fabric R2. [Cat 2058].
- 96.3 Bowl. Fabric R2. [Cat 2236].
- 96.4 Incipient/fully flange-rimmed bowl, Cam 305. Fabric R2. [Cat 2134].
- 96.5 Flange rimmed bowl, Cam 305. Fabric R2. [Cat 2058].
- 96.6 Bowl, Cam 246. Fabric R1. [Cat 2236].
- 96.7 Open form. Fabric R2. [Cat 2161].
- 96.8 Carinated jar. Cf Cam 226. Fabric R2. [Cat 2236].
- 96.9 Jar rim, Fabric R2. [Cat 2056].
- 96.10 Jar rim, Fabric R2. [Cat 2236].
- 96.11 Jar. Fabric R2. [Cat 2086].
- 96.12 Jar rim, Fabric R3. [Cat 2260].
- 96.13 Jar rim, Fabric R3. [Cat 2161].
- 96.14 Jar rim, Fabric R3. [Cat 2236].

Context 1003/1005

Ditch 1005 pre-dated 1003, but it produced only a very small quantity (c. 4kg) of pottery. The date range is as for 1003, i.e. Flavian–Hadrianic.

- 94.1 Dish/bowl. Fabric R1. [Cat 1007].
- 94.2 Bowl. Cf Cam 112/3. Fabric R2. [Cat 7294].
- 94.3 Open form. Fabric R1. [Cat 1147].
- 94.4 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1080].
- 94.5 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1147].
- 94.6 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1147].
- 94.7 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1007].
- 94.8 Reeded-rimmed bowl (Cam 246). Fabric R1. [Cat 1086].
- 94.9 Reeded-rimmed bowl, (Cam 246). Fabric R1. [Cat 1078].
- 94.10 Carinated bowl. Fabric R1. Corpus No. 500. [Cat 1090].
- 94.11 Beaker. Variant of Cam 108. Fabric R1. [Cat 1090].
- 94.12 Beaker. Cf Cam 11. Fabric B1. Probably residual. [Cat 1006].
- 94.13 Neckless jar. Fabric B1. [Cat 1036].
- 94.14 Neckless jar. Cam 259. Fabric B1. [Cat 1080].

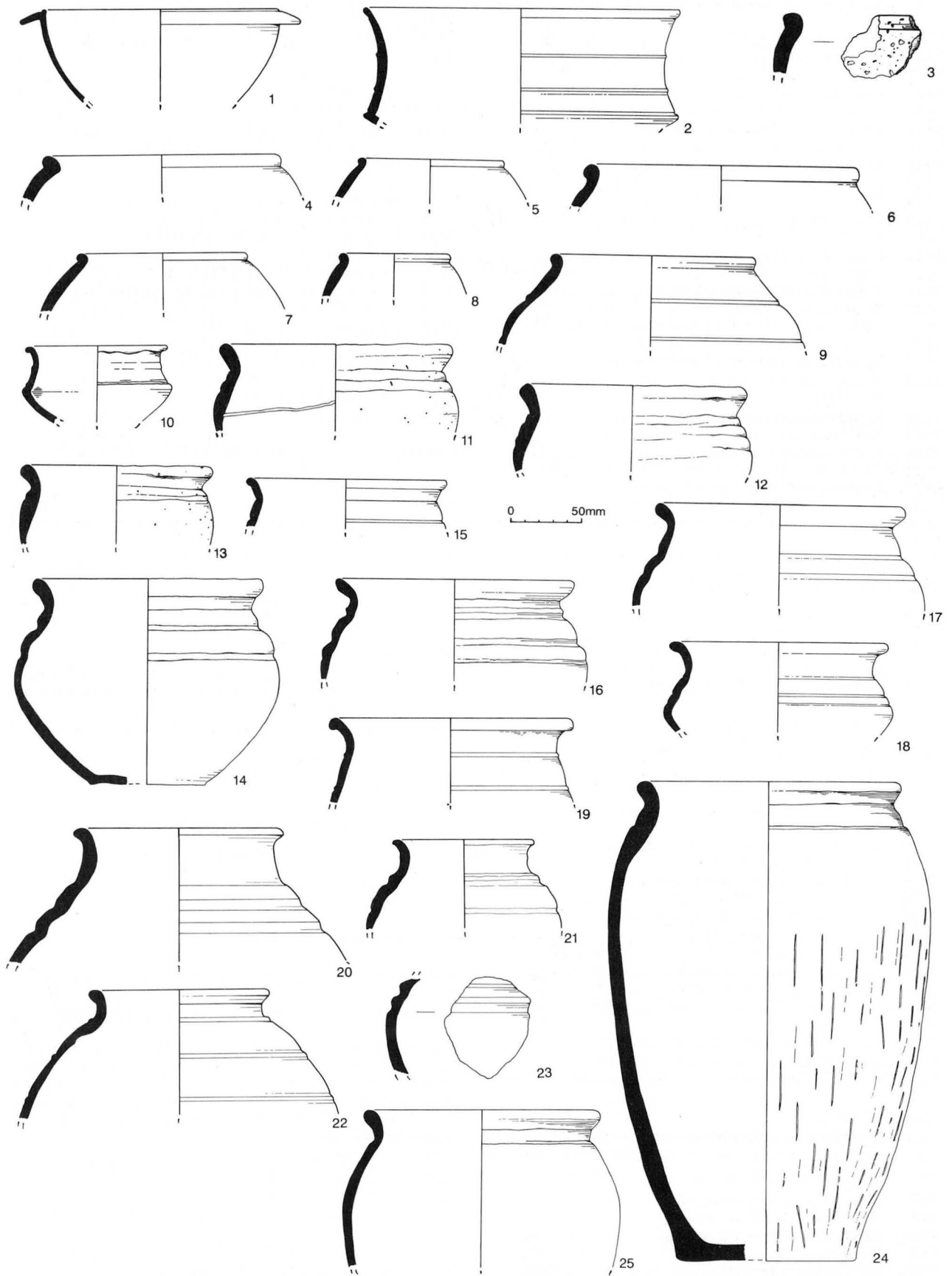


Figure 85 Roman pottery from CEU excavations

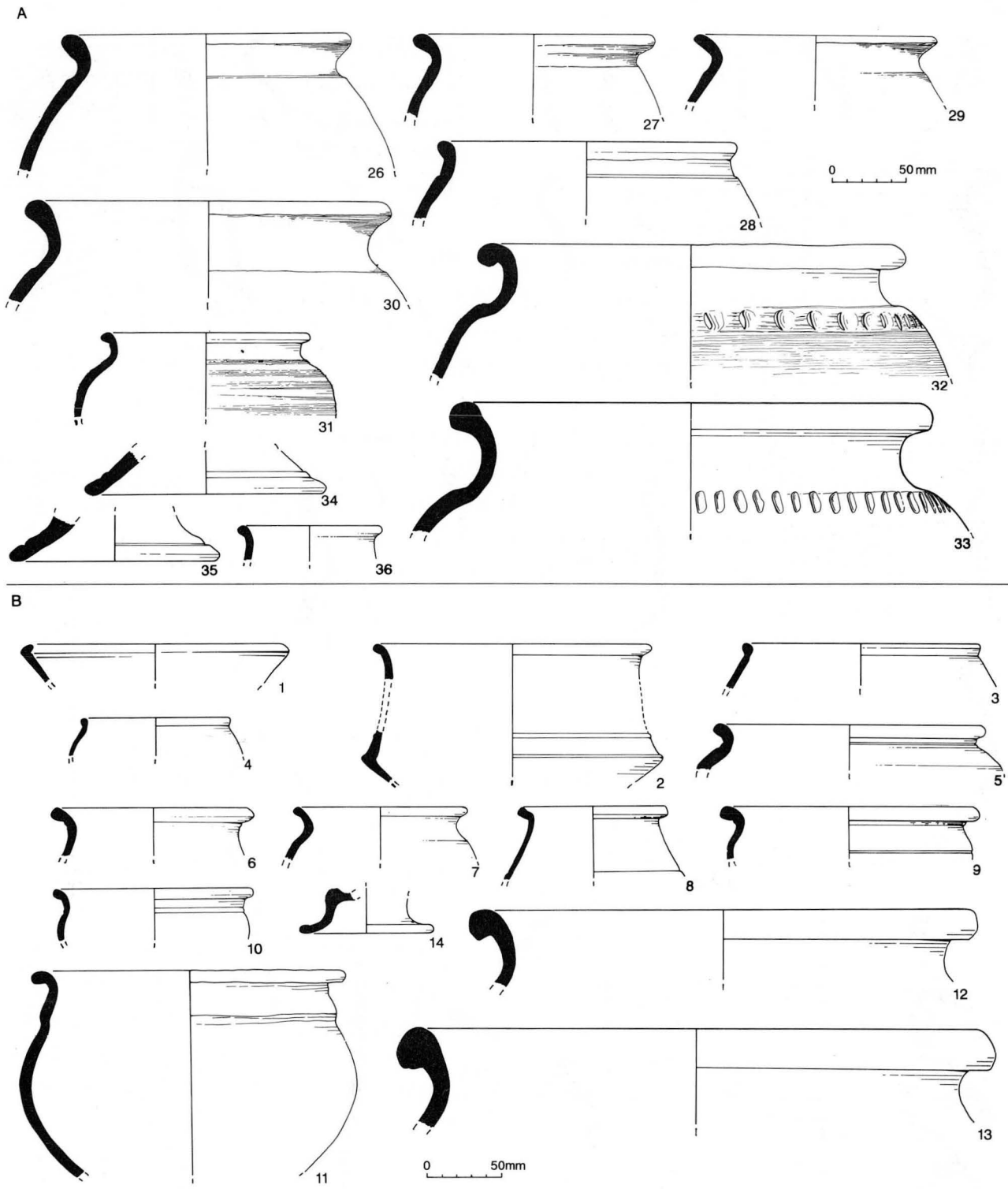


Figure 86 Roman pottery from CEU excavations

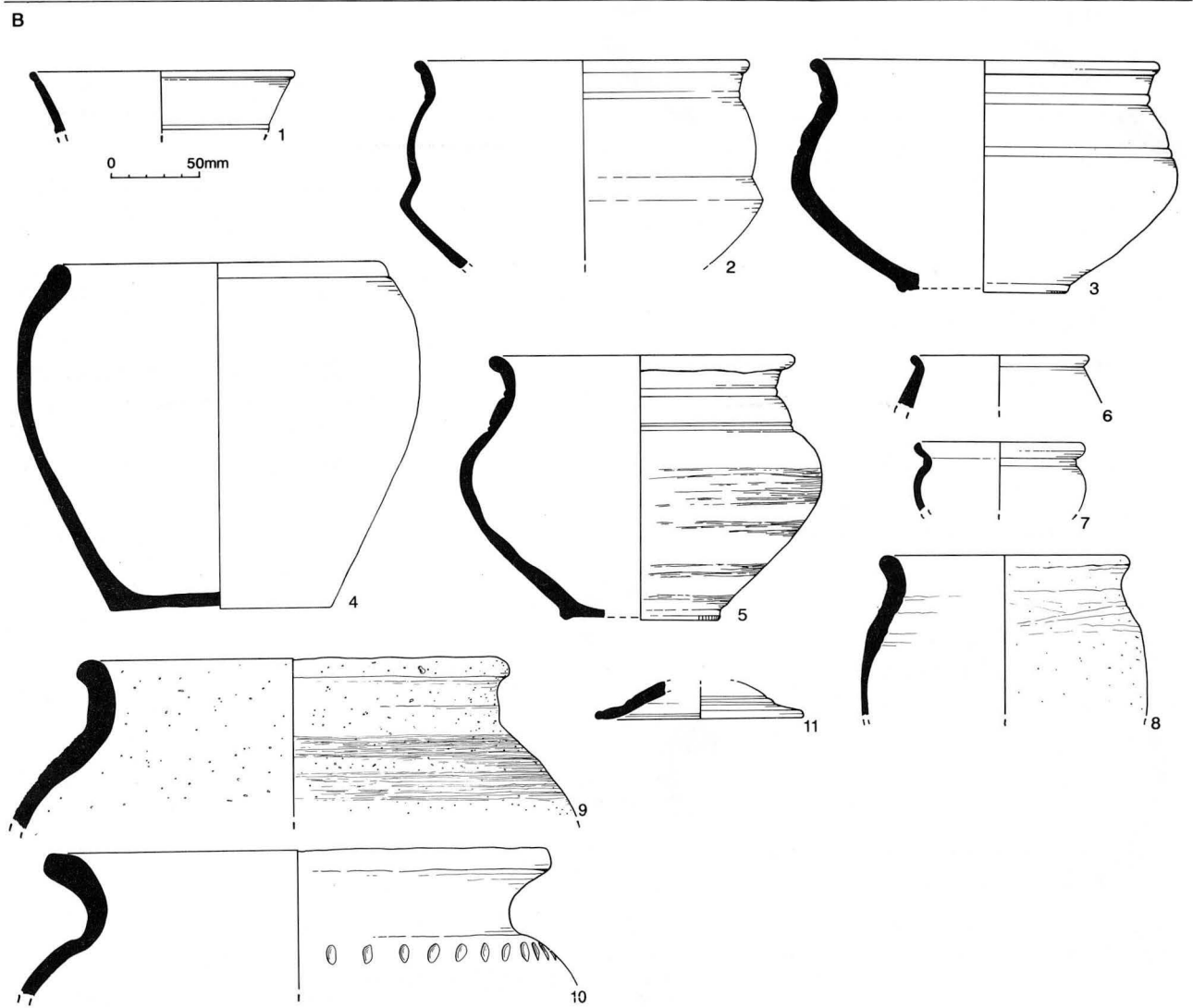
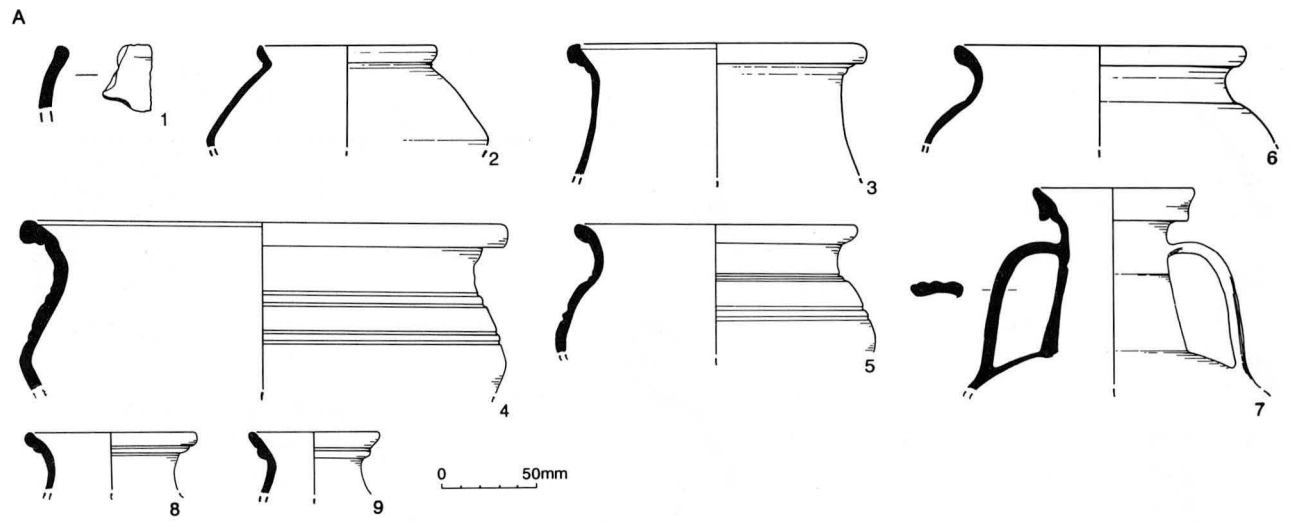
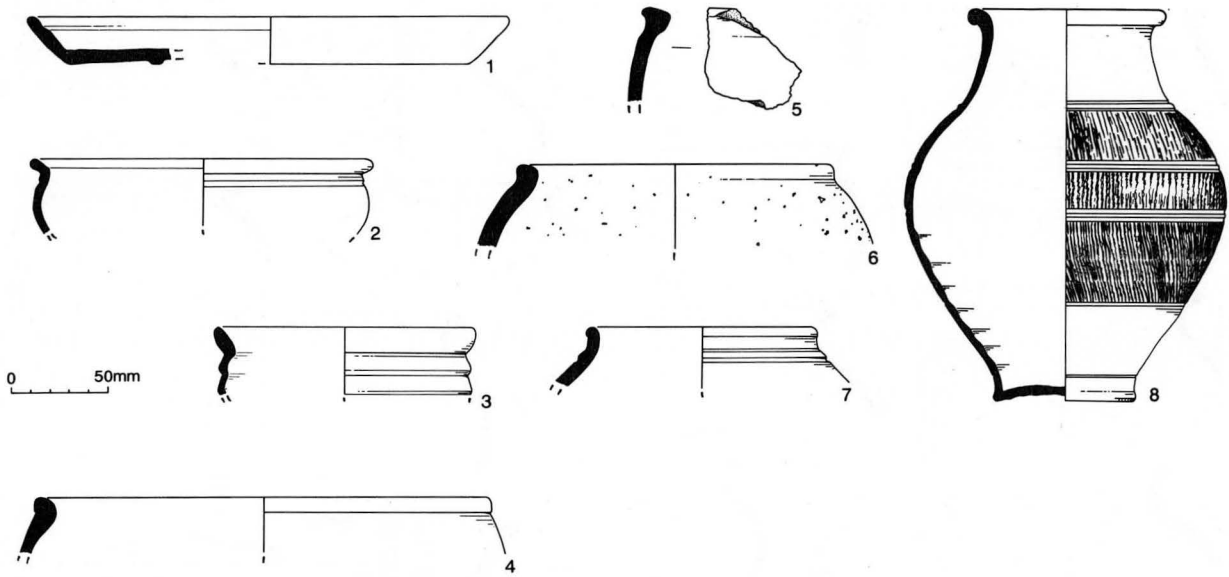


Figure 87 Roman pottery from CEU excavations

A



B

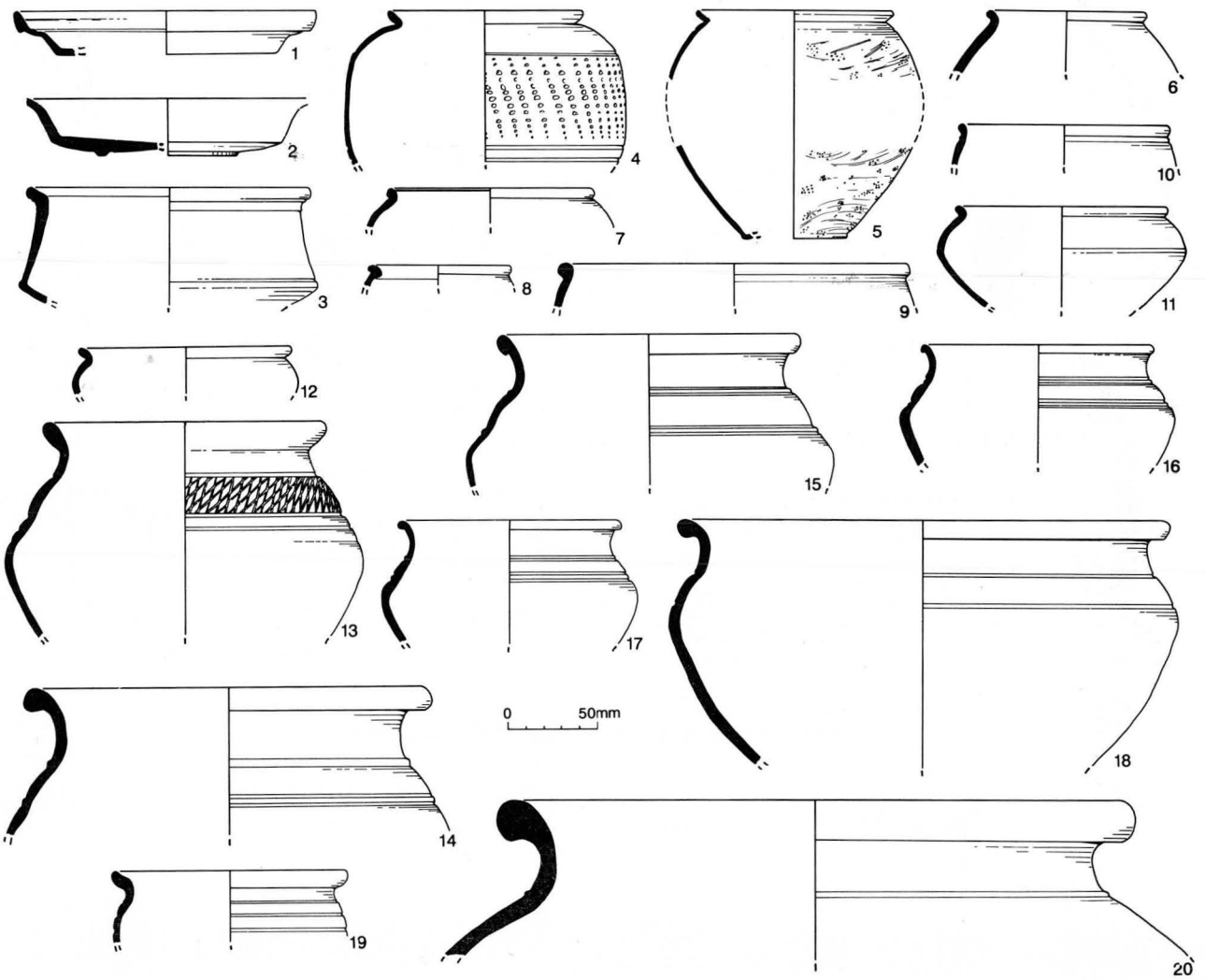


Figure 88 Roman pottery from CEU excavations

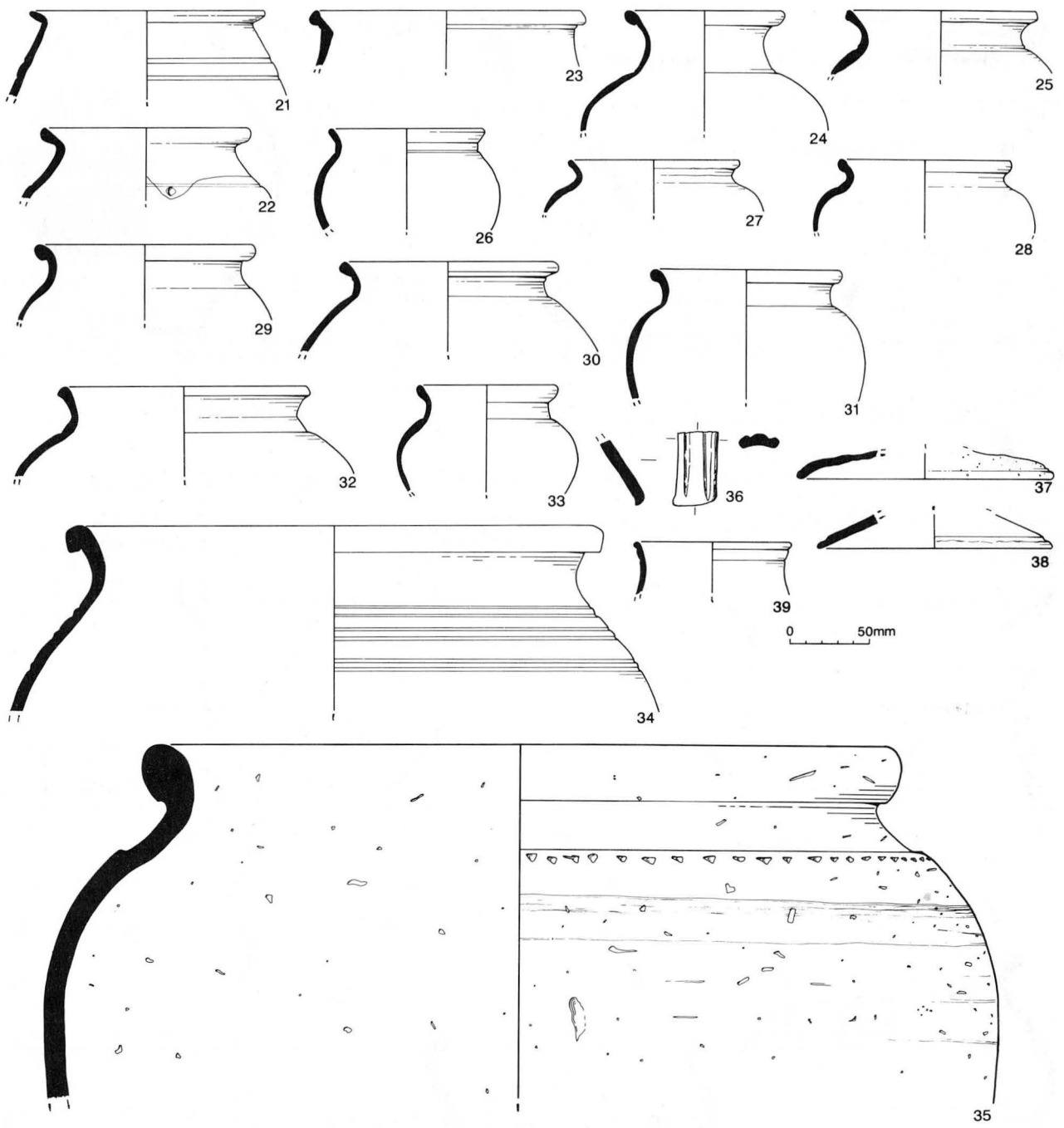


Figure 89 Roman pottery from CEU excavations

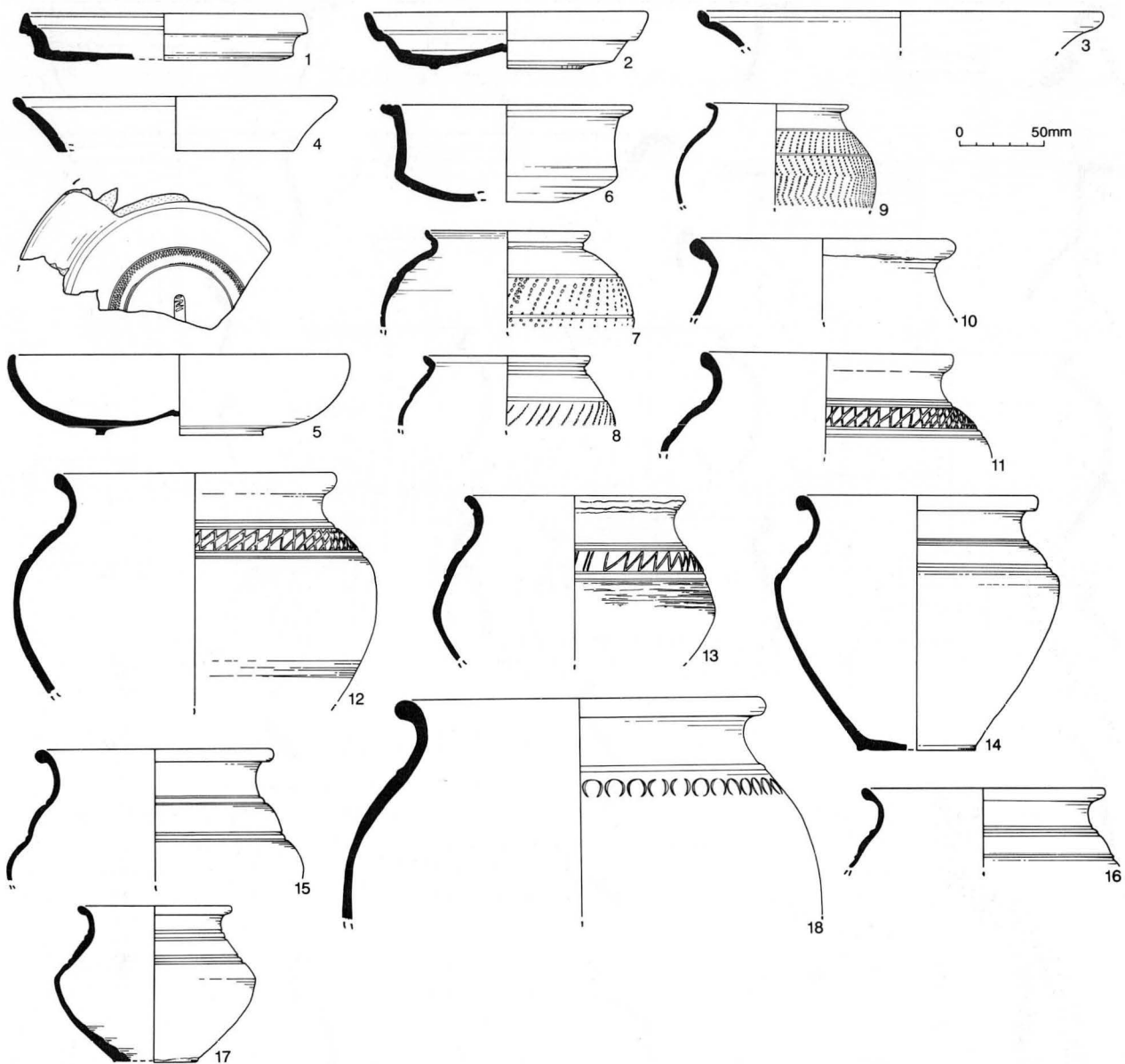


Figure 90 Roman pottery from CEU excavations

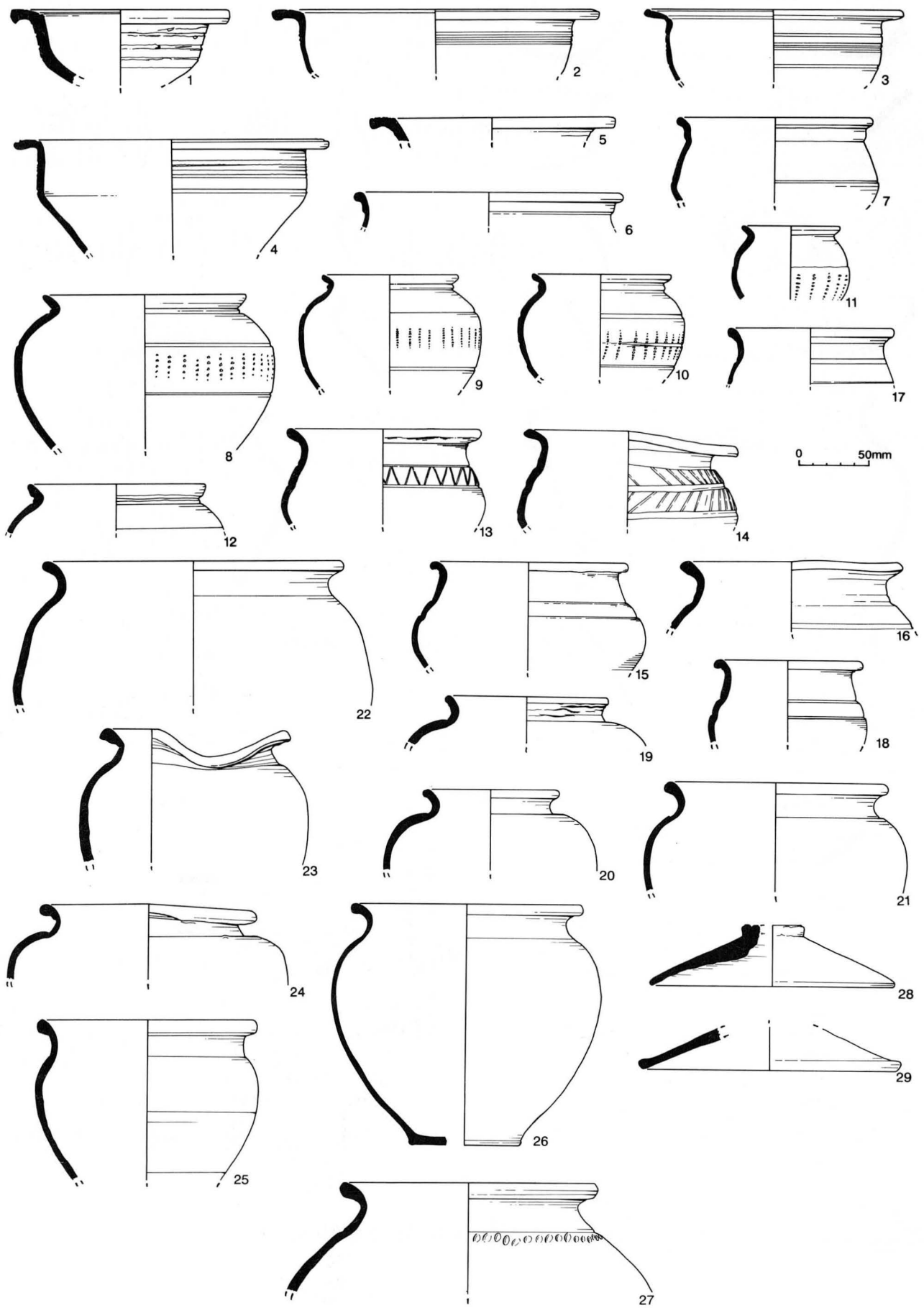


Figure 91 Roman pottery from CEU excavations

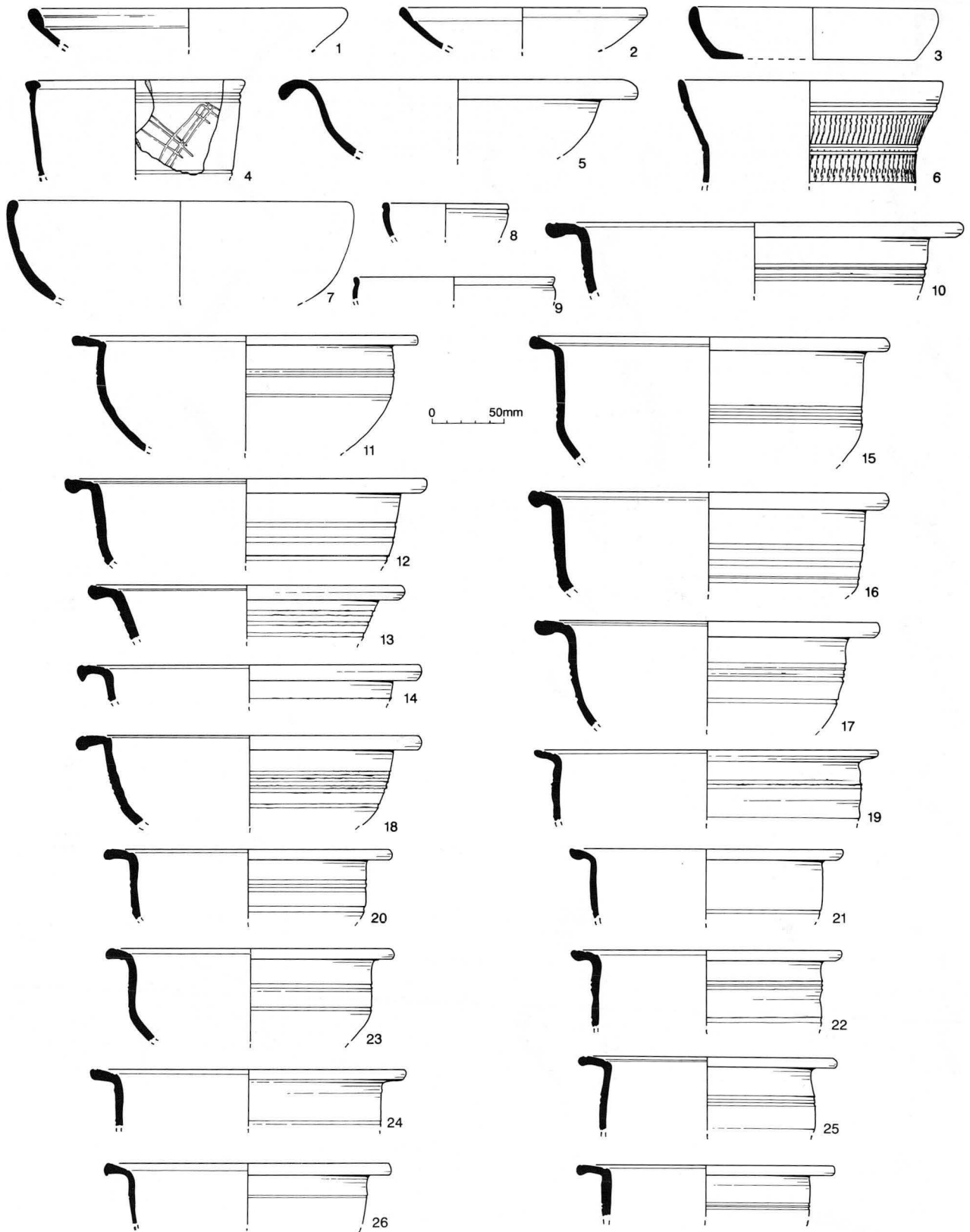


Figure 92 Roman pottery from CEU excavations

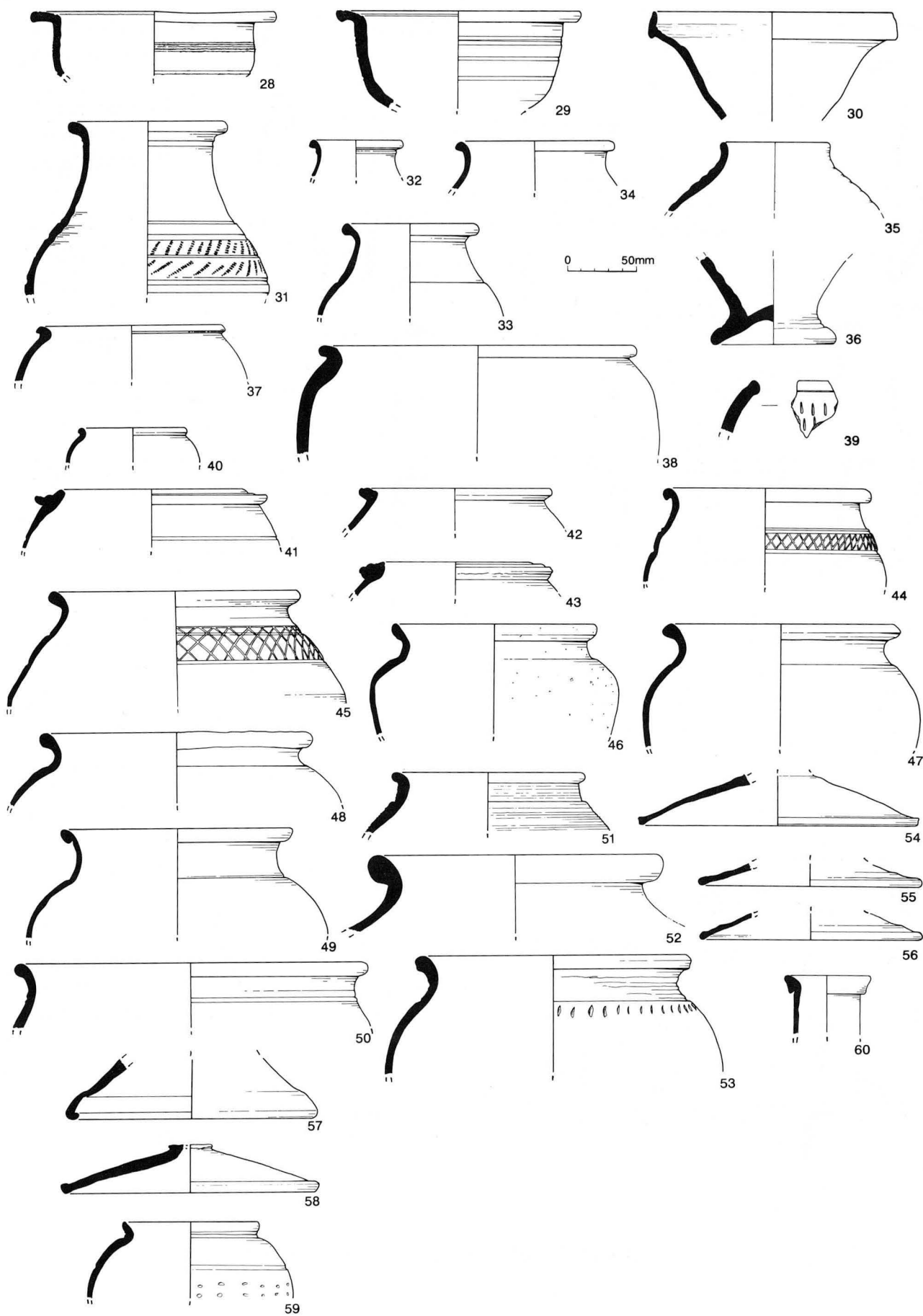


Figure 93 Roman pottery from CEU excavations

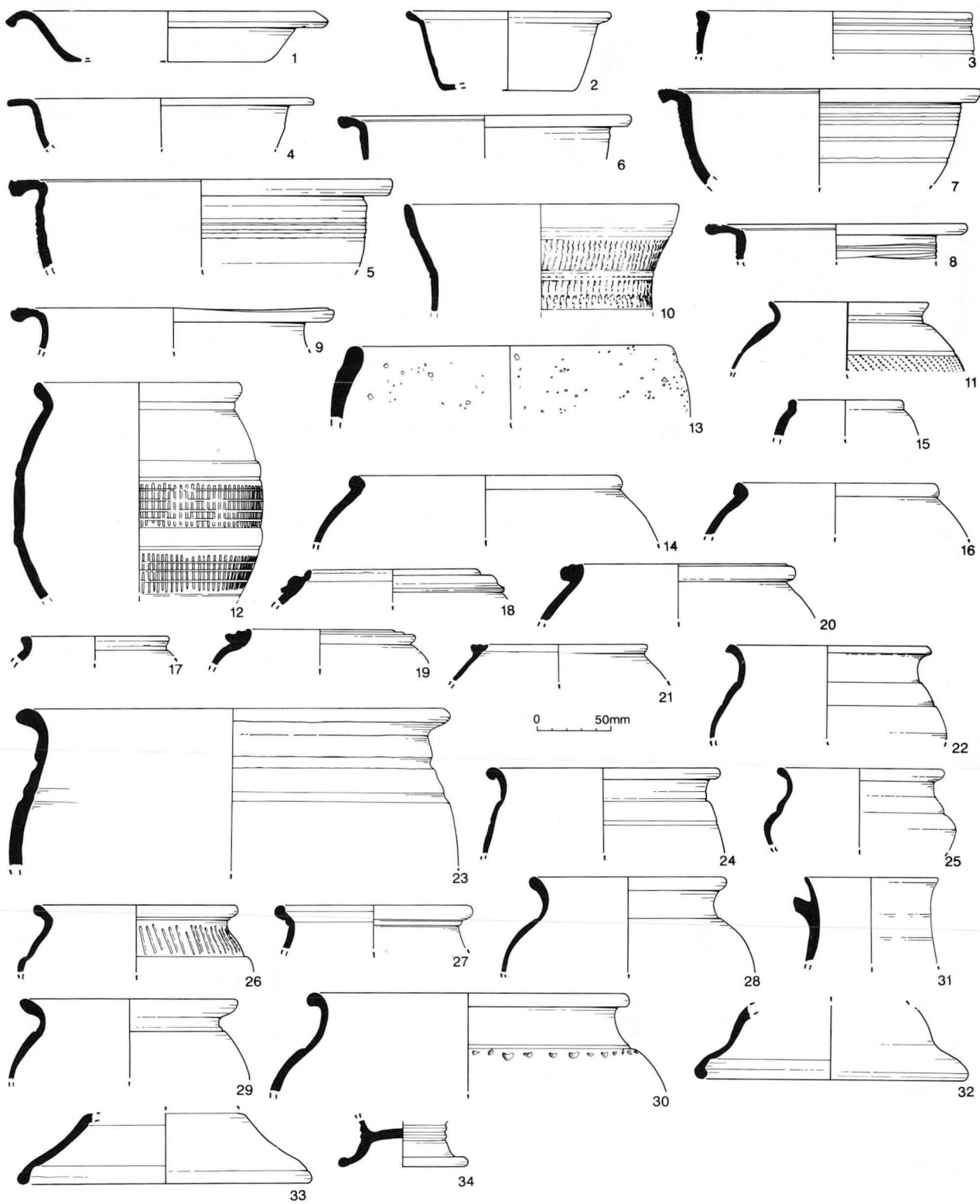


Figure 94 Roman pottery from CEU excavations

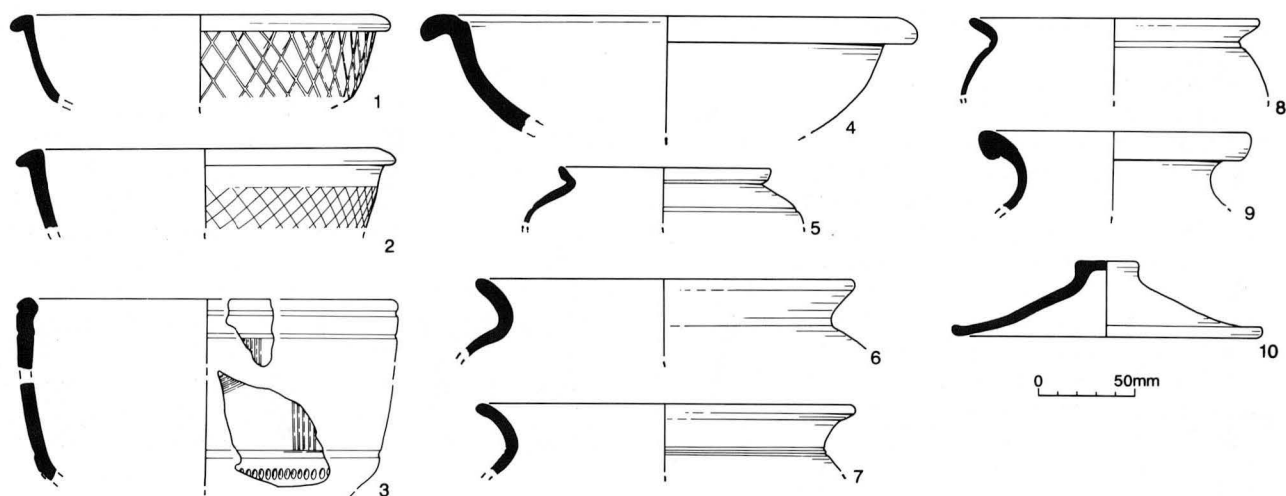


Figure 95 Roman pottery from CEU excavations

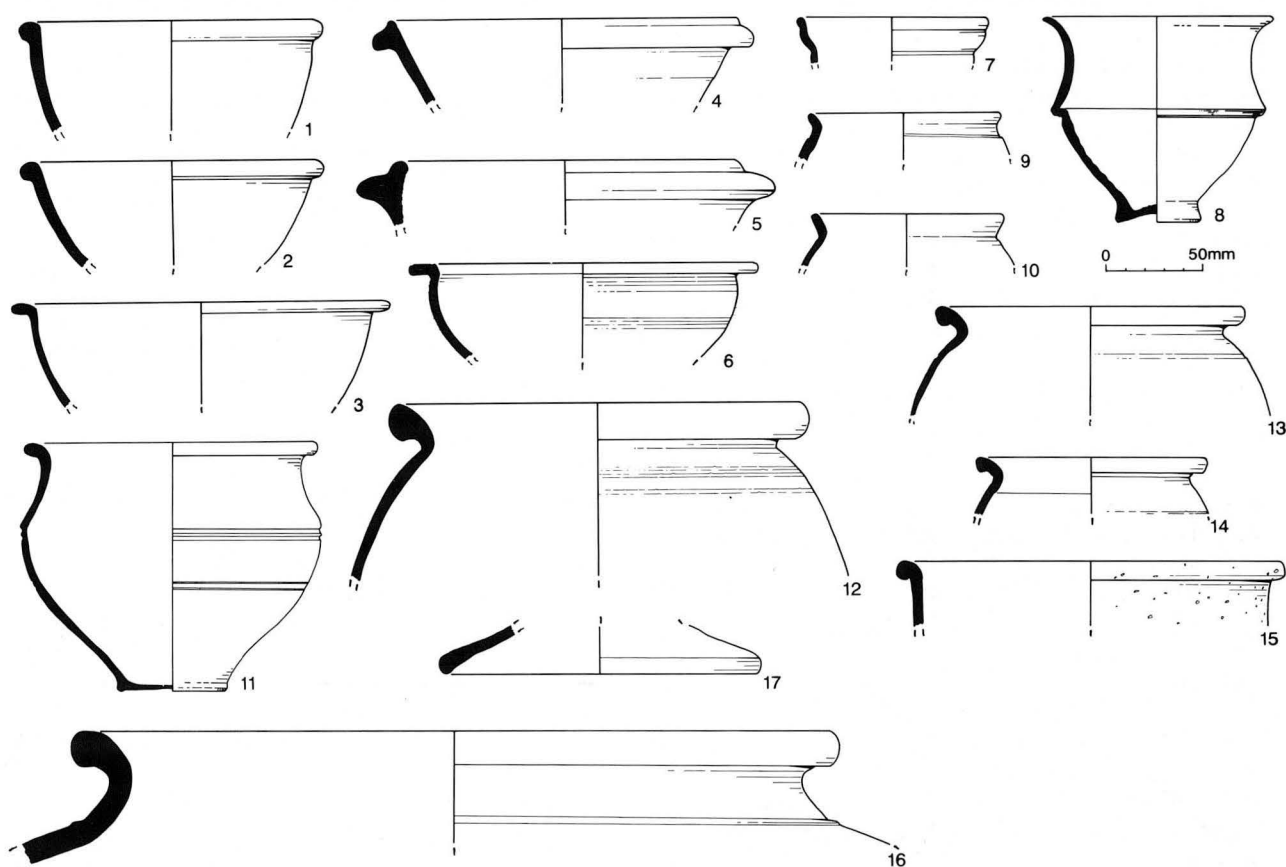


Figure 96 Roman pottery from CEU excavations

- 96.15 Necked jar. ?Late shell tempered fabric. [Cat 2161].
 96.16 Storage jar. Fabric R1. [Cat 2086].
 96.17 Lid. Fabric R2. [Cat 2135].

The grave goods

Cremation 648

- 49 Nr. Form 33. Fabric R2. [Cat 649]. Probably 1st century AD.

Grave 634

- 49 Neckless small jar. (Form 107). Fabric R2. [Cat 701].

Grave 636

- 49 Plain rimmed dish in Fabric H1. [Cat 646].

Grave 651

- 48.11 Bowl-jar in Fabric H1. [Cat 720, 687].

- 48.10 Small jar in Fabric H1. [Cat 720, 687].

From the fill of this grave came two more vessel parts, A bead rimmed dish, Fabric B1, [Cat 673], and a small jar Fabric R3, [Cat 673]. Not illustrated.

Grave 702

- 48 Flagon in Hadham red ware. [Cat 721].

The earlier excavations at Ardleigh

Introduction

In spite of the attempt to do so by Couchman and Savory (1983), it is impossible to make an accurate inventory of the number of excavations which have taken place at Ardleigh, let alone locate them all with confidence. The surviving documentation is sparse and scattered, a concordance preserved in the Colchester and Essex Museum (CoEM), clearly once part of a larger document, lists forty sites, although several of these are simply finds *loci*. Those included on Fig. 5 were originally plotted on an Ordnance Survey 1:10 360 map (Sheet No. TM 02 NE), which was endorsed by Hull (the last dated entry is 1959), or on a palimpsest sketch-plan of field 676 on which were plotted two apparently Iron Age sites (identified as Nos C3, and ?C8), and the Roman sites R5–8 (see below). Measurements given in miscellaneous typescript fragments preserved in the same files were also used. Isobel Thompson has attempted (1982) to unravel the findspots of later Iron Age material. The reader is referred to this work for further detail as well as to Sealey, this volume.

The plan and typescripts are in the CoEM file on Ardleigh parish, while the map is one of the series maintained on the County of Essex as a whole by Hull on behalf of the Museum until he was approaching his retirement.

The sites noted here constitute finds and discoveries as well as the excavations carried out by Erith and the CAG which would appear to have located dumps or smaller collections of material which include kiln waste, or reports of finds of pottery kilns, as the background to a brief exploration of what evidence there is for ceramic production at Ardleigh.

In 1956, soon after the series of discoveries had begun at Ardleigh, Hull began to assemble detailed information on Felix Erith's finds and sites in the format he used to write the typescript of the county-wide archaeological *Gazetteer*. Sadly only one or two photocopied leaves of this *Ur-text* survive. However there is kept in the Museum a better preserved (though still fragmentary) typescript which is clearly derived from it (*Discoveries at Ardleigh, nd*). This includes material dating down to the later pre-Roman Iron Age. The Roman sites are dealt with less comprehensively. The Roman kiln and waste sites were clearly intended to be treated separately, but unfortunately no text has been found. Only one of the Roman sites (R3, a burial), is described in detail.

From the documentation which does survive, *fundstellungen* R1 and R2 are identifiable as the sites of what have been referred to as 'kilns' I–II (Fig. 5. Nos 23 and 20, respectively). It is also clear from the records that only one kiln was found, at site R2. The idea that two kilns had been discovered developed from the fact that Hull had noted substantial quantities of waste pottery at both sites and was satisfied that while no structural debris had been found, a kiln existed very near to the dump at R1.

In their kiln surveys both W. J. Rodwell (1982) and V. Swan (1984) alter these kiln identifications, Rodwell by reversing the sequence, and Swan (1984) by leaving 'Kiln I' undesignated and identifying 'Kiln II' as I. *Sensu stricto* this was the right thing to do.

In 1956 the Museum became more directly involved in Erith's work and began to explore four further scatters

of Roman material which he had brought to light in field 675 by deep ploughing (these were designated sites R5–8; cf entries 7–10 below). This work is described in a short, unpublished typescript (Hull 1957), which is preserved in the Colchester and Essex Museum.

In 1955 Erith had explored what was later to be called site R6, which comprised two areas of blackened earth. Here he found a large oval pit containing a substantial amount (c. 40kg) of pottery, 'of which much was obviously spoiled in firing, mixed with ash and blackened earth', (Hull 1957, 1). In the succeeding year the Colchester and Essex Museum became 'directly concerned' in excavations and explored the second black patch at R6 (the material from which was designated R6a) and also a further area of Roman pottery to the north of this point (at R7, Fig. 5.25).

Notes on the earlier explorations

1) (Fig. 5.27) (TS in CoEM)

'A member of the firm of Abbots, Nurserymen, told Mr Erith that in 1925 they had found Roman pottery in black earth and burnt material in the field north of Wolfdene [now called Elm Park]. This they reported to P G Laver who pronounced the pottery to be of third century date. One black pot about 12 ins high they kept for a long time but lost it'. In a pungent footnote Hull noted; 'the usual woeful tale; no one should retain anything.'

2) (c. TM 053 288) (TS in CoEM)

Some time before c. 1950, what, in the words of its finder Mr C.F. Barker was identifiable as a 'pottery kiln' was found at the west end of land some 200yds west of the road at the Pightle Poultry farm, Dead Lane. No further details are available. No pottery reported. An emendation of the CoEM TS: reads '*I suspect it was probably a burial site. F H E[erith]*'.

3) Site R1 (Fig. 5.23) (Hull 1963a, 38; CoEM MSS).

This site, one of the first Roman discoveries made by Erith (in c. 1955), appears to have comprised a dump of kiln waste. As noted in the introduction it has been called kiln 2, but while there is little doubt that there was a kiln in the vicinity (as Hull indicates) this was not found. From the location, the site lay somewhere to the north and slightly to the west of CEU Area 7.

Corpus Nos: 113, 126–8, 136, 144–5.

4) Site R2. (Fig. 5.20; TM 056 285) (Hull 1963a, 36, fig. 7).

For a description of this see Hull 1963a. A cancelled but still legible caption to a draft of the kiln drawing published there identifies 'Kiln II' as having been excavated by Felix Erith, under the direction of the Museum (that is Rex Hull). Little further can be added to the contemporary account (Erith to P. R. Sealey, *in litt*).

Corpus Nos: 13, 16, 28–9, 31, 35, 68, 72–3.

Corpus Nos from R1–2: 3, 19, 30, 43–4, 66, 74–5, 90, 95, 115, 129 and 148.

5) Site R3 (Unlocated) (Hull nd, 21)

According to Hull (*ibid*) this was a Late pre-Roman Iron Age or Early Roman burial. It is not discussed here.

6) Site R4 (Unlocated) (Hull MSS).

No further information. No finds in Museum attributable to this site.

7) Site R5 (Fig. 5.26) (Hull nd).

Hull records that the plough turned up a 'noticeable amount of Roman Pottery' in this spot, which can be identified as lying a little to the north-west of CEU Area 21. The description of the explorations here, and of the recovery of this material is brief and to the point: '*a small amount of spoil was turned over, in doing which some more pottery was recovered, together with large lumps of daub, some burnt, some charred, varying in colour, and it appears, in many cases containing grain or impressions of it*'. With the exception of the site of R2, this is the only account of an excavation pre-dating the CEU work which makes reference to finding fired or burnt clay, which suggests that the spot was close to a kiln or other fired clay structure. Whatever the truth of the matter the delvings on site R5 produced an assemblage of generally '*rather smallish sherds, mostly rather battered*' including bowls of Cam 246, and jars of Cam 218, and 268, 246 and 268. They are almost certainly 2nd-century kiln products. This ties in with the date of the kiln waste

No.	Fig. ident.	Old desig.	Date	Remarks
1	5.27	None	c. 1925	Possible waste dump
2	N/A	None	1950	Possible kiln
3	5.23	R1, 'Kiln 1'	1956	Erith CoLEM waste dump
4	5.20	R2, 'Kiln 2'	1957	Erith CoLEM kiln
7	5.26	R5	1957	Erith CoLEM waste dump
8	5.24	R6	1955-6	Erith CoLEM waste dump
9	5.25	R7	1958	Erith CoLEM waste dump
10	5.28	R8	1960	CAG? ?Dump. No data
12	5.19	EP 2	late 1956	CAG. Kiln dump in ditch
13	5.18	EP 3	1958	CAG? Kiln dump?
14	5.18	EP 4	1958	CAG/Hull. ?Kiln dump
15	5.29	EP Kitchen Gdns 1964		CAG. Kiln dump in ditch
16	N/A	None	1979/80	CEU Area 7, Kiln 7375
17	N/A	None	1979/80	CEU Area 7, ditches 1003, 1003/5
18	N/A	None	1979/80	CEU Area 7, ditch 7150
19	5.21	None	1979/80	CEU Area 21, Kiln 8162
20	N/A	None	1979/80	CEU Area 21, ditch 8212

Table 3 Ardleigh sites and finds: identification and concordance

recovered from Area 21 (especially from ditch 8067) A single box of material is now in the Colchester and Essex Museum.

Of some interest is the fact that both here and at R6 (some 200m further to the south) evidence was recovered for the production of fine wares. Hull noted that the material from R5 was datable to the Flavian era and included 'a fine grey rim of Cam f. 27 (Roman) and a number of fragments of a grey bowl, with the upper band rouletted as in the Drag f 29, and the next below it bearing a series of saltires done with a comb impression and brushed strokes of the comb. Below this there was another rouletted band. The ware is fine grey [this is our Corpus No. 56]. The remains may prove to cover one or more such vessels. In the same ware and style are a fragment of carinated bowl, the upper part bearing chevrons, the lower a rouletted band, and two fragments of probably f 108 decorated with slanting comb impressions. It would appear that there was a kiln nearby making this ware'.

It is clear from this evidence that a kiln in this part of the site (perhaps Area 21 kiln 8162 itself) was used for the manufacture of fine wares in the Flavian-Trajanic period.

Corpus Nos: 9, 17, 68-71, 77, 103.

8) Site R6. (Fig. 5.24) (Hull 1957, 1).

This site lies in the SW corner of field 676 close to trackway 12 (see Fig. 114) about 200m to the south of R5. Erith first explored this site, which comprised two areas of blackened earth, in 1955. Here he found a large oval pit containing a substantial amount (c. 40kg) of pottery 'of which much was obviously spoiled in firing, mixed with ash and blackened earth' (Hull 1957, 1). The Colchester and Essex Museum became 'directly concerned' in the excavations in the succeeding year (1956) when they stripped the second dark earth patch (finds from the Colchester and Essex Museum intervention were identified as R6a). The pottery includes wares of the Flavian-Trajanic period and possibly the mid-later 2nd century.

Corpus Nos: R6:18, 32, 56, 58, 78, 99, 100, 106, 108-9, 112, 114, 121, 139, 142. R6 Trench A: 48-9.

9) Site R7 (Fig. 5.25) (Hull 1957).

In the year following the discovery of the second black patch at site R6, that is in 1957, the Museum carried out further explorations, cutting a series of sections across what proved to be a Roman ditch. The ditch produced ceramics principally from one area (Trench B), which 'struck the ditch fully at a point where it was packed with pottery, much of it in large pieces'. A proportion of this was obviously under-fired, so it was clear that once again a dump of kiln wasters had been struck. All of the pottery from the excavations, as far as could be seen at first glance, was of the same date, nor was there any kind of stratification in the earth filling' (Hull *ibid.*, 1-3). The dating of the feature is of some interest. Hull suggested a date of c. AD 100, roughly contemporary with the important pit 7 in Insula 1 at Colchester (Hull 1958, fig. 53-6), but it contained at least one bead-rimmed dish (Cam 37) with lattice decoration, also two related bowls with out-turned rims and lattice decoration which are probably related (see Corpus Nos 25-27). This suggests a date not much before c. AD 125-30. There are three ditches in Area 8 from which this material might have come: ditch [2067], which produced c. 14kg of

Hadrianic-Antonine pottery, ditch [2196], which produced c. 5.6kg of material dated to the Trajanic-Antonine period, and ditch [1508], which produced a smaller assemblage (c. 2.5kg) of early-mid 2nd-century pottery. Of these features perhaps ditch 2067 is the most likely candidate. Corpus Nos: Trench A: 34? 57? 101, 104. Trench B: 6, 15, 22-3, 25-7, 83, 92-3, 96-8, 104, 110, 117, 120.

10) Site R8 (Fig. 5.28) (Hull Drawings and ?MSS).

Surviving data relating to the early excavations at Ardleigh refers to a number of other possible sites but other than the fact of their existence there is no definite information about them. The small plan referred to in the introduction, for example, locates site 'R8' just to the north of CEU Area 8 (see Fig. 5.7). We have no data on this site and no pottery in the Museum can be identified as coming from it. A robbed kiln was found in Area 21 (Kiln [8162]: Fig. 5.21). Although there was no evidence to date this robbing it is possible that the excavation at R8 uncovered this kiln.

11) Sites R9-R14 (Unlocated) (Hull Drawings).

Hull drew some pottery, apparently from Ardleigh, which bears the endorsement 'R14'. Unfortunately no information was found in the Museum on any sites with numbers higher than R8, and certainly nothing is known of any site with a number as high as R14. The pottery cannot now be found and as there is no further information to assist us further discussion is restricted to sites R1-8, and to the sites below.

The Elm Park Sites

The grounds of Elm Park, previously known as 'Wolfdene', were periodically explored by Felix Erith and by the Colchester Archaeological Group (the CAG). The concordance refers to four sites with an 'EP' or Elm Park prefix. No details seem to be available for EP1. More is known of EP 2, which appears to have been excavated by Hull. Site EP 3 is referred to as producing 'Roman pottery' and some notes on the finds survive, and there are some records of the finds from Elm Park 4, which was called a 'Roman hut or kiln site'.

12) Elm Park 2. (Fig. 5.19) (Hull nd).

This site was found in the autumn of 1956 when the paddock to the west of Elm Park was ploughed for the first time by Mr Erith. The plough brought up some pottery, and when Erith removed the soil he revealed 'a curving line of clay which might have been the remains of a furnace wall, but it was incomplete and only two inches or so remained of it in thickness'.

(Hull nd, 1).

Non-pottery finds recovered included 'a large quantity of slag, from metalworking, presumably iron...the remains of a bronze toilet set and its ring, and small fragments of lava millstones, small iron nails and remains of an iron lock (?)'. The burnt clay included a piece of whitewashed daub.

The pottery scatter was not extensive but the assemblage size is not given and no data on stratigraphy is preserved. It included wasters, leading Hull to conclude that a kiln was 'not far away' (*ibid.*). The dating of the assemblage is therefore a tentative business. Hull felt on balance that it 'dated to the first half of Trajan's reign (c. AD 96-106)' (*ibid.*, [1]),

with little later material, and that this was the date which 'we can certainly attach to the pot kiln'. A date in the period c. AD 80–120 seems likely. A single box of material is preserved in the Museum.

There is some confusion concerning some finds from this site: in *The Roman Potters Kilns of Colchester* (1963b, 46) Hull observed:

'It is worthy of note that in 1956 Mr F. Erith cleared a large pit in the area of the Roman Pottery kilns at Ardleigh ... It was full of charcoal and ash and broken wasters. Among these lay nearly all the fragments of a broken bowl [Drag] f 37; it has been restored. Mr Erith recognised the pattern of the York mould, and close examination showed that the new find might well have been from the York mould, only the pattern differed in having one small leaf added. That it is from a mould of the potter X-3 is certain. The wasters found in this pit were of Trajanic date'. In 1965 Erith published a note on a decorated f 37 sherd, stating that it had been found in 'a pit containing Roman pottery' which had been discovered 'in 1957, when ploughing up grassland in Elm Park, Ardleigh'. One vessel in the Corpus (No. 105), provenanced as 'Elm Park 1957', may be from this pit.

Corpus Nos (all Elm Park 2), 8, 24, 45, 46, 61–2, 82, 84, 85, 134–5, 137.

13) Elm Park 3 (Fig. 5.18). (Anon MS).

Virtually no documentation on this feature appears to survive in ColEM, save for a quarto-sized sheet entitled 'Ardleigh — Elm Park 3. Roman: Grey ware from the kiln(s)'. However the holograph description which follows, although extremely brief, may refer to the Elm Park 2 finds. It refers to the recovery of coarse pottery in a 'great variation of colours, from imperfect firing'. The wares include fragments of a single ?Cam 95; reeded-rimmed bowls of Cam 246, and jars of Cam 268. Other jar fragments recovered were from vessels with zones of burnished lattice between plain burnished bands. These are possibly variants of Cam 108 or, more likely, narrow-necked jars.

14) Elm Park 4 (Fig. 5.18, Area not located precisely). (Anon TS).

This site, described as a 'Roman hut or kiln site', is barely known. A single sheet of 'onionskin' paper bearing a typescript account of the pottery is clearly the work of Rex Hull.

Hull described the pottery as 'obviously mostly ... from a kiln, and [the fabric] shows great variety of colour due to faulty firing'. Forms noted include fragments of two platters, one of which was similar to a Cam 14, also a sherd of a vessel resembling a Cam 37, but very shallow and without decoration (cf Corpus No. 13, which is also very wide for its depth). Bowl forms noted included Cam 68 (cf Corpus Nos 48–9), 242 and 246 (see Corpus Nos 36–42), also jars, either narrow-necked (cf Corpus Nos 92–105), and the Cam 268 (Corpus Nos 115–119). There were also fragments of a cheese press (Cam 199, Corpus Nos 137–140). Hull characterised the fabric here as more or less gritty (basically Bilton's R2–3). The pottery suggests production here in the later Flavian-early Antonine periods, a date which agrees with the evidence from the other Ardleigh sites.

15) Elm Park 'Kitchen Gardens' (Fig. 5.29) (Erith and Holbert 1965).

Following its discoveries there in 1956 (see above) the Colchester Archaeological Group returned twice to Elm Park in the early 1960s, and excavated a ditch which they traced 'running obliquely across the line of the kitchen garden'. This feature was apparently 1–1.25m ('some 3–4 feet') in depth and continued eastwards of the excavation trench on roughly the alignment, it was then felt, of the ditch found at R5 (above). However the complexities of the crop-mark plot since compiled indicate that the two excavated ditch lengths are unlikely to be part of the same feature (cf the entry on R5 for its possible identity). The quantity of pottery recovered from the 'Kitchen Garden' ditch was estimated at 2000 sherds, and included bowls of Cam 246, 108 beakers, and cheese presses (Cam 199) as well as jars of Cam 266 and 268. The assemblage is therefore contemporary with, and very similar to, those from Area 7 ditch 7150 and Area 7 ditches 1003, 1003/5. Interestingly, it is from here that the only sherd decorated with compass-scribed arcs was found. Erith described it as West Stow ware (Holbert and Erith 1965, 20 no.19) which indicates that it was not thought to be in a local fabric. Indeed while there is evidence of fine-ware production (e.g. of 'poppyhead' beakers) no definite 'London ware' decorated vessels in Ardleigh fabrics have been found.

The CEU Finds

The CEU excavations stripped several areas where finds of fired clay indicated the possible sites of kilns. This revealed further dumps and the remains of two kilns; one in Area 7 [No. 15, Cat 7375], and a further kiln in Trench 21 (No. 19; Cat 8162) which might have been excavated by Erith when he was working on R5 (above). The structures are discussed elsewhere. There were two principal dumps of waste in ditches: in Area 7 ditch 1003, 1003/5 (see Figs 92 and 93.1–60; Fig. 94.1–34), and Area

7 ditch 7150 (see Fig. 91.1–29). A smaller deposit of probable waste was found in Area 21 ditch 8212 (Fig. 90.1–18).

16) Area 7 Kiln (Cat 7375), (see Fig. 7 for location of Area 7).

Site of a Roman pottery kiln. This was cut into the edge of ditch 7012. Pottery from the oven [7378] was datable to the 1st century AD. Material from the ditch was datable to the Neronian-Flavian period, which suggests a similar date for the kiln.

17) Area 7 Ditches (Cat 1003; 1003/5), (see Fig. 7 for location of Area 7).

Ditch 1005 contained some possible kiln material but its recut, ditch 1003 contained a substantial assemblage (some 77kg) of pottery: a substantial total which comprised nearly one fifth of the total site assemblage. The pottery found included a broad cross-section of Ardleigh kiln products including bowls of Cam 246 as well as a range of jar types. See Figs 92–93.1–60).

Corpus Nos: 12, 37, 41, 51, 55, 91, 122–5.

18) Area 7 Ditch (Cat 7150), (see Fig. 7 for location of Area 7).

The pottery from this ditch, which runs at right angles to ditches 1003; 1003/1005 on the alignment of ditch 1451 resembles that from ditch 1003 (see 16, above). It does not, however, represent a recut of an earlier feature (ditch 1005, in the case of 1003) and does not contain residual material. It is entirely Roman in character. It contained a number of wasters (cf. Corpus 40, 42, 63–65, 86). The forms are entirely characteristic of a Flavian-later Flavian date, and there are no forms which are datable to the Hadrianic or later periods (for example, the cavetto-rimmed jar, or perhaps more significantly for it is a definite kiln product, the Cam 37, the bead-rimmed dish.

Corpus Nos: 40, 42, 63–5, 82, 87, 111, 148.

19) Area 21 Kiln.

Site of Roman through-draft pottery kiln. The kiln appears to have been relined or refloored at least once.

This kiln appears to have been excavated at some time prior to the CEU excavations. There are two known candidates: R8, the records of which are non-existent, and Hull's site R5, which may have been here (see the discussion of both sites, above). The trenches found, however, seem to be rather more extensive than implied by his notes and the quantity of pottery found at that time seems rather meagre for a kiln site. It thus seems possible that the site was excavated on yet another occasion, not necessarily recently. The pottery which did survive these diggings suggests a Flavian-Trajanic date.

20) Area 21 (ditch Cat 8212), (see Fig. 7 for location of Area 21).

Dump of c.10kg of pottery including waste material. Including platters, beaker/jars and jars of Cam 118. Date: Neronian- Flavian. Corpus Nos: 59, 60, 67, 79, 88, 132.

Summary of findings

The Ardleigh excavations from 1955–1980 revealed three pottery kilns, one on site R2, and two more in Area 7 [Cat 7375] and Area 21 [Cat 8065], together with a number of waste dumps across an area of some 500 × 200m indicating the existence of a fairly scattered pottery production site spanning the 1st and 2nd centuries AD. The dumps noted were in a pit [at R6]; and also in ditches (possibly at R1; at R7, and in the more recent excavation campaign in CEU Area 7, ditch 7150, and ditch 1003; 1003/1005). Some smaller caches of dumped material were also found. Linking the dump material with the kilns proved to be a difficult task. There is no guarantee that dumps close to kilns are associated with them; indeed Hull felt that the pottery from R6 had been imported from elsewhere, and it is possible that the other dumps were created from similar material. In consequence our knowledge of the development of ceramics production here (in terms of which kiln and which dumps were in use at any one time) remains very sketchy. Some possible patterning emerged however: the dating evidence suggests that the earliest production was in and around Areas 7 and 21, and the latest restricted to the more southern parts of the site. For a broader overview, see the concluding discussion.

The kiln pottery

Introduction

As a result of the excavations carried out at Ardleigh by Felix Erith and others, pottery totalling in all over 150kg came into the stores of the Colchester and Essex Museum. While some sorting appears to have been carried out before it came into the Museum (Hull MSS), not all of it was washed and none of it was marked. That this has led to some muddling of the material is confirmed by differences in attribution between one of Hull's original draft drawings and another of the same vessel compiled by the CEU. One cannot, therefore rely too heavily on the provenance of individual pieces (for observations on the attribution of later Iron Age material in the Museum see Thompson 1982, 581–2).

Rex Hull saw the Ardleigh assemblage as an important addition to the Romano-British material from Colchester, and there is no doubt that once he had published his paper on the prehistoric aspects of the site (galleys of a paper he wrote on the prehistoric finds exist), he intended to publish a report on the Roman pottery from the site. However, with the exception of some notes few of his observations got into print, and much of what he wrote cannot now be found. This is not necessarily a tragedy as Hull appears to have been persuaded that the stratigraphic integrity of the assemblage was better than it really was, and had some of his suggested dates (e.g. a Hadrianic inception date for Cam 406) been widely disseminated, problems would have arisen.

It is clear from his notes that Hull intended that the pottery should be related to the Camulodunum type series, of which the first instalment had been published in 1947, and he went as far as to assign new Cam numbers to several of the Ardleigh vessels (e.g. Cam 240, 300, 385 (Fig. 102.122–8)).

But these additions to the Cam type series never saw the light of day. Their identification came too late for them to be included in *Roman Colchester*, then very far advanced, and Hull was soon to be presented with substantially more Roman pottery from Colchester production sites to work upon, for even as Erith began his explorations at Ardleigh in 1955 other amateurs, principally H.C. Calver, had commenced digging in the vicinity of the kilns uncovered in 1933 at Sheepen (Hull 1963b, fig. 9). Calver brought to light one kiln (to be No. 29 in Hull's sequence) and identified the position of two others (Hull's Nos 30–31). These findings brought matters to a head and as a result it was decided in 1959 'to go forward with the publication ... on the work of 1933, and ... to promote an excavation to add these three further kilns to the 25-year old report' (Hull 1963b, 35). The Ardleigh material was summarily set aside.

Since the third and last work on the Cam type series was published (Hull 1963b), further ceramic series based on Essex material have been created. Of these, the most substantial will be the classification of the material excavated by the Colchester Archaeological Trust (Symonds and Wade forthcoming). This presented a problem. A site-based typology (one *is* in the site archive but it conflates some important forms) would be a poor reflection of the enormous range of the Colchester series. It was decided to present here only a Corpus of Ardleigh kiln products, cast — as far as is practicable now — in terms of the original Cam series, that is following the presentation, as there, from 'open' to 'closed' vessel

classes. On the assumption that if the principal criterion for inclusion in the Corpus was the existence of definite waste versions of a form then the list would be rather short, inclusion was based on the presence of underfired or overfired versions in probable waste deposits, or exclusivity to the site, or abnormal representation on the site. The Corpus is therefore not exhaustive, but aims to encompass the principal products of the industry and their more characteristic variants in a manner analogous to that used at Mucking by Rodwell (Jones and Rodwell 1973).

It had been intended to reproduce the relevant Cam form definitions at the head of the appropriate form entries, but Hull compressed these so greatly that without the original form drawings they are rather uninformative, so a basic description, updating some of our knowledge is given at the beginning of each form entry. Then the significance of the form at Ardleigh is discussed briefly and its incidence at the various production sites or areas is noted (*quanta*, while in the site archive, are not particularly significant here). The entry finishes with a brief assessment of the date of the form. Quotations from the Hull foul papers (MSS and TSS) are in italics. Page references are given where unambiguous ones exist. The Camulodunum forms are illustrated as follows:

Cam 11/12, 26/7 (Corpus Nos 1–10)
Cam 37 (not illus.)
Cam 38 (Corpus Nos 13–16)
Cam 46 (Corpus Nos 23–4)
Cam 68/329 (48–9)
Cam 108 (Corpus Nos 59–67)
Cam 119 (Corpus Nos 74–8)
Cam 122/3 (Corpus Nos 68–71)
Cam 175sim (Corpus No. 129)
Cam 199 (Corpus Nos 137–40)
Cam 218 (Corpus Nos 79–91)
Cam 232 (Corpus Nos 92–3)
Cam 266 (Corpus Nos 107–14)
Cam 268 (Corpus Nos 115–121)
Cam 280/1 (Corpus Nos 94–106)
Cam 287 (Corpus No. 136)
Cam 298 (Corpus Nos 43–4)
Cam 199 (not illus.)
Cam 306 (Corpus Nos 28–31)
Cam 307 (not illus.)
Cam 315 (not illus.)
Cam 330 (Corpus Nos 54–8)
Cam 406 (Corpus Nos 72–3)

The Fabrics

Temper was added to the clay source at Ardleigh to produce fine, medium or coarse fabrics. Those manufactured in what might be termed a 'Romanising' tradition (cf Going 1987, fabrics 34, 45), with brownish red core and margins and dark black-brown surfaces, were classed by Belton as her fabrics B1–3, while the more highly-fired 'Roman' reduced or 'grey' fabrics, produced from the Flavian period onwards, are described as her fabrics R1–3. As Belton herself noted there are overlaps, some being classified entirely on the presence or absence of temper. At its finest the ware bears comparison with 'London' wares (Marsh 1978). Basically, however the fabrics are a single continuum. Hull noted of the wasters that he had seen, that '*the clay at Ardleigh is good grey, but is often very soft owing to underfiring, and many vessels were made of a curious paste which fires a light bluish grey and is full of dark flecks and blotches like scraps of decayed wood, but quite hard...*' (Hull TS). Hull was convinced that this temper was probably sawdust, but this is not confirmed.

A note on the drawings

The Corpus drawings were done by the Central Excavation Unit and include studies of material excavated by Erith and others, and also from a number of drawings made by Rex Hull, which are preserved in the Colchester and Essex Museum. Hulls' drawings were used in *extenso* because in some cases they are the only record of some of the pottery (Corpus No. 136, for example, has gone missing since Hull drew it), and because the material was generally in a better state of preservation. Sometimes the latter drawing is substantially more complete, suggesting that life in the CoLEM store was not without its own hazards. Unfortunately the pottery that Hull drew was at some time reunited with the original material, without being obviously marked or otherwise identified. This has led to some identification problems, and in some cases it is clear that the same piece has been drawn by Hull, and by the CEU. Where there was suspicion that two drawings were of the same vessel, the more complete drawing was used and the other omitted.

In some cases there have been problems of provenance. Where there is only a brief description on the original drawing but no link to a specific findspot, whatever notes exist must serve as our record. The most important incidences of this are the provenances of the first twelve vessels from sites R1 and R2, which were on a sheet missing from a typescript report. The Corpus entry for these vessels is therefore R1/2 (*cf e.g.* Corpus No. 3).

The Pottery forms

Platters

The basic platter forms manufactured at Ardleigh belong firmly in the Gallo-Belgic range, and are clearly native variants of various *Terra nigra* vessels. There are three basic forms represented here: the classic variant of the Cam 11/12 (Fig. 96.1–2), a version with a deeper, concave body and a short angular rim beading (Fig. 97.3–5), and what will be called copies of the Cam 11/13 (the Cam 26/7), with a functioning footing but with an upturned, simple rim (Fig. 97.6–9).

Incidence: Not particularly common, the most significant deposit containing them being Area 21 ditch 8212. This deposit, which also contained ovoid beakers of Cam 108 (Fig. 99.59–60, 67), is rather earlier than the suggested date of nearby kiln [8165], which contained a sherd of a bead-rimmed dish (Cam 37) and was therefore not backfilled much before c. AD 125.

Date range: the platter class is met with in various developed forms in Essex until well after the Flavian period (they are present, e.g. in Colchester pit 1 in Insula 7, dated c. AD 100: Hull 1958, 124–8 and figs 53–6) and survive into the Hadrianic period after which they are replaced by Cams 37 and 38. Further west, in Hertfordshire a developed platter form continued to be manufactured into the Antonine period (*cf* Partridge 1982, fig. 96, 38–40).

- 97.1 Fabric R1. Area 21, ditch 8212/8151 fill [Cat 8086].
- 97.2 Fabric R1. Area 21, ditch 8212 fill [Cat 8085].
- 97.3 Fabric R1. Site R1/2.
- 97.4 Fabric B1. Area 21, ditch 8212 fill [Cat 8085].
- 97.5 Fabric R1. Area 21, ditch 8212 [Cat 8085].
- 97.6 Fabric R1. Dump in Site R7 ditch (trench B).
- 97.7 Fabric R1. Elm Park 2.
- 97.8 Fabric R1. Elm Park 2.
- 97.9 Coarse grey ware. Fabric R2. Site R5 (Trench A).
- 97.10 Fabric NK. Area 21, ditch 8212 fill [Cat 8081/8085].

Dishes

Shallow, dish/bowl. (Nos 11–12). *Cf.* Cam 46 and West Stow type 4.5. This vessel has a drooping flange rim. It may be shallow (No. 11) or rather deeper. It is related to the flanged bowl below (Corpus Nos 20–22). It is not common.

Incidence: In dump in ditch 1003 in CEU Area 7.

Dating: Flavian-Trajanic or later.

- 97.11 Fabric R1. Area 7 Clearing over 1003/1005 [Cat 1007].
- 97.12 Fabric R1. Area 7. Ditch 1003 [Cat 1138].

Bead-rimmed dish. Cam 37. (Not illustrated) (Hull 1963b, 178 and fig. 102).

This form, best known outside Essex in Black-Burnished B2 and its 'allied' fabrics, *may* have been manufactured on the site, but there was no definite production evidence from any of the excavations at Ardleigh, or for that matter, from Colchester. Hard to distinguish from this form are rim sherds of a rather unusual bowl which *is* an Ardleigh product (Corpus Nos 25–7, below).

Incidence: EP 2; Roman site 7, and Area 8.

Dating: Probably as given elsewhere: Hadrianic-early Antonine and superceded by the plain dish form, the Cam 38 below.

Developed bead-rimmed dish. Cam 38. (Nos 13–16) (Hull 1963b, 178 and fig. 102).

This form appears to supercede the Cam 37. It has a rounded rim where the earlier form had one which tended towards the triangular. It also lacks the lattice tooling on the exterior which the earlier form characteristically possesses. All have a bevel between the base and the lower side wall. Not a particularly common form at Ardleigh.

Incidence: Some ten vessels in R1–2; also in the ditch dump at R7 (trench B).

Dating: Later 2nd century.

- 97.13 Fabric B1, Site R2.
- 97.14 Fabric R2, Area 11, ditch 7502 fill [Cat 7528].
- 97.15 Fabric R3, Dump in Site R7 ditch (trench B).
- 97.16 Fabric R2, Site R2.

Bead-rimmed dish/bowls. (Nos 17–8).

While these vessels are superficially similar to Cam 37–8 they are also related to the fine ware imitation samian bowl forms (see Corpus No. 58). They may be decorated with light fine rouletting under the rim, as No. 18. Rare. The fabric of No. 17 is coarse and gritty but the paste of No. 18 is finely levigated. It is probable that the latter vessel is in the intended fabric.

Incidence: sites R5 and R6.

Dating: probably Flavian-Hadrianic.

- 97.17 Gritty grey ware. Fabric R2. Site R5 trench A.
- 97.18 Fine grey ware. Fabric R1. Site R6.

Reeded-rimmed dish (No. 19). (Marsh 1978, 158–60, type 26, figs 6.12–13).

Often mica-dusted, but in reduced ware here (a grey ware waster was found at Cophthall Close, London, Marsh 1978, 158). Common in London, but rare elsewhere. Not in the Cam type series.

Incidence: R1–2.

Dating: presumably similar to the reeded-rimmed bowl (below, Corpus Nos 34–42)

- 97.19 Fabric R1–2. Roman 1–2.

Bowls

Hemispherical bowl with flanged rim (No. 20–22) (Cam 311, also Marsh 1978, type 26 and fig. 6.16).

A flange-rimmed bowl with a slightly down turned rim. This vessel, is usually in a fine reduced ware here and at Colchester (Hull 1963b, 186) is mainly found in mica dusted fabrics elsewhere. The rouletted flange is known at Colchester.

Incidence: Areas 8 and 22 (No. 21, probably ?intrusive in ditch 8008) and also the dump at R7 (trench B).

- 97.20 Fine grey ware. R1. Area 8, ditch 1633 [Cat 1630, 1635].
- 97.21 Fine grey ware. R1. Area 22, ditch 8008 [Cat 8004]. Probably intrusive.
- 97.22 Fine grey ware. R1. Rouletting on the flange. From Site R7 (trench B).

Cam 62 similis (Nos 23–4) (Hull 1963b, 179).

A carinated bowl form with vertical upper sides and a small bead rim. The body is usually decorated with burnish line tooling. Rare.

Incidence: Found at Elm Park Site 2.

Dating: Flavian-Trajanic, perhaps a little later.

- 97.23 Soft sandy yellow-red fabric (underfired). Site R7 (trench B).
- 97.24 Fabric R2. [EP 2].

Latticed bowl type (Nos 25–7) (Unclassified in Cam).

Bowl with an out-turned pointed rim, vertical upper body, sloping lower body. In its proportions the basic shape is related to the Cam 246, a common Ardleigh product (see below, Nos 32–5), but its decorative repertoire is more characteristic of the Cam 38, with which it shares aspects of its rim shape. It is rare at the site and only recognised so far in the dump in the ditch at R7.

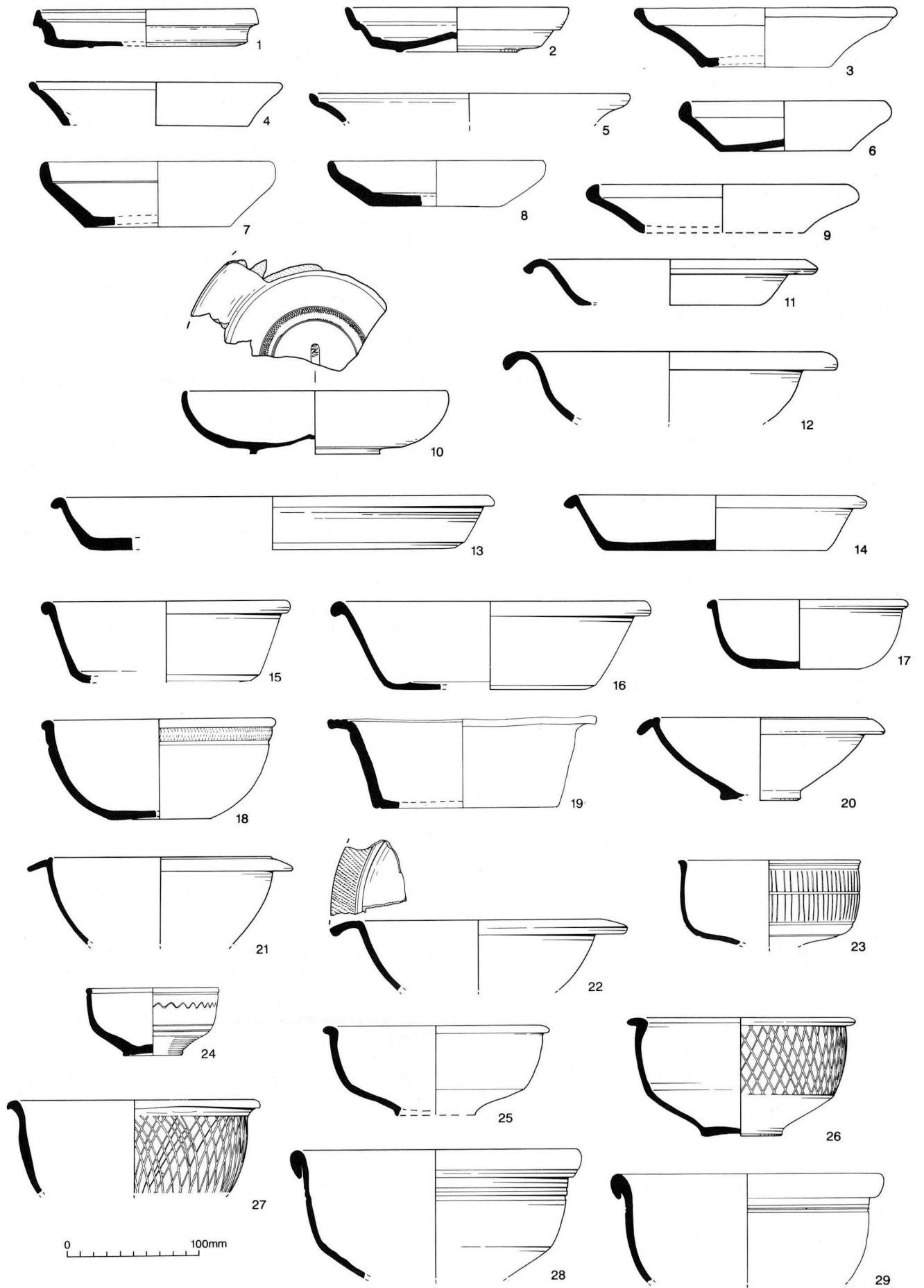


Figure 97 Ardeleigh Roman pottery: kiln products

Incidence: Roman site 7.

Dating: Unclear, but probably not too dissimilar to the Cam 38; *i.e.* Hadrianic-Early Antonine.

97.25 Underfired reddish-brown ware, Fabric R2. Undecorated version. Dump in Site R7 ditch (trench B).

97.26 Fabric R2. Dump in Site R7 ditch (trench B).

97.27 Fabric R3. Dump in Site R7 ditch (trench B).

Cam 306. (Nos 28–31) (Hull 1963b, 186 and fig. 105).

This unusual form has given rise to considerable discussion owing to its rarity and to continued uncertainties about its date, a confusion which played a role in the redating of the Colchester Mithraeum deposit (see Going 1987, 119–20).

Hull, in his discussion of the material from kilns 27–8 at Endsleigh School, Colchester (1963b, 162–8), mentioned the occurrence of unequivocal waste versions of Cam 306 at Ardleigh and that it was possible to place them in these 'early second century kilns' (Hull 1963b, 165). Unfortunately, in the rather more widely read section of the Cam typology, he noted that its dating was 'uncertain. One in a grave seems Antonine. Fragments occur in the 'Mithraeum'. The dating seems approximately 175–350 or later' (Hull 1963b, 186). From this developed the idea that Cam 306 might be a diagnostic 3rd-century form.

We may now see that the form did originate in the early 2nd century, and that its basic proportions are those of the contemporary reeded-rimmed bowl, while it probably continued to be manufactured into the 3rd century AD it cannot, *contra* Going 1987, be a diagnostic 3rd-century form. It is unlikely to have lasted out the 3rd century.

As well as at Ardleigh and in the Endsleigh school kilns it was clearly made in other Colchester locations: a Cam 306 in a coarse reddish-brown ware, 'misshapen in firing'...with many broken vessels' was apparently found close to E. W. A. Drummond Hay's Lexden Road kiln (No. 1 in Hull's *Kiln Gazetteer*). Similarly numerous sherds of the same form were found at Butt Road, including a waster from the fill of *grave 656* (Crummy, Crummy and Crossan 1993, 25–6). The appearance of the form on the site led to suggestions that it was in some way linked with the burial rites there but William Wire's *County Illustrations* records a possible kiln (Hull's Kiln 5 or 6) in the immediate vicinity of the site. It seems more probable that some, or most of them originated here.

Incidence: Sites R1–2.

Dating: Early 2nd to later 3rd century?

97.28 Brown-grey, slightly underfired. The turning down of the rim is clearly seen in the section. Two grooves. Six fragments of one pot. [Roman site 2].

97.29 Red with brown core, surfaces mottled black. Seven sherds. Site R 2].

98.30 Good grey ware. [Roman site 1].

98.31 Thin, hard, dark grey, not polished. The outside of the rim broken.

One example only found in kiln I. The base could belong to another vessel. [Roman site 2].

Segmental bowl form (Nos 32–3).

Small bowl with a canted, everted rim. The form is closely linked to the sequence of Cam 246 bowls below, but is separated from them as they seem to be a distinctive variant.

Dating: Flavian-Antonine?

Incidence: R6.

98.32 Soft grey with flecks. Underfired. Site R6. (Hull Master No. 50).

98.33 Fabric R2. Area 8, ditch 2083 [Cat 1745].

Cam 246 (Nos 34–42) (Hull 1963b, 183).

This vessel type is the 'segmental' or 'reeded-rimmed' bowl, a most common form manufactured at many production centres. It is best known in its Verulamium Region/Brockley Hill guise, and is found throughout south-east England from the later 1st century AD onwards. It was also clearly a major form at Ardleigh. Rim forms vary greatly but are generally weakly moulded. The ware is grey or brown and is usually merely smoothed.

Incidence: Found in 'dump 1' (R1, where it was described by Hull as 'very common', found in site R2, and in some numbers in R7. It was also 'well represented' at Elm Park Sites 2, 3–4; the Elm Park Kitchen Gardens site; and was present in some quantities in the CEU excavations, being found in Area 7 ditch 7150 and ditch 1003/1005.

Dating: Flavian-Antonine.

98.34 Sandy dark grey-brown, blackish exterior. Underfired. Site R 7 Trench B

98.35 Slate grey, with dark flecks Kiln 2.

98.36 Fabric R1. Area 7, ditch 1003 (Cat 1142). Not reproduced in Group.

98.37 Fabric R1. Area 7, ditch 1003 (Cat 1141).

98.38 Fabric R1, Area 7, ditch 1003 (Cat 1141).

98.39 Fabric R1, Area 7, ditch 1003 (Cat 1207).

98.40 Fabric R1. Area 7, ditch 7150 (Cat 7237).

98.41 Fabric R1. Area 7, ditch 1003 (Cat 1141).

98.42 Fabric R1. Area 7, ditch 7150 (Cat 7238).

Wide-mouthed jar (Nos 43–4).

Squat, round bodied wide mouthed jar with a short, slightly flaring neck, topped by a bead rim. Rare.

Dating: Flavian-Hadrianic?

Found at : R1, and possibly elsewhere.

98.43 Light grey ware with dark flecks. Kiln 1.

98.44 Good grey ware with black flecks. Kiln 1.

Cam. 298 (Nos 45–7) (Hull 1963b, 186, fig. 105).

A squat, carinated bowl with a widely flaring mouth, larger than the above form with a slight shoulder offset. The form occurs often as a strainer at Camulodunum (Hull 1963b, fig. 105) but plain ones are more common. Strainer bowls were found at Ardleigh in Area 8 ditch 1718 [cat 2034] and Area 20, pit 7993. Hull decided that he was going to term the form, which he had previously only seen 'in a grave at Colchester' the Cam 240, but in the event the slot is listed as 'vacant' in RPK (Hull 1963b, 183). Rare.

98.45 Blue grey ware, coarse sandy ware. Elm Park 2.

98.46 Fired red with blackish surface, but probably intended to be reduced. Elm Park 2.

98.47 Fabric R2. Site R7.

Cam 299 (not illustrated) (Hull 1963b, 186, fig. 105).

A wide bowl first described at Newstead (Curle 1932) is our Cam 299. We had imagined it to be Antonine and to last into the 4th century. But here it is in Kiln II represented by four rims in good brown-grey ware.

Incidence: Rare

Dating: Flavian-2nd century.

Cam 307 (not illustrated) (Hull 1963b, 186, fig. 105).

Is a rather wide and squat jar with the rim hollowed inside to receive a lid. There are five fragments from Kiln II, one large and four quite small. All too small to draw, all fine grey.

Incidence: Kiln II.

Dating: 2nd century.

Cam 315 (not illustrated) (Hull 1963b, 187, fig. 105).

A wide shallow bowl or perhaps more correctly a lid, for the outside is smoothed or polished and the inside neglected. One small piece from site R2 in a fine grey ware (Fabric R1).

Incidence: R2.

Dating: 2nd century?

Fine bowl forms imitating samian types

The imitation samian vessels are hard to classify with any degree of precision, for the forms are all essentially hybrids owing their major characteristics to the three main 1st-century AD samian bowl forms (Cam 29, 30 and 37). As the South Gallic samian producers flagged a number of local potteries moved into the niche which they perceived to be opening up. For a generation or so, potteries such as West Stow and elsewhere produced these grotesqueries before they disappeared in the Antonine period. There is no evidence that the Ardleigh potters ever went in for using compass-scribed arcs, and thus made true 'London' ware.

Incidence: Evidence suggests that dumps at sites R6 and R7 both contained production waste of these forms.

Dating: Flavian-Trajanic.

Cam 68/329 (Nos 48–49)

'Wide bowls, copies of Drag. f. 29. Fine polished brown, grey, or black ware. Decorated with groups of incised lines, often in festoons'. Made at West Stow.

Incidence: R6 trench A. and at least seven similar in kiln 1. Their fabric was a 'bluish grey ware, polished'.

Dating: Flavian-Trajanic.

99.48 Fabric R1. Roman site 6 (Trench A).

99.49 Fabric R1. Roman site 6 (Trench A).

Carinated bowl (Nos 50–53)

Not a common form, but a highly distinctive one. The body shape is a variation on a beaker and a Drag f 29, with a sharply concave, almost waisted shape. At West Stow somewhat similar body sherds were classified as from jug forms (*cf.* especially West 1990, fig. 59.263 with our No. 53). The evidence is lacking here for such an identification.

Incidence: Rare.

Dating: Flavian-Hadrianic?

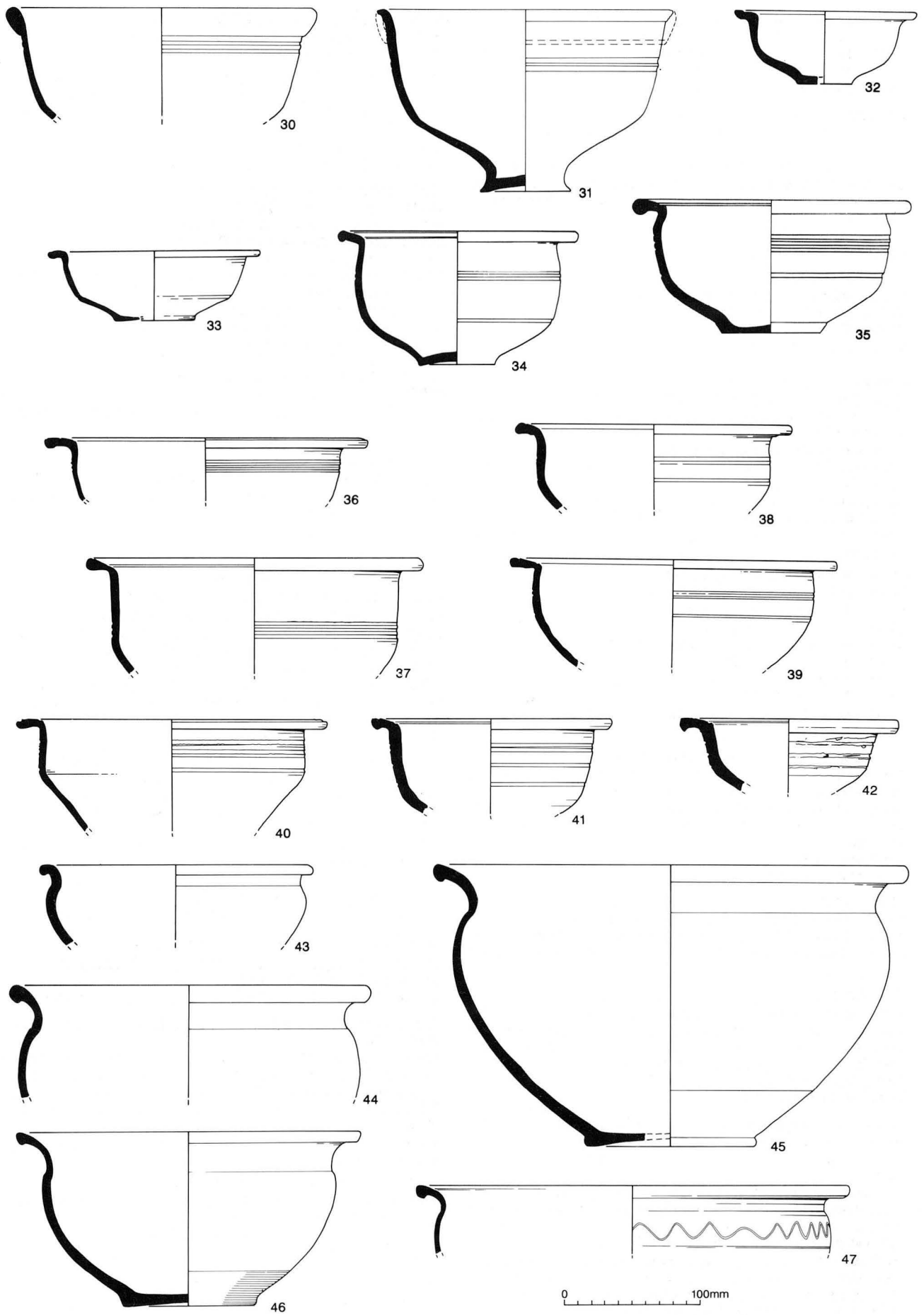


Figure 98 Ardleigh Roman pottery: kiln products

- 99.50 Fabric R1, Area 7, ditch 1003/1005 [Cat 1090].
 99.51 Fabric R1, Area 7, ditch 1003 [Cat 1156].
 99.52 Fabric B1. Area 8, fills of ditches 1541 and 1726 [Cats 1540, 1543, 1588, 1937, 1961].
 99.53 Fabric R1, Area 8, ditch 1718 [Cat 1720].

Cam 330 (Nos 54–8) (Hull 1963b, 187 and fig. 105)
 Hemispherical bowls imitating the basic shape of the Drag f. 37 (West Stow type 5). These are usually in a finely levigated grey ware. Decoration is applied with a comb, sometimes wavy line, usually as vertically-delineated panels with stabbed decoration between. No. 58 is the most ambitiously decorated example. Compass-scribed arcs are not found. Rare.

Incidence: Roman site 1; Areas 7–8.
 Dating: Flavian-Trajanic.

- 99.54 Fabric R2. Area 8, ditch 1968 [Cat 2095].
 99.55 Fabric R1. Area 7, ditch fill [Cat 1003].
 99.56 Fabric R1. [Site R6].
 99.57 Fabric R1 ditch on site R7.
 99.58 Fabric R1 [Site R6].

Beakers

Cam 108 (Nos 59–67) (Hull 1963b, 179).

Ovoid beakers with short, everted rims decorated with comb applied stabbing in the form of verticals and chevrons, between girth grooves. Usually the finish is comparatively rough.

Incidence: Elm Park Sites 2–3; the Elm Park Kitchen Gardens site; Roman Site, 6; and Area 7.

Dating: Probably one of the earlier forms manufactured at Ardleigh, occurring as probable waste with platter Nos 1–2, 4 in pre-Flavian ditch 8212. The form may have been superseded in the early 2nd century by 'poppyhead' types.

- 99.59 Fabric R1 Area 21, ditch 8212 ditch fill (Cat 8085).
 99.60 Fabric R1 Area 21, ditch 8212 fill (Cat 8207).
 99.61 Fabric R1. Elm Park Site 2.
 99.62 Fabric R1. Elm Park Site 2.
 99.63 Fabric R1 Area 7, ditch 7150 fill (Cat 7239).
 99.64 Fabric R1 Area 7, ditch 7150 fill (7239).
 99.65 Fabric R1 Area 7, ditch 7150 fill (7239).
 99.66 Fabric R1 Site R1/2.
 99.67 Fabric R1. Area 21, ditch 8212 fill [Cat 8085].

Cam 122/3 (Nos 68–71) (Hull 1963b, 182, fig. 102)

Poppyhead beakers and their derivatives. These were generally rare at the site, and although true wasters were not found, underfired examples (e.g. Corpus 71) indicate production at, or close to site R5. It is worth noting that there is no evidence of their manufacture at Colchester. Cf also the odd barbotine decorated vessel from site R5 Trench A (Corpus No. 77).

Incidence: Site R 5.

Dating: Flavian-Hadrianic.

- 99.68 Medium reduced ware Fabric R2. Roman site 5 (Trench A).
 99.69 Fine grey ware Fabric R1. Roman site 5 (Trench A).
 99.70 Brown f 268 ware (Fabric R2). Roman Site 5 (Trench A).
 99.71 Dull, soft (underfired) brown grey fabric. Roman site 5 (Trench A).

Cam 406 (Nos 72–3) (Hull 1963b, 190 and fig. 107)

A tall beaker with a narrow foot, folded wall, and an insloped rim with a marked lip. It is not common, but was certainly made here. The appearance of probable waste of this form on site R2 prolongs pottery manufacture at Ardleigh into the early third century.

Dating: late Antonine+

Incidence Rare, sites R1–2.

- 99.72 'Fine pale grey ware', Fabric R2. Kiln 2.
 99.73 'Hard grey ware', Fabric R2. [Roman site 2].

Jars

Cam 119 (Nos 74–8) (Hull 1963b, 179, 182 and fig. 102)

Narrow-necked jar. The form is basically the post-conquest development of the Butt-beaker. It has a long history and persists into the 2nd century AD and perhaps beyond. Usually manufactured in fine reduced, or oxidised wares (e.g. No. 78). They are usually decorated on the mid-body zone, here with impressed stamping (Nos 74–6) barbotine applied panels (No. 77) and light rouletting and combing (No. 78). Not common.

Found at: dumps at R1/2 and R5, at EP2 and in Area 7 ditch 1003.

Dating: Later Flavian-2nd century.

- 99.74 Fabric R1; Site R1/2.
 99.75 Fabric R1; Site R1/2.

- 99.76 Fabric R1; Area 7, ditch 1003 fill [Cat1065].
 99.77 Fine polished red fabric. Site R 5 (Trench A).
 99.78 Fine dark grey ware (Fabric R1). Site R6.

Cam 218 (Nos 79–91) (Hawkes and Hull 1947, 259–61, pl. LXXV).

This common vessel type was made at Ardleigh. It can occur with plain cordons (Nos 79–84) or with burnish line decoration (Nos 85–91), usually in the form of lattice or chevron designs.

Incidence: Found at: Elm Park 2, Site R7.

Dating: later 1st century to mid-2nd century AD.

- 100.79 Fabric B1, ditch 8212 [Cat 8196].
 100.80 Fabric B1, Area 7, ditch 7002 [Cat 7066].
 100.81 Fabric B1; Area 8, ditch 2154 [Cat 2150].
 100.82 Thin hard dark grey ware, Elm Park 2.
 100.83 Dark brown-grey (Site R7 Trench B).
 100.84 Fine hard dark grey ware (Fabric R1). Rouletted shoulder bulge. Elm Park Site 2.
 100.85 Fine hard grey ware (Fabric R1). Elm Park Site 2.
 100.86 Fabric B1, Area 7, ditch 7150 fill [Cat 7238].
 100.87 Fabric R1, Area 7 ditch 7150 [Cat 437–9].
 100.88 Fabric B1, Area 21, ditch fill [Cat 8196].
 100.89 Fabric B1, Area 7, ditch fill [Cat 7857].
 100.90 Fabric R1, Site R1 or R2.
 100.91 Fabric R1, Area 7, ditch fill 1003/1005 [Cat 1141]. Not shown in group.

Narrow-necked jars

Cam 232/282 similis (Nos 92–3) (Hull 1963b, 183).

Jar with a narrow mouth with one or multiple undecorated neck cordons. Incidence: EP2 and R7. Rare.

Dating: 1st–2nd century.

- 100.92 Fabric R2. Site R7 (trench B).
 100.93 Fabric R2. Site R7 (trench B).

Cam 280–81 (Nos 94–106) (Hull 1963b, 186, fig. 104).

Large narrow-necked jars. These vessels are related to the f. 218 and the ffs 232 and 282. As Hull noted, early examples are 'full and round' while later examples are of a more ovoid shape. Early examples may be plain or have lattice decoration on the upper body on a flattish cordon or delineated by girth grooving. Later examples may have burnished line looping or wavy line decoration, a trait which seems to be post-Antonine.

Incidence: Elm Park Site 2, also R5 (trench A) R6, and R7.

Dating: Flavian-later 2nd century+.

- 101.94 Underfired fabric R1, Surface gone. Labelled '1st site' ?R1.
 101.95 Red brown ware, ?black coated and polished; Site R1 or R2.
 101.96 Hard grey, vague polish. Fabric R1. Site R7, (Trench B).
 101.97 Rather coarse grey. Fabric R2. Dump in Site R7 ditch (trench B).
 101.98 Reddish grey, underfired, surfaces gone. Site R7 (Trench B).
 101.99 Thin good brown grey, underfired. Fabric R1. Two fragments. [R6].
 101.100 Fine grey. Fabric R1. Site R6.
 101.101 Dark grey ware. The base is conjectural. Site R7 (trench A).
 101.102
 101.103 Fine dark grey Fabric R1. Site R7 (Trench A).
 101.104 Thick grey, rather coarse Fabric R2. Site R7 (Trench B).
 101.105 Fabric R1. Elm Park 1957.
 101.106 Very fine grey ware, Fabric R1. Polished lower walls. Site R6.

Cam 266 (Nos 107–14) (Hawkes and Hull 1947, pl. LXXXIII; Hull 1963b, 183)

This is one of the staple post-conquest products of the Ardleigh kilns. During the 2nd century the form develops into Cam 268, and the fabric becomes more Romanised and fired to a brownish-grey (R1–2). The form 266 was originally just wider than tall, and very rounded (see Hawkes and Hull 1947) but as time went on it grew taller.

Incidence: Elm Park Site 2; Elm Park Kitchen Gardens Site; and Area 7.
 Dating: Flavian-early Antonine.

- 101.107 Fabric B1 Area 7, ditch 7150 [Cat 7234].
 101.108 Fine pale grey ware (R1) smoothed exterior. Polished lower wall. Site R6.
 101.109 Fine brownish ware. Smoothed. Site R6.
 101.110 Fabric R2. Polished lower walls. Dump in Site R7 ditch (trench B).
 101.111 Fabric R1; Area 7, ditch 7150 [Cat 7237].
 101.112 Soft grey ware (Fabric R1). Lower wall polished. Site R6.
 102.113 Fabric R2; Site R1.
 102.114 Fine light grey ware, surfaces smoothed. Site R6.

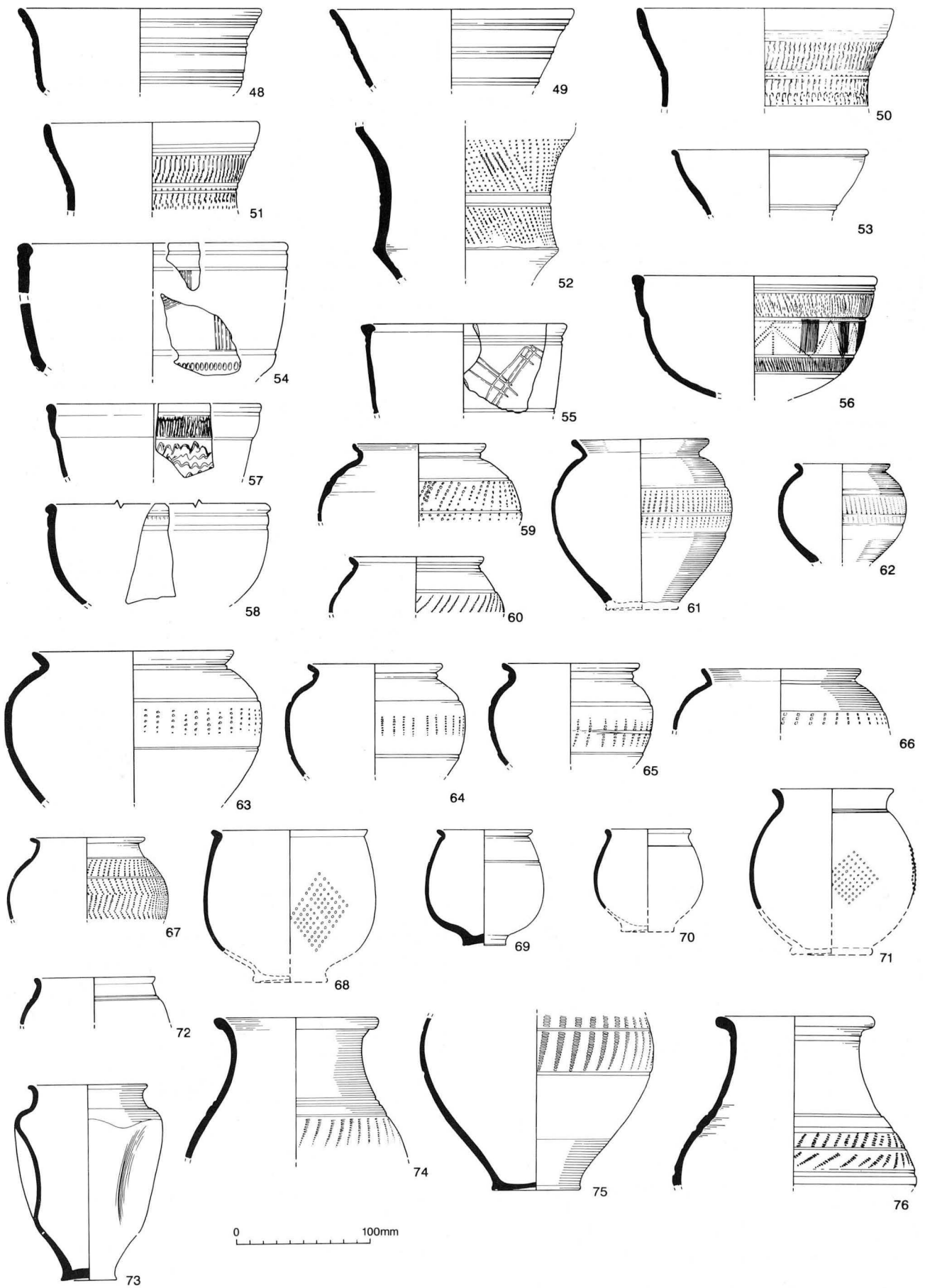


Figure 99 Ardeigh Roman pottery: kiln products

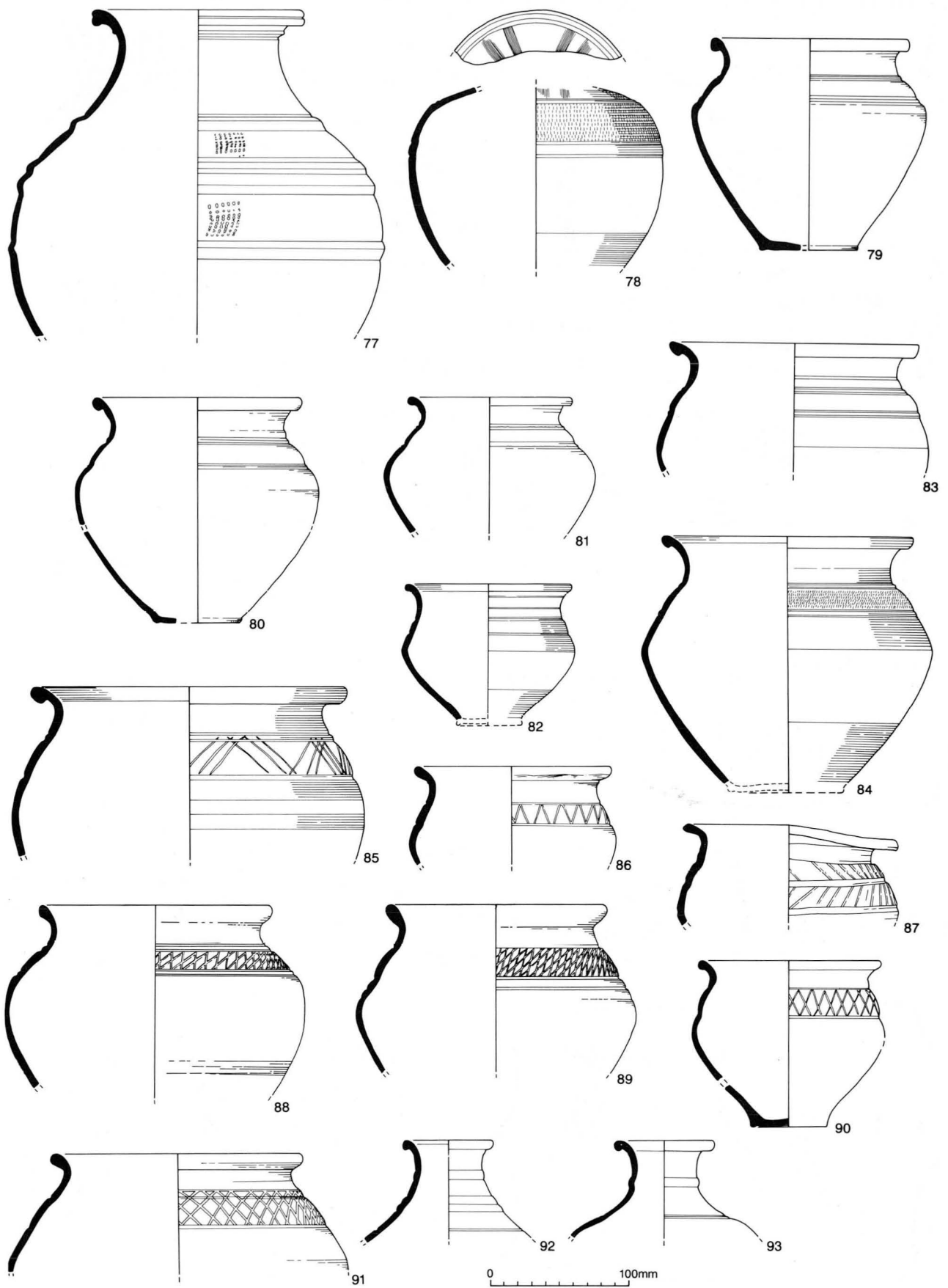


Figure 100 Ardleigh Roman pottery: kiln products

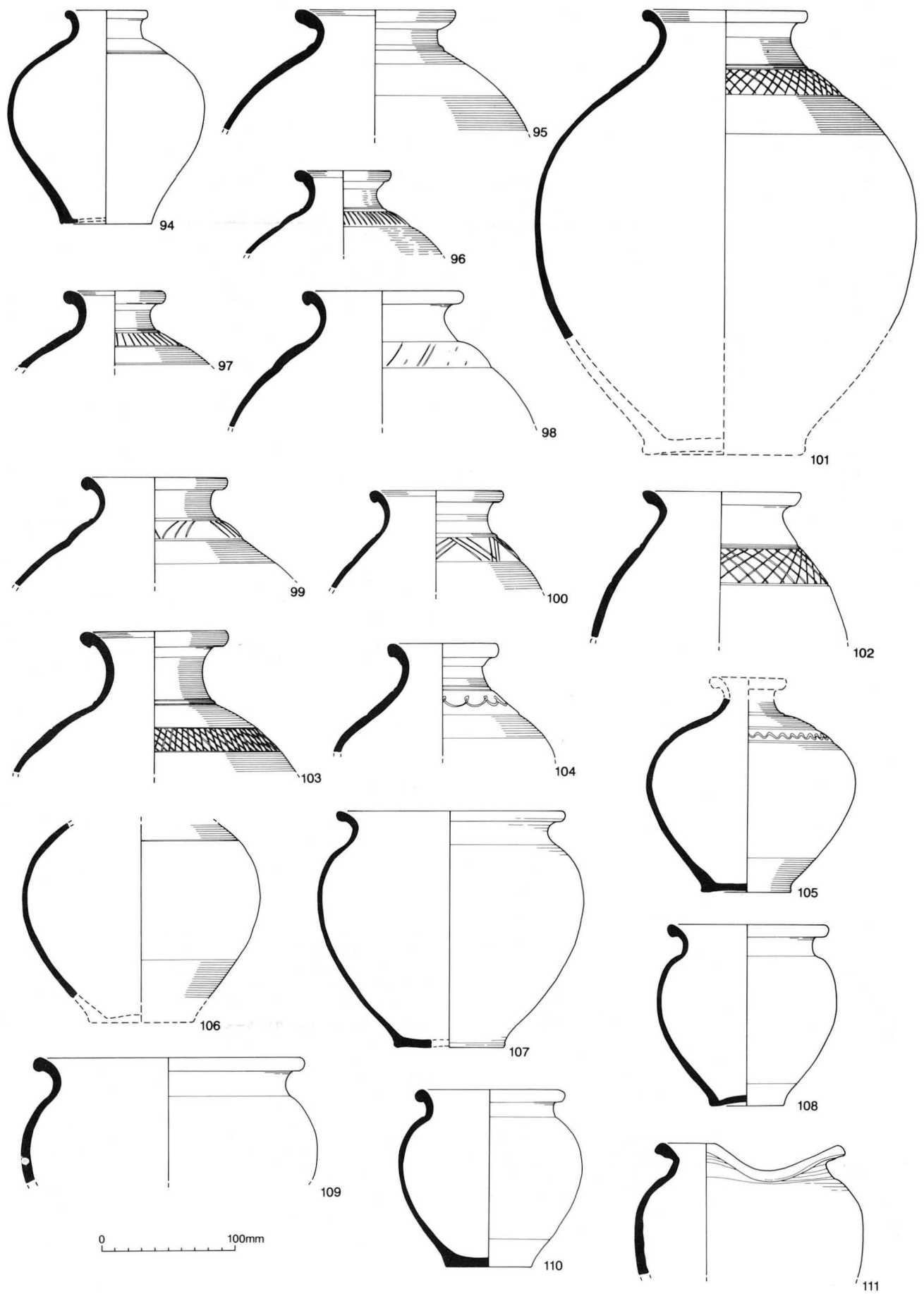


Figure 101 Arleigh Roman pottery: kiln products

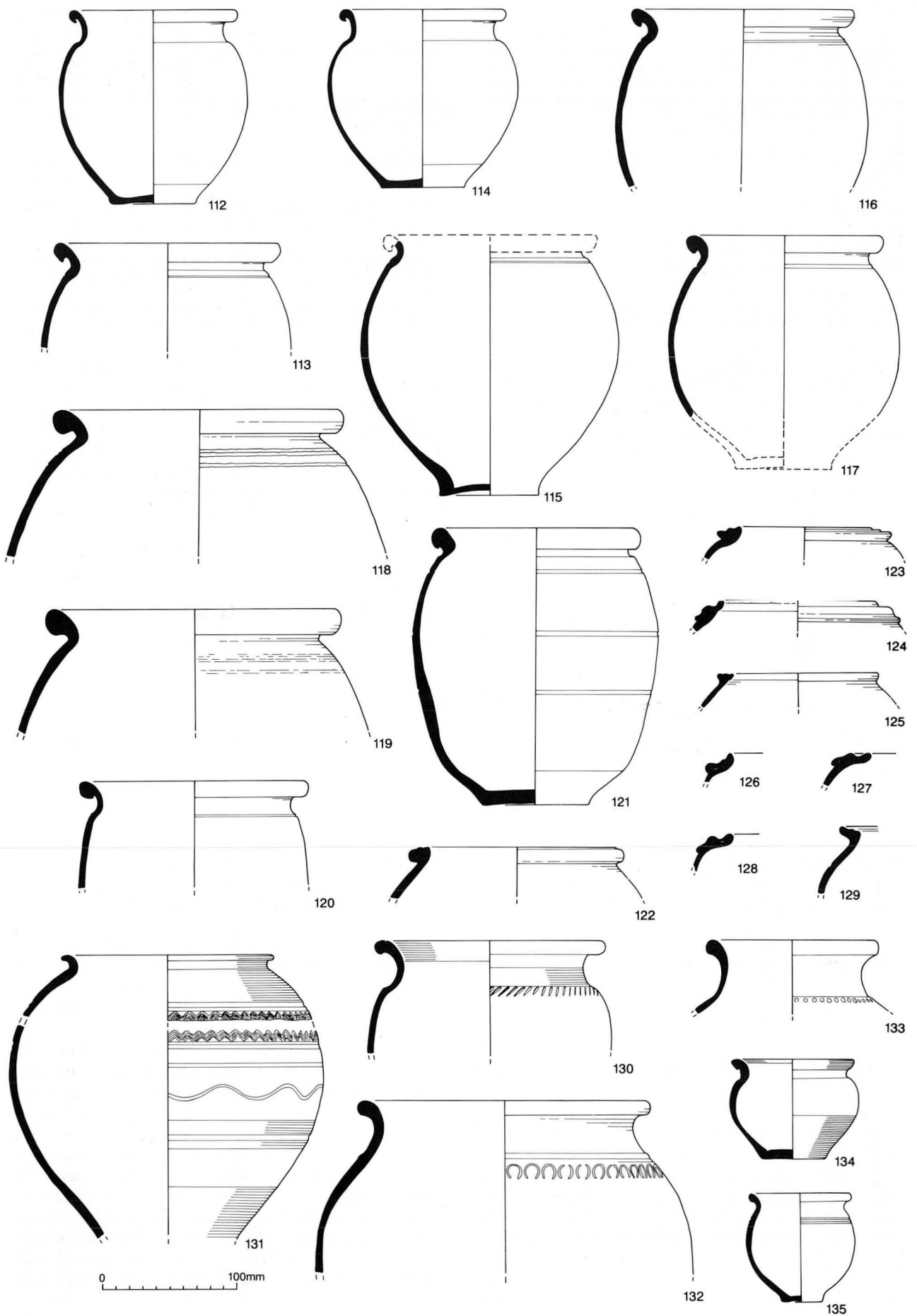


Figure 102 Ardleigh Roman pottery: kiln products

Cam 268 (Nos 115–21) (Hull 1963b, 198, fig. 103)
Cam 268 was regarded by Hull as the most common of the jar forms manufactured in the Colchester potteries and among the commonest vessels found in Roman Colchester. It appears to have superceded Cam 266. The length of time it was manufactured remains unclear: but there is some evidence to suggest that it ceased to be made some time during the early 4th century AD (see Going 1984, 1987, 1992).
Dating: Hadrianic–Antonine to early 4th.
Incidence: Elm Park Sites 2–4, Elm Park Kitchen Gardens; Sites R6 and R7.

- 102.115** Fabric R2; Site R1 or R2,
102.116 Fabric R2;
102.117 Gritty grey. Site R7 Trench B.
102.118 Fabric R3; Area 8, Pit 2260 lining [Cat 2260].
102.119 Fabric R3; Area 8, Soil? [Cat 1909].

Slightly squatter, more cylindrical variant

- 102.120** Gritty grey ware (R2). Site R7 Trench B.
102.121 Grey ware (?R2). Composite drawing from three vessels. Site R6.

Trifid-rimmed jars (Nos 122–8)

Neckless jar with a rim turned outwards over the last of the wall and folding it down to make an insloping rim which is folded on top. The shape of the lower body we know nothing. Hull proposed this form as his Cam 385 but in the event it was left 'vacant' in *Roman Potters' Kilns* (although a flagon appears over the type number in the relevant figure).
Fabrics: R1–2.

Dating: Trajanic–Antonine?

- 102.122** Fine grey ware (Fabric R1) Area 7, ditch 1003/5 [Cat 1007].
102.123 Fabric R1 Area 7, ditch 1003/5 [Cat 1207].
102.124 Fabric R1 Area 7, ditch 1003/5 [Cat 1078].
102.125 Fabric R1 Area 7, ditch 1003/5 [Cat 1007/1080].
102.126 Grey ware, underfired; Site R1.
102.127 Fine grey with faint dark flecks (Fabric R1). Site R1.
102.128 Fine pale grey (Fabric R1). Site R1.

Cam 175? (No. 129) (Hawkes and Hull 1947; Hull 1963b, 182, fig. 102).
The so-called 'Honey Pot'.

Dating: 1st–2nd century.

Incidence: Single vessel from R1/2.

- 102.129** Hard dark grey ware, possibly overfired. R1/2.

Miscellaneous jars (Nos 130–33)

These are principally large oval-bodied jars but precise details of their forms are obscure. Parallels are given where they are felt to be merited.
Incidence: Rare.

Dating: 1st–2nd century.

- 102.130** Fabric R2; Site R1/2.
102.131 Fabric R2; Site R1/2.
102.132 Fabric B1; Area 21, ditch 8212 fill [Cat 8085].
102.133 Fabric R2. A large vessel, cf Cam 285. Elm Park Site 2.

Miscellaneous small jars (Nos 134–5)

Miniature vessels cause some difficulties of classification, but these small jars are reminiscent of the Cam 266.

Incidence: Rare

Dating: 1st–2nd century.

- 102.134** Fabric; R1–2 Elm Park Site 2.
102.135 Fabric; R1–2 Elm Park Site 2.

Face Urns (No. 136) (Hull 1963b, 186, fig. 104)

(Sp Cam 287). Hull is our only record for this vessel, which is now missing. He described it as 'a rim sherd of a very large urn of fine hard grey ware with no polish. The rim outline compares with the Ardleigh wide-mouthed bowls ... [originally classed by Hull as the Cam] form 300 [see Fig. 98, Nos 45 and 46], but it must have topped a very large vessel of approximately globular shape, with a cordon at the neck, across which lies a horned face (or Pan) in very high relief. ... Grey face urns are not so numerous as those in buff ware...' For a recent survey of face and headpots see Braithwaite (1984). The appliqué face has horizontal eye slits and two small projections resembling *cilia*. Hull argued that these were horns and that the figure was a possible Pan-mask, but it is possibly a blundered Mercury.

Incidence: One vessel only, from R1.

- 103.136** Fine hard grey ware with no polish. [Roman site 1]. Now missing.

Miscellaneous

Cam 199 (Nos 137–140) (Hull 1963b, 183)

The 'Cheese press'. The function of these enigmatic vessels remains as obscure as ever. Possible kiln manufacture was also noted at West Stow.
Dating: Probably 2nd century AD.

Incidence: Rare, from site R6 and Elm Park Sites 2, 4; Elm Park Kitchen Gardens site.

- 103.137** Fabric R1. Elm Park Site 2.
103.138 Fabric R2. Roman 6 (Trench A).
103.139 Fabric R1. Roman site 6.
103.140 Fabric F1. Area 7, ditch 1003 [Cat 1142].

Lids (Nos 141–48) (Hull 1963b, 175)

Hull found the lids at Ardleigh 'dully monotonous' and felt that there was 'little to gain from them'. They are rare and display little in the way of typological development, but most belong to a basic form with either a plain rim (141–4) or one with a slight beading (145–7). No. 148 was manufactured with a steam vent, which is not a particularly common feature.

Incidence: Produced at R1 and R2, also found at sites R6 and 7 (trench B), also found in e.g. Areas 7, 8, in 1003. Probable kiln products are represented in most of the dumps.

Dating: Probably later 1st to mid-2nd century or shortly after.

- 103.141** Fabric R3. Area 8, ditch 1968 [Cat 2095].
103.142 Reddish grey with dark flecks. Fabric R2, Site R6.
103.143 Fabric R2. Area 8, ditch 2196 [Cat 2179].
103.144 Fabric R2; Site R1.
103.145 Underfired fabric R2. Site R1.
103.146 Fabric R2. Site R1.
103.147 Underfired Fabric R2, Site R7 (trench B).
103.148 Fabric R1; Area 7, ditch 7150 [Cat 7239].

A brief history of the Ardleigh Roman Pottery Industry

Economically at least, the fortunes of the Ardleigh pottery industry must have been closely linked with that of the much larger production centre at Colchester, which lay just an hours' travel, some five miles to its south-west (Hull 1958; 1963). However, while their development and eventual fate appear to have run along similar lines, there is no evidence that the smaller site at Ardleigh was a mere satellite of the other (the pottery exhibits its own stylistic 'grammar', suggesting different potters), or that the two were necessarily rivals.

Manufacture of ceramics on any scale in this area of Essex must have begun in the later pre-Roman Iron Age. The site lies within Thompson's (1982) style zone 2, (North East Essex), which is characterised by forms and fabrics first encountered *en masse* at Sheepen. The most recent excavations, however, do not shed much light on the beginnings of the Ardleigh industry. Some putatively locally manufactured Late Iron Age products were discovered: the pre-conquest assemblage from 7671 for example, certainly produced some locally manufactured forms, but there is no unequivocal evidence of pre-conquest production and the question of just how early on large-scale manufacture began at Ardleigh remains obscure.

The earliest unequivocal production waste at Ardleigh is represented by the small pre-Flavian assemblage in Area 21 ditch 8212; a dump of material from which came some platters (Corpus Nos 1–2, 4), Cam108 beakers (Corpus Nos 59–60, and 67) and Cam 218 jars (Corpus Nos 79, 88). Later 1st-century production evidence is represented by waste dumps in Area 7 ditches 1003, 1003/5, and ditch 7150 and 8025 in Area 2, which contain essentially the same forms. Possibly slightly later in date, and belonging — at least in their inception — to the Flavian-Trajanic period are the dumps from the ditches at R6, and probably also R7, both of which produced fine wares imitating samian forms (see Corpus Nos 56–58). The dump at R7 appears to have continued to accumulate into the Antonine period, the earliest likely date of the Cam 37 dish (Corpus No. 15), which came from it. The evidence of the

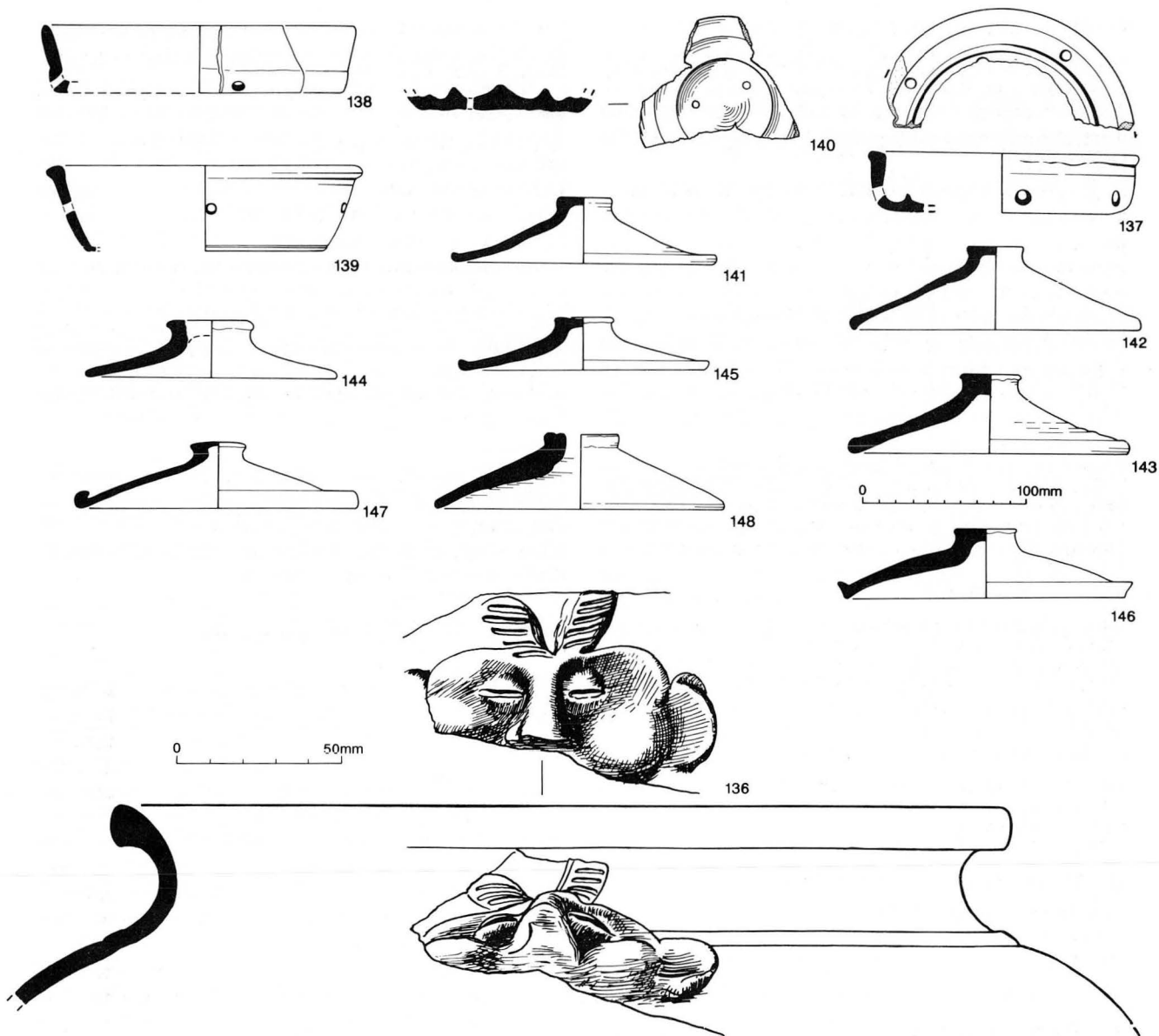


Figure 103 Ardleigh Roman pottery: kiln products

excavated kilns themselves is slightly more equivocal. Area 7 kiln 7375 produced little dating evidence but it was constructed in ditch 7012, pottery from which suggests it was open in the latter half of the 1st century AD and into the early 2nd. This is probably current with the life of the kiln. This is also the most probable construction date of the robbed kiln [Cat 8162] in Area 21.

The Romano-British pottery forms manufactured at Ardleigh, as we have seen in the discussion of them, are very closely linked stylistically with those of the Colchester potteries and the clays are also very alike, being derived from what in geological terms is virtually identical material. Hull noted that the Ardleigh potters, in contrast to those at Colchester, used to add an organic material, which he thought was possibly sawdust, to the paste, presumably to improve its refractory qualities, but this is not a consistent trait. It is not likely to be possible to distinguish between them on fabric grounds, and assigning products to either production centre will probably rest on nuances of form and decoration as well (for example, although the fabrics are not particularly informative the

lattice-decorated bowls are a highly characteristic, perhaps exclusive, Ardleigh form).

Hull, who was more familiar with the pottery from the two sites than anyone, has remarked on the occurrence of probable Ardleigh wares at Colchester, and in retrospect some of the pottery noted by the writer at Chelmsford, especially vessels among Chelmsford fabric groups 39 and 45 (Going 1987, 8–9), seem in retrospect more likely to be products of the Ardleigh kilns rather than from Colchester (for the basic supply pattern to Chelmsford, and thus probably central Essex as a whole during the later 1st to the 2nd centuries AD, see Going 1987, 110–12, figs 52–5). Most notable among possible candidates are some vessels from the later 1st-century AD deposits on Chelmsford site 'S' (see Going 1987, especially fig. 22.59; fig. 24.123–4), and the exemplar of Chelmsford beaker type H1 3/1 (Going 1987, fig. 13). Elsewhere in Essex, a trifid-rimmed neckless jar from Great Dunmow (Going and Ford 1988, fig. 56.48) may be identified as a characteristic Ardleigh type (see Corpus Nos 122–8). But there is much stylistic overlap between the two centres and

the matter remains one of nice judgement. Indeed, the fabric classifications in the Colchester pottery report (Symonds and Wade forthcoming) do not distinguish Ardleigh fabrics from the broader 'Romanising' grey ware, and grey ware fabric groupings (fabrics GX and UX, respectively).

It appears that later 1st-century AD pottery production at Ardleigh is centered on the basic 'trio' of vessel classes: the platter in its various 'developed' native guises; the globular neckless beaker/jar (*sp.* Cam 108); and the high-shouldered jar (Cam 218). By the end of the 1st century more forms had been added to the range and we can see the emergence, as at Colchester and West Stow, of a fine ware repertoire which included bowls loosely based on the samian forms 29, 30 and 37 (types manufactured at several sites as an attempt to augment declining South Gallic samian supplies), and new beaker forms, including poppyhead beaker and other types decorated *en barbotine* (such as the Cam 119 jar, Corpus No. 77) for which, interestingly, good production evidence at Colchester is still lacking.

Relative production levels remain extremely difficult to establish, of course, but there is some evidence that after the Flavian-Trajanic period pottery production declined at Ardleigh. This is evidenced, most significantly, by a general lack in the dumps found so far, of the early bead-rimmed dish, the Cam 37 (*one* was found in the dump in ditch R7). Now if the site was producing pottery in substantial quantities at this time one might expect to see this form, a highly characteristic product in BB2 and in other related fabrics, in some numbers among the ditch dumps at Ardleigh.

There is clearer evidence for an increase in production during the Antonine period. The bead-rimmed Cam 38 dish, which probably replaced the Cam 37 around AD 160, is rather more common and this suggests that production is picking up. Other characteristic forms of the middle 2nd century and after include the later Cam 266 and 268 (*cf.* especially Corpus Nos 112–14). The latter form is especially common during this period. At this time the Colchester potteries, too, entered their *floruit*, marketing their fine wares and mortaria widely across Essex, East Anglia and sometimes beyond.

Post-Antonine, *i.e.* 3rd century and later production is much more difficult to discern at Ardleigh. There are some sherds of folded beakers of Cam 406, (*e.g.* Corpus No. 73 from kiln 2, (site R2)), and some of the narrow-necked jar types, particularly those with burnish-line decoration (*e.g.* Corpus Nos 104–5), suggest that production continued into the 3rd century, when several ceramics production centres, including Colchester, appear to have come close to grief or to have collapsed altogether during the so called '3rd century decline'.

This enigmatic episode obscures much of our knowledge of the later production history of many ceramic production sites. During this period, to put it at its simplest, numbers of major producers appear to have substantially diminished production levels and entered a period of stylistic conservatism which makes dating early 3rd century strata a difficult matter (Going 1992, 99–100, fig. 1). From around AD 240/50 onwards ceramics production appears to have revived, and during the latter part of the century numerous vessel forms are added to the production repertoires and many settlement sites show evidence of supply shifts, presumably because the collapse

or near-disappearance of formerly important production sites made it necessary to obtain new sources of supply.

Rodwell (1982) felt that Colchester production might have been stifled by 'Severan expropriations', but this does not explain the continued enfeeblement of the ceramics industry there several decades later. Nor was Colchester the only site affected. Ray Farrar long ago noted that while there was post-mid-3rd century revival of ceramics industries elsewhere, the BB2 production centres, traditionally thought to be sited in Essex (on the north bank of the Thames, if not at Colchester) remained in a debilitated state (Farrar 1973, 101).

While Rodwell questioned whether Colchester colour-coat production lasted '*after, or even as far as, the mid third century*' (Rodwell 1982, 53, also 54–5), and Swan also expressed doubts about the longevity of Colchester manufacture (1984), production did not disappear entirely, although the Colchester industries never recaptured the importance that they enjoyed in the 2nd century AD. Hull dated his latest kilns, (Nos 7–11, 25–6, 32 and 33) to the later Roman period, and Rodwell's (1982) table 1 implies that pottery production outlasted the 3rd century. Colchester Kiln 25 may not have been backfilled before the mid 4th century, for it contained undoubted Oxfordshire oxidised wares, not current in the region until the 4th century (Hull 1963b, fig. 89.7). However the fact of pottery production at Colchester in the 4th century is not necessarily an indicator of economic vitality: it is extremely doubtful that production endured on any large scale. For example, what Hull called the 'commonest vessel in Roman Colchester' (the Cam 268B) was no longer evident on 4th-century levels at the Colchester/Kent Blaxill site, and there are other signs that ceramics were only fitfully available within 4th-century AD Colchester. Perhaps the most important evidence is funerary: at Butt Road, a proportion of the 3rd/4th-century inhumation burials which were accompanied with pottery grave-goods (see Going 1994, 23, 47–8) contained vessels which were certainly not heirlooms, but which were two hundred or more years old. This unusual state of affairs strongly implies that ceramics were increasingly hard to obtain, even for ritual purposes.

It is now becoming clearer that the industries which failed to recover from the 3rd-century decline were primarily sited in eastern Britain, and that revival was strongest from the mid-3rd century onwards at production centres in the central and western regions of the Province, or among those with readier access to markets within these regions. The latter include the Nene valley and possibly Much Hadham, which began their expansion from regional and local producers into major later Roman players at about this time.

With this image of regional ceramics manufacturing decline in mind — a pattern which also evident in Kent in the later Roman period — we may reconsider the picture at Ardleigh. The latest form for which there is *manufacturing* evidence on the site, as opposed to a mere presence, is the Cam 407 (see above). This form, which Hull regarded as post-dating the main run of colour-coated production at Colchester (Hull 1963b), is evident here only in a coarse fabric. It is probably datable to the mid-3rd century AD or slightly later. But if one looks for more characteristic post mid-3rd century forms, firstly in the putative waste assemblages and then in the site assemblage as a whole, the evidence is largely absent.

The later versions of Cam 407, with their elongated, 'funnel' necks (e.g. Hull 1963b, fig. 107) are lacking, while Cam 305A, the incipient flange-rimmed successor of the developed Cam 38 is not present in *any* of the production assemblages, and barely present on the site as a whole. The characteristic Cam 305B, successor of Cam 305A does not occur in unequivocal kiln fabrics. The lack of this form, a staple product which was probably in production at Colchester in the period c. AD 225–50, and the absence of contemporary waste dumps containing other material is hard evidence that by now pottery production at Ardleigh was at an extremely low level, if not altogether ended by AD 240.

It would seem, therefore, that ceramics production at Ardleigh was in its *floruit* during the *Haut Empire* (to use the useful Continental period division), rather than during the later Roman period with two principal periods of major manufacture: the later 1st century (c. AD 60–110/20), and the period c. AD 150–200. This corresponds reasonably closely to what is known of the principal ceramic production trends at Colchester and indeed, also fits the national production trends outlined in Going 1992 (fig. 1).

There can be little doubt that had they been in outright competition with it, the Ardleigh potters would always have found themselves at a disadvantage in comparison with those at Colchester, who had an established market immediately close by, a road network which radiated in all directions from the *Colonia*, and easy access to water transport, some of which at least, was London-bound. Only during the generation or so after the Boudican revolt, could Ardleigh have wrested the initiative from their temporarily prostrate neighbour, and it is perhaps not entirely coincidence that it is during the later 1st century AD and the early 2nd century that probable Ardleigh products appear to have achieved their widest distribution, appearing at Chelmsford and Great Dunmow in central Essex. However unlike the BB1 production centres of the Poole Harbour area the Ardleigh potters appear to have secured no lucrative Army contracts to sustain them and when the Colchester potteries began their 2nd-century rise, they found themselves too unfavourably sited to prosper. From this time on the Ardleigh pottery must have been condemned to play a very minor role in the total production in the region and when Colchester suffered a decline in its fortunes Ardleigh, with narrower margins, probably stopped production.

Ardleigh, then, appears to suffer like other eastern industries from an economic downturn which in the east was prolonged. The collapse of some producers does not imply the disappearance of pottery manufacturing in the region as a whole, however: there were local kilns producing pottery in the 4th century, e.g. at Rettendon (Tildesley 1971), Inworth (Going 1987, 82–9) and at Moulsham Street in Chelmsford (Going 1987, 73–8), but these late production sites are fairly isolated entities. Above all they are small scale. They do not imply a flourishing local market; rather, they indicate that a substantial part of Roman Britain could no longer sustain large scale pottery production, which raises questions about how large a proportion of the later Roman population even *used* ceramics.

VIII. Fired Clay

by H.J. Major

Salt Briquetage

There was a total of 281 sherds of salt briquetage from the site, weighing 5891g. They came from 129 contexts, with only 14% of these contexts containing more than two sherds. The material appears to consist solely of vessel fragments. There were a number of rims, with straight or obliquely cut tops, one with a groove along the top, and a rounded rim from 7639, ditch 7424. This rim shape is somewhat unusual for briquetage, which normally has more squared rims. The fabric is standard for briquetage, usually red in colour, often with a pinkish or purplish tinge, and with fairly heavy vegetable temper.

The distribution of the briquetage was analysed to see whether there were any significant concentrations, or whether the material could be regarded as fairly uniformly distributed over those trenches which contained briquetage. The results showed that the only part of the site with a significantly larger than average amount of briquetage was Area 23. All except one sherd from this trench came from a single context, 7592 (fill of ditch 7857), and this was the largest group from the site as a whole (47 sherds, weighing 754g).

Ardleigh has already been noted as an inland site with finds of briquetage (Barford 1990). However, the material from these trenches adds considerably to the amount of briquetage previously noted (six sherds.)

Baked Clay Objects

Triangular Loomweights

(not illustrated)

Fragments of triangular loomweights came from Areas 7, 8, 20 and 21. The distribution of this common Late Iron Age artefact in Essex is discussed by Major (1982). The loomweights from Ardleigh are fragmentary, and none have been illustrated; however, all examples with any measurable dimensions are listed below. Besides these, fragments (some dubious) also came from contexts 1142, 1577, 2036, 7393, 8016 and 8117.

The fragments from 8115 (kiln 7375) are of some importance. Thought by the excavators to be kiln waste, they presumably represent rubbish which has been dumped into the disused kiln. Assuming that they were not redeposited, it may be surmised from this that the Iron Age type of warp-weighted vertical loom was still in use at the beginning of the 2nd century. While it might be expected that the use of vertical looms would continue some way into the Roman period, direct evidence for such survival is rare.

- n.ill. About 200 fragments, probably all from the same object or type of object, probably a triangular loomweight, in a poorly fired fabric with moderate sand. The group includes some joining edge pieces and a fragment with a small perforation, diam. 8mm, at the right angle for a triangular loomweight hole. This size of perforation is small for a loomweight, but larger than the holes in the loomweight from context 8115. If this is loomweight, then it is probably a large but rather flat one. 4715g. (2179, ditch 2196, sub div 8).
- n.ill. Fragments from the apex of a triangular loomweight in a heavily vegetable tempered fabric. Width 59mm. 268g. (7846, ditch 7844, sub div 20)
- n.ill. Two definite and six probable fragments of triangular loomweight in a soft fabric with moderate sand. The group includes an edge fragment, and a perforation, diam. 10mm. 302g. (7952, ditch 7951, sub div 20).

- n.iii. Fifty fragments, probably all from triangular loomweights, in a poorly fired fabric with few inclusions. Reconstruction was difficult, as the material had not been washed. There are parts of at least two loomweights of similar size. The largest piece has perforations through two corners, and, if symmetrical, would give a side length of c. 160mm with a width of 85mm. The holes are unusually small, only 5–6mm in diameter. One piece has a saddled apex. 3598g (8115, 'Rake-out' from kiln 7375, sub div 7).
- n.iii. Triangular loomweight fragment, with part of a hole present. Original width c. 60mm. 64g (8189, backfill, sub div 21).

Slabs and Belgic Bricks (not illustrated)

Five possible slab fragments came from Area 5, and one from fieldwalking. At least one may be overfired Roman tile, but the others could be Bronze Age or Iron Age in date.

There were also three fragments of possible 'Belgic Bricks', two of them from fieldwalking and the third from context 8045. The only fragment with any measurable dimensions was a rectangular or tapering block, 44mm wide (from fieldwalking).

Other objects (not illustrated)

In addition to the objects listed below, there were possible fragments of a structural daub from contexts 2179 and 8060, and a possible object fragment from 8047.

- n.iii. A quarter of a cylinder with a roughly flat base, in a sandy grey fabric. Possibly kiln furniture. Diam. 98mm, surviving ht. 117mm. 552g. (2273 pit 2266 sub div 8).
- n.iii. A fragment with slag on the surface, possibly the rim from a crucible. 2g. (7555, well 7683, sub div 20).
- n.iii. Fifteen fragments in a poorly fired fabric with moderate sand. Several pieces have surfaces, and one has a possible hole (which *might* have been made by the excavator), diam. 14mm. These are likely to be fragments from the kiln structure, probably the flue arch, but the material is in too poor a condition to be certain. 1056g. (8111 flue fill, kiln 7375, sub div 7).

Other Baked Clay

A total of 1139 other fragments weighing 12604g was recovered. Most had no surfaces surviving, and a full catalogue is available in the archive. The most common fabric present had sparse inclusions, and was generally poorly fired; a lesser amount was similar, but with more common sand. Few of the fragments had any indication of their derivation, although some had possible wattle marks, and others probably came from triangular loomweights. A small amount of the material from 8115 (the bulk of which was triangular loomweight, described above) may be from the kiln structure.

As with the briquetage, the distribution was analysed using the amount per ten square metres. The method used was similar to that for Essex County Council fieldwalking analyses, using the population standard deviation. The average plus one standard deviation is considered significant; plus two standard deviations, very significant. The aim was to see whether there were any significant concentrations of baked clay (excluding objects), which might suggest the proximity of buildings or other structures using clay, or whether the material could be regarded as fairly uniformly distributed over those trenches which contained baked clay.

Two areas had significantly more material than average, Areas 1 and 23. In Area 1, the baked clay came predominantly from a single feature, ditch 527. In Area 23, the larger than average amount of baked clay was accounted for by a single group from ditch 7857. This feature also contained a significant amount of briquetage, and one of the larger groups of Roman tile.

IX. Brick and Tile

by H.J. Major

A total of 769 fragments weighing 23,343g was recorded. It included both Roman and post-Roman (probably all post-medieval) brick and tile. Few contexts contained any amount of brick and tile, out of a total of 276 contexts with brick and tile, only fourteen contained ten or more fragments. Of these, seven were ploughsoil, one was backfill of Area 21, two were post-Roman layers and two post-Roman spreads. Of the Roman contexts only two had ten or more tile fragments, 1187 (Area 7) and 7468 (ditch 4857, area 23), with ten and eighteen fragments respectively.

Roman tile was not a major component of the site assemblage, and there are no individual tiles of any particular interest. The normal range of roof and structural tile was present, including four small fragments of box flue tile. Three areas contained significantly more Roman brick and tile than average, Areas 7, 8 and 20. In all these areas, this was due to there being single features with larger amounts of material, and not to the presence of more tile than average in the area as a whole.

Areas 4, 5 and 10 had significantly more post-medieval brick and tile than normal. In all these areas, the bulk of the material came from the ploughsoil, which in the case of Area 10 had been sieved.

X. Textile Remains

by E. Crowfoot

Metal objects from two of the Roman graves (copper alloy brooch 10455, grave 651; iron brooch 10161, grave 636), and an iron nail (10532 context 776 ditch 764), preserved textile remains (full details in archive). Only two were sufficiently well preserved for identification (10455 grave 651, 10532 context 776 ditch 764), both seem to be three-shed (2/1 or 1/2) twill weaves. This weave was found on one other Roman site in Britain, in the Trajanic hoard at Corbridge, Northumberland; six examples are recorded from Mainz, Germany (Wild 1951). All these are of wool, spinning Z in both systems as here, but the weaves rather coarser: Corbridge 10/8 threads per cm and the Mainz pieces ranging from 8–10/6–10 to 13/13 per cm.

XI. Cremated Bone

Twenty cremations recovered by CEU, together with fifteen from the earlier work, are reported by S.A. Mays. In addition brief comments on some of the bone from the CAG ring-ditch excavations, originally published in the Group's Bulletin are included; together with a summary of the report on the burials recovered in 1974 (Couchman and Savory 1983).

Cremated bone from CEU excavations, and unpublished bone from earlier work

by S.A. Mays

Introduction

The site is a large Bronze Age cremation cemetery. Ring-ditches indicate the former presence of round-barrows (see Part I). In the present report bone from thirty-five burials is examined. Fifteen were recovered by Felix Erith the late 1950s (Erith and Longworth 1960), and

<i>All burials</i>				<i>Adult burials only</i>			
N	Mean	Std dev	Range	N	Mean	Std dev	Range
12	271.1	337.7	13.4–1183.6	9	340.1	366.7	52.2–1183.6

Note: in three burials bone weights were not determined because remains were received mixed with large quantities of extraneous material

Table 4 Weights of bone (in grams) from 1959–60 urns

represent all the bone from the original excavations which can currently be located at Colchester Museum.

Two parts of the cemetery were excavated in 1979–80 by the CEU. Area 5 yielded a large ring-ditch, within which were several Roman inhumation graves and one Bronze Age cremation. Due to the nature of soil conditions on site, no bone survived from the inhumations. Area 7 yielded nineteen cremations. This was part of the same area worked by Erith twenty years before. The cremations probably represent some combination of un-urned burials not located by Erith and remaining bone from urned burials which were lifted in the 1959–60 work. This last means that some of the 1979–80 material could actually be from the Erith burials studied in this report (*i.e.* there may be duplication of some individuals). However by studying the locations (as far as they are known) of the particular burials which survive from the 1959–60 season this seems unlikely, although the possibility cannot be completely excluded (N. Brown pers comm.). For the purposes of analysis it is assumed that no such duplication is present.

Methods

Age and sex were inferred where possible. In sub-adults age was estimated from epiphyseal fusion (Flecker 1942) or simply from the general size and robusticity of the bones. In adults, cranial suture closure (Perizonius 1984) was used to provide a very approximate indication of age at death. In adults, sex was inferred, where possible, from dimorphic aspects of the skull and pelvis (Brothwell 1981), otherwise from the general size and robusticity of the skeleton. No attempt was made to sex sub-adults.

For the 1959–60 material, the weight of bone from each burial was determined, and the mean fragment size estimated. Due to the nature of the 1979–80 remains, it was not thought worthwhile to determine precise figures for these parameters here, however approximate weighings were obtained as part of the assessment of this material, and these are given in the catalogue of burials, largely for the sake of completeness. The burials were scanned for burnt animal bones but none was found.

Results

The results are given in full, burial-by-burial detail in Table 5. Only a summary is presented in this section.

(i) Demography

There were twenty-one adults (*i.e.* individuals aged over about eighteen years), of which six were probably male, five probably female, the rest could not be sexed. There was one adolescent/adult, and nine sub-adults, of which at least two were under about two years old. In four instances neither sex nor age could be determined.

(ii) Quantification of the cremated bone

Summary statistics for weights of bone from the 1959–60 urns are given in Table 4.

On combustion, an adult corpse yields about 2.0–2.5kg of bone (Trotter and Hixon 1974). The Ardleigh burials are therefore substantially incomplete. A number of factors may be playing a part in this but it is not possible to determine which is the most important. Any bone deposited outside the urn would not have been lifted by Erith, and he excavated the contents by hand so smaller fragments may have been overlooked. In addition, some bone may have suffered destruction in the soil, and collection of remains from the pyre for burial in antiquity may have been incomplete.

Bone colour and firing temperature

Shipman *et al.* (1984) demonstrated that bone colour varies with firing temperature. The fragments from Ardleigh were, almost without exception, neutral white in colour. If Shipman and co-workers' results can be used to infer temperature, this means that the pyres reached in excess of about 940°C. This is similar to temperatures attained in modern crematoria (Wahl 1982). That such high temperatures were reached should not surprise us – Stiner *et al.* (1995) have shown that temperatures of 900–1000°C are reached in ordinary camp-fires, and once ignited, body fats may burn very fiercely – temperatures in excess of 1000°C may be attained (Henderson *et al.* 1987).

The uniformity of colour might be taken to indicate uniformity of firing of the corpses. The degree of uniformity is perhaps surprising; bones tend to shatter on heating and fragments fall to hotter or cooler parts of the pyre; this would be expected to produce fragments of varying colours, reflecting the varying temperature in different parts of the pyre. Although there is little doubt that high temperatures were reached, the uniformity of firing at Ardleigh may be illusory. Thoroughly cremated bone survives well in the soil even when, as at Ardleigh, unburnt bone does not. Perhaps at Ardleigh, poorly fired bone fragments failed to survive in the soil, leaving the well fired material as the only surviving human remains from these burials.

Bone from CAG Ring-ditches

(from Spencer in Erith 1961b)

Ring 2

Burial A. Bones lost

Burial B. Two individuals ?adult female ?young child

Ring 3

1. Bones much comminuted. Phalanges indicate adult and child; presumably mother and child. The only teeth were those of the child: germs of two canines and pieces of pre-molars, part of an incisor. Pyre: thorny brushwood.
2. Remains of a child.
3. An exceptionally effective cremation, evidently of an adult, possibly female.
4. Multiple cremation. Three fragments of an old adult, male. Fragments of skull of female. Fragments skull *etc.* of child. Vertebrae *etc.* of adult and juvenile.

<i>Context</i>	<i>Sex</i>	<i>Age</i>	<i>Mean frag. size (mm)</i>	<i>Estimated no. of frag.</i>	<i>Weight (g)</i>
Erith and CAG excavations					
<i>D14</i>	Male	17–19 years	20	1200	153.4
<i>E1</i>	Unknown	Adult	18	100	52.2
<i>D16</i>	Male	Adult	15	200	102.1
<i>A7</i>	Unknown	Adult	15	1000	-
<i>A8</i>	Unknown	Adult	15	6000	1183.6
<i>A9</i>	Unknown	Unknown	10	250	131.0
<i>B7</i>	Female	Adult	15	200	76.8
<i>D13</i>	Unknown	Adult	15	100	-
<i>D25</i>	Male	Adult	18	1200	514.5
<i>E2</i>	Male	Young/Middle Adult	20	1200	529.9
<i>E3</i>	Unknown	Infant/Young Child	15	35	13.4
<i>F1</i>	Male	Older Adult	20	500	289.1
<i>G4</i>	Unknown	Adult	25	40	59.5
<i>H6</i>	Unknown	Child	8	1000	-
<i>H17</i>	Unknown	Child	15	100	47.1
1979–80 excavations Area 5					
<i>750</i>	Unknown	Adult/Adolescent	8	50	12.5
<i>Context</i>	<i>Sex</i>	<i>Age</i>	<i>Approximate quantity of bone</i>		
1979–80 excavations Area 7					
<i>1195</i>	Unknown	Adult	171g		
<i>7132</i>	Unknown	Juvenile/Infant	A few fragments		
<i>7145</i>	Unknown	Infant	A few fragments		
<i>7147</i>	Unknown	Young Adult	298g		
<i>7168</i>	Female	Young Adult	288g		
<i>7194</i>	Unknown	Unknown	A few fragments		
<i>7196</i>	Female	Adult	70g		
<i>7213</i>	Unknown	Child	150g		
<i>7217</i>	Unknown	Unknown	20g		
<i>7238/7239</i>	Male	Adult	48g		
<i>7241</i>	Unknown	Unknown	30g		
<i>7243</i>	Female	Adult	200g		
<i>7245</i>	Female	Young Adult	690g		
<i>7247</i>	Unknown	Adult	240g		
<i>7249/7250</i>	Unknown	Child	167g		
<i>7270</i>	Unknown	Child/Adolescent	160g		
<i>7291</i>	Unknown	Young Adult	230g		
<i>7310</i>	Unknown	Infant	20g		
<i>7368</i>	Unknown	Adult	20g		

Key: Approximate age ranges are as follows:
 Infant, 0–2 years; Child, 2–12 years; Adolescent, 12–18 years; Young Adult, 18–35 years; Middle Adult, 35–50 years; Old Adult, 50+ years.

Table 5 Catalogue of burials examined by S.Mays

5. Remains of teeth of child; also finger bones (or toes). No determinable bones of any older person. Possibly more than one child; one an infant.
7. Adult and juvenile bones (phalanges) indicate a possible mother and child cremation. Part of the child's maxillary is preserved.
8. Bone fragments of young adult. Roots of incisors. Centre of vertebrae of infant. Mother and child burial?
9. Remains of child. No evidence of more than one individual.
10. Remains of young infant only. Charcoal suggests brushwood pyre.
11. (Free burial, not in urn). Another multiple cremation. Adult bones; vertebrae, limb bone and cranial. An unusual terminal phalange. Juvenile bones; maxillary, humerus, distal epiphysis, phalangeals. Skull and other fragments of child about six years, and of a baby. Right condyle and mandible of a female.
14. Infant; roots of milk teeth recognisable.
15. All the bones (of which few survived) are the remains of a child. Brushwood used for the pyre. (This urn contained three other pots, one within the other).
17. Adult and child. Maxillary, part phalanges, skull fragment of adult. Part of bones of child.
18. Pieces of cranium only; adult.
19. Skull fragments of a juvenile. No fully mature bones.
20. Cremated remains of a child aged about seven years. Many bones recognised: top of femur, radius, earbones, basioccipital *etc.* Teeth include a pre-molar with roots developed, germs of incisors and milk molars (five represented). The child wore a pendant, a canine tooth of young pig, pierced for suspension (Couchman 1975). This urn also contained a curved strip of bronze about 1½ inches long, possibly part of a bracelet (Couchman 1975).
21. Primary cremation in a 'Bucket' urn. No sign of bones of a fully adult individual. Teeth: incisors, canines and pre-molars. Parts of maxillary and mandible of juvenile. Some very fragile fragments may represent a very young baby but no piece large enough to determine. Probably the remains of a 'teenager' and a child with milk teeth.
22. One piece of cranium of an infant. Small bits of charcoal.
23. Charcoal and shell fragments. No bones at all.
24. (Free burial, not in an urn). Adult, probably male.

Ring 4

Cremation "A". Fragments of bones are abundant and some of size, amongst which is an unusually large portion of a female skull, adult. Some of the phalanges are partly preserved. There are also remains of an infant, including part of a jaw bone with well preserved sockets of the incisors and an eye-tooth. The child was about two years of age. Oak appears to have been used for the funeral pyre some pieces of charcoal are included. Presumably not mother and child.

Cremation "C". The remains of a child, but no means of determining the age. There is nothing well enough preserved for comment.

Cremation "B". Remains indicate a child of about eight years of age. Only the root of an incisor tooth is well enough preserved for comment. Is not large enough to have belonged to an older individual.

Cremation "D". Only a few pieces of bone preserved on which no comment is possible.

Bone from Martell's Pit burials (from Denston in Couchman and Savory 1983)

Unurned cremation: Two individuals one adult ?male, one child.

Urn A: One adult ?female

Urn D: One individual ?immature

Urn G: One individual ?immature

Part IV. Discussion: Burials, Boundaries and Settlement at Ardleigh

'Lastly, a late Bronze Age culture, localized in south Britain, which had no direct influence, so far as we know at present, on Highland Zone peoples, is represented by burials with "Deverel-Rimbury urns"... It is an urnfield culture with little or no visible sign above ground: but small earth-heaps long ago flattened out, no doubt originally marked most of the burials, and such urnfields occasionally show little barrows... The contemplative mind, reflecting on the culture sequence in Middle Bronze Age Wessex and the influence this must have had on all Britain, will have little use for these late urnfields!'

Life and Death in the Bronze Age (Fox 1959)

I. Introduction

Burial evidence of various kinds and periods dominates the archaeological record at Ardleigh. The nature of the cropmark complex, and the placing of the CEU excavation trenches to date and explore the relationships of the major linear cropmarks, has augmented this with information regarding a variety of boundary features. Acid gravels precluded bone recovery, and neither samples for carbonised plant remains nor samples from the waterlogged lower fills of wells were taken; evidence of the agricultural economy is therefore limited. This is perhaps the major contrast between the excavations at Ardleigh and other landscape projects undertaken in east Essex during the 1980s (e.g. Wymer and Brown 1995, Wallis and Waughman 1998). With the obvious exception of the Iron Age enclosed roundhouse, evidence of houses, their ancillary structures, storage pits *etc.* is almost entirely lacking within the excavated areas at Ardleigh. In consequence, as the title of this section suggests, settlement at Ardleigh must be approached through study of burials and boundaries, which are themselves often intimately connected; and provide an underlying theme for the discussion which follows.

II. Neolithic

Large scale investigation of gravel areas in Essex almost inevitably reveals evidence of earlier Neolithic activity (e.g. Brown 1988a, Wallis and Waughman 1998). Given the scale of later settlement and burial at Ardleigh, the Neolithic evidence is, unsurprisingly, highly fragmentary, comparable with that recovered from parts of the Roman town of Colchester (Crummy 1992a). A few fragments of pottery from undecorated bowls (above p.76) and some flintwork were recovered from Area 5 to the north of the cropmark complex, and a shallow pit, in Area 4, produced a single decorated rim of a Peterborough Ware or Mildenhall bowl (above p.76). Recently a rim sherd of a Mildenhall bowl has been recovered from excavations in Elm Park (Brown forthcoming). A flint axe has been recovered from ploughsoil north of Frating Road

(Couchman and Savory 1983) and two greenstone axes are recorded from north of the village (unpublished Hull manuscript, Colchester Museum Records). It appears likely that these rather sparse finds may derive from shifting settlement and/or successive reoccupation during the Neolithic period. Occupation, apparently of this kind, has been better preserved at a number of other sites in east Essex (Holgate 1996).

III. Bronze Age

A Beaker apparently deposited in a wooden box has recently been excavated in Elm Park (Brooks pers. comm., Fig. 104). Another Beaker (Clarke 1970, no. 225) was recovered during gravel extraction west of Slough Lane in 1944. An account of the discovery states that it was:-

'...found in Hutton's gravel pit at Martell's Hall in August 1944. By great good fortune, the mechanical excavator revealed it in the side of the pit and it was recovered by the operator, Mr J. Warren of Elmstead. Mr Warren has proved himself an acute and reliable observer. He says the vessel stood upright at the bottom of a round pit with rounded bottom, which could be clearly distinguished by its darker filling. The pit was five feet deep from the surface and its top, visible after the surface soil had been removed to a depth of two feet, was not more than four feet in diameter. There was nothing else in the pit.' (Unpublished Hull manuscript, Colchester Museum Records).

The pit appears to have been large enough to have accommodated a crouched burial, bone from which would not have survived in the acid gravel. These Beaker deposits may represent an early stage in the development of the cemetery complex which ran along the eastern edge of the stream valley (Fig. 104). With the possible exception of the Hutton gravel pit Beaker, two apparently empty pits adjacent to the ditches of rings 6 and 10 (Fig. 108 and below p.168) of a size appropriate to crouched inhumation burials, and perhaps the central feature within ring 5 (below p.171), the Ardleigh cemetery consists entirely of cremations.

Quarrying west of Slough Lane took place well before the discovery of the cropmarks, and the systematic archaeological recording which was developed at Ardleigh from the mid 1950s (above p.1). The evidence of Bronze Age burial is thus inevitably concentrated east of Slough Lane (Fig. 104). Although its full extent remains unknown, cropmarks and excavations indicate that the main cemetery complex extended across an area about 800m long by about 200m wide.

Area 7 of the CEU excavations was placed to examine part of the cemetery area, within the zone known to have produced many urns during Erith's original investigations. The extraordinary density of ring-ditches revealed within

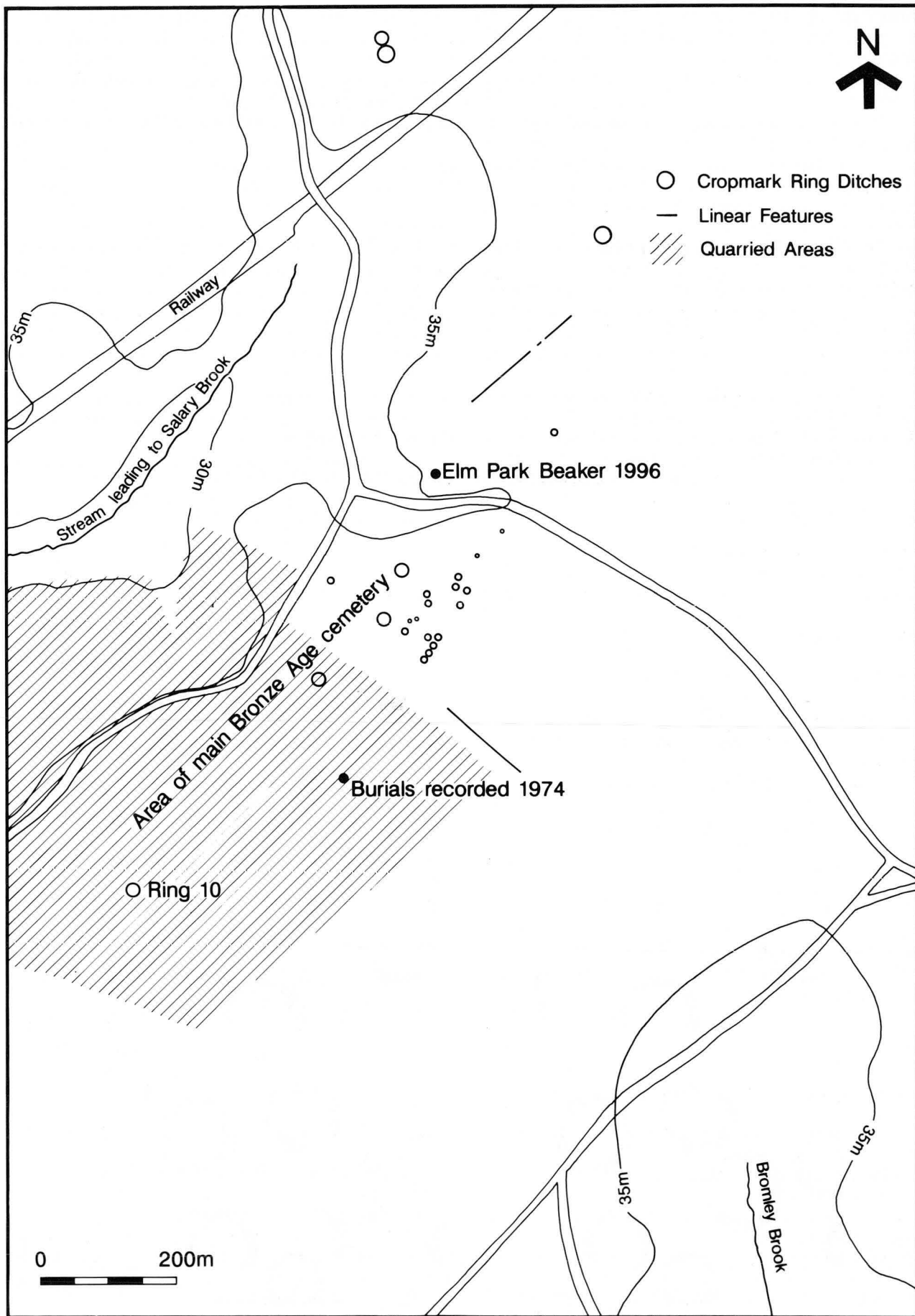


Figure 104 Major features of the Bronze Age landscape

Area 7 can be divided into four groups on the basis of diameter, width and depth of the ditches (above p.39), although all are at the lower end of the general range of ring-ditch dimensions (Lawson *et al.* 1981; Lawson 1986).

The division into size groups can be used to provide some insight into the layout and structure of the cemetery in Area 7, bearing in mind the principle of 'ordered adjacency' used by Garwood (1991) in discussing the barrow cemeteries of southern England. The four group 1 ring-ditches may have been constructed first, as they appear to form a focus for this area of the cemetery (Fig. 105.1). It is possible to suggest that, of these four ring-ditches, the earliest are 1033 and 7078 (Figs 24 and 105.1). They form a pair of close-set ring-ditches 1.3m apart, the remaining two ring-ditches of group 1 (1030, 1052) seem to be placed with regard to the first pair, and 1033 in particular.

The ring-ditches of group 2 lay west and south-east of ring 7078 (Fig. 105.2) and may have been constructed next. Three small beaker sherds were recovered from the east side of group 2 ring-ditch 7112, and the north-east side of the adjacent group 1 ring-ditch 7078 (above p.76 and Fig. 24). Three group 1 ring-ditches (7078, 1033, 1052), one of group 2 (7112), and ring-ditch 7248 (which lay only

partly within Area 7) defined a rectangular zone in the western part of Area 7 (Figs 24 and 105.2). Within this area numerous cremation burials were placed arranged in three clusters (above p.41, Fig. 24); these burials may have taken place over a prolonged period, during which the ring-ditches of groups 3 and 4 were added to the cemetery.

The precise sequence in which the ring-ditches of groups 3 (Fig. 105.3) and 4 (Fig. 105.4) were added is uncertain. However, it is clear that the spaces between the ring-ditches of groups 1 and 2 were infilled by the tiny ring-ditches of group 4 (above p.41), often only 3m in diameter. This further constricted the already narrow spaces between the various ring-ditches. The north-west corner of Area 7 was occupied by the densely packed ring-ditches of group 3 (above p.41, Fig. 105.3). These ring-ditches effectively blocked direct access through the gap between the group 1 ring-ditches 1024 and 1030. The ring-ditches of group 3 were so densely packed that in one case (1018) the ditches had to be 'flattened' to avoid cutting into another ring-ditch (1021) and leaving a gap between the two of under 1m (Fig. 24).

It is notable that each of the smallest group 4 ring-ditches had evidence for centrally placed cremation burials, whilst all the other ring-ditches had no clear indication of burial pits. Indeed, the majority had no

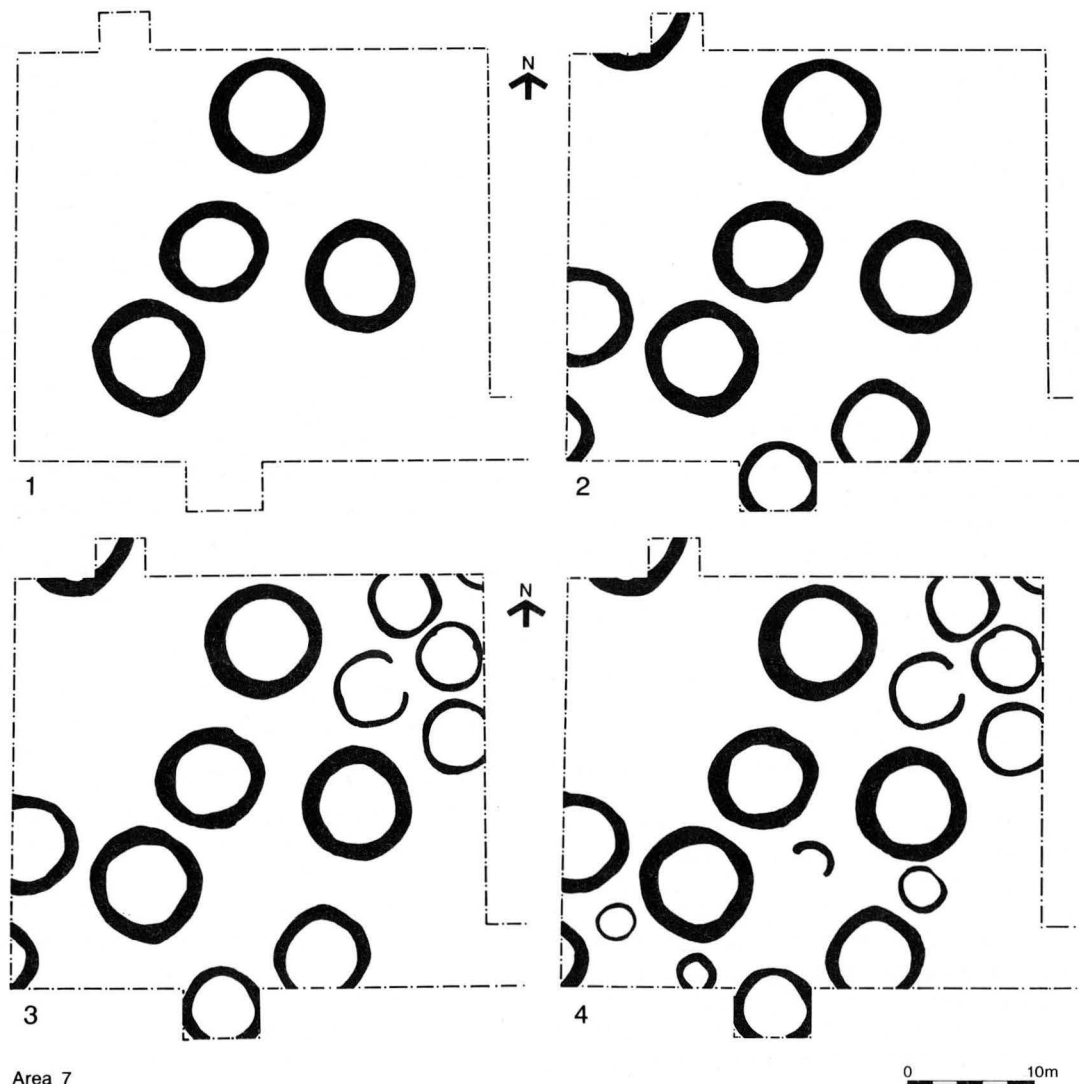


Figure 105 Suggested developmental sequence for the Bronze Age cemetery in CEU Area 7



Figure 106 Reconstruction of Bronze Age cemetery in CEU Area 7 as it may have appeared when in use

internal features at all. Unfortunately, plough damage had completely removed any evidence for internal mounds. Assuming that such mounds existed, they must have been quite slight, and any mounds within the tiny group 4 ring-ditches could have been little more than large heaps.

Many of the burial pits within the rectangular area defined by the ring-ditches of Area 7 are closely spaced but rarely intercutting. The instances where pits appear to cut each other (e.g. 7189/7203/7249/1257/4290/7160, Figs 24 and 25) are at least as likely to be the result of excavation by Erith to remove urns in the 1950s, followed by second excavation by CEU in 1979/80. The numerous urns recovered in the 1950s were also very closely spaced (Plate I, Erith and Longworth 1960, fig. 1), but only in two instances was intercutting observed. This led to the suggestion that there had been some kind of surface indication to mark the individual burials (Erith and Longworth 1960, 178–80). Burials recovered during rescue recording at Martell's gravel pit included an unurned cremation burial in a fairly deep pit, with an urned cremation cut into the top of the original burial pit (Couchman and Savory 1983, fig. 3). It seems unlikely that this relationship was fortuitous, rather a surface marker of the original burial, allowed the burial pit to be located and reopened for the insertion of the urned cremation.

An experimental burial of an inverted plastic bucket, carried out during the CEU excavations (Pls XXIX and XXX), indicates that a small mound would be left if the spoil from a burial pit were simply backfilled. Such a practice would explain the position of urn B1 (Erith and Longworth 1960, 180), which had apparently been buried in such a shallow pit that, without a mound, its base would have protruded above the ground surface. It is, therefore, possible that the burials within Area 7 would once have presented dense clusters of low mounds, rather like those described by Fox (above p.162). These low mounds over individual burial pits would, perhaps, have been accompanied by only slightly

larger mounds within the group 4 ring-ditches, with rather more substantial mounds within the other ring-ditch groups, the largest mounds being within the ring-ditches of group 1. Even these would have been relatively small and much smaller than many Bronze Age round barrow mounds, including in all probability other mounds within the Ardleigh complex (below pp 167–8).

Unfortunately, it has proved impossible to precisely locate the positions of burial clusters A–H recovered in the 1950s (Erith and Longworth 1960). Since it is known that all eight clusters occurred within the Long Eleven Acres field, it is clear that parts, at least, of clusters A/D/E must have lain within CEU Area 7. A position for A/D/E further north or south would mean some clusters falling outside the boundaries of the Long Eleven Acres. As noted above (p.41), the fills of many of the pits within Area 7 and the range and mixed nature of the finds, which often included modern material, led the excavators to conclude that these features were the locations of urns excavated by Erith. During preparation of this report, efforts were made to match the few diagnostic sherds of Bronze Age urns recovered by CEU to vessels excavated by Erith. No joins were achieved, but in one case sherds from one of the CEU pits appear likely to derive from one of Erith's urns. Sherds from CEU feature 7240 were similar in fabric and decoration to Erith urn E13 (Erith and Longworth 1960, and above p.76, Fig. 59.40). Although there were no joining sherds, the rather crudely incised decoration on the globular urn E13 is matched on the material from 7240 (Fig. 54.5). E13 has the stump of a single lug, the opposite side is missing and it may be that the stump of a lug from 7240 (above Fig. 54.5) came from this side of E13. If this is so, most of group E and part of group A would have been within Area 7. The roughly straight line between A4, D22, 24, E3, 5 to the south and A5 to the north might represent the line of Roman ditch 7150, and the gap between E4 and 6 would be the line of Roman ditch 1451 (Fig. 107).



Plate XXIX Experimental burial of bucket by CEU, a hole just big enough to hold an inverted plastic bucket was dug producing a small heap of spoil



Plate XXX When the spoil was shovelled back over the inverted bucket, a small conical mound was left marking the burial place

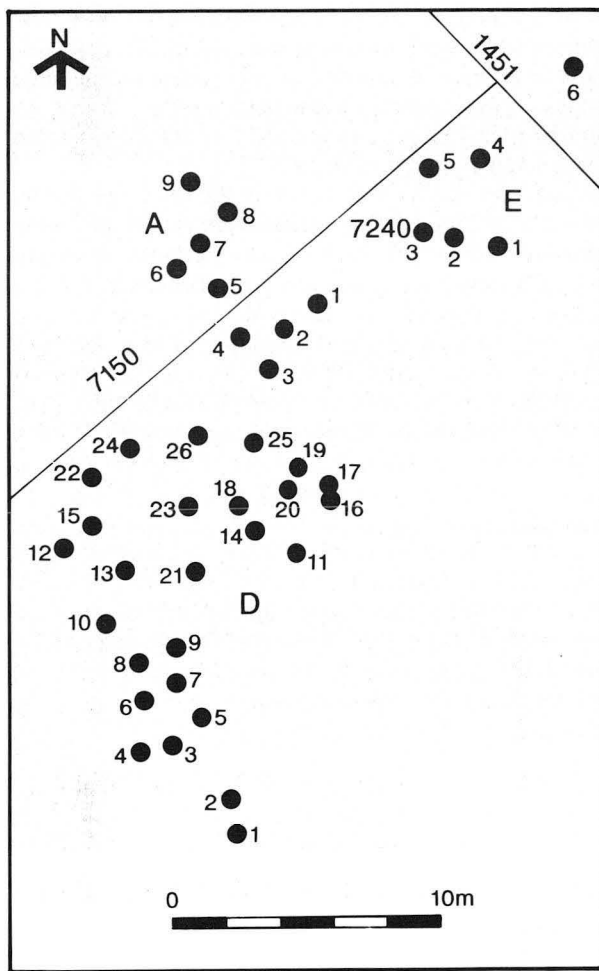


Figure 107 Possible location of Erith's original 'urnfield' finds of the late 1950s, in relation to two of the Roman ditches recorded in CEU Area 7. Four figure numbers are CEU features; letters, one and two figure numbers are from Erith and Longworth 1960 fig.1

The complexity of burial practice revealed within CEU Area 7 is even more marked, when the results of the CAG ring-ditch excavations are taken into account. Most of the cropmark ring-ditches excavated by CAG were larger than any revealed in CEU Area 7, although CAG rings 1 and 2 were only marginally larger than the Area 7 group 1 ring-ditches.

Erith's original reports of the CAG ring-ditch excavations show considerable interest in, and attempts to reconstruct, the original use, elaboration and subsequent destruction of these monuments. It seems possible that these interpretations were influenced by the then recently published works of Fox (1959) and Ashbee (1960). These commendable attempts to view the excavated evidence as the remains of functioning structures, reached their most complex form in the reports on rings 3, 6 and 10 (Erith 1961 a and b, 1962b, 1963). Ring 3 was the most elaborate of the ring-ditches excavated by CAG and the report includes a series of reconstructed sections with comments illustrating the suggested sequence of construction, use and destruction of the monument. The description of ring 6 has only the briefest account of the excavated features, followed by a rather longer interpretive description of the monument's use and destruction. The

suggested sequence was once again illustrated by a series of reconstruction sections. In this case, these were the only drawings included in the report. Similarly, ring 10 was only briefly described and illustrated by a small scale plan, presented as one of a comparative series of plans of ring-ditches excavated at Ardleigh and other nearby sites.

The comparative plans from the ring 10 report and the reconstruction sections of rings 3 and 6 are reproduced here (Figs 108–110) for comparison with the somewhat different interpretations outlined below. Erith's excavation reports (*e.g.* Erith 1960a, 52; 1961a, 34; 1962b, 107) stress the largely stone-free nature of the ditch fills of many of the ring-ditches, leading to the suggestion that mounds had been created from topsoil brought from elsewhere (Erith 1960a, 52). The stone-free ditch silts led Couchman and Savory (1983, 4) to suggest that some of the Ardleigh ring-ditches may have been '...flat ring-ditched enclosures' without mounds. The present soil at Ardleigh, after centuries of ploughing, is remarkably stony as a farmer Erith was particularly familiar with the Ardleigh soils, so to him the absence of stones in the ring-ditch fills would have been particularly striking. However, the soil profile may have been very different in the Bronze Age; for instance a prolonged period of pasture would have resulted in a largely stone-free soil. The underlying gravel would, of course, still have contained many stones; but instead of being dug entirely through a stony matrix, only the bottom 20–50% of the Bronze Age ditches would have penetrated the stony gravel. The bulk of the material dug out would have derived from a largely stone-free soil, and this may go some way to explaining the largely stone-free ditch fills which so puzzled Erith.

Ring 1 contained a central oval pit which had been filled with about 0.23m of '...stone-free soil' (Erith 1960a), which included a single pot sherd close to the bottom of the pit. Two large urns were then placed in the pit, their positions at the same level, and '...just gently touching...', leaving little doubt that the vessels were deposited at the same time. This pair of urns show the opposition of decoration which seems to reflect a deliberate choice when vessels or part of vessels were placed together (Brown 1995, 127). The urns were probably covered by a mound (Erith 1960a). This may simply have been a small heap, derived from backfilling the already partly filled pit, perhaps, augmented by material from the surrounding ditch. The fills of the ditch, although indicating an initial stony deposit, were largely stone-free (above p.17).

Potsherds apparently representing part of at least two other vessels were recovered during excavation of ring 1. The distribution of this material is of some interest and possibly indicates an element of deliberate deposition. A rather sparse scatter of sherds ran south from the centre of the ring-ditch (Fig. 8). Only one sherd lay north of the central burial pit. Further sherds were found in the south-west and north-east quadrant of the ditch (Fig. 8). This opposition of north-east and south-west quadrants is also reflected in the occurrence of charcoal within the ditch. Two disturbed areas of fill in the north-east quadrant were associated with charcoal flecks, whilst in the south-west a strip of wood ash '16 inches by 2½ inches by ½ inch deep' (Erith 1960a) may represent a burnt branch.

Ring 2 was of broadly similar dimensions to ring 1 (above p.17), with a central feature comprising a shallow depression about 1.3m in diameter and 0.1m deep. This was considered to be a manmade pit, but the section seems

to indicate that the hollow could just as easily be an undulation in the gravel surface. As with ring 1, two pots were placed within ring 2. However, in this case, they were not so clearly paired. An upright Globular urn was placed at the centre of the ring-ditch (above p.17). About 1m to the north-east an inverted bucket urn was placed within a fairly steep-sided pit filled with 'dirty soil' (Fig. 9). Although perhaps not as obvious as in some other cases, the 'opposition' of vessels found together may also be present here; a globular urn placed upright paired with an inverted bucket urn. Rather more potsherds were recovered from this ring-ditch than ring 1, apparently representing parts of at least three more vessels. This sherd material was fairly evenly distributed around the ditch silts, only a few sherds were found within the ring-ditch on the east side (Fig. 9). The barrow mound may have been similar to that suggested for ring 1.

Ardleigh ring 10 was rather larger than rings 1 and 2, but more severely damaged by ploughing, the ditch being only 0.75m deep. No sections were drawn (above pp 24–6) Only the base of a centrally placed bucket urn survived with a very small quantity of cremated bone. Two pits, 1.25m in diameter and 0.75m deep, were located equidistant 1m each side of the central burial on the north-south centre line of the ring-ditch; the fills of both pits were stone-free and devoid of artefacts. A large pit, over 2m in diameter but of unspecified depth, lay east of the central burial, immediately adjacent to the ring-ditch (Fig. 108). Again the fill was stone-free and without artefacts. The stone-free fill of the ditch contained twelve urn sherds in the south-west quadrant (Erith 1963). The former presence and size of any mound within ring 10 is problematic; perhaps only a small mound was heaped over the central burial, in the manner of a disc barrow (Grinsell 1941, fig. 1; Ashbee 1960, fig. 3), with the two pits north and south at the circumference. This would have left a broad berm between central mound and ditch, making it relatively easy to locate the large pit immediately adjacent to the ditch and due east of the central burial. This pit may have been dug to accommodate an inhumation burial (above p.162) all trace of which had disappeared in the acid soil.

Ring 6 lacked any trace of a central burial but was otherwise similar in layout to ring 10 (Fig. 108), with the same arrangement of a pair of pits on the north-south centre line with another placed adjacent to the ditch. All three features had stone-free fills and were devoid of artefacts. The ditch fill produced numerous potsherds (Erith 1963), mostly of Roman date, but with some Bronze Age and 'Iron Age A' material. Roman sherds were found at considerable depth in the ditch, suggesting that it remained largely unfilled into the late 1st century AD. The reconstruction of the ring-ditch offered by Erith (Fig. 110) suggests that the apparently empty pits at the centre of the ring-ditch may originally have held burials, placed after the pits had already largely filled up, and subsequently removed by ploughing. Alternatively, it seems at least as likely these pits never held burials (as indeed was suggested by Erith 1963, 108). Given that only the very base remained of the centrally placed urn in ring 10, it may be that a central burial had originally existed in ring 6. Any such deposit would have been completely destroyed if placed fractionally higher than the ring 10 burial. Given the relatively shallow ditch, a substantial mound filling the interior of the ring-ditch, as suggested by Erith's reconstruction (Fig. 110) may seem unlikely. Alternatively, as with ring 10, a much smaller centrally

placed mound may be suggested, with the pits north and south of the central burial at its circumference. Again this would have left a wide berm allowing room for the large pit immediately adjacent to the ditch and due east of the central burial. This pit, as suggested for ring 10, may also have held an inhumation burial.

Ring 4 was the largest of the ring-ditches excavated by CAG, about 25m in diameter, and rather less of it was examined (above pp 18–19). Four sections were cut through the relatively substantial V profiled ditch (Fig. 11) and a rectangular area examined at the centre. This revealed a centrally placed unurned cremation which included 'much wood ash' (Erith 1966, 2). Three further unurned cremations were recorded to the north-west of this burial. A total of three sherds of Bronze Age pottery including a bucket-urn rim were found either side of the central burial and a further sherd in the ditch fill to the north (Fig. 11). Allowing for the small scale of the ring 4 excavations, the arrangement of burials is somewhat reminiscent of ring 3 (below), although the ring 3 burials were mostly in urns. Speculative suggestions as to the mound form of ring 4 are even more difficult than for some of the other CAG ring-ditches. However, the sections seem to show an external bank, although a similar case could be made for an internal bank on the basis of the south section (Fig. 11).

The records of ring 8 (above p.24) are insufficient to allow much useful comment on the arrangement of burials or structure.

Ring 3 was the most complex ring-ditch investigated by CAG, it was about 11.5m in diameter with a ditch about 1.3m deep and up to 2.3m wide (Erith 1961a, 34). Various gravelly deposits within and outside the ring-ditch were regarded as upcast from the ditch and/or burial pits, but seem more likely to represent the cyroturbated gravel surface (above p.18). Almost all the burials were projected back onto one or other of the two sections, often from some distance away. As a result, the sections appear to show a complex series of intercutting burials (Fig. 10) which was not in fact the case. The disposition and sequence of burial deposits is better understood from the plan (Fig. 10) and photographs (Pls VIII and IX) rather than the sections. The central cremation burial within an inverted urn, of unusual form and decoration, was placed within a relatively deep pit. Equidistant from this burial were two pits filled with 'wood ash' situated on the east-west centre line of the ring-ditch. This arrangement is clearly reminiscent of those within rings 8 and 10. Twenty-four other burials were placed within the ring-ditch, four of which were unurned. With two exceptions, all the burials were placed north of a line formed by the central burial and two 'woodash pits'. The secondary satellite burials within ring 4 were also placed north of the central burial, however in general the south or south-east sides of barrows/ring-ditches are favoured for such burials, the north side being most unusual (Ashbee 1960, 84–85).

Burial 18 (Fig. 10) was placed close to and south-west of the central burial, and burial 17 was placed about 1m south-east of the western 'woodash pit'. Burials 1 and 2 were placed so close together that they may have been deposited at the same time. The opposition of decoration, characteristic of vessels found together (above p.82 Brown 1995) is not so apparent in this case: both vessels have finger-impressed rims, and in common with most of the ring 3 pots, a row of pre-firing perforations below the rim.

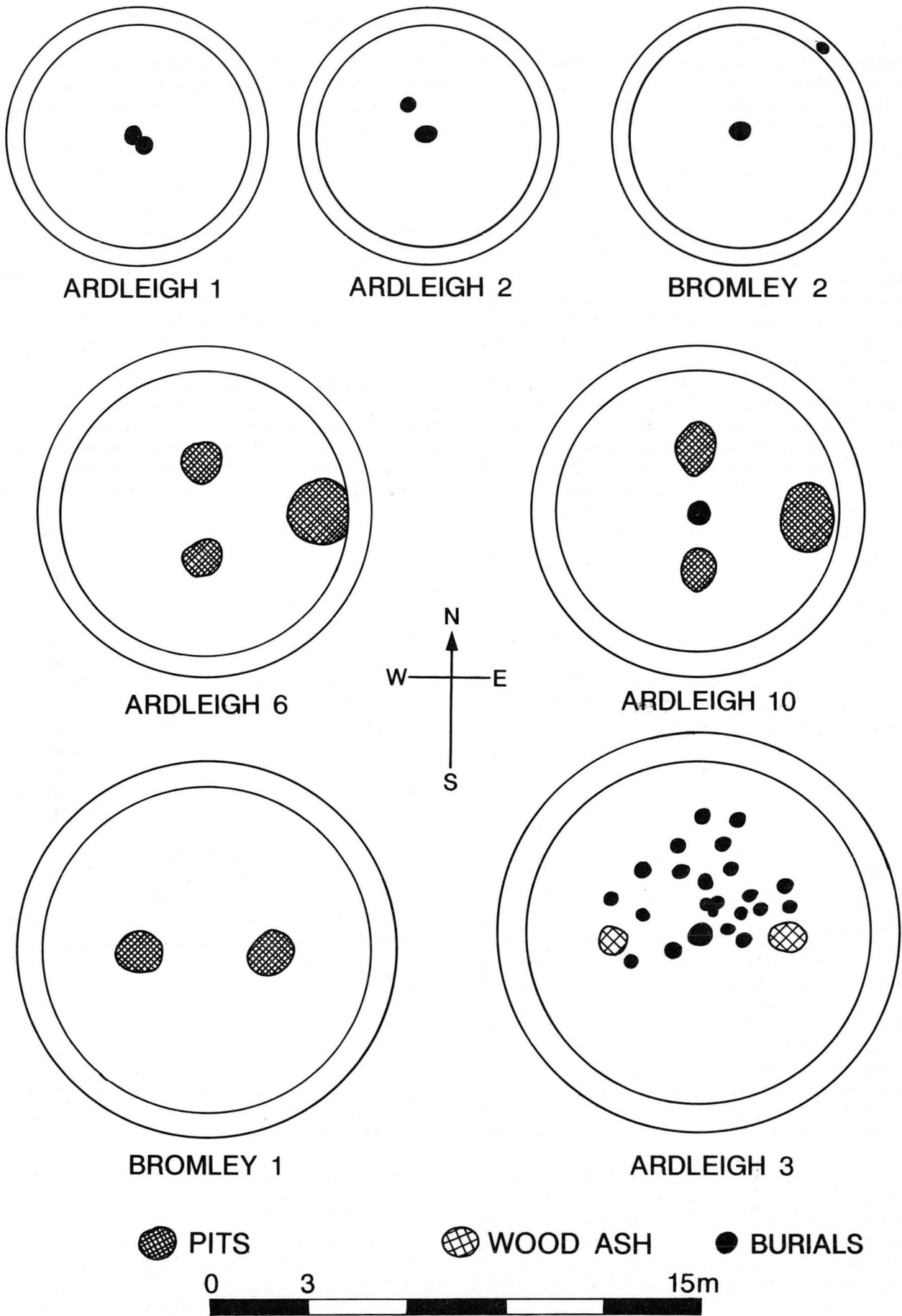


Figure 108 Comparative plans of CAG ring-ditch excavations at Ardleigh, together with plans of two ring-ditches excavated by CAG at Bromley, c. 3km east of Ardleigh, after Erith 1963

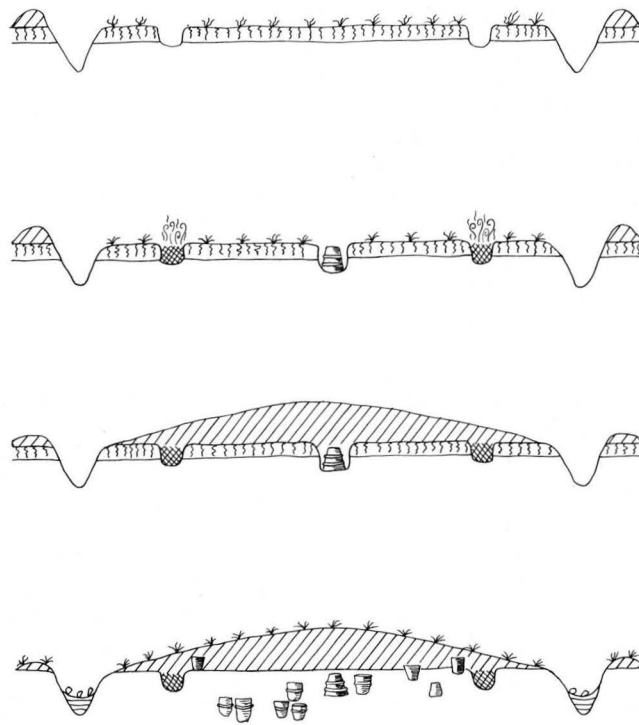


Figure 109 Idealised sections showing construction and use of CAG ring 3. Top original construction as a flat ring-ditched enclosed with external bank, two pits dug and left open. Central burial deposited and fires lit in the two pits. Mound heaped over whole of central area. Bottom, numerous secondary cremations inserted, ditch partly silts. After Erith 1961b, Erith shows three further sections (not reproduced here) illustrating the suggested destruction of the monument and cropmark formation

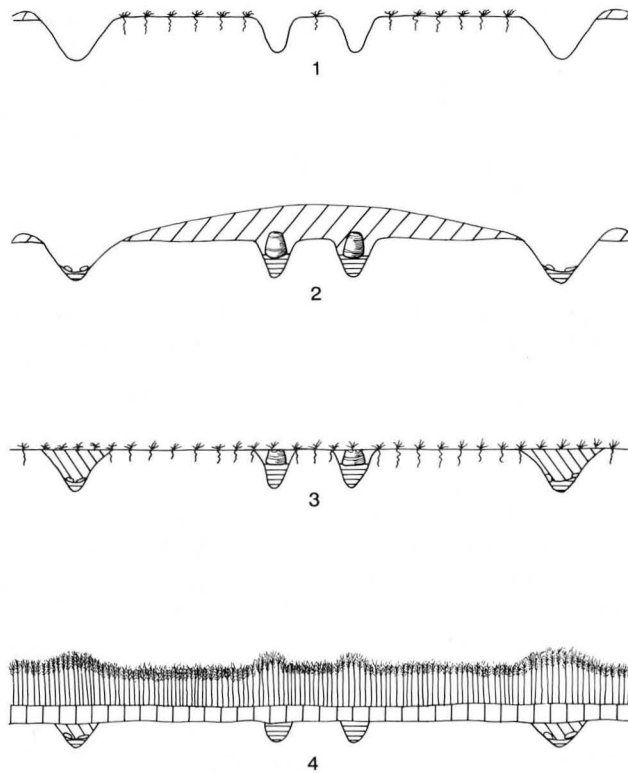


Figure 110 Idealised sections showing construction, use and destruction of CAG ring 6.
 1. Original construction as a flat ring-ditched enclosure, with pair of central pits.
 2. After pits and ditch have partly silted, two urned cremations are inserted in the pits and a mound erected covering the whole central area
 3. Mound and bank levelled for agricultural purposes, destroying part of the two cremations
 4. Subsequent ploughing destroys remaining parts of cremation and produces cropmark. After Erith 1962b

However, vessel 1 has a plain cordon set high on the pot, the exterior of which is plain, whilst vessel 2 has a finger-impressed cordon halfway down the pot, the exterior of which is decorated by vertical rows of finger impressions.

The position of these two burials was apparently marked in some way as a third burial (3) (Fig. 10, Pl. VIII) had been inserted on top of urn 1. Although this appears eventually to have caused urn 1 to sag and collapse, it seems likely that originally urn 3 was placed on top of, without necessarily damaging, the earlier burial. This situation is reminiscent of the way in which the grave pit of an unurned cremation in the Martell's gravel pit was reopened to allow the insertion of an urned burial (above p.173).

The ditch contained a stony primary fill, and an upper fill of 'loam' which the section appears to show (Fig. 10) contained some large stones. The ditch fill contained about 100 Bronze Age sherds, together with some later material in the upper levels (Erith 1961a, 34). In the north-east quadrant of the ditch, a deposit of ash and cremated bone may represent a burial inserted into the ditch (above p.17).

Once again, the presence and nature of any mound within the ring-ditch is problematic. An initial phase of an unrounded ditched enclosure, perhaps with an outer bank, as Erith's reconstructions suggest (Fig. 10) appears likely. The subsequent erection of a mound covering the entire area within the ring-ditch (Fig. 109) is perhaps unlikely. It may be that the central burial was initially merely covered by a small mound resulting from backfilling the grave pit, forming a disc barrow, as suggested for rings 6 and 10 (above p.168). A number of the other burials (5, 7, 11, 12, 20, 22, and the complex of burials 1, 2 and 3) to the north of the line formed by the central burial and ash pits, may subsequently have been buried beneath a low mound which had the primary burial at its centre and the 'wood ash' pits at its circumference. It can be suggested that burials 4, 8, 9, 13, 14, 15, 16, 17, 19, 24 and 25 (Fig. 10) form a rough semi-circle which may mark the edge of such a mound. It is noticeable that the urns accompanying these burials are less well preserved than those within the rough circle they demarcate. Possibly, this results from burials inserted into the edge of a mound becoming more quickly prone to erosion/ploughing than those sealed by it. The exceptions to this pattern are burials 6, 18 and 23, which are at least as heavily damaged as any of the peripheral urns. The sections (Fig. 10 and Pl. VIII) appear to show that these were burials placed at a relatively high level and this may have resulted from the insertion of burials into a barrow mound. Burial 18 appears to have been deliberately placed close to the primary burial (Fig. 10). Given the central position of the primary deposit, this may simply have been achieved by inserting burial 18 close to the central summit of the mound.

Ring 5 appears to be the most unusual of all the CAG ring-ditches and probably the latest. The ring-ditch was about 20m in diameter, and produced only a very faint cropmark, the ditch being relatively shallow, with a fill of 'stone-free silt and backfill' (Erith 1975).

The central feature was an irregular oval pit (Fig. 12) about 1.2m deep. The lower fill was devoid of finds, at a depth of about 0.55m. A small patch of black ash with two fragments of burnt bone was flanked by two large joining fragments of a jar, which can now be seen as of classic post-Deverel-Rimbury type (Needham 1995). Two small fineware sherds were recovered from above the central ash

deposit. One of these sherds is clearly of Late Bronze Age/Early Iron Age date, the other is now missing but the illustration (Erith 1975, fig. 2) seems similar to a sherd from the upper fill of the well at Lofts Farm (Brown 1988a, fig. 16.66). There is no indication as to the original purpose of the central pit, an inhumation burial is a possibility (Needham 1995, 167). If so, the burial pit was subsequently reopened for the insertion of the deposit of wood ash and pottery, although the original account records no hint of any recut (Erith 1975).

Ring-ditch 652, excavated in CEU Area 5, lay about 650m north of the main cemetery complex (above p.35). Unlike any of the other ring-ditches investigated at Ardleigh, there were clear, albeit slight, traces of a mound (above p.35). This possibly indicates that the mound within 652 was rather more substantial than those within most of the other Ardleigh rings. The mound was still sufficiently prominent in the Roman period to be used as a focus for a small cemetery. The variable depths of the graves inside and outside this ring-ditch confirm the presence of a mound at this time (above p.51). The way in which a linear feature, apparently still open in the Saxon period (p.66) was aligned on 652, cutting the ring-ditch but not its interior, also suggests the presence of a mound. A very slight rise was still detectable in the ploughed field surface prior to excavation, and layers which appeared to be the very last remains of mound/buried soil were recorded in the excavated trenches (above p.35). Replotting of the cropmarks has revealed a conjoined penannular enclosure (above p.12 Fig. 24, Pl. V) north of ring-ditch 652. This cropmark was not known at the time of the CEU excavations, and the feature does not appear to have intruded into any of the Area 5 trenches (above Fig. 22). The ditch silts present a relatively complex sequence, when compared to those revealed by CAG (above pp 35-9).

Four features were revealed within the central excavated area. A shallow pit, only part of which extended into the excavated area, produced a few flints, and might pre-date the ring-ditch. A post-hole adjacent to this pit may be related to it, or could be a marker post related to the central burial and layout of the ring-ditch. At the centre of the ring-ditch, a shallow oval pit (685) may have been a grave for a crouched inhumation. Unburnt bone would not have survived in the acidic ground conditions. No finds were recovered from this feature, presumably indicating that any burial was either unaccompanied or accompanied by organic materials. Adjacent to 685 lay pit 909, these features were so close together that there can be little doubt that they were positioned with deliberate regard for one another. Pit 909 produced a large quantity of cremated bone, placed on a bed of charcoal at the bottom of the pit. The arrangement of the bone suggested it had originally been deposited in a leather or fabric bag. This arrangement of burial and the lack of any urns or sherd material is in marked contrast to any of the ring-ditches excavated by CAG. A small sub-rectangular feature 616, with a deposit of ash and fragments of burnt bone, may relate to the central cremation but could belong with the Roman cremation in Area 5 (below p.183).

Chronology and Structure of Burial at Ardleigh

The unurned cremation burial from the ring-ditch in CEU Area 5, associated with a radiocarbon date of 2195-1750 cal BC at 2 σ (HAR-3908; 3600 \pm 80 BP) (Table 1), appears

to be amongst the earliest burials from Ardleigh. The beakers from Elm Park and west of Slough Lane (above p.162) may be contemporary, or slightly earlier. Three radiocarbon dates from cremation burials within Area 7 are rather later 1510–990 cal BC (HAR–5743; 3020±100), 1300–900 cal BC (HAR–5744; 2880±70 BP) and 1410–770 cal BC (HAR 5745; 2810±120 BP) all at 2 σ , (Table 1). However, the first two dates were obtained on charcoal recovered from pits which had apparently had pots removed by Erith in the 1950s (above p.41) and were subsequently excavated by CEU; the possibility of contamination is, therefore, high.

An early origin for highly decorated pots of the Ardleigh style appears likely (above p.78 Brown 1995). Certain of the burials from the main cemetery at Ardleigh could well be as early as the unurned cremation from ring 652. A radiocarbon date from a cremation burial at Brightlingsea associated with highly decorated Ardleigh style pots of 2200–1510 cal BC at 2 σ (GU–1502; 2490±140BP) (Brown 1995) is broadly contemporary with the date from the ring 652 cremation.

The vessels with highly complex decoration may indicate that the main cemetery at Ardleigh began within the first half of the 2nd millennium BC (Brown 1995). It apparently flourished throughout the middle and late 2nd millennium. Much of the pottery from the burials within ring 3 can be seen to be relatively late within the developmental sequence of Ardleigh ceramics (above p.78 Couchman 1975; Brown 1995). A suggestion supported by the inclusion of a 'deckseldeos' as an accessory to one of the ring 3 burials (Brown 1995, 128–130, Needham 1995, 166–167). These burials may thus date towards the end of the 2nd millennium BC.

Certain vessels from Ardleigh, and other similar cemeteries (above p.79) are reminiscent of hook rim jars, a classic form of early post-Deverel-Rimbury assemblages (Barrett 1980) and may thus date to the beginning of the 1st millennium BC. Pottery recovered from CAG ring 5 represents the latest deposit of the Bronze Age cemetery complex and comprises a large part of a jar of a type current in the first half of the 1st millennium BC.

The manner in which this pot was placed, with pieces either side of a deposit of ash, clearly recalls the arrangement at the centre of ring 4 (above pp 18–19) and both are reminiscent of the way in which sherd material occurs on later Bronze Age settlement sites (e.g. Wymer and Brown 1995). In ring 4, the central cremation was accompanied by 'much woodash' and sherds had been placed either side of this deposit. One of these sherds (Erith 1966, fig. 4) is similar to the typologically late pottery from ring 3 and to material from Grimes Graves (Longworth *et al.* 1988). It may, therefore, be suggested that ring 4 is also relatively late in the ceramic sequence at Ardleigh. Whilst unurned cremation itself is not necessarily a good chronological indicator, and certainly need not imply a late date, for instance at Ardleigh the unurned burial from CEU ring-ditch 652 may be amongst the earliest from the site; it is notable that all four burials revealed within the excavated area of ring 4 were unurned. Elsewhere within the Ardleigh cemetery, unurned cremations appear quite rare; it may be that the presence of only unurned burials in ring 4 is also a reflection of a late date. It has been suggested that there is a move towards unaccompanied cremation in the Late Bronze Age (Butterworth and Lobb 1992, 174). Some support for this

suggestion may be provided by the site at Broads Green (Brown 1988b, 6), where unurned cremations were assumed to be contemporary with features, including a possible shrine structure, associated with a post-Deverel-Rimbury plainware assemblage.

Discussion above (pp 165–171) of the arrangement of the ring-ditches and the presence or absence of mounds within them, is a clear reminder of the complexity of burial practice at Ardleigh. The division of the cemetery into clusters of burials, a characteristic of many Deverel-Rimbury cemeteries (Ellison 1981) was apparent from Erith's original discoveries (Erith 1958, Erith and Longworth 1960, 178–179). As Barrett *et al.* (1991, 217) note, from recognition of these clusters of burials, analysis has tended to proceed by a search for clusters of association (type of pot, position, gender *etc.*), a search which has proved largely fruitless (Barrett *et al.* 1991, 217; Ellison 1981). An alternative approach (Barrett *et al.* 1991, 217–8), sees each burial as the result of an elaborate sequence of choices, this approach is encapsulated in the discussion of the cemetery at Handley Barrow 24 (Barrett *et al.* 1991).

Despite the large number of burials recovered from Ardleigh, the surviving evidence is in some ways rather flawed. This is particularly true of the cremated bone and/or ash and charcoal recovered from the burials, which does not appear to have received the careful study/curation which was afforded to the burial urns. The publication of 1960 (Erith and Longworth) included no analysis of the bone, the great majority of which cannot now be located (above p.67). Even where bone was examined, as with material from the CAG ring-ditch excavations, it was not quantified, and the presence of charcoal appears only to have been recorded where large enough for the wood to be identified. There is thus uncertainty as to whether cremations were accompanied by ash/charcoal. Perhaps they were so accompanied, but without fragments large enough for wood identification.

Nonetheless, it seems reasonable to attempt an account of the choices which structured burial at Ardleigh. It is important to bear in mind Barrett's (1988, 31–32) comments concerning the way in which cremation, in common with secondary burial, establishes a separation between rites of liminality and rites of incorporation, a separation which is often marked topographically. The topography of the main Ardleigh cemetery is certainly striking, both in itself (below pp 173–4), and in its relationship to the wider landscape (front cover). It is possible that the deposition of cremated remains at Ardleigh may have followed a lengthy liminal period. The multiple burial which appears to be a feature of the Ardleigh cremations (Couchman and Savory 1983), may suggest that bodies were subject to storage, temporary burial or excarnation, before cremation and final disposal. Many of the multiple burials are of women and children, some of which may simply result from deaths during childbirth. However, there are a few examples in which the children are described as infants, and in most cases there is no reason to suppose that the individuals died at more or less the same time.

It is noticeable that Erith repeatedly suggested that pits within the ring-ditches were dug, and left open, for some time before they were used for burial. He cited the accumulation of silt in the pits prior to the deposition of the burial deposit, though it is of course possible to suggest

alternative explanations for this (Milton 1987, 24). Erith considered that these features were dug during the winter months for the practical reason of taking advantage of soft ground conditions. It may be that some of these features were dug at an early stage of the funerary process, and left open until the cremation and final deposition of the remains.

To return to the choices displayed by the Ardleigh cremations, the first set of choices concern selection of material, whether or not to collect cremated bone; whether this would be most of the bone from the pyre or merely a token deposit, as may be the case with the scrap of cremated bone from the ash deposits in ring 5. Ash or charcoal might or might not be collected from the pyre. Despite the inadequate records of this aspect of the Ardleigh burials, it is quite clear that in some cases incorporation of pyre material was important. This is most clear with the central deposits in rings 4 and 5, both of which were described as 'ashy' or containing 'much woodash', and both of these deposits had sherd material placed either side of them. In ring 3 woodash was placed in the two pits on the east-west centre line of the barrow and charcoal, ?a charred branch, was incorporated within the ditch fills of the south-east quadrant of ring 1. The cremation within ring-ditch 652 was placed on a bed of charcoal. There may be a link here with feature 676 south of the ring-ditch; this was described as a hearth base, containing much charcoal and a fragment of burnt bone. It is tempting to regard this as a pyre base, although it appears rather small (about 0.9 × 0.6m), unless for a child, or tightly bound body of an adult, or perhaps for the burning of bone collected after exposure or temporary burial.

Choice of container for the selected material clearly allowed access to a wide range of symbolism. The type, size and form of vessel may all have been significant. Recent study of the profuse decoration used on 'Ardleigh' style urns has suggested that the decoration carried encoded meaning linked to the use of grog temper (above p.81 Brown 1995). This is apparent in burial contexts, where pots or fragments selected for deposition together show clear 'opposition' of decoration (above p.81 Brown 1995, 126–7). Selection of particular vessels could be used to carry symbolism between the domestic and funerary spheres. Regrettably, no Middle Bronze Age settlements are known within the area of the Ardleigh group. However, in general, Deverel-Rimbury ceramics appear regularly to have been transferred from domestic to funerary contexts (Barrett 1989, 124; Barrett *et al.* 1991, 224) and ceramics were used in a variety of structured deposits, apparently placed with symbolic intent, within settlement sites (Barrett 1989; Wymer and Brown 1995). The great majority of cremations at Ardleigh were in urns, inverted or upright, the former being most commonly employed (Erith and Longworth 1960). Where deposition in a pot was not chosen, the cremated bones frequently seem to have been contained in leather or fabric bag (Erith 1958, 12). One urned and one unurned cremation were capped with large stones, and many more of the urned burials may originally have been provided with lids of organic material. Rows of perforations below the rim of bucket urns are frequently regarded as means of attaching such lids, and elaborate rims, applied cordons and lugs may also have served as means of attachment (above p.78).

Choice of a particular spot for burial of cremated remains was carried out with careful regard to other burials whose presence was clearly known and understood (Barrett 1994, 125). The place chosen for each burial within the cemetery complex allowed relationships to ancestors or ancestry to be expressed (Barrett 1994, 115; Garwood 1991, 15–17). Of the hundreds of burial deposits recorded at Ardleigh, many placed close together, only four could be said to 'cut' one another. In no case does this appear to be accidental, the result of more burials being added to an already crowded cemetery. Instead, earlier graves were reopened for the addition of new burials; this is unmistakable in burials 'C and D' from Martell's Hall gravel pit (above p.171 Couchman and Savory 1983, fig. 3), seems probable for burials 2, 3 and 1 of ring 3 (above p.71 Pl. VIII) and may be the case with Erith and Longworth's (1960, 180) burials H16/15 and D16/17. Occasionally urned cremations were placed so close they were clearly paired, and it is these deposits which show the selection of 'opposed' decoration (above p.81 Brown 1995). Burials might be placed within ring-ditches of various sizes with or without mounds. Ring-ditches and mounds may have provided circumscribed areas or platforms, within or on which particular actions could be carried out. Over time an elaborate and distinctive cemetery topography was created which determined access routes to the place of burial.

The interpretation of the cemetery in Area 7 outlined above (pp 162–7), and shown in the reconstruction drawing (Fig. 106); would have meant that the sheer density of ring-ditches and mounds would have at least partially obscured any view from the east, towards the rectangular area 'behind' ring-ditches 1052, 1033 and 7078. The arrangement of the major Bronze Age boundaries (below pp 175–7) and the indications, albeit slight, of settlement locations make it likely that the main approach to the cemetery would have been from the east. Moreover, it would have been virtually impossible to walk through the cemetery in a straight line. Anyone approaching from, or returning to, the east would be diverted, often along very narrow paths, round the numerous ring-ditches, many of which seem deliberately placed to prevent direct access through gaps between other ring-ditches (Fig. 105.4). The route of approach and departure may have been of considerable symbolic importance (Barrett 1994, 119). If the chronological sequence suggested above is correct, with group 1 ring-ditches constructed first and groups 2 and 3/4 progressively added, the maze-like appearance of the cemetery and sinuous approach to the central rectangular area would have become increasingly complex. At Ardleigh the metaphorical path taken by the relatives of the dead, from mourning to reincorporation into the community of the living (Barrett 1994, 116) would have had a complex and circuitous physical expression.

The Ardleigh cemetery thus reveals a series of choices by which the actions of the living could channel grief, define and redefine relations between themselves and with the dead. The elements which make up the cemetery, cremation burial, Deverel-Rimbury ceramics and ring-ditches/barrows are all widespread within the Bronze Age of southern Britain. Extensive cemeteries often focused on barrow structures are also well known (*e.g.* White 1982, Ellison 1975, 1981). However, nowhere outside the area of the Ardleigh Group (Brown 1995,

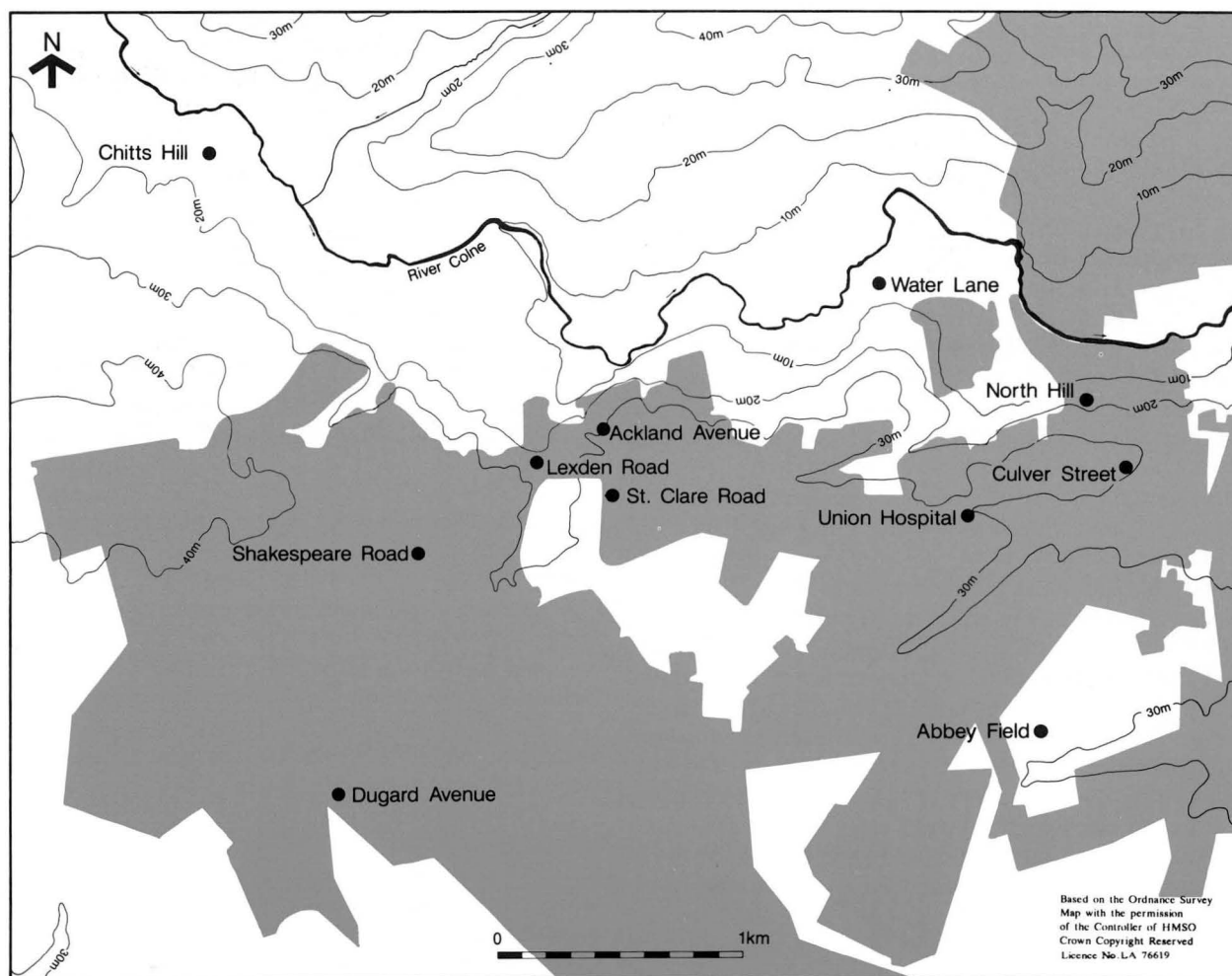


Figure 111 Map showing location of cremation burials and Deverel-Rimbury pottery west of Colchester

1996) do cemeteries reveal the extraordinary maze-like form of the cemeteries of north-east Essex. It seems entirely fitting that the makers of the highly distinctive and profusely decorated Ardleigh pottery should have created burial landscapes of great complexity. The inhabitants of north-east Essex, and south-east Suffolk, clearly used essentially similar cultural elements in ways quite distinct from their neighbours, and this would seem to provide scope for the kind of detailed regional analysis advocated by Barrett (1988, 40).

Cemeteries similar to that at Ardleigh are known from a number of sites in north-east Essex. The number of urns recovered from White Colne during gravel extraction in the early 1920s indicate a cemetery of similar size to that at Ardleigh. Unfortunately, few details of the cemetery survive: a brief description preserved at Colchester Museum states that:-

'The urns were interred in rows running east and west, and many were inverted over the cremated remains. Each urn was placed in a small pit which was dug down and, in some cases, slightly into the underlay of gravel, the tops or bases, as the case might be, of the urns lying, but very little below the surface...'

The chronological range of the White Colne pottery would appear to cover a broadly similar span to that at Ardleigh, with numerous highly decorated urns early in

the sequence and plain buckets, including hooked-rim forms, relatively late (above pp 78–9).

Plotting (Fig. 111) of a series of finds recovered during building work in the late 19th and early 20th centuries (all the material is listed in Brown 1995, and some illustrated above, Figs 78.171–3; 79; 80.180–2) shows a distinct cluster of finds west of Colchester. They lie roughly between the line of the Iron Age Lexden and Grymes Dykes, above the Colne Valley. It is possible that these finds represent fragments of an extensive complex of cemeteries, no doubt considerably disturbed by Late Iron Age burial and Dyke construction. The finds from Water Lane and Chitts Hill cemeteries were situated down slope closer to the River Colne about 1.3 and 0.6km to the north. The finds from Culver Street appear more likely to derive from settlement contexts than burial (Crummy 1992a), as may the single sherd from North Hill, and these finds may indicate the locations of some of the settlements, whose inhabitants created these cemeteries (Fig. 111).

The dense concentration of ring-ditches with burials mainly between rather than within the ring-ditches revealed in CEU Area 7 can be matched at Brightlingsea (Clarke 1989). The rather more fragmentary plan recovered at Chitts Hill may reflect a similar layout (Fig. 112). Whilst the plans of Ardleigh and Brightlingsea are strikingly similar, it is clear that the layout of the two sites is rather different, and detailed comparison must await full publication of the Brightlingsea excavations.

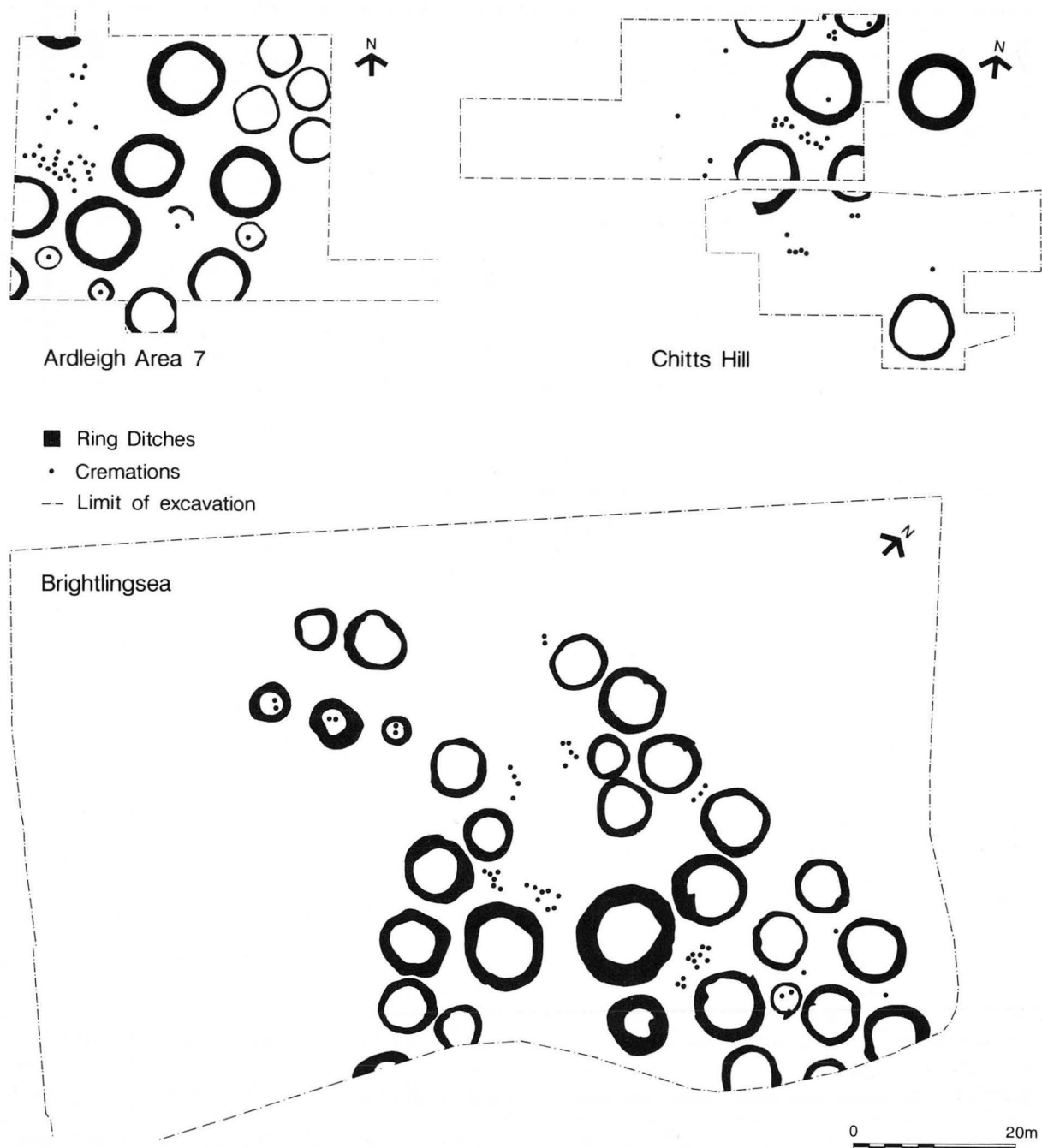


Figure 112 Comparative plans of excavated ring-ditch cemeteries in north-east Essex

Dense clusters of cropmark ring-ditches are known from a number of locations in north-east Essex (Priddy 1981, Brown 1996), and appear comparable with the excavated examples at Ardleigh and Brightlingsea. Selected examples are shown in Fig. 113. It is perhaps dangerous to assume that all such unexcavated ring-ditch clusters are necessarily of Bronze Age date. Excavations at Alresford (Bedwin 1986), produced little dating evidence but appeared to show the ring-ditches to be post-Roman.

The cropmark sites often show a regular relationship with earlier or presumed earlier monuments. Thus the Brightlingsea cemetery lies *c.* 400m east of a large ring-ditch of early Neolithic date (Lavender 1994). Two ring-ditch cemeteries (one shown in Fig. 113) at Little Bromley lie 100m and 400m east of a cropmark of a

possible Henge (Harding and Lee 1987). Similarly, the ring-ditch cemetery at Thorpe Hall, Thorpe-le-Soken lies 400m east of a substantial concentric ring-ditch (Fig. 113). No such relationship is known at Ardleigh but any features which lay more than 2–300m west of the ring-ditch cemetery are likely to have been destroyed by earlier gravel extraction and/or railway construction.

Two large linear ditches were constructed (above pp 42–51), one (7503) running roughly south-east from the area of the cemetery; part way across a flat area of land between the valley of a tributary of the Salary brook, and the headwaters of the Bromley brook. The other ditch (1912) ran north-east from the northern edge of the main cemetery, across the flat land away from the Salary brook tributary and roughly aligned on a large ring-ditch in the centre of the cropmark complex (Fig. 104). A large area of

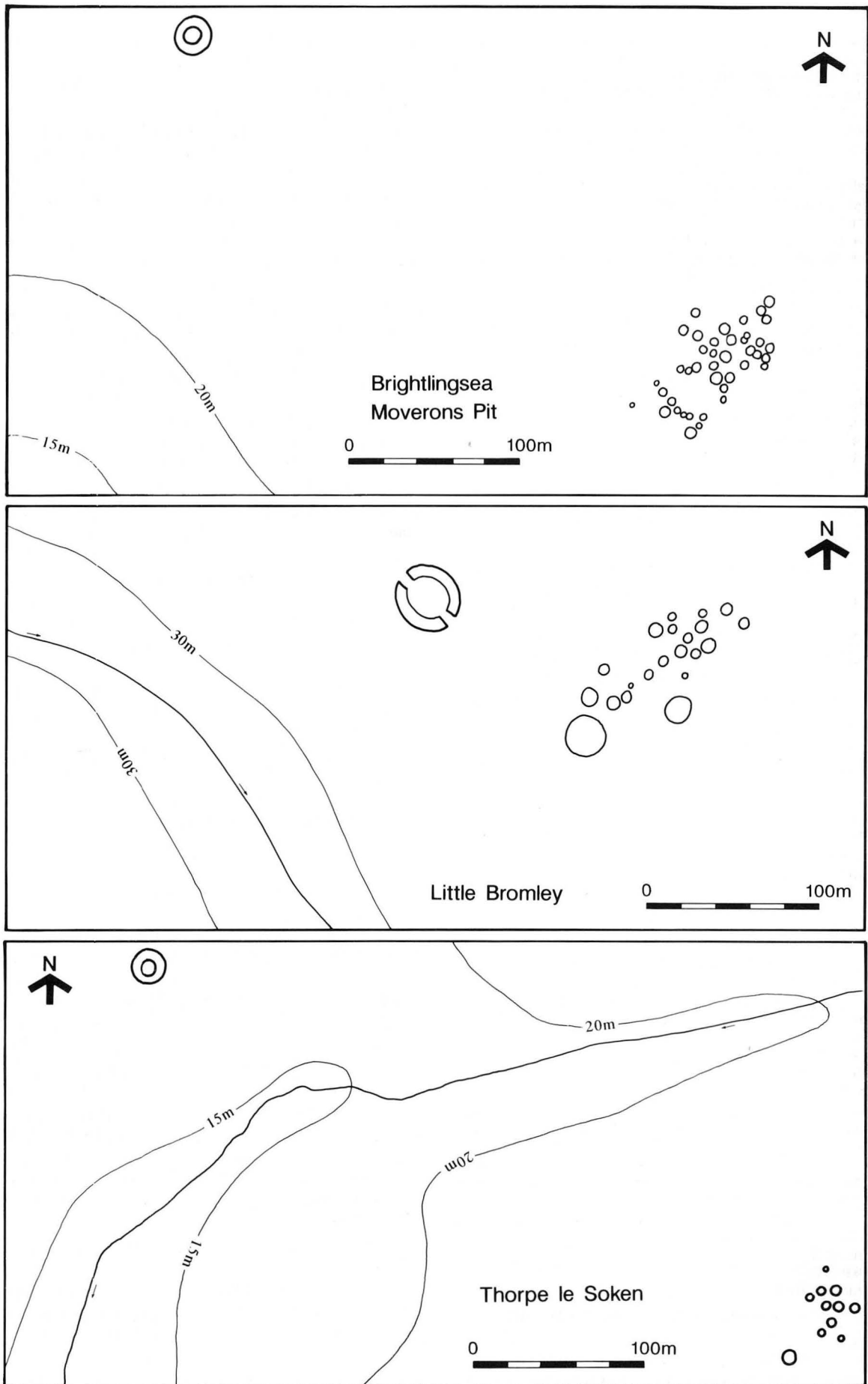


Figure 113 Location of selected cropmark ring-ditch cemeteries showing relationship with 'hengiform' monument. Brightlingsea has been excavated, the ring-ditch cemetery was Middle Bronze Age, the large concentric ring-ditch Early Neolithic

flat land above the 35m contour line was thus marked out by a boundary which incorporated natural stream valleys, the eastern edge of the main ring-ditch cemetery, and two large ditches. Both ditches produced flint-gritted body sherds, likely to be of Bronze Age date. Charcoal from the ditches produced radiocarbon dates at 2σ of 1495–1100 cal BC (HAR–5129) for 7503, and two dates 1310–840 cal BC (HAR–5126), 1395–930 cal BC (HAR–5128) for 1912. Although evidence of Middle Bronze Age settlement is lacking at Ardleigh, it is tempting to suggest that unenclosed settlements were located in the area defined above. There are certainly indications that this was the case in the Late Bronze Age; scatters of pottery and other finds of broadly early 1st-millennium BC date are recorded from a number of locations within this area (Fig. 5). Unfortunately with the exception of two small Late Bronze Age bowls (Couchman 1975), few details of these finds were published and the material cannot now be located at Colchester Museum.

Major Bronze Age ditches like 7503 and 1912 are hard to parallel locally. They clearly contrast with the rather slight and fragmentary Middle Bronze Age settlement enclosures recovered from North Shoebury and elsewhere in southern Essex (Wymer and Brown 1995), and, with the shallow field ditches at Mucking (Jones and Bond 1980). The nature and arrangement of these features may perhaps be better paralleled by the major linear boundaries of the Wessex area (Bradley *et al.* 1994). Once established, the framework formed by these two linear boundaries and the main ring-ditch cemetery, influenced the layout of settlement, and movement through the landscape for many centuries (below pp 181–3).

IV. Iron Age

In marked contrast to the elusive character of settlement and house structures during earlier periods at Ardleigh, the Iron Age evidence is dominated by a single substantial enclosed roundhouse (above pp 26–9). Although the building was regarded by the excavators as Iron Age 'A' (Erith and Holbert 1970), the published pottery is clearly of Middle Iron Age date (Brown 1996), as Drury (1978, 52–6) has demonstrated. The Middle Iron Age appears to see a marked shift in roundhouse construction. In the first half of the 1st millennium BC, such structures seem almost invariably to be post-built, whereas in the Middle Iron Age such buildings are marked by more or less substantial ring-gullies. This pattern seems to occur locally (Brown 1996), and in other areas of southern Britain (Allen *et al.* 1984, 100). Thus given the nature of the archaeological excavations at Ardleigh it is perhaps unsurprising that the only clear house structure recovered was of Middle Iron Age date.

However, even for a Middle Iron Age house the Ardleigh example is very substantial. For instance, the average depth of the ring gully is greater than all except one of the eighteen examples recorded at Little Waltham; similarly, its internal diameter is exceeded by only one of the Little Waltham rings (Drury 1978, table 2). The relatively large Ardleigh structure is further enhanced by the rectangular enclosure tightly drawn around the circular gully and marked by a deep ditch with a single entrance (Fig. 13). All of which as Harding (1974, 32) noted '...gives an impression of contrived architectural grandeur'.

The house seems to have remained in use for some time: the multiple post settings of group 3 (above p.26 Fig. 14) indicate post replacement. The ?post-holes, pits and short linking gully on the south side of the ring gully (above p.26, Fig.14), may also indicate structural repairs. The ditch 'D' south of the circular gully, ran parallel to the main enclosure ditch. As Harding (1974, 31) suggests, this seems best regarded as an early shallower narrower version of the enclosure ditch. Sections of the major enclosure ditch 'A' (above p.26 Fig. 15) seem to show at least one phase of substantial recutting.

Many Iron Age roundhouses in the south and east of Britain are associated with small enclosures of one kind or another (*e.g.* Allen *et al.* 1984, Cunliffe 1991), although none are particularly similar to the Ardleigh example (Harding 1974). Perhaps the closest parallels are structures 3 and 16 from the Fengate Cats Water subsites (Pryor 1984, 28–35, 54–58). The major difference between the Ardleigh roundhouse and the other sites is its isolation. The Cats Water enclosed roundhouses are part of a complex of ditched enclosures. Clusters of roundhouses appear to be the norm locally, most clearly at Little Waltham (Drury 1978), but also seen at sites like Slough House Farm and Lofts Farm (Wallis and Waughman 1998). Aerial photographs have revealed nothing similar at Ardleigh, instead the enclosed roundhouse is apparently sited some distance from the main cropmark complex of ditched enclosures and trackways (Fig. 4). This isolation is reinforced by the surrounding enclosure ditch, with its single narrow entrance further constricted by two flanking gullies (Fig. 13). Surviving post-holes on the interior close to the ditch edge (marked H on Fig. 13) may indicate that the enclosure was originally backed by a palisade. Any internal bank would have filled most of the gap between enclosure ditch and circular gully. Layers of sandy gravel derived from the exterior in section 4 (Fig. 15) may perhaps indicate some form of external bank, which would have further enhanced the separation of the enclosed roundhouse from its surrounding area.

Such separation may represent a deliberate attempt by the occupants to isolate themselves from direct contact with their surrounds; a practice apparently common to a range of Iron Age enclosures (Bowden and McOmish 1987). The Ardleigh enclosure may have served a similar function to the rather later triple-ditched enclosures of south Essex (*e.g.* Toller 1980; Cunliffe 1991 fig. 12.17). These appear to isolate their, often very small, interiors from the outside world. Despite the apparent isolation of the interior, lenses of charcoal within the Ardleigh enclosure ditch at the south-east corner appear to be derived from the exterior (Fig. 15). A short length of gully joining the exterior of the enclosure was recorded at this point (Fig. 13), and it may be that some activities were carried on outside, but close to, the enclosure in this vicinity.

Finds locations were not recorded in any detail but nonetheless there are hints of interesting patterning. A small rather crude cup (Erith and Holbert 1970, fig. 15.36) was placed on the bottom of the enclosure ditch, close to the entrance causeway, unfortunately whether north or south of the entrance is not recorded. Presumably this represents some kind of foundation deposit, and can be paralleled by the placing of a coarse jar at the bottom of a Middle Iron Age enclosure ditch at one of the Stansted

sites (Havis 1991). The '...larger pieces of pottery were found either in the circular ditch terminals, or in the enclosure ditch at either side of the causeway.' (Erith and Holbert 1970, 18), a copper-alloy awl was also found in the enclosure ditch near the causeway, whilst an iron ring was recorded simply as '...found in the enclosure ditch'. A large concentration of loomweight fragments were found in the terminals of the circular gully (Erith and Holbert 1970, 24). It is possible that this may reflect activity within the structure (Fasham 1985, 128). However, deliberate deposition of loomweights is attested at both Iron Age (e.g. Wymer and Brown 1995, 158) and Bronze Age sites (Brown 1996), and it is dangerous to assume a direct functional correlation between such deposits and activities carried out nearby (Hill 1995, 85).

Layers of charcoal-rich fill recorded in the north ditch adjacent to the house site and in the south-east corner of the enclosure (Fig. 15), were succeeded by uniform deposits of silt loam, and appear to mark the abandonment of the enclosure. Two 'Belgic' sherds were said to have been recovered from these charcoal layers, with another from the deposit above (presumably these sherds are Erith and Holbert's 1970, fig. 15, 31–33), indicating a date of abandonment around the end of the 1st millennium BC and beginning of the 1st millennium AD.

Elsewhere in the cropmark complex, Middle Iron Age occupation has proved elusive. Parts of at least three Middle Iron Age jars of Little Waltham forms 3 and 4 (Drury 1978), were apparently recovered during the CEU excavations (above p.76). Sherds of Middle Iron Age pottery were recovered residual from ditch 7403 in Area 16 (above p.76). The evidence for Late Iron Age settlement at Ardleigh is characterised by 'Belgic' pottery scatters in the topsoil, recorded during ploughing by Erith and in fieldwalking by CEU (Figs 5 and 8). With the exception of one scatter north of cropmark trackway C11 (Figs 5 and 114), these all lie within the zone defined by the Bronze Age cemetery and linear features (Figs 5 and 114).

There seems to be an intimate connection with the major cropmark trackways. The ditches of these features wherever examined yielded early Roman ceramics; however the basic framework for these tracks was created by the major features of the Bronze Age landscape (Fig. 104). The routes themselves may be of considerable antiquity, in some cases perhaps of Bronze Age origin. Trackway C10 (Fig. 114) follows the eastern boundary of the Bronze Age cemetery passing through a gap between the cemetery and Bronze Age ditch 7503 (Figs 24 and 104), whilst trackway C49 (Fig. 114) is clearly aligned on a gap in Bronze Age ditch 1912 (Figs 31 and 104). This ditch seems to have marked a major change in land use and been a significant land boundary into the Roman period (below p.181). A system of narrow shallow gullies partly revealed within Area 20 (Fig. 31) marked out strip-like enclosures, which are reminiscent of similar features within an area of Late Iron Age settlement at North Shoebury (Wymer and Brown 1995, fig. 26), and similar enclosures might be present at Stansted (Havis pers. comm.). These ditches at North Shoebury appeared to be settlement features rather than field boundaries, and the same may be true at Ardleigh, some support for this may be the density of pottery from the topsoil in this general area (Fig. 6). A series of parallel linear cropmark features to the east may represent a similar system of

ditched enclosures, in this case aligned on trackway C10 (Fig. 114A).

A third sequence of cropmark features occupies a rectangular enclosure adjacent to trackway C10 opposite the main Bronze Age cemetery (Fig. 114B). These cropmarks are undated but Late Iron Age burials were recovered from just within the north-east corner of the enclosure and more burials lay just outside the south-east corner (above p.30 and Fig. 5). Association of burial and boundaries is a recurrent feature, and the eastern boundary of the Late Iron Age settlement at North Shoebury was marked by a row of three cremation burials (Wymer and Brown 1995).

Surviving details of the Late Iron Age burials at Ardleigh indicate that cremated bone was most often placed outside the pots (above p.30, Fig. 16), and this was the case with the three burials at North Shoebury (Wymer and Brown 1995). Sealey has recently discussed Late Iron Age cremations from Essex, and it appears cremated bone was quite frequently placed outside the accompanying pot. This practice may be far more common than Fitzpatrick (1994, 108) appears to suggest. Another Late Iron Age burial was apparently recorded within the grounds of Elm Park (above p.30) and might have been placed close to the line of trackway C12, if this continued northwards across the grounds of Elm Park.

The peripheral location of burials, often placed on or close to boundaries, is matched by the location of the Cauldron Pit (above p.30) just outside the large Bronze Age ditch 1912, which appears to have served as a boundary to the Late Iron Age settlement. This deep pit seems to be a variation on the ritual shafts, or wells, of the Late Iron Age and Roman period (Wait 1985, 51–81). The deposition of many broken vessels is reminiscent of similar deposits within the burial pit at Stanway (Crummy 1992b); the Cauldron Pit is fully discussed below.

The Character and Function of the Cauldron Pit

by P.R. Sealey

The most interesting components of the pottery are the four spouted strainer bowls from the Phase I dump on the pit floor. Such is the rarity of Late Iron Age spouted strainer bowls that the discovery of a fifth nearby in 1957 (see above) may be taken as an indication of the source of the material dumped in the bottom of the pit itself. The 1957 strainer came from a site 50m to the south, inside the boundary ditch of the Late Iron Age and Early Roman settlement. The Late Iron Age pottery found with this fifth strainer is contemporary with the wares from the lowest levels of the pit and the presence of burnt daub may suggest the destruction by fire of a structure in the immediate vicinity.

The Function of the Cauldron Pit

It is to the credit of the excavators that they recognised the anomalous character of the pit. This is most obvious in their half-hearted attempts to account for it as an abandoned water hole, a rubbish dump or even as a pit dwelling (Erith and Holbert 1974, 4, 19). The last possibility is of some interest as a survival of a model of Iron Age pits long since superseded (Cunliffe 1992, 69–70).

The difficulties faced by the excavators are understandable. The general configuration of the pit is far removed from contemporary wells, with their rectangular



Figure 114 The cropmark complex, showing the extent of the scheduled area and trackways mentioned in the discussion

timber linings. Nor does it suggest a water hole for livestock. The clean sand on the pit floor shows no signs of contamination with the mud that watering animals would have introduced; although farm animals might have gained access down the north slope, the otherwise precipitous sides of the pit would have made it a menace for livestock, rather than an amenity. Cobbled floors are known in Late Iron Age and Roman Essex but the Cauldron Pit can hardly have been a gravel quarry because of the quantity of stones present in the Phase II infill. Elsewhere in Essex, Iron Age pits had been filled with decaying organic matter covered by spreads of soil to keep down the smell and flies. Periodically they were dug out and the contents presumably used as manure; it seems reasonable to regard them as subterranean compost heaps (Medlycott 1994, 28, 44). But Ardleigh was no such manure hole because the material dumped on the pit floor had never been dug out in antiquity.

The Cauldron Pit as a Ritual Feature

Since the Cauldron Pit cannot be accounted for as a gravel quarry, well, water hole or manure pit one must seek elsewhere for its function. We may begin with a reminder of what is known about its history and the sequence of its infilling. At about the time of the Roman invasion, a pit at least 1.5m deep was dug through gravel just outside a settlement boundary, to receive a deposit of burnt domestic debris from a recent fire perhaps 50m away inside the settlement. When this material had been cast on the pit floor, the hole was backfilled immediately with stony silt to reinstate the former ground level. The sequence of operations apparent in the Ardleigh pit defies explanation as straightforward economic or utilitarian activities and one is driven to suggest that the pit belongs to the twilight world of ritual practices. It has been argued that the boundaries of settlements were a focal point for ceremonial deposits in the Iron Age and Roman periods (Bowden and McOmish 1987, 82–3; Hingley 1990, 100–2; 1991, 91, 98–103, 106–8) and the Ardleigh Cauldron Pit may only be fully explicable within the framework of such native ritual.

This is not the place to offer a review of the growing body of evidence to suggest that Iron Age ritual practices in Britain included the consignment of material to shafts, pits and ditches. Discussions of the topic, with extensive bibliographies, are available elsewhere (Ross 1976; Wait 1985; Merrifield 1987; Hingley 1991; Cunliffe 1992; Hill 1995). Instead attention here is focused on two rural sites in Kent and Essex that may have a direct bearing on the Cauldron Pit.

At Farningham (Kent), occupation of a Late Iron Age farmstead enclosure ended c. AD 50 with the abandonment of the site. One of the latest pits had a spread of at least forty-three broken pots resting on the top of brown loam cast in the bottom of the pit. Many of the vessels could be restored to give complete profiles: a cache of pottery had evidently been broken in one operation in the immediate vicinity and most of the debris had been thrown into the pit. Pits cut in the chalk inside the Farningham settlement were common and there is no reason to suppose that this particular pit had been dug specifically to take the deposit described here (Philp 1984, fig. 6 pit 16, 18–22, 32, 34, pl. 10; Couldrey 1984, 58–63). The excavator was reluctant to concede the possibility of a ritual explanation, but Merrifield (1987, 8, 49) has argued persuasively that

Farningham exemplifies what he called a *rite of termination*, an assemblage of material deliberately deposited on a site to mark its abandonment, perhaps here after a final valedictory feast.

At Woodham Walter (Essex), another large dump of broken pottery was found in the ditch of a rectangular enclosure of Late Iron Age date. A dense concentration of broken pottery was confined to a 6m stretch of ditch. Sherds are large and represent fresh breaks to about eighty pots; most have profiles that could be restored in their entirety. As at Farningham, a large group of pottery had been smashed in the immediate vicinity of its excavated context, in one operation. The wares present were dated c. AD 40–60 and the likelihood is that all this crockery had been broken in the fifties AD (Buckley *et al.* 1987, 14, pl. 8; Rodwell 1987, 30–5, 38–9). It was suggested by Wallace (1989) that this unusual deposit was another rite of termination; activity at Woodham Walter was indeed scaled down dramatically afterwards, to judge by the pottery from the site. What should not be overlooked about the assemblage is that it had been burnt: charcoal and burnt grain were present in the same context (Buckley *et al.* 1987, 11; Evans 1987 respectively), and many of the illustrated pots are described in such terms as *damaged by burning, badly burnt, discoloured and crazed and soot-encrusted* (Rodwell 1987, 30–2 *e.g.* nos 132, 139, 142 and 155).

Although the Cauldron Pit has similarities with the practices revealed at Farningham and Woodham Walter, the settlement at Ardleigh was not abandoned at the time of the Cauldron Pit ceremony, and so one cannot take it as a rite of termination in the way the expression is used of our other two sites. But all three are linked by the consignment of shattered domestic pottery to a hole in the ground at a time of crisis: the abandonment of a site, or the destruction by fire of part of the settlement. The practices described here took place within a decade or so of the Roman invasion on sites flanking the Thames Estuary and one wonders if they are not unconnected with the traumas and dislocations of the conquest itself. Ardleigh is remarkable in that the material was laid to rest in a pit dug specifically for its reception and that it was buried without delay beneath soil shovelled back into its pit.

V. Roman

The overall impression of the Roman period at Ardleigh is of a fairly mundane farming community. Such an economy may provide a context for the short-lived pottery industry (above pp 141–57), which may have briefly served to augment income from farming, perhaps seasonally. Perhaps in only two ways does Ardleigh betray its proximity to the major Roman town at Colchester; the provision of defences in the early Roman period and with the presence of exotic grave goods in a small later Roman cemetery. In this the Ardleigh settlement may be compared with that at Maxey, Cambridgeshire, which also lay within an area of considerable prosperity in the Roman period, yet displayed little sign of proximity to wealth (Pryor *et al.* 1985). At Ardleigh it appears possible that this may be part of a distinctive localised variation in the distribution of wealth and landholding. Villa sites appear to be fairly common and evenly distributed across north Essex and into Suffolk (*e.g.* Hingley 1989, fig. 63); however these sites are notably absent from the Tendring Plateau on

which Ardleigh is situated. This gap in the distribution is clearly emphasised by a marked cluster of sites along the Colne Estuary south of the Tendring Plateau, and by a few sites to the north at the mouth of the Stour Estuary. Given the extent of the cropmark evidence available for the Tendring Peninsula as a whole the absence of villa sites from the central area is unlikely to be fortuitous.

Wherever examined, the ditches of the trackways which lie at the core of the Ardleigh cropmark complex appear to be of Roman date. The main central trackway (*C10*) was examined in four places (Areas 4, 6, 7 and 12) and trackway *C12* was examined in one location (Area 9). As is often the case with such features, pottery recovered from the excavated segments of trackway ditch was rarely of sufficient quality or quantity to provide secure dating; the material recovered was predominantly of 1st or 2nd-century date with some possible pre-conquest sherds. However, it seems likely that the trackways were already in existence by the later Iron Age (above p.177). Indeed their relationship with major features of the Bronze Age landscape may indicate that certain elements of the trackway system were already of great antiquity by the Roman period (above p.177).

Despite the lack of later Roman pottery from the trackway ditches it is perhaps dangerous to assume that these features were abandoned early; a number of other factors may have been at work (below p.183). Certainly, wherever examined, there is at least some evidence for ditch maintenance in the form of recutting (above p.51, p.65).

Not surprisingly, given the distance between the areas examined (Figs 5, 7 and 114), the sequence of ditch maintenance varied considerably along the lengths of trackway *C10*. Area 4 in the north had the most evidence for recutting of the ditches and here a third ditch appeared to indicate that the width of the trackway had been altered at some stage (above p.51). This accords with the cropmark evidence north of Area 4 (Fig. 7); here the cropmark of the eastern side of trackway *C10* (Fig. 114) has a 'braided' appearance, perhaps indicative of periodic realignment. In Area 6, part of a cobbled surface, perhaps metalling for the track surface, was preserved (above p.55). A number of pits cut this cobbled surface, presumably dug at a time when the track had gone out of use, or at least was not in constant use; pits also impinged on the line of the trackway (*C49*) in Area 20 (Fig. 31). Similarly, in Area 7, a kiln was constructed into the eastern trackway ditch of *C10*, projecting into the trackway. During firing this would have constituted a considerable obstacle, and presumably was operational at a time when little or no traffic was using the track. The western side of track *C10* in Area 7 appeared to be double ditched, and possibly provided with a fence (above p.56).

Trackway *C12* which branched north-west from the central track *C10* (Fig. 114), was examined at one place (Area 9). Here again there was recutting and a pit had at some stage been dug within the track. The ditch excavated by CAG within the grounds of Elm Park (above p.33) was considered to be one of the ditches of this trackway (Erith and Holbert 1970).

Trackway *C49* also ran west from the main track *C10* (Fig. 114), and excavation in CEU Area 20 revealed a relatively complex sequence of realignments briefly discussed below. To the north cropmark trackway *C11*, apparently aligned on the major ring-ditch at the centre of

the Ardleigh cropmark complex (Fig. 114), remains unexamined; as do two very narrow straight sided tracks either side of trackway *C10* further north again (Fig. 114 *C91* and *C100*). The cropmark evidence seems to indicate that the entrances to both these narrow tracks were blocked by the ditches of trackway *C10*. A rather similar narrow track was associated with a group of rectilinear enclosures at the braided eastern edge of trackway *C10* (Fig. 114 *C101*). Trackway *C13* which ran south from trackway *C10* was not examined, but appears to be rather different from the other cropmark tracks (Fig. 114), being almost twice as wide as the widest part of trackway *C10*, in places reaching a width of over 40m. It is tempting to regard this trackway as a major drove which periodically carried relatively large numbers of livestock, fed into it from other parts of the trackway system, to a large area of pasture somewhere south of the main cropmark complex.

In Area 20, trackway *C49* also seems to have been designed for managing movement of livestock; channelling traffic to and from trackway *C10*, through an area of ditched enclosures (Fig. 7) perhaps, devoted to a range of domestic, agricultural or horticultural activities, to an area of more open pasture. The boundary of the ditched enclosures appears originally to have been marked by Bronze Age ditch *1912* (above p.62). This was replaced at the beginning of the Roman period by ditches *7766/7424* and *7857* (pp 62–63, Fig. 31). These features extended the boundary west of the Bronze Age ditch, and created a broad trackway with a funnel-like entrance, well suited to channelling livestock to and from an area of pasture beyond the western boundary of the ditched enclosures. It is difficult to imagine a greater contrast with the next reorganisation; the western boundary was regularised as a straight V-profiled ditch backed by a palisade. The entrance and trackway *C49* were reduced in width to pass through a narrow gap provided with a fairly substantial gate structure (above p.63, Fig. 31). This arrangement clearly demonstrates a concern for security rather than ease of movement. The full extent of the defences is unknown, however a corner coincident with a butt end of the major Bronze Age ditch was recorded in Area 21 (above p.64, Fig. 29). This would seem to imply that the cropmark ditched enclosures either side of trackway *C49* were enclosed by the defences.

Unfortunately these defences are not securely dated. Very little datable material was recovered, and the ceramic assemblages from the features in Area 20, whatever their stratigraphic relationship, were predominantly of 1st-century date with some 2nd-century material (Going above pp 125–9, details in archive). Amid 1st-century date for this defended phase would seem appropriate, and it seems reasonable to associate it with the Boudican rebellion of AD 60. Whether they were constructed before, during or after the revolt is unknown. There is no sign of destruction or violent attack, either of the defences or any of the other excavated areas. It is therefore possible that the Ardleigh settlement passed through the revolt relatively unscathed, despite its proximity to Colchester. Perhaps the defences were added in the uncertain aftermath of the revolt. A post-Boudican date would accord well with more grandiose defensive works immediately to the west where Colchester was provided with a wall and Grymes Dyke was constructed (Hawkes and Crummy 1995, 109–115, 178). The inspiration of the Ardleigh defences seems to owe more to Roman military

fortifications than any native works. The Ardleigh palisade slot may be compared with a similar slot within the Colchester Dyke System which Hawkes and Crummy (1995, 59–61) associated with the Claudian conquest. Defences of this kind appear to be unparalleled on Early Roman rural settlements in south-east Britain, although a length of palisade slot excavated west of Colchester might be part of a somewhat similar arrangement (Hawkes and Crummy 1995, 124–126). Whatever the precise date and purpose of the defences, they were short-lived and trackway C49 was again broadened (above p.63, Fig. 31), the line of the defensive ditch being recut and apparently maintained as a major boundary in land use, with ditched enclosures south and east, and an area largely devoid of cropmarks to the north and west (Fig. 114).

At this time, land south of the defences appears to have been taken into the system of ditched enclosures. In Area 21, the line of the defensive ditch was extended beyond the butt end of the Bronze Age ditch (Fig. 31), and continued across the southern part of Area 8. The ditched features in Area 8 are quite different from those excavated elsewhere at Ardleigh, predominantly consisting of lengths of often narrow and shallow gullies, frequently recut along more or less the same line (above pp 57–8, Fig. 27). This multiplicity of features seems to form a series of small, short-lived enclosures. The distinctive pattern of features may result from a succession of small temporary enclosures, created to manage livestock at particular times of the year.

Expansion of the system of ditched enclosures can also be seen in Area 7, where enclosures very different from those in Area 8 were created. The western boundary of trackway C10 had clearly respected the edge of the main Bronze Age cemetery. However, the site of the cemetery was now incorporated into series of rectilinear fields/enclosures. Ditch 1451 cut through, and may have been aligned on, a number of the Bronze Age ring-ditches (Fig. 24), whilst a second ditch running parallel to trackway C10, created a field 37m wide (above p.56, Fig.24), and enclosing one of the core areas of the Bronze Age cemetery. Cropmark evidence indicates further fields/enclosures were laid out further west, north of 1451 (Fig. 4 and 114). A jar (Pl. I) had been placed at the bottom of one of the excavated segments of 7150, and a platter (Pl. I) placed in a similar position in a segment (7011) of the trackway ditch almost directly opposite, to the east. Placed deposits of pottery and other items are a well known phenomenon in Roman period ditches; they take a variety of forms and clearly served a number of purposes (e.g. Wallace 1989; Wymer and Brown 1995, 16–161). In this case it seems reasonable to suggest that these two vessels were placed as offerings when the former cemetery site was enclosed and, presumably, brought into a very different kind of land use. This might also provide a context for the complete Roman pot recorded by Erith as having been placed close to ring 8 (above p.24).

It has been suggested above that the trackways and enclosures within Areas 8, 20 and 21, were connected with the movement and management of livestock. Whilst there is no direct evidence of this at Ardleigh, the location of a number of wells may provide circumstantial evidence for livestock management. An adequate water supply is clearly vital for human habitation, but is perhaps even more crucial for animal husbandry, particularly of cattle. Two wells were placed adjacent to the Bronze Age ditch

in Area 20, immediately south and north of trackway C49 (Fig. 31). The location of these wells and trackway may be compared with those at Great Dunmow (Wickenden 1988, fig. 10). A third well was located just north of the ditched enclosures in Area 8. The peripheral location of these features may have facilitated the watering of stock moving between the ditched enclosures.

A string of large cropmark pit-like features associated with the east side of trackway C10, and running from a group of rectilinear enclosures to just beyond the junction of trackways C10 and C100 (Fig. 114), may also be wells/water-holes. The large cropmark features within the broad junctions of trackways C13/C10, and C11/C10 are harder to interpret. They may be areas of severe trampling caused by large numbers of livestock turning through these junctions during wet weather, or simply ponds/water-holes for watering stock during movement along the trackways. It is conceivable that these features represent quarry pits for metallurgical material for the track surfaces. This has been suggested for a somewhat similar feature immediately *outside* a Roman trackway at Slough House Farm (Wallis and Waughman 1998). Such a function seems less likely for the Ardleigh features which lie within the trackways. Two large features within the broad trackway 13 (Fig. 114), on the north side towards its eastern end, may well also be ponds/watering-holes. As such these features have a fairly precise parallel surviving in the modern landscape south of Salcott-cum Virley. Here a broad funnel shaped green lane runs toward former grazing marsh (from about TL94451280 to 94821300), and incorporates a pond at its broadest eastern end. When visited about ten years ago, this broad lane survived as a strip of pasture; though all the surrounding land including the former grazing marsh, liberally scattered with the vivid orange remains of ploughed Red Hills, had been converted to arable. A large irregular feature, and two pits north of the enclosed Middle Iron Age roundhouse (Fig. 114) could be interpreted as a pond /water-hole and two wells.

Further south another 'well' with a tree trunk lining was recorded by Erith (1965b), during gravel extraction at Martell's gravel pit. The curious arrangement of the fill of this feature has led to its interpretation as a ritual shaft (Erith 1965b; Wait 1985) and this seems a reasonable view. However, it is perhaps dangerous to assume a clear distinction between ritual and utilitarian purposes. Wells dug primarily for the practical purpose of water supply might be used for ritual purposes, and the converse may also be true. The variety of well linings at Ardleigh, tree trunk, wattle, and timber framing seems to be a common phenomenon on Roman sites in southern East Anglia (e.g. Flitcroft and Tester 1994, Wallis and Waughman 1998).

The recovery of numerous fragments of triangular 'loomweights' (Major above p.157) from the upper fill of kiln 7375 might also reflect the importance of livestock, in this case for cloth production. However, although traditionally regarded as loomweights, such objects may be oven/kiln furniture of some kind. The site context record shows that the excavators clearly regarded these fragments as part of the debris of the last kiln firing (details in archive). This would tend to support Poole's (1995) recent suggestion that current evidence favours an interpretation of these objects as kiln furniture.

Evidence of Late Roman activity at Ardleigh is very slight, being confined to pottery recovered from the upper

fill of 2265 in Area 8, and the presence of a small cemetery in Area 5.

The cemetery was revealed during excavation of ring-ditch 652 and followed an earlier phase of reuse for burial in the Early Roman period. An inurned cremation burial of the 1st century AD was located peripheral to the barrow (Fig. 22), perhaps placed deliberately opposite a small 'hearth' (616 Fig. 22) which may be the base of a cremation pyre (above p.55, p.171). By contrast, the later inhumation graves ran through the centre of the barrow reusing the mound, and extending beyond the ditch to both east and west. The layout of the excavation trenches make it unlikely that the full extent of the cemetery was revealed (above Fig. 22). The east-west trenches revealed a row of six graves and a further grave was recorded in a trench to the north opposite the centre of the barrow. It seems likely that at least a double row of burials were present. The differential depths of the graves inside and outside the ring-ditch indicates that a mound still existed (above p.51), and this seems to have provided a focal point for some of the linear features in this part of the cropmark complex (Fig. 4 and Pl. IV). The southern ditch of the barrow was incorporated into a linear feature, the extension of the northern ditch of trackway C9 (Fig. 114). The configuration of this ditch, and the main row of inhumation burials (Fig. 22), would suggest that this feature could have marked the southern limit of the cemetery. To the north, a linear feature (Fig. 114) not represented on the cropmark plot of the 1970s (Fig. 3), ran roughly parallel to the road leading to the crossroads at the centre of Ardleigh village. The butt end of the feature was recorded by CEU (Fig. 22), cutting the ditch of ring-ditch 652. Cremation 648 seems to have been placed adjacent to this feature, whilst inhumation 732 just cut its butt end.

The Hadham Ware vessels from the inhumation graves may be broadly dated to the late 3rd or 4th century (Going above p.140 and pers. comm.). Such a date would accord with the presence of worn bracelets (Philpott 1991, 142–144) present in grave 651 and apparently decapitated body (above p.52) in grave 634 (Philpott 1991, 126). The collection of chalcedony beads from this cemetery is remarkable (above pp 72–4), and the occurrence of such unusual items in two of the graves (above pp 51–5) may suggest a family connection. Given the presence of these beads of Sarmatian origin, it is tempting to make a connection with the arrival of a substantial Sarmatian population in Britain in the late 2nd century AD. However, such connections are always fraught with difficulty (Philpott 1991, 134) and in this case the likely date of the graves is much later, as is the date of the burial with similar beads at Lankhills cemetery (above p.73, Clarke 1979). Objects such as beads and other ornaments may of course have no direct link with ethnic identity, being relatively easy to acquire through trade. Nonetheless the beads, together with brooches of continental, perhaps east European, origin (Major above, and pers. comm.), may suggest that some at least of the Ardleigh burials were of people of foreign origins. This may seem strange given the apparently unremarkable rural nature of the Roman settlement at Ardleigh; however, it should be recalled that it is within easy walking distance of Colchester. The Roman town would presumably have supported a fairly cosmopolitan population.

The general lack of evidence for Late Roman occupation at Ardleigh, particularly the absence of pottery of that date, may be taken to indicate that much of the site was abandoned. There is evidence for ditch maintenance in the form of recutting/cleaning of the major trackway ditches, and the ditches would no doubt have been periodically useful for drainage. However in an area as relatively high, dry and free draining as Ardleigh, drainage may not have been the primary function of the ditches. The line of a largely silted-up ditch, particularly if accompanied by a hedge, would still have served as a boundary or field division. Indeed, in terms of stock control, a well-maintained hedge would have been a more important element in any field boundary than a ditch. Furthermore, the presence or absence of domestic refuse in ditches may in part reflect shifting patterns of occupation and rubbish disposal. The excavated areas at Ardleigh lie largely in the west and south of the cropmark complex (Figs 5 and 7) and if the foci of Roman settlement had shifted elsewhere, this might result in the impression of absolute abandonment.

These factors are further compounded by the demise of the short-lived pottery industry at Ardleigh (above pp 141–157), coupled with a more general hiatus in pottery supplies to rural sites in eastern England, during the Late Roman period (Going above p.157 and pers. comm.). It is noticeable that the wide trackway C13, interpreted above as a droveway, heads towards the Roman road from Colchester to the Stour Estuary and Manningtree. However, C13 also leads towards the area of the later Ardleigh heath (Fig. 2), and it is tempting, if perhaps rash, to suggest that there may have been an early shift in settlement towards the edges of this heathland, focused on an area of open pasture. Warner (1987, 11–12) has suggested that the boundaries of some greens on the Suffolk claylands have Roman origins; and that these greens may embody some kind of continuity of common pasture rights from the Roman to Saxon/Early Medieval periods.

VI. Saxon

Evidence of Saxon occupation at Ardleigh is very slight, confined to a brooch recovered from the topsoil (p.70), two sherds of pottery and a group of three burials in CEU Area 7. One of these graves appears to have been set beneath a small barrow which was incorporated into the corner of an irregular field defined by narrow shallow gullies. The field boundaries were broadly comparable to those identified at Mucking (Going 1993). The dating of these features is problematic; depending on the relationship of the supposed barrow and field boundaries and Roman ditch 1451, having been misrecorded (above p.66), and the assumption that these graves with burials either unaccompanied or accompanied by a single knife are most likely to be Early/Middle Saxon in date.

However, if the dating of these features is correct they are of considerable interest. It is noticeable that the Saxon burials avoid the barrow (652) in Area 5 with its later Roman cemetery, and were instead placed within the area of the main Bronze Age cemetery. This might be fortuitous; however, it seems likely that the barrow within Area 5 had become associated with the Roman period cemetery. The Saxon graves may have been deliberately placed within the Bronze Age cemetery, in an attempt to

forge a connection with an older social order. This seems to be a widespread phenomenon, most obviously represented in Essex, by the cemetery focused on the Late Bronze Age enclosure at Springfield Lyons (Buckley and Hedges 1987b) and the burials within the Orsett causewayed enclosure (Hedges and Buckley 1985).

The field boundaries would clearly indicate that the Early Roman ditch 1451 had gone out of use, and its former line did not appear to influence the course of the Saxon boundaries. Despite this, it seems clear that certain elements of the cropmark complex survived to influence the present day landscape as Couchman and Savory (1983, 5) have noted. To the north the line of trackway C10 is continued by Home Farm Lane, and to the south it runs parallel, to Slough Lane (Figs 7 and 114). Where the line of trackway C12 extended across the grounds of Elm Park it could link with the curve in Slough Lane south of the present railway line (the drive to Elm Park is of recent origin). As noted above, the line of the linear feature running north from ring-ditch 652 is broadly parallel to the road leading to the crossroads at the centre of Ardleigh village.

It seems clear that the settlement shifts which led to centres of occupation moving away from the cropmark palimpsest, eventually producing the twin settlement foci of Ardleigh village and heath (Fig. 2), did not result from a sweeping reorganisation at one period. As yet the archaeological investigations at Ardleigh have provided only slight hints of the origin and duration of the processes involved.

VII. Present Condition and Potential of the Archaeology of Ardleigh

The archives relating to, and the finds derived from, all the sites described and discussed above, are housed in Colchester Museum. Together these provide a considerable resource for fresh research, or to pursue further, topics discussed in this volume. For instance, the large collections of Bronze Age pottery from Ardleigh and adjacent sites, held at Colchester Museum, have received much attention recently (this volume and Brown 1995), building upon earlier studies (Erith and Longworth 1960; Couchman 1975). However, the potential of this material has by no means been exhausted. Detailed consideration of vessel form has not been undertaken, vessel volume has only been briefly explored (*e.g.* Barrett 1980, 298–301), and fabric analysis has not proceeded beyond visual inspection.

As for the cropmark palimpsest itself, north of the Martell's Hall quarry, the Scheduled Ancient Monument includes the surviving part of the main cemetery complex (an area about 300m × 200m), the core of the trackway/enclosure system, the major Bronze Age linear boundaries and the Early Roman defences (Fig. 114).

The southern fringe of the cropmark complex has been quarried away, including an unknown, but presumably substantial, part of the main cemetery (*e.g.* Fig. 104). The Martell's Hall quarry is coming to the end of its life, and thus a major threat to the Ardleigh cropmarks is diminishing. Any further quarrying is likely to take place away from the cropmarks to the south-east, in the vicinity of the former Ardleigh Heath. Small scale development on the fringes of Ardleigh village, such as the recent provision

of a new access road for Elm Park (Brooks in prep.) will have some impact.

The greater part of the Ardleigh cropmarks remain under plough, as they have been for many decades, and in some parts probably for centuries. It is unlikely that this is causing further damage to the archaeological remains; although deeper cultivation, subsoiling or provision of new drainage systems, clearly will. Comparison of the results of Erith's investigations of the 1950s, with the CEU's work in Area 7 during 1979/80, might give the impression that ploughing in the intervening years had severely damaged the archaeological remains. By contrast with the numerous well preserved urns recovered by Erith, CEU's Area 7 excavation only revealed two rather badly damaged vessels. However, this probably reflects the effects of Erith's thorough removal of urns from this area, rather than the long-term effects of the deeper ploughing introduced in the 1950s. A very similar cemetery was excavated in 1989/90 (Clarke 1989 and in prep.) about 10km south-west of Ardleigh, at Brightlingsea, in an area with a comparable history of ploughing. This revealed cremation burials with a state of preservation similar to that encountered by Erith at Ardleigh in the '50s. At Ardleigh itself, the rescue work at Martell's Hall quarry in the mid 1970s (Couchman and Savory 1983) also produced burials with preservation comparable to those recovered by Erith.

Despite CAG's numerous ring-ditch excavations, at least as many are known to remain unexcavated. Given the density of burials recorded outside the ring-ditches; it seems reasonable to suppose that all the numerous investigations carried out at Ardleigh, have revealed only a fraction of the total. Many, perhaps hundreds, more may remain within the main cemetery complex alone. Furthermore, despite the intensity of field investigation and the prolonged campaign of air photography, the sheer density of ring-ditches revealed in CEU's Area 7 excavation was largely unsuspected. It is unlikely that this phenomenon is confined to this one location within the cemetery complex.

It has not proved possible to accurately replot some of the cropmark ring-ditches recorded by CAG either from the ground or during low level flights (above p.6). Air photographic survey clearly needs to continue, to address these problems. Even in an area as intensively photographed as Ardleigh, fresh details continue to be recorded; for example the significant new boundary and conjoined ring-ditches (above pp 12–14), in the north of the cropmark complex. The Ardleigh cropmarks are but one of a number of cropmark palimpsests in the Tendring Peninsula. Study of Ardleigh in conjunction with these other sites, and in relation to the distinctive topography of the area (above p.1), may help to elucidate the local development and nature of the distribution of monuments, barrows, trackways, enclosures and settlements.

Throughout the second half of the 20th century, the burials and cropmarks of Ardleigh have been the subject of archaeological investigation. As has been pointed out in a different context (Wilkinson and Murphy 1995, 222–3), publication of this volume should not be regarded as an end to this process, but rather as a foundation for further work. It is vital that research, interpretation and conservation continue into the 21st century; the archaeology of Ardleigh has much to offer, at a local, regional and national level.

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