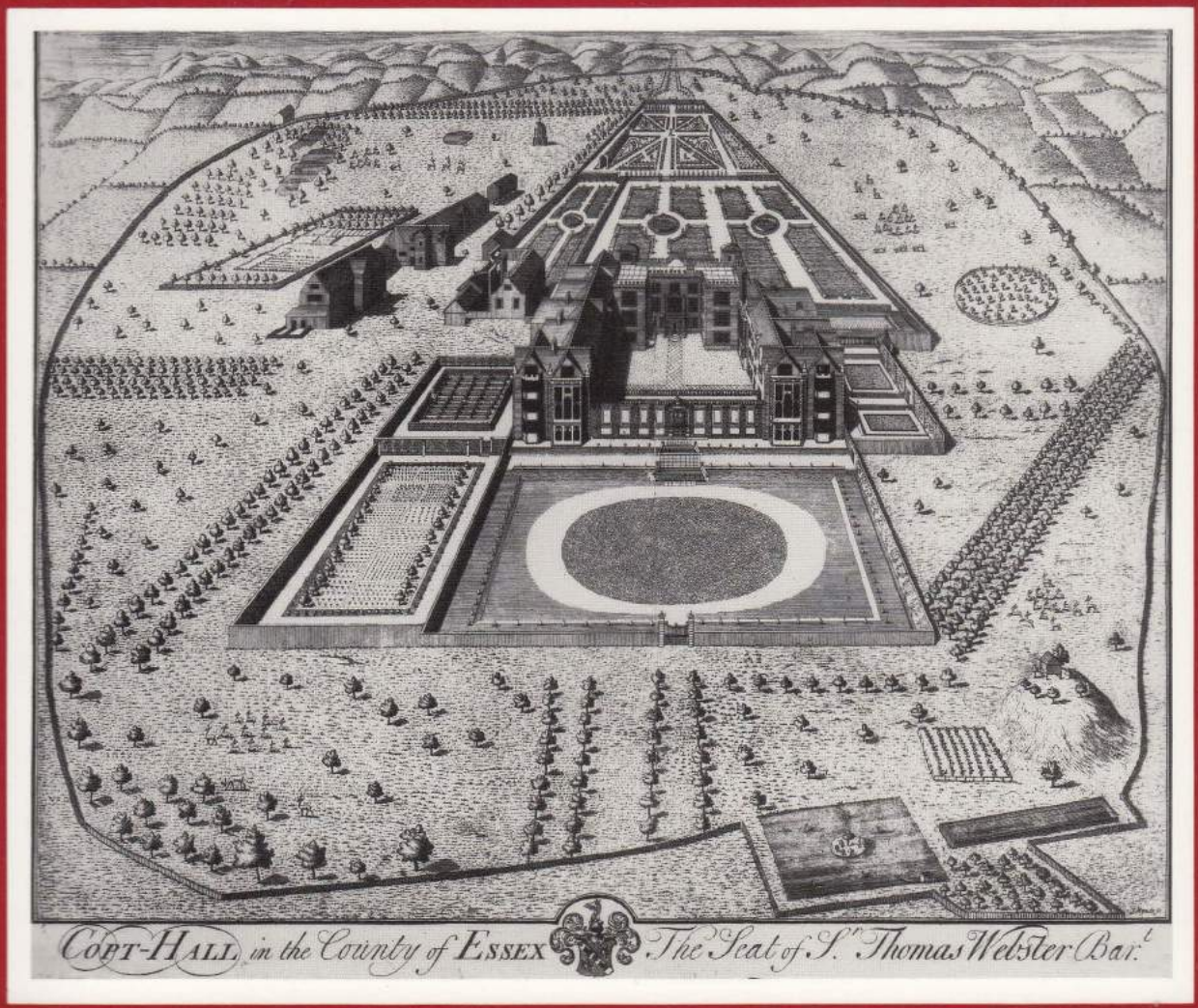
ESSEX

ARCHAEOLOGY AND HISTORY



TRANSACTIONS OF THE ESSEX SOCIETY
FOR ARCHAEOLOGY AND HISTORY

Volume 17 1986

ESSEX ARCHAEOLOGY AND HISTORY

THE ESSEX SOCIETY FOR ARCHAEOLOGY AND HISTORY

The Society was founded in 1852 as the Essex Archaeological Society

Its objects are:

(1) To promote and encourage the study of the archaeology and history of the historic county of Essex.
(2) In furtherance of the above to publish the results of such studies in *Transactions* and to disseminate information on matters relating to archaeology and history in Essex through appropriate media.
(3) To organise conferences, lectures, and visits for the benefit of members and interested members of the public; to educate the wider community in the historical and archaeological heritage of Essex; to co-operate with other bodies on matters of common interest and concern.
(4) To provide library facilities for Society members and approved members of the public.

Publications

The articles in its *Transactions* range over the whole field of local history. Back numbers and offprints are available; list and prices on application to the Librarian.

Members receive a quarterly *Newsletter* covering all aspects of the Society's activities, news of current excavations and fieldwork, and items of topical interest.

The Library

The library is housed at the Hollytrees, High Street, Colchester, and is extensive. It aims to include all books on Essex history, and has many runs of publications by kindred Societies. Members may use the library on any weekday during museum opening hours (10-1, 2-5, Saturdays, October to March, closes 4 p.m.) on presentation of a signed membership card.

Membership

Application should be made to the Hon. Membership Secretary for current rates.

Articles for Publication are welcome and should be set out to conform with the Notes for Contributors, of which offprints are available. They should be sent to the Hon. Editor.

A list of officers, with addresses, will be found in this volume.

Subscribing Societies in Essex

A.W.R.E. (Foulness) Archaeological Society; Billericay Archaeological and History Society; Brain Valley Archaeological Society; Castle Point Archaeological Society, Clavering and Langley Local History Group; Essex Society for Family History; The Friends of Historic Essex; Great Bardfield Historical Society; Halstead and District Historical Society; Haverhill and District Archaeological Group; Ingatestone and Fryerning Historical and Archaeological Society; Maldon Archaeological Group; Saffron Walden Historical Society; Southend-on-Sea and District Historical Society; Waltham Abbey Historical Society; West Essex Archaeological Group; Woodford and District Historical Society. Chigwell School.

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THE TRANSACTIONS OF
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Contents

Editorial

In 1860, when the Colchester and Essex Museum, as it came to be known, was established in Colchester Castle, largely at the instigation of the Essex Archaeological Society, the Society agreed that its already existing collections should be included. In return, three of the members of the Corporation's Museum Committee were to be members of the Society. At that time, when Britain appeared to be on a course of continued economic growth and industrial prosperity seemed assured, the agreement was somewhat loosely drawn up — after all, some Councillors were Society members.

The Society's representatives did not in fact take their seats till 1891, for the committee met but rarely. The Society however, continually pressed for improvements as well as providing money for purchases and repairs. In 1914 the arrangements were under review when matters of greater moment cut short the discussions.

With the return of peace a new agreement was drawn up in 1926 by which the Society was granted the use of part of the Hollytrees for its library. The principle of representation was, however still accepted, and the Society had four seats on the Museum Committee.

After the second world war all four seats became difficult to fill with local people, and the Society offered one to the County Council in recognition of their creation of the Museum School Service in 1967.

In 1974, under new local government legislation the Society's representatives were classified as co-opted members, and finally, in 1986 the Borough Council decided that all co-options should be abolished.

The Society was advised that legally it had insufficient grounds to press its claim, and hence its direct involvement with the running of the museum has come to an end, though its nominated members still receive the open agenda.

While the Society will, of course, continue to support the museum, the ending of a relationship spanning over a century is deserving of record, and, it is hoped, a tear. The Society's representatives have faithfully served the causes for which it stands, and have frequently been able to contribute their knowledge (and not infrequently, their wit) to enrich committee meetings.

While, therefore, understanding the reasons for this decision, it is sad that it should have come at a time when, at least ostensibly, much stress is laid on public participation and private initiative.

Prehistoric Settlement and the Romano-British 'Small Town' at Heybridge, Essex

by N.P. Wickenden

Introduction

Heybridge is now a suburb of Maldon, at the head of the Blackwater estuary on the east coast of Essex (Fig. 1, A). Both the Chelmer and the Blackwater discharge into the estuary. The modern topography following the construction of the Chelmer and Blackwater Navigation in 1797 is shown in Fig. 1, B. The ancient topography is reconstructed in Fig. 2. Aerial photography shows an abandoned channel of the R. Blackwater (the dashed line on Fig. 2), indicating that the rivers once joined further east. The map suggests that the junction was once still further to the east, the rivers having subsequently merged at the point where the narrowness of the flood plain forced them closest together.

The gravel terrace to the N. of the Blackwater was occupied from the Neolithic period onwards. Aerial photography shows farmsteads and extensive patterns of land division of late Iron Age and Roman origin (Fig. 2 and p.62-3), elements of which survive in the modern landscape. On the N. bank of the Blackwater is an area of intensive Romano-British occupation *c.*50ha in extent, one of the many 'small towns' of the Trinovantian *civitas*, and on circumstantial evidence a port, of relevance not only in the Roman period, but also in the immediate pre-Roman and post-Roman periods.

In recent years, excavations have taken place within several of these settlements. The results are now being published in detail, for, eg, Chelmsford (Drury forthcoming), Braintree (Drury 1976a), Great Dunmow (Wickenden forthcoming) and Kelvedon (Rodwell forthcoming; Eddy 1982). For a study of the Trinovantian towns based on evidence available in the early 1970s, see Rodwell 1975.

By 1970, much of the northern part of the Romano-British 'small town' at Heybridge had been developed for housing, a process which began early this century. In 1971, proposals to develop a further area, to the S. of Crescent Road (TL 850082: Fig. 1, C), prompted the Essex Archaeological Society to organise a trial excavation, undertaken in September 1971 by Mr. S.R. Bassett. This showed that, whilst much of the eastern part of the site had been destroyed by small-scale gravel working, an area at the western end warranted further examination, since it showed evidence of early Saxon as well as Roman and earlier occupation. An excavation was therefore undertaken for eight weeks during March, April and May 1972 under the direction of P.J. Drury, during which an area of *c.*1600sqm was stripped (Fig. 1, C). The Saxon features, comprising five *grubenhaüser*, and a probable ground level structure, with associated early 5th century pottery, has been published separately (Drury & Wickenden 1982). Post-excavation work has been undertaken by Chelmsford Archaeological Trust.

This report is concerned with the prehistoric and Roman settlement. In addition to a report and discussion of the 1972 excavations, a detailed gazetteer has been compiled updating the entry in the *Victoria County History of Essex* (III, 1963), and including the results of a watching brief carried out by Mr. I.G. Robertson, now curator of the Passmore Edwards Museum, London. This provides the basis for a review of the nature and extent of the 'small town' as a whole.

The finds and archive have been deposited with Colchester and Essex Museum. A copy of the archive has been deposited with the National Monuments Record.

Microfiche

A microfiche supplement is included in this volume. It contains:

1.A	Catalogue of the lithic material *by Elizabeth Healey.*
1.B	Report on stone samples *by Martyn Owen* (Geological Museum).
1.C	Analysis of copper alloy objects *by Justine Bayley.*
1.D	Analysis of the ironworking slags *by J.G. McDonnell.*
1.E	The prehistoric pottery: the fabric codes.
1.F	The Roman pottery: the fabrics.
1.G	The Saxon pottery: the fabrics.
1.H	The medieval and post-medieval pottery *by C.M. Cunningham.*
1.I	Post-Roman ceramic building materials *by P.J. Drury.*
1.J	Post-medieval iron.
1.K	The animal bone *by Dr. R.M. Luff.*
1.L-2.A	The context archive.

References to this supplement are given in the text in the form 'MF 1.H'.

Microfiche errata

1.E	Heading should read 'POTTERY'.
1.F	Fabric 59 should read: Fabric 58 'Amphora of Uncertain Origin'.
1.K	Table 12 Feature 179, delete 'molar'.

The Excavated Features

The subsoil is gravel, overlain by some brickearth in the vicinity of the site, but not in the excavated area. The post-medieval ploughsoil (*c.*0.35m thick) was removed by machine. Stratigraphy did not survive except where layers had subsided into earlier features.

All major features are described. Unless specifically

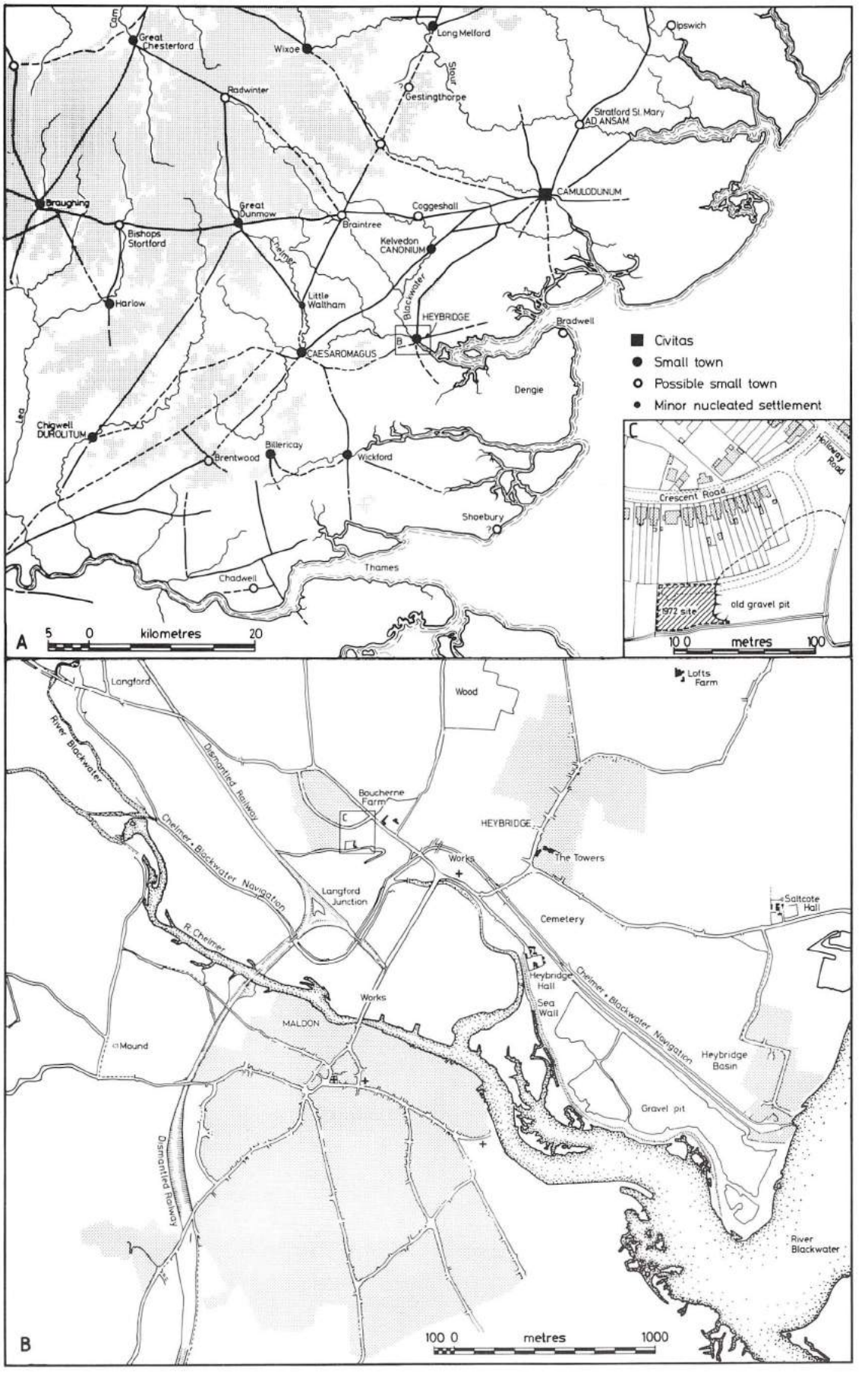

Fig. 1 A, Essex, showing Romano-British small towns. B, The modern topography of Heybridge and Maldon, with an insert, C, of the setting of the 1972 excavation (B, C *based on Ordnance Survey maps; Crown Copyright Reserved*).

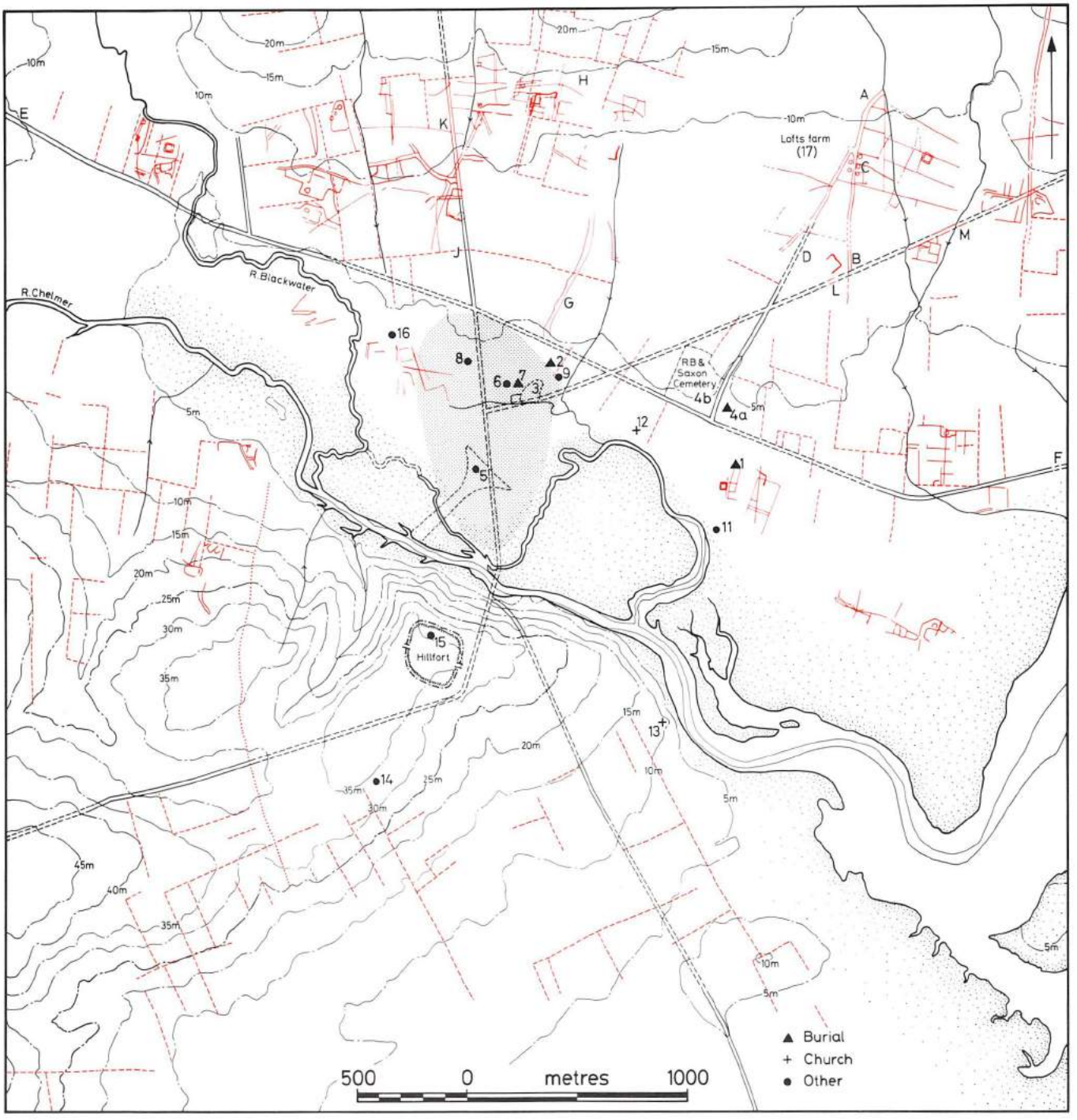

Fig. 2 The ancient topography of Heybridge and environs, with sites mentioned in the Gazetteer. Cropmarks, (based on Essex County Council Sites and Monuments Record, aerial photographs in the Cambridge University and NMR collections, and plans supplied by P. Brown) and selected boundaries from the tithe maps, *c.*1840 (dashed lines) are plotted in red.

stated, the fillings essentially consisted of brown pebbly loam. Depths indicated are usually below the cleared level (contoured on Fig. 7) unless otherwise stated. Animal disturbance was considerable, especially on the western half of the site. Other lesser features, which have no direct bearing on the interpretation of the site, are not here included. Full details are given in the archive of contexts (MF 1.L-2.A).

Phasing

Features have been allocated to one of 11 phases within seven main periods, mainly as a result of the dating of their contents, but also on stratigraphical grounds and 'context association'. Dating evidence sections at the end of each phase contain alphanumeric codes referring to Roman pottery forms as described in Going forthcoming. Fabric numbers in bold are listed in p.35, 37.

I Early pre-Roman Iron Age and earlier
II.1 Middle pre-Roman Iron Age
II.2 Late pre-Roman Iron Age
III.1 Mid 1st century AD

Fig. 3 Heybridge: Periods I and II. Scale 1:275.

III.2 Later 1st century AD
IV.1 2nd century AD
IV.2 End 2nd-early 3rd century AD, up to the laying of the gravel metalling 303 (*c.*AD 225-250)
V.1 Mid-late 3rd century
V.2 4th century
VI Early 5th century (Pagan Saxon)
VII Post Saxon to modern.

Period I: Early Iron Age and Earlier (Fig. 3)
The earliest feature located was a post-hole, dated by pottery in its fill to the late Bronze Age (Fig. 15.4-5, p.31), 0.38m deep, and large enough to take a post 0.30-0.50m in diameter. Although a considerable quantity of LBA-EPRIA pottery was found residual in later features, only post-hole 103, *c.*0.36m deep, can convincingly be ascribed to the EPRIA on the evidence of a significant amount of pottery in its fill (Fig. 15.18,20).

Residual in later features were a number of flint flakes and implements, some later neolithic, some probably earlier (p.29). Prehistoric pottery, also largely residual, begins with neolithic bowls and a beaker sherd, and includes much LBA and some EPRIA material (p.31).

Period II, Phase I: Middle Pre-Roman Iron Age
(Fig. 3) by P.J. Drury
By the middle Pre-Roman Iron Age, the site lay within, or more likely on the periphery of, a settlement on the gravel terrace. A four-post structure, a putative semi-circular structure, and a number of pits, post-holes, and stake-holes were found. However, over much of the site, prehistoric features must have been totally obliterated by later features, especially Romano-British ditches and gravel pits.

The four-post structure, *c.*2.80m square, was defined by post-holes 84, 85, 167, and 168. Post-hole 84 was 0.52m deep (Fig. 9). The carbonised stump of a substantial squared post, *c.*0.50 x 0.35m, survived. Post-hole 85 was 0.58m deep (cut by pit 83, V.1); the central post pipe was *c.*0.40m square. Only the bottom of post-hole 167 survived. Both it and 168 were partially destroyed by ditch 32. The remnants of a charred post, *c.*0.30m square, survived in 168. The hollow 124, 0.2m deep, had ash in its fill, and the gravel around was reddened by heat, suggesting a hearth, or an association with the destruction by fire of the four-post structure. The radiocarbon date of 150 ± 80 bc from post 84 is broadly indicative of a MPRIA date, as is the pottery from post-holes 84 and 85. The former also produced briquetage.

Post-holes 160, 164, 201, 170, 184, 171, 183 and 206 appear to define a semi-circular structure *c.*8m in diameter. They were generally 0.16-0.30m deep, 206 being *c.*0.46m deep. Post-holes 183 and 164 possibly held two posts, but in no case were post pipes observed. Seemingly associated was a slot, F158, 0.2-0.36m deep, filled with fine grey silt. In the middle of the putative structure were two contiguous pits, 172 and 182, 0.30m deep; after excavation F204 was found, 0.12m deep below the bottom of 182 and either associated with it or the remains of a post-hole truncated by it, and thus perhaps associated with post-hole 211. To the north-east of the structure was pit 180, mostly destroyed by 19th century gravel digging. It was 0.45m deep and contained a group of MPRIA pottery (Fig. 15, 22-23), and fragments of pierced triangular loomweights, as well as some intrusive Roman tile and pottery fragments.

Pottery comparable to Little Waltham fabrics G and H (Drury 1978b, 58), typical of the MPRIA in the area, came from post-holes 164, 170, 171, and 183, and also from features 172 and 182, making clear that the semi-circular structure is broadly contemporary with the four-post structure. It probably belongs to a relatively well-defined group of similar, possibly workshop, buildings, known, for example, from Gun Hill (Drury & Rodwell 1973, 53-4, 60) and Mucking in Essex, and Barley in Hertfordshire (Drury 1978a, 68; Rodwell 1976, 44). The large and deep post-hole 206 may represent a doorpost on the diametrical line, as at Gun Hill (Drury 1978a, fig. 15).

Post and stake-holes were largely confined to the south-western corner of the excavated area, and lacked any coherent pattern. Something similar occurs in the Early Iron Age at Linford (Barton 1962, 60-1, fig. 2; Drury 1980, fig. 19). They are assigned to this period primarily on the evidence of the absence of any Belgic or Roman pottery; some do contain MPRIA pottery, but the majority were barren. To the south of the post-hole scatter were two amorphous pits, 132 and 208 (0.64, 0.47m deep respectively), substantially cut away by later ditches. One post-hole, 94, (Fig. 9.S10), 0.15m deep, contained a large fragment of a Glastonbury ware bowl (Fig. 15.34), and an almost complete miniature cup, with a partly vitrified exterior (Fig. 15.35).

Elsewhere on the site, post-holes 80 and 143, *c.*0.1m deep, probably formed a two-post structure *c.*2.30m long. This is within the most usual length range (2.50 ± 0.20m) at Little Waltham (Drury 1978b, 124). Otherwise, only a scatter of post-holes generally no more than 0.1-0.2m deep survived Romano-British activity. F86, 0.46m deep, may have housed two successive substantial posts (Fig. 9).

Dating Evidence
3 (Post-hole) *Pottery* Middle Iron Age rim (Fig. 15.25).
84 (Post Pit, 4 post structure) Radiocarbon date 150 bc ± 80 (HAR 4843; AML 813339); using the current estimation of the half-life, this can be adjusted to 211 ± 80 BC.
85 (Post Pit) *Pottery* Middle Iron Age omphalos base (Fig. 15.30).
94 (Post-hole) *Pottery* Glastonbury ware bowl (Fig. 15.34) and a miniature cup (Fig. 15.35).
180 (Pit) *Pottery* group of MPRIA pottery (Fig. 15.22-3).
183 (Post Pit) *Pottery* Middle Iron Age footring base (Fig. 15.28).

Period II, Phase 2: Late Pre-Roman Iron Age
Activity in the vicinity of the site was indicated by early 1st century AD native pottery (p.33) and a potin coin (p.22), all residual in later contexts.

Period III, Phase 1: Mid First Century AD (Fig. 4)
The primary evidence for early Romano-British activity on the site comes from residual artefacts, particularly a coin of Claudius I (p.22), a legionary apron mount (Fig. 10.4), Nauheim derivative brooches (p.23), a scatter of south

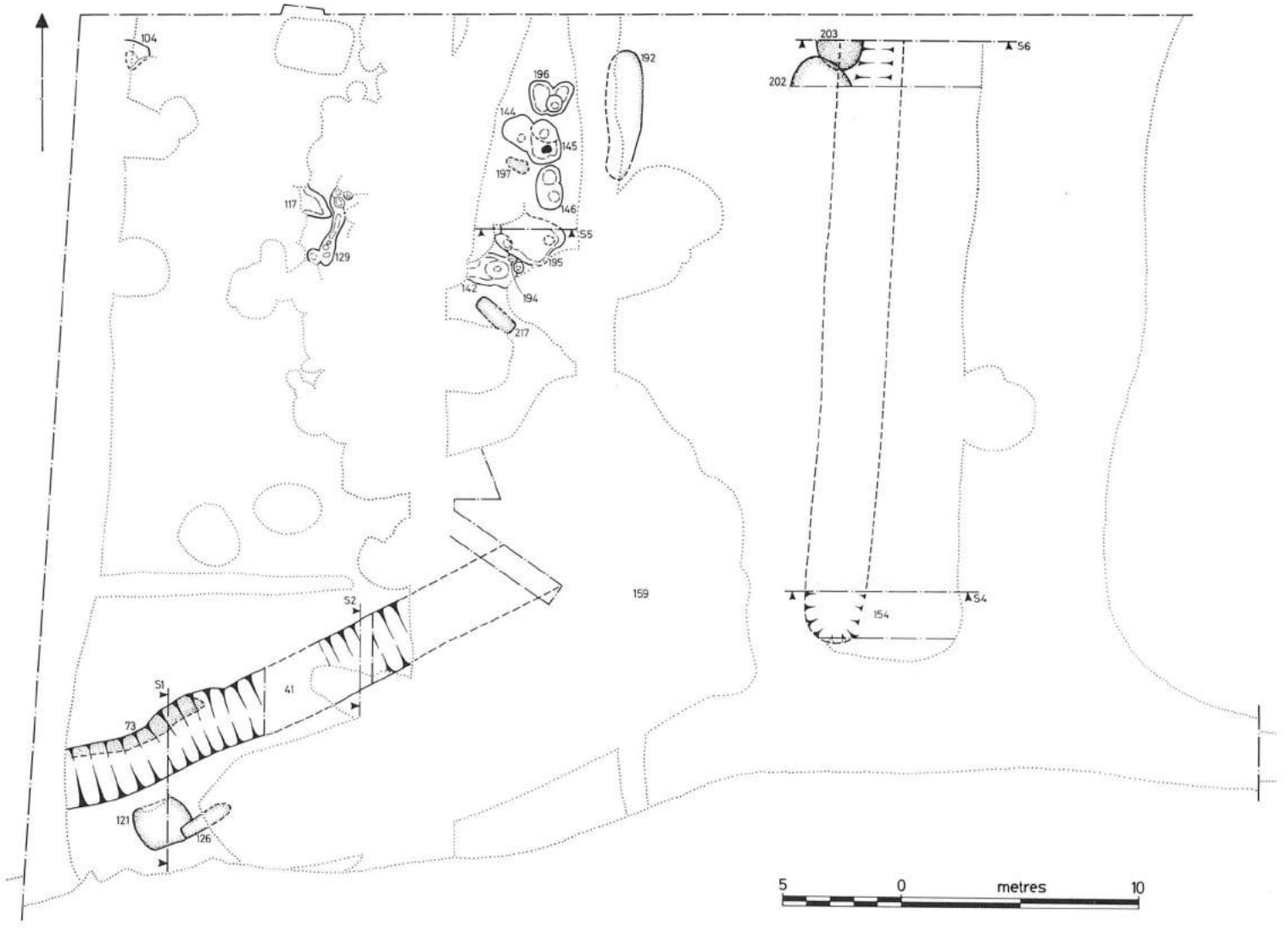

Fig. 4 Heybridge: Periods III.1 and III.2. Scale 1:275.

Gaulish samian (p.46), and of other early wares, particularly an amphora stamp of *c.*AD 40-49 (p.46) and a sherd of Pompeian Red ware (p.50).

Some contemporary features have probably been destroyed by later activity. The earliest identifiable features to survive relate to the two ditch lines which remain a dominant feature of the site's topography until the early Saxon period. Beneath ditch 41, a short length of the bottom of a predecessor, 73, was traced for *c.*2m, with a distinct change of angle in its length. It was filled with fine, yellow-brown, very gravelly loam and contained pottery, as well as some daub with wattle impressions (Fig. 8; S1). F121 and F126 follow the same alignment. Pit 121 was 0.42m deep below the later gravel metalling (Fig. 8; S1), and was cut by slot 126, 0.75m deep. Both features, but in particular 121, contained fragments of burnt wattle and daub.

Elsewhere, features 192, 202 and 203 suggest the establishment of the other principal boundary ditch, 154, at this time. The longevity of the boundary lines established at this period suggests that they are of more than local significance, i.e. that they relate to the framework of the Romano-British small town generally. There is evidence in later phases that the east-west ditch, 73, and its successor, 41, defined the north side of a road, particularly the gravel metalling on its putative frontage at the end of Period IV.2, and the site of the Period VI rectangular building. Confirmation of this pattern is provided by cropmarks to the east of the settlement. The landscape context will be discussed further below, but the assumption of a street south of the line of ditch 73/41 is implicit in much of what follows.

Dating Evidence

73 (Ditch) Six sherds LPRIA grog-tempered pottery. Twelve Roman greyware sherds and tile intrusive from cutting of ditch 41.

121 (Pit) Four LPRIA sherds, including form C7-1 (Thompson 1982); fragment of pyramidal loomweight. Sherds of the same fabric came from **192, 197, 202** and **217**; the latter also produced briquetage.

Period III, Phase 2: Later 1st Century AD (Fig. 4)

Ditch 41 was dug, following the alignment of its predecessor 73. It was *c.*2.75m wide and *c.*0.80m deep (below the later gravel metalling, 303). The spoil was probably thrown up on the north side; although no trace of a bank survived, Fig. 8.S1 and S2 clearly show the washing down of silt from this side into the bottom of the ditch. The bottom-most layer (V: silty gravel) contained pottery, burnt daub, and a sherd of Belgic grog-tempered ware, re-used as a spindle whorl (Fig. 13.61).

The full extent of the ditch is uncertain, since its termination is lost in the gravel pit 159 (IV.2). It is, however, probable that 41 ended near the eastern limit of pit 159, forming an enclosure with an entrance between its butt end and a ditch, 154, running north-south. This latter ditch was recut several times across a span of six metres (Fig. 8; S6), the outermost limits being clearly seen as soil marks after the subsoil had been removed. Excavation, however, proved fruitless; all the cuts with the exception of the deepest, 154, were filled with barren tips of gravelly loam, quite possibly the spoil thrown up by the digging of 154. This is *c.*2.50-3.00m wide, and is 0.60m deep. The earliest finds, however, give a *terminus post quem* of the 2nd century.

The remaining features, largely post-holes, all lie within the suggested enclosure and again indicate a concentration of activity in the north-western part of the site. Only 195, a sub-rectangular pit, 0.52m deep, partially filled from the west with tips of gravel (Fig. 9), merits detailed description. There were two post-holes in the western and eastern corners, 0.10m and 0.06m deep respectively below the pit bottom. The northern edge of the pit lay under an unexcavated baulk; there was no post-hole in evidence in the southern corner, which was partially cut away by gravel pit 156 (IV.1). It is possible, given the regularity of the pit, that it was originally timber-lined.

Dating Evidence

41V (Ditch) *Pottery*: ?A, (**45**), Fig. 16.3.

117 (Hollow) *Pottery*: Jar G3 (**47**), ?Flavian.

146 (Post Pit) *Pottery*: Dressel 1 amphora spike, 1st century BC (Fabric **Addendum d**); Romanising Fabric **45**.

195 (Pit) *Coin*: Potin, Allen Type O2 (Plate 1), probably first half 1st century AD. *Pottery*: everted rim jar with rippled shoulder, B2-1, grog-tempered (Thompson 1982); Jars G3, G20 (probably with cordon), **47**, pre-Flavian.

Period IV, Phase 1: 2nd Century (Fig. 5)

Ditch 41 was recut in the 2nd century; the grey silty layer, IV, largely consisting of spoil washed in from the bank, dates to this phase (Fig. 8; S1). On the east, the lowest fill of ditch 154,V, can also be dated by its pottery, albeit very uncertainly, to the 2nd century (Fig. 8; S6).

Some gravel digging took place on the eastern side of ditch 154. Pit 212 was evident as a soil mark in the bottom of pit 155 (V.2) and was also cut by the easternmost cut of the north-south ditch (soil mark, not excavated). F179 is a hollow, 0.14m deep, which cut the post-holes belonging to the Period II semi-circular structure, and was itself cut by pit 205 (V.2). There is also a shallow hollow, 0.11m deep, to the south (251).

The remaining features all concentrate in the north-western quadrant of the site, and form a group of contiguous amorphous hollows, presumably the result of gravel digging.

Dating Evidence

41 IV (Ditch) *Pottery*: Jar G20 (**47**), pre-Flavian – early 2nd century.

154 V (Ditch) *Pottery*: Romanising Fabric (**45**), Colchester buff ware (**27**).

Period IV, Phase 2: End 2nd — Early 3rd Century up to the Laying of the Gravel Metalling 303 (Fig. 5)

Ditch 41 was recut, for the second time, in the late 2nd century, allowing a layer of gravel, III, *c.*0.07m thick, to trickle in and accumulate. This contained much normal domestic debris.

The new cut gradually silted up during the early 3rd century with a black pebbly loam, II. This contained residual Iron Age material, as well as contemporary Roman pottery. The east end of ditch 41 was cut away early in the 3rd century by the digging of a large, amorphous gravel pit, 159, only partly excavated (Fig. 5). It was a maximum of *c.*0.42m deep below the gravel metalling 303, and had been backfilled with the silty topsoil mixed with dirty sand and gravel as, presumably, the deeper clean gravel was extracted.

At this time, an outer, wider ditch, 115, was dug. The

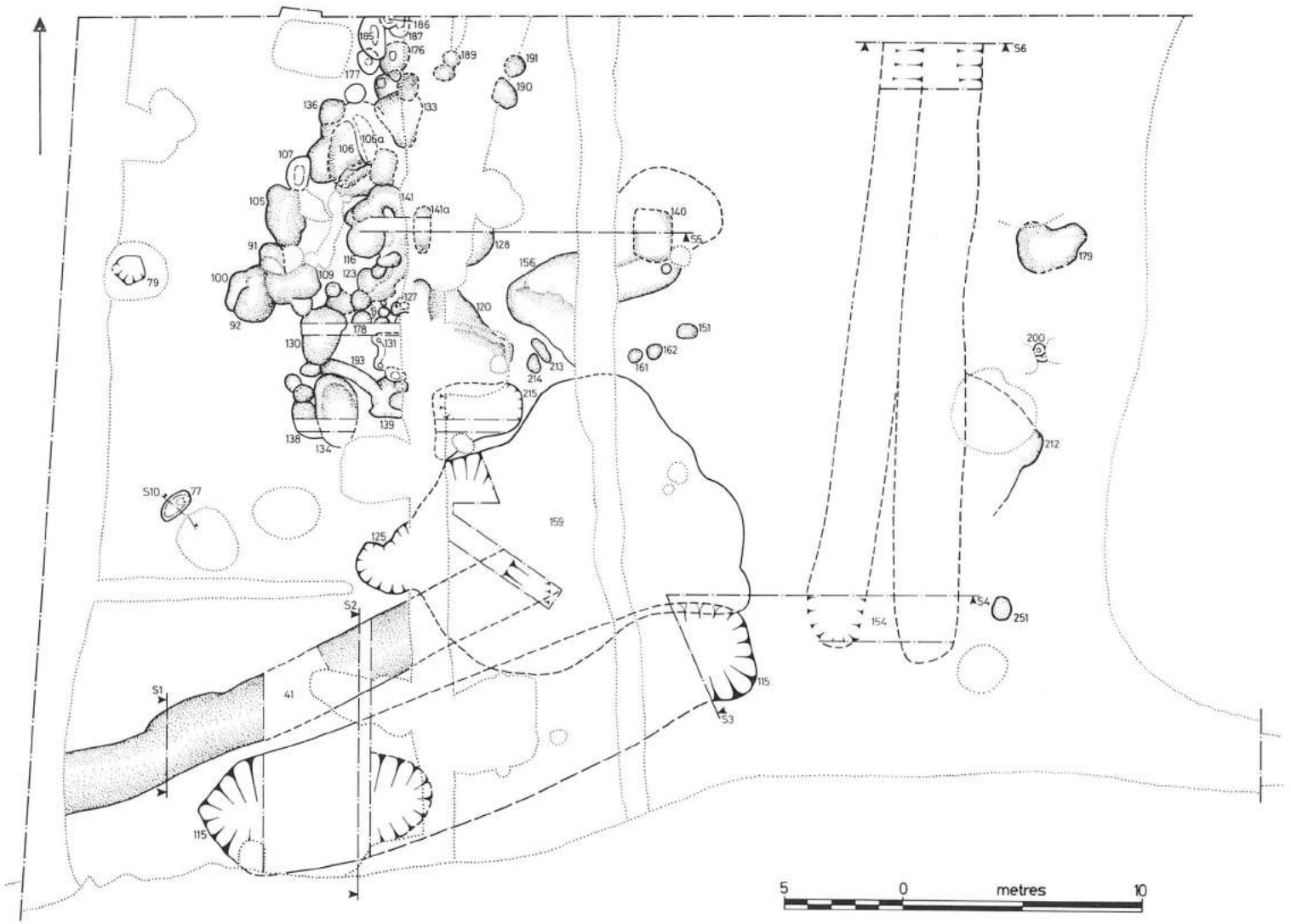

Fig. 5 Heybridge: Periods IV.1 and IV.2. Scale 1:275.

spoil from it was thrown up on the inside, finally sealing ditch 41 with the Roman subsoil, I, (Fig. 8; S1 and 2). Part of this bank slipped back into the bottom of the ditch almost immediately, since no silting up had occurred. This clean, yellow-orange ballast, III, contained only one Roman sherd and a copper alloy rod (Fig. 8; S2).

In its eastern half, the new ditch 115 cut away the edge of the gravel pit 159, and the spoil from it was probably scattered over the depression rather than piled up as a bank, as seems to have happened further west. At the west end it was *c.*0.90m deep, bottoming onto a hard layer of iron pan, but in the eastern half it was only *c.*0.56m deep. The purpose of this wide, amorphous hole, *c.*5.50m wide and *c.*24.50m long, was probably to drain the immediate area. Standing water built up over the collapsed gravel in the west, forming a dark grey sludge, II, over which settled a fine grey silt, I, (Fig. 8; S2). This contained pottery, slag and tile. In the shallower eastern cut, the ditch silted up with a layer of grey silty gravel, II (Fig. 8; S3). Here, however, there was no build up of standing water, as this was able to drain away into the natural gravel. A narrower ditch was then cut into this and silted up with a layer of gravel, I, mainly washed in from the south (Fig. 8; S3).

Around AD 225-250, the entire ditch 115 and some surrounding depressions in the subsoil were filled with a dump of black, charcoally loam, 308, to a maximum depth of 0.30m. It contained pottery, tile, *opus signinum*, large amounts of slag (p.26), tile tesserae, briquetage, vitrified clay, iron, copper alloy and lead.

Ditch 154, on the east of the site, was still in use; layers III and IV in its fill cannot be precisely dated, but span this phase and Period V.1 (Fig. 8; S6).

It was probably in this phase that the well shaft 79 was first dug (Fig. 9; see p. 20). The shaft was *c.*0.90m square and *c.*1.45m deep (0.50m below the level of the iron-panning). The hole was *c.*2.50m square on the surface. It was almost certainly once lined with timber, though no trace survived. The bottom layer, III, consisted of the collapsed gravelly packing (Fig. 9). The well was presumably in continuous use until its filling in Period V.1.

Pit 131, 0.34m deep, was cut by ditch 58 on the east, an unexcavated baulk to the north, and a post-pit to the south (part of 139). The western edge, however, survived intact and contained two clear corner posts, 0.50 and 0.54m deep. This feature closely resembled pit 195 (IV.1) and was probably the base of a timber-lined pit, supported by four corner posts (Fig. 9). Other features belonging to this phase, were mostly amorphous gravel digging holes.

The black charcoally loam, 308, described above, was deposited specifically to level up the south-western quadrant of the site, ready for the laying down of the gravel metalling 303 on the street frontage in the second quarter of the 3rd century, i.e. at the end of this phase. For its extent, see Fig. 6. It had been preserved best over the ditches 41 and 115, into which it had slightly sunk; its eastern limit at this date is uncertain, since it was extended at the end of Period V.1; it probably finished in line with the centre of 159. The gravel was kept in use as the Roman ground surface throughout the 3rd century, contemporary debris being trodden into its surface.

Dating Evidence

41 III-I (Ditch) *Pottery*: Bowl, B4.2 (**41**), Fig. 16.18, Hadrianic-Antonine (Layer I); Jar, G5.5 (**47**), Fig. 16.20 (Layer II).

115 III-I (Ditch) *Pottery*: Fabrics **1,2**; Ledge-rimmed jar (**47**).

308 (Loam layer) *Pottery*: Beaker, H34.2 (**47**), Fig.16.22, *c.*AD 180/90-230/50; Beaker, H41-2 (**47**), Fig. 16.21; Storage jar, G42 (**44**), Fig. 16.23; Folded beaker (**2**).

79 III (Well) *Coin*: Marcus Aurelius, 170-71; *Fibula*, Fig. 10.1, 1st century AD. *Pottery*: Mortarium, D13 (**27**), Fig. 21.135, stamp dated *c.*AD 135-175; Bead-rimmed bowl, B4 (**47**); Ledge-rimmed jar, G5 (**47**).

Period V, Phase 1: Mid-Late 3rd Century (Fig. 6)

The laying of the gravel metalling 303 represents a distinct change in the nature of activity on the site, shapeless, shallow gravel diggings within an enclosure giving way to a small group of distinctive features.

Well 79, which was probably first dug in Period IV.2, and had been in continuous use, filled up with a very dark loamy soil (Fig. 9; Layers I and II). This contained a group of pottery, which, along with the material from pits 65, 75 and 76, must represent the output of a local kiln (see p.46-50); and other domestic debris, including 114 iron nails, briquetage, and substantial pieces of a Rhenish lava quern; bone and oyster were also well-preserved.

Pit 65 was cut through the gravel metalling 303 and was filled with fine black sooty charcoally soil, I and II, much less compact than the charcoally layer, 308, into which it was dug. The pit measured 4.80m long by a maximum of 2.30m wide, with a maximum depth of 0.80m (Fig. 9). As well as the local kiln pottery, it contained a large quantity of domestic refuse, including window glass, tile (some pieces mortared), briquetage, *opus signinum*, much slag (in the bottom layer) and 132 iron nails. The shape of the pit is reminiscent of a pottery kiln; this is discussed further on p.46.

Pits 75, *c.*2.70 x 2.25m across and 0.52m deep (cutting the iron panning) was filled with a lower layer (II) of very gravelly loam, and an upper filling (I) of dark soil (Fig. 9). Its contents were broadly similar to the other pits, and included much overfired tile and some mortar retaining the impression of tile bedding.

Pit 76 (Fig. 9), with steep sides and a flat bottom *above* the water table, was probably used for storage. It measured *c.*2.90m x 1.15m across and 0.44m in depth. Its ultimate filling consisted of a near barren layer (III) of dark grey weathering silt; this was sealed by a layer of clean gravel (II) which presumably washed in from the sides and could indicate that the gravel metalling 303 originally extended further north. The main fill (I) consisted of fine, black loam which included 177 iron nails, 12 tile tesserae and other domestic rubbish.

A group of shallow post-holes, 87, 88, 89, 90, 95 and 98, together with three stake-holes, all lay on the arc of a circle, and possibly formed a fence, screening pits 75 and 76. The depths all ranged between 0.05m and 0.20m; F95 had stone packing collapsed into its pipe, *c.*0.20m in diameter. F98 contained a tile tessera.

Pit 83 measured *c.*2.40 x 1.40m, with a central deep hole (0.80 x 0.90m x 0.44m deep). Its black filling and contents were similar to the other pits.

Ditch 154 remained visible as a hollow, layers III and IV containing 3rd century pottery. A butt end of the ditch

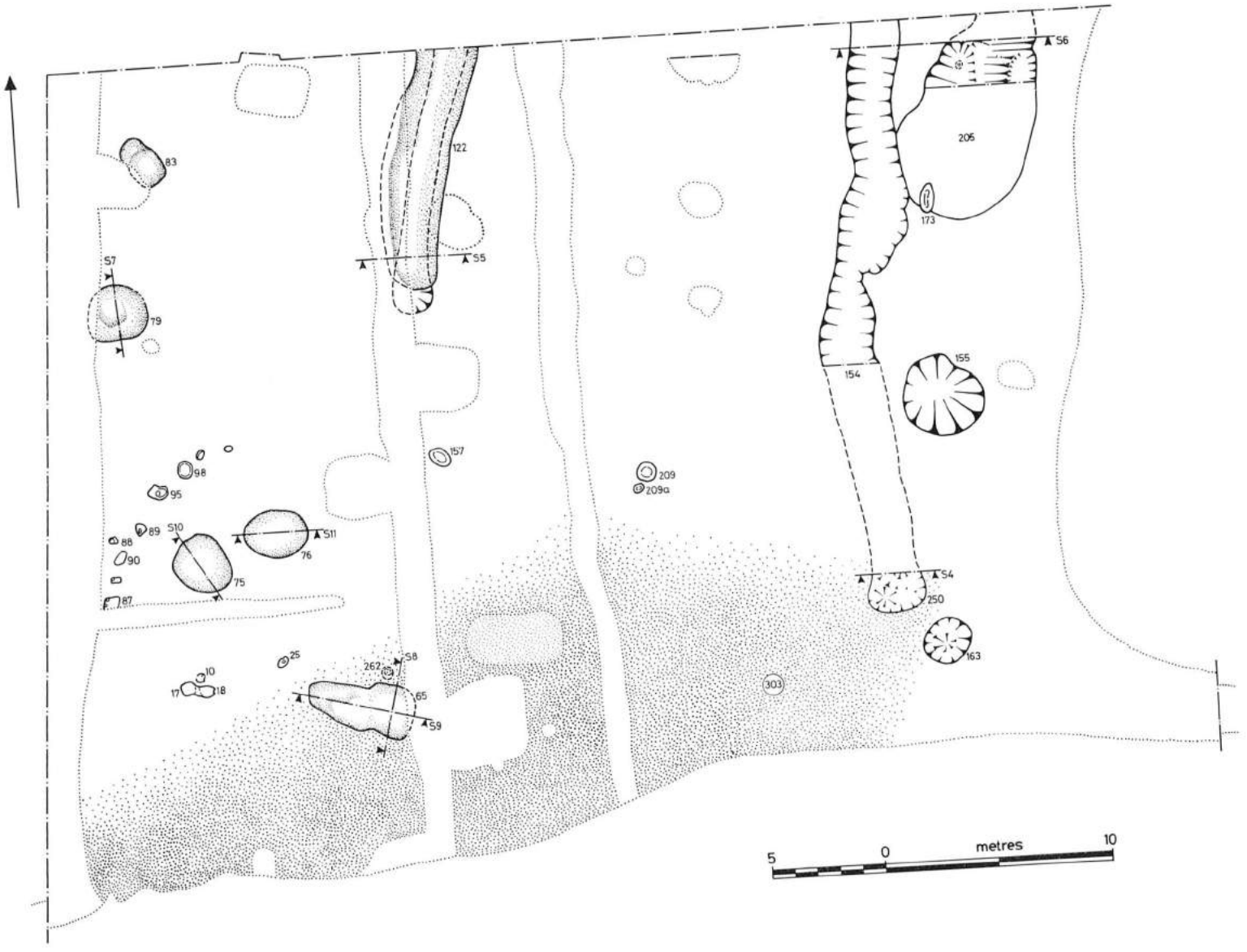

Fig. 6 Heybridge: Periods V.1 and V.2. Scale 1:275.

was excavated, 250 (Fig. 8; S4). This was *c.*0.50m deep from the gravel metalling. Its lowest layer (II) was a grey pebbly silt, covered by black, charcoally material with some gravel (I). This was similar to the black layer 308 further west, and included much wasted tile, but is later in date, probably *c.*AD 300. It nevertheless served the same purpose as 308, levelling up the hollow of the ditch, this time in preparation for the laying of an extension to the gravel metalling 303 at the turn of the century.

Ditch 122 was dug approximately parallel to 154, up to 2.60m wide; it was recut once in this period, the later cut being *c.*0.60m deep (Fig. 8; S5).

Dating Evidence

For the pottery groups from 65, 75, 76, 79, see p.37-41.

65 (Pit) *Coin*: Claudius Gothicus, AD 268-270.

83 (Pit) *Coin*: Septimius Severus, AD 193-211; *Pottery*: Beaker, H32.1 (**2**), Fig. 21.147, *c.*AD 225/35 onwards; Lid, K7 (**2**), Fig. 21.148, 3rd century. Mortarium stamp, as Fig. 24.199.

250 I-II (Ditch) *Pottery*: Jar, G5.6 (**47**), Fig. 16.19; Bowl B6.1 (**47**); Folded beaker (**2**).

122 (Ditch) *Pottery*: Roller-stamped jar (**47**), Fig. 21.145; 'Hunt' Cup, H23 (**2**), Fig. 23.182; Folded beaker (**2**); Bowl, B6 (**47**); Fabrics **4, 48**.

Period V, Phase 2: 4th Century (Figs 6,7)

Early in the 4th century, the gravel metalling 303 went out of use, and a dark brown pebbly loamy subsoil, 302, accumulated over it to a maximum depth of 0.17m, except in the north-western corner; here 302 was absent where the natural gravel met the base of the modern ploughsoil. In the south-western quadrant of the site, a number of post-holes were cut through 302 and the gravel. Many formed part of a rectangular structure of either late Roman or Saxon date (see below, Fig. 7, and Drury & Wickenden 1982, 10-12, fig. 5).

Pit 155 was *c.*3.50m across, but only 0.26m deep. Its fill included much pottery and tile. Pit 163, 0.49m deep, had a lower filling of dark grey, charcoally, silt with pebbles, capped by finer silt. Pit 205 was large and pear-shaped, not excavated *in toto* but not more than 0.50m deep, with a post-hole in the northern cut reaching 0.65m. The pit had a silty filling with a lower layer of mixed gravel and silt. Its southern edge is cut by a small ?post-hole, 173, with a grey, charcoally, silty filling.

In the latter half of the century ditch 122 was recut, slightly narrower and shallower, but longer; the top 0.26m silted up with a black fine charcoally filling (I), which contained a group of late Roman pottery, including much shell-tempered ware, Oxford red colour coat and some Argonne ware.

Ditch 154 was silting up at the same time. Its uppermost two layers (the top 0.18m), filled with a pebbly loam and also contained late shell-tempered ware. However, unlike ditch 122, these layers also contained much early Saxon pottery (see below).

Dating Evidence

155 (Pit) *Pottery*: Fabrics **3, 51**.

163 (Pit) *Pottery*: Jar, G9.4 (**40**), Fig. 22.152, mid-later 4th century; Bowl, B6, (**47**), *c.*AD 260/80+; sherd Fabric **3**.

205 (Pit) *Pottery*: Jar, G9.4 (**40**), mid-later 4th century; Fabric **48**.

122 (Ditch) *Pottery*: Bowl, B6 (**48**), Fig. 22.153; Jar, G24 (**48**), Fig. 22.154; Jar (**51**), Fig. 22.155; Jar, G27.2 (**51**), Fig. 22.156; Fabrics **2, 3, 4, 30**. For a discussion, see p.43.

154 I-II (Ditch) *Coin*: Constantine I, AD 317-324. *Pottery*: Fabrics **3, 51**; Saxon (Drury & Wickenden 1982, fig. 8.56-59).

Period VI: Early 5th Century (Fig. 7)

A full description of excavated Saxon features has been published elsewhere (Drury & Wickenden 1982). A brief summary only is given here.

As has already been noted, the upper silt of ditch 154 contained Saxon sherds along with late Roman pottery, showing that it remained a feature in the landscape. Saxon pottery also accumulated in a hollow over the butt end, 250, caused by the subsidence of the gravel metalling, 303. The principal evidence of occupation was, however, five *Grubenhäuser*, containing early Saxon pottery. This could be dated to the first quarter of the 5th century, and included vessels with faceted carinations.

It is suggested that late Roman fine wares were in contemporary use. A possible ground level structure, based on lines of shallow post-holes and stone responds cutting through or set into the Roman dark soil in the south-western corner of the site, is also postulated. This dark soil accumulated above the gravel 303, so that its date could be either late Roman or Saxon.

Period VII: Post-Saxon to Modern (Fig. 7)

The eastern limit of the site was defined by a large 19th century gravel pit, 256; the southern limit was formed by a drainage channel, part of a system laid out when the river Blackwater was canalised in the later 18th century. The western limit coincided with ditch 32, of fairly recent date (?contemporary with the drain on the south), 1.40m wide, *c.*0.68m deep, filled with a homogeneous dark brown pebbly loam, and containing medieval and post medieval pottery, and peg tile.

Two pits, 46 and 53, had been cut into the drainage channel bank in recent times. The latter contained post-medieval brick and pegtile, as well as a pottery mercury container (Fig. 25).

Three ditches must have formed part of a middle Saxon or later ditch system. Ditches 58 and 110 run parallel (*c.*7.50-8.00m apart, centre to centre) from north to south, and can be traced north of the site on aerial photographs (Couchman 1979, 53. 12a). The former was filled with very black, charcoally soil with much pebble, and reached a depth of *c.*0.65m, stopping at the layer of heavy iron panning. Ditch 110 was only *c.*0.32m deep. Like 58, it contained finds from all periods, including Saxon pottery. Over the top of the ditch, after removal of topsoil, were found sherds from a 14th-15th century vessel (MF 1.H). Ditch 58 was much straighter and more uniform than 110, which narrowed to *c.*1.00m wide in the south. Both retained the same basic shape, including a kink in line with the northern edge of Grubenhaus 119, suggesting that there was once another landscape feature crossing them at this point. They probably define an access lane between fields.

Ditch 24 ran east-west at right angles to the parallel ditches. It reached a maximum width of *c.*1.00m, but was very shallow (*c.*0.12m deep). Finds included one Saxon sherd and a large piece of fired clay, possibly kiln furniture (Fig.

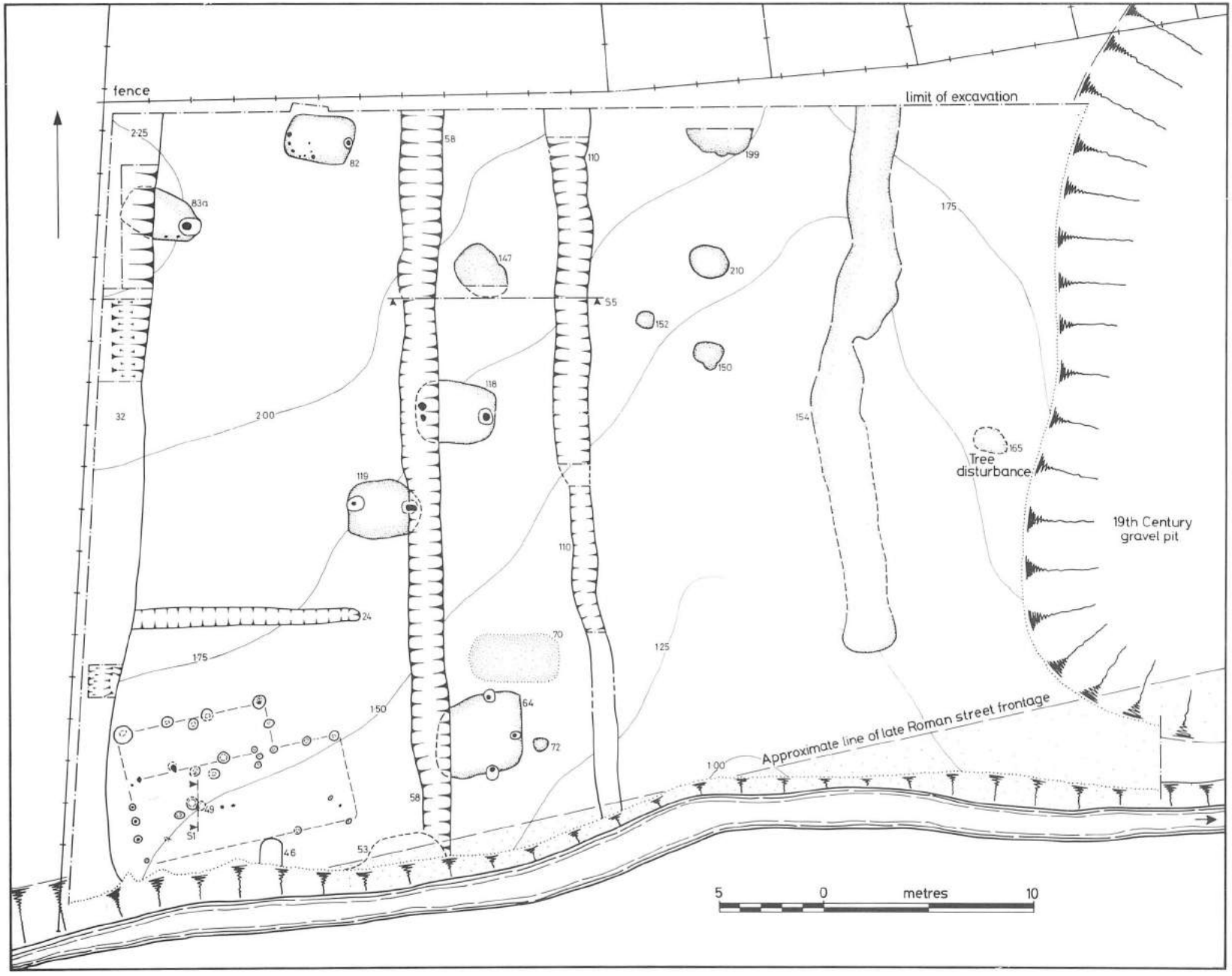

Fig. 7 Heybridge: Period VI and VII. Scale 1:275.

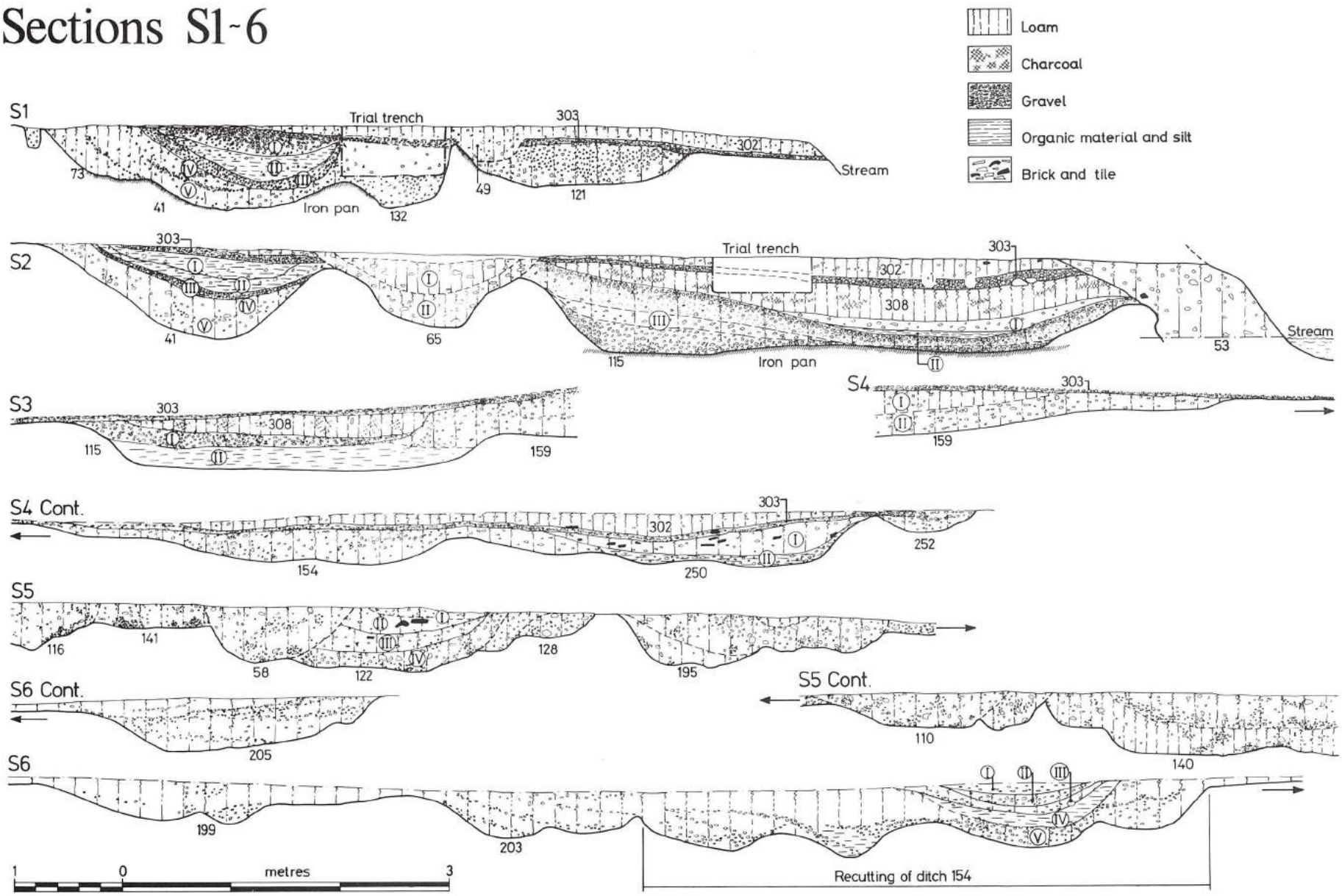

Fig. 8 Heybridge: Sections S1-6, and key to sections. Scale 1:50.

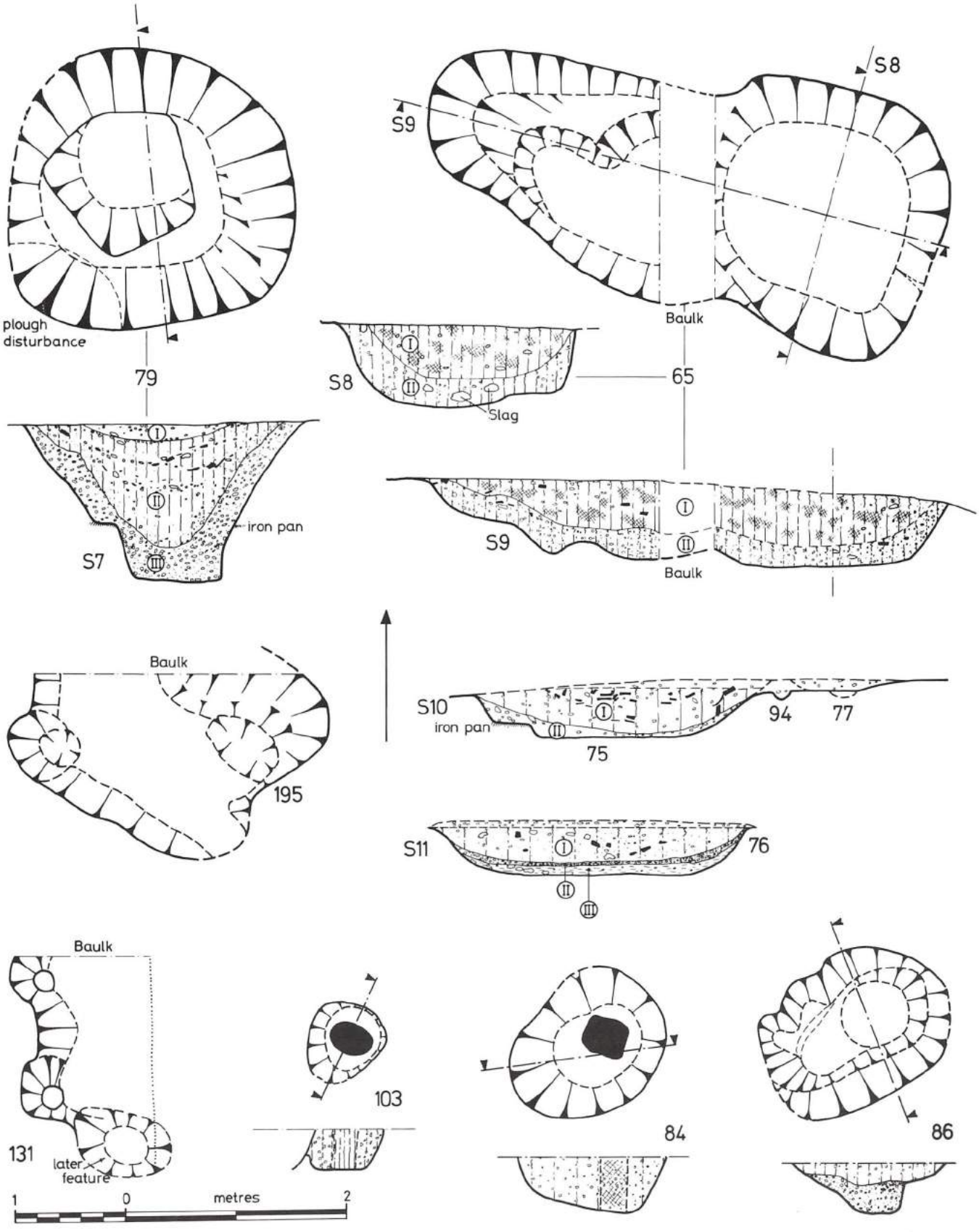

Fig. 9 Heybridge: Detailed plans and sections. Scale 1:50.

13.58). The distance between its east end and ditch 58 suggests the width of the bank alongside the latter.

Building Materials

Stone

No stone structure was found on the site, though it is probable, given the relative abundance of stone and the presence of roof tiles, that much of the assemblage is derived from a masonry building in the vicinity. No piece has any traces of adhering mortar, but one large stone from Group E has a sawn surface (Ditch 154 I, V.2/VI).

A. *Septarian* nodules occur, both burnt and unburnt, from Period IV.1 onwards.

B. *Chalk* is present in small quantities from Period IV.1 onwards.

C. *Carstone* This is a highly ferruginous sandstone, and may be from either the lower Greensand of eastern England, or even perhaps from younger (Pleistocene ?) rocks such as the Red Crag. Period IV.1 onwards.

D. *Sandstone* A fine-grained yellowish and friable sandstone with abundant iron oxide grains; it resembles some of the sandstones from the Hastings Beds (Lower Cretaceous) of the Weald. From Pit 65 I (V.1). A fine-grained calcareous sandstone of unknown provenance came from Pit 75 (V.1).

E. The largest group of stones comes from the *Hythe Beds* (Lower Greensand) of the Weald, a series of alternating layers of sandy glauconitic limestones (*Kentish Ragstone*) and calcareous sandstones (*Hassock*) with occasional beds or lenticles of *Chert*. It seems that when the strata were quarried, the stone was taken out indiscriminately, as opposed to the more modern method when the tendency was to use only the Rag, and better types of Hassock, discarding the Chert. Maidstone has always been the main quarrying area, ever since Roman times, the stone being shipped down the Medway to the Thames and thence wherever required. A large piece of greensand was found in the early Roman ditch 41 (Periods III-IV).

F. *Erratics*

i) a brownish siliceous sandstone, probably a fragment of Sarsen. From post-hole of GH 83A (VI).

ii) a smoothed, flat pebble of quartzite; the smoothing is probably due to water-action rather than use. The lithology is typical of the so-called Bunter pebbles from the Triassic rocks of the Midlands, a great many of which have tended to end up in drift deposits elsewhere. From GH 119 (VI).

iii) a medium-grained reddish sandstone, very similar to rock-types from the Permo/Triassic rocks of the Midlands. Pit 155 (V.2).

For a complete report on stone samples submitted to Martyn Owen, see MF 1.B.

Tile

The tile recovered was, without exception, extremely fragmentary, and no dimensions apart from thickness could be recorded. It first appears on the site in Period III.2 (Ditch 41).

Fabric

The normal range of Roman tile fabrics, hard, red and sandy, make up most of the assemblage. Two fragments in a gault clay fabric were present (302 and 304). These were perhaps produced in north Essex or Suffolk. At Verulamium these seem to date before *c.*AD 125 (Wheeler & Wheeler 1936, 141).

Manufacture

All the tiles were made using a mould, generally sanded, and in the case of one box flue tile fragment (122, V.2) certainly of wood. The edges of many, especially the *tegulae*, were trimmed with a knife when leather-hard. Many are reduced to a grey colour. It is conceivable that this was done purposefully to give a polychrome effect. A number are, however, totally wasted; one fragment from the gravel surface 303 has a vitrified face and had probably formed part of a kiln wall. A kiln is therefore likely in the vicinity.

Forms

The *tegulae* and *imbrices* were wholly unremarkable.

Bonding Tile

These were nearly all 30 mm thick, a few being 40 mm. Two pieces have a slightly sunken margin, 15 to 20 mm in from the edge, on the upper surface (122, V.2; 308, IV.2). These have also been noted on the Temple site at Chelmsford (in prep), and might possibly be floor-tiles.

Box-Flue Tiles

There were 63 examples of comb-decorated box flue tiles, using curvilinear and geometric patterns. A further three examples were cross-hatched, a feature which seems to be early at Chelmsford (Drury forthcoming). Both circular and square knife-cut apertures are present. There was one fragment from 53 (VII) of a flat duct tile with a circular hole; this would have been used, as an alternative to box-flue tiles, in the construction of cavity walls (see Webster 1979, fig. 15.2D).

Surface Treatment and Incidental Impressions

A fragment of *tegula*, 22 mm thick, had a round nail hole pierced before firing. The aperture on the surface is 10 mm in diameter, but only 2 mm on the underside, and hence was probably never fixed in this way. Pit 75 (V.1).

One abraded fragment of *tegula* bears hobnail impressions, though not forming any regular pattern. Pit 76 (V.1).

The impressions of two dog paws were noted, one being on a wasted bonding tile, 35 mm thick. Pit 75 (V.1) and Ditch 122 (V.2).

Fifteen semicircular 'signatures', made by the tilemaker's fingertips, were found. These are concentric grooves, one to three in number. They occur on both *tegulae* and bonding tiles.

One fragment of bonding tile (30 mm thick) had been scored with an 'X' before firing (Pit 65 I, V.1). This is possibly part of a 'tally number', *cf.* Brodribb 1979, 219.

Traces of Use

The majority of fragments are small, and often abraded, and are nowhere in a primary context. Traces of *opus signinum* occur on the following: Ditch 24 (combed box flue tile, VII); 303 (bonding tile, end IV.2); GH 119 (bonding tile, VI).

Tesserae

46 tesserae cut from Roman tiles were found in Roman contexts. Of these number, 12 came from Ditch 115 (IV.2), and 12 from Pit 76 (V.1). One tessera from the former was cut from a combed box flue tile, and one from the latter was in a gault fabric. Sizes ranged from 20 x 20 x 15 mm to 35 x 25 x 20 mm. No traces of mortar were present. The earliest occurrence of a tessera is in Period IV.1 (141), though in view of the accumulation of the rest in later features, this one is possibly intrusive.

Mortar

Fragments of *opus signinum* were recorded from Pit 65 I (V.1), Well 79 (V.1), and 308 (end IV.2). A pebbly white lime mortar used as a tile bedding and still retaining the shape of *imbrices* was recorded from Pit 75 (V.1).

Wattle and Daub

Fragments of burnt clay were ubiquitous. Most are small and abraded, though some do show wattle impressions. From Ditch 41 (III.2-IV) came a small, gritty, abraded fragment with part of two round wattle impressions, 25 mm in diameter. A similar fragment from Chelmsford (Wickenden in Drury, forthcoming) is probably from a partition wall.

From Ditch 122 (V.2) came a fragment of daub, whose surface is scored with diagonal parallel grooving as a form of keying to receive a plaster finish. A 7 mm diameter withy runs perpendicular to the surface.

There was a mass of burnt daub in Pit 121 (III.1), including three large pieces from a wall, perhaps 100mm thick originally. Both horizontal and vertical wattles, 10-20mm in diameter, are present.

In Pit 65 I (V.1), there was a small group of clay veneers, 15mm thick, which seem to be detached finishing coats from daub walls. A similar veneer from Pit 179 (IV.1), 12mm thick, has much grass marking on both surfaces, presumably as an aid to keying.

Pigments by Justine Bayley

F65 II (V.1) yielded the base of a greyware pedestal pot containing a deep red haematite pigment (Munsell 10 R 3/6 'Dark Red'). AML 802739.

A second red haematite pigment on the inside of a carinated sherd from a greyware vessel was confirmed by X-ray fluorescence. Ditch 250, AML 810184.

The Small Finds

The Coins

British by Lyn Sellwood

British Potin, Class II, O2. (Plate 1) Pit 195
Weight: 0.718gm Diameter: 13mm
Obverse: Crude head facing left. Features reduced to a large, raised central pellet surrounded by a circle inscribed with dividers from which a straight line emanates. Another faint arc is inscribed above this circle. The profile is represented by two crescents which face the same way. The whole is surrounded by an inscribed circle.
Reverse: Bull above an exergual line. The back of the animal is a straight line. The front and back legs are represented by two inverted 'V's between this and the exergue. A crescent in the field above the bull represents the tail, a large raised central pellet occurs under the body. The whole is surrounded by an inscribed circle.

A broken tang projects from one side of the coin; separation of the coin from its neighbour at the opposite side has resulted in a break which encroaches into the design, particularly on the reverse.

Plate 1 The potin coin from pit 195 (actual diameter 13mm).

Roman by Richard Reece

Emperor	*Date*	*Identification*	*Context*
Claudius I	43-64	Copy. Reverse indeterminate	GH 82
?? Hadrian	117-138	Worn Sestertius. Rev. illegible	302 over 110
Antoninus Pius	138-161	R.I.C. 598	154 I
Antoninus Pius	138-161	Sestertius. As R.I.C. 794	GH 82
Antoninus Pius	138-161	Dupondius. As R.I.C. 699	Unstrat
Antoninus Pius	138-161	Cast of a Dupondius?	302
Faustina I	145-160	Sestertius, Rev. illeg.	302
Marcus Aurelius	161-180	R.I.C. 1006 (AD 170-1)	79
Marcus Aurelius	161-180	Sestertius, Rev. illeg.	302 over 64
? Marcus Aurelius	161-180	? Dupondius. As R.I.C. 895	GH 82
Marcus Aurelius	161-180	Dupondius. Rev. illeg.	76
Commodus	180-192	Sestertius. Rev. illeg.	GH 64
Crispina	180-190	Sestertius. Rev. indeterminate. Cut and hammered, for possible re-use as weight	Modern distur bance
Septimius Severus	193-211	Denarius. Reverse Victory. R.I.C. 22 ?burnt	65 I
?Septimius Severus	193-211	? Denarius. ? As R.I.C. 189	83
Claudius Gothicus	268-270	R.I.C. 48	65 I
Barbarous Radiate	270-290	Reverse ? Pax	154 on surface
Diocletian	294-305	R.I.C. 6 London 23(a)	base of 302
Constantine I	317-324	As R.I.C. 7 London 154 (AD 319-320)	154
Constantine I	320-324	R.I.C. 7. Trier 303	106 (intrusive)
Constantine I	320-324	R.I.C. 7. Trier 368	122 II
Constantine I	324-330	R.I.C. 7. Trier 475	58
Constantine II	324-325	R.I.C. 7. London 296	122 II
Urbs Roma	330-345	Copy of HK 190	122 II
Constantinopolis	330-335	HK 59	GH 83A subsoil
Helena	324-330	R.I.C. 7. Trier 508	302
Constans	345-348	HK 148 $\frac{D}{TRP}$	302
House of Constantine	350-360	As CK 25	302
Magnentius	350-360	As CK 49	110
House of Valentinian	364-378	As CK 96	302

Summary

As a group of coins the Heybridge finds run from the immediate pre-Roman Iron Age up towards the end of the 4th century. There are no obvious gaps, unless the absence of coins of the House of Theodosius struck after 388 be considered important. With only one coin of the preceding period, the House of Valentinian, little importance may be attached to the absence of the smaller, later and often scarcer coins.

There is, however, an absence of peaks of coin loss which may usually be expected around the years 260 to 296 and 330 to 350. Instead there is an unusual concentration of coins struck between 140 and 220 and another group struck between 315 and 330. The first group may have been lost over a century between 150 and 250, or they may all have been lost in a short burst of activity in the first 20 years of the third century. The group of 315 to 330 is perhaps only unusual in that it fails to lead to the normal burst of coin loss from 330 onwards.

The majority of the 31 coins are residual in post-Roman deposits. It is possible that once discovered they were especially kept and even treasured, but their simple occurrence in such deposits does not insist on this idea.

The coins found in Roman deposits can do no more than give an earliest possible date for those deposits. Thus

the two denarii of Septimius Severus show that Pits 65 and 83 had not finally been sealed until the early years of the third century at the earliest. It would be tempting to go on to say that these coins had a limited life and were almost certainly lost by the years 270 to 280.

In conclusion, the coin evidence alone suggests a moderately flourishing site which enters a clear period of decline around 325 to 330, from which it never really seems to recover.

The Brooches

by S.A. Butcher
(Inspectorate of Ancient Monuments, London).
Metal analyses and technical notes by Justine Bayley, (Ancient Monuments Laboratory).

Fig. 10.1 Small Nauheim-derivative brooch of bronze, 36 mm long, with with very thin bow. The pin is missing, but was formed from the same piece of metal as the bow and spring. The catchplate is broken, but was plain and small. Well 79 III (V.1).

The type is common in southern Britain and on the continent in the first century AD. At Camulodunum it was found in Claudian-Neronian contexts (Hawkes & Hull 1947, 312); at Fishbourne, there were many of this type in levels of 43-75 AD (Hull, in Cunliffe 1971, ii, 100).

Fig. 10.2 Iron brooch of Nauheim – derivative type. Only the upper half survives, showing a large spring of five coils plus inferior chord. The rounded bow is badly cracked. Iron brooches of this type were common in the first century (for an example from Hod Hill, see Brailsford 1962, 11). A rather similar one was dated 'Neronian/early Flavian' at Old Winteringham (Stead 1976, 198.21). AML 770549. 302.

Fig. 10.3 Brooch of P-profile with sheath foot. The rounded cross bar contains a spring of many turns held on a bar which protruded through the solid ends. The upper bow is triangular in section with a chevron moulding where it joins the crossbar. There are similar mouldings where the highly-curved upper bow meets the straight foot, which is also of triangular section. Both the head and foot are damaged and it is possible, though unlikely, that the head bore a knob as in incipient 'crossbow' brooches. The front surfaces of the bow between the chevron mouldings and also a triangle straddling the ridge of the foot were gilded. Mercury was not detected by X-ray fluorescence, which suggests the gold was applied as leaf. There are widespread traces of 'tinning' which suggests all the non-gilded areas, including the back of the brooch, were tinned. The brooch was bronze but contained some zinc and lead. 303, *c.*AD 225-250.

The general type of this brooch occurs mainly on military sites on the German *Limes* and in Britain, though there are no close parallels known to the writer. An example from Zugmantel is similar (Böhme 1972, taf 13.590) and in discussing the type Böhme concludes (*ibid*, 24) that it is the typical military brooch of the second half of the 2nd and early 3rd centuries. British examples tend to confirm this: Housesteads (Charlton 1934, 195.3 — from an early 3rd century context); Corbridge (Haverfield 1911, 184, 24); Ebchester (Maxfield 1975, 72). A related brooch from Richborough (Bushe-Fox 1949, 120.58, AM Lab No 7350286) also has gilded and tinned decoration.

Unillustrated

1. Fragment of upper part of bow of same general type as the Hod Hill group, and made of leaded bronze. First three-quarters of the 1st century AD. 302.
2. Bent piece of angular wire with part of coiled spring at one end, probably the bow of a similar brooch to Fig. 10.1, though it is possible that it is only a spring and pin. Made of brass. Certainly 1st century AD. Ditch 41 III (IV.2).
3. Curved pin, incomplete. Possibly made of gunmetal. Pit 83 (V.1).

Objects of Copper Alloy

The majority of the copper alloy is in a good state of preservation. In addition to the illustrated objects the following were found: fragments of three pairs of tweezers (65 I (V.1) and 163 (V.2)); a broken link (GH 64, VI); a fragmentary worn band finger ring (83, V.1); three shanks of pins, needles or *ligulae* (303 (IV.2), 75 (V.1), GH 118 (VI)); various fragments of sheeting, offcuts and unidentifiable lumps. Complete record sheets are deposited with the archive.

Analyses were carried out by Justine Bayley (Ancient Monuments Laboratory) by X-ray fluorescence (XRF), and her identifications of the alloys are included below. The full report, including Table 1, is reproduced in MF 1.C.

Fig. 10.4 Abraded object, possibly a legionary apron fitting. Brass. Ditch 58 (VII).

Fig. 10.5 Lock-pin, 33 mm in length, with a rectangular shape and round head. The end of the shaft is abraded, but there are signs of a rivet in place. For the type, see Frere 1972, fig. 39. 117-8 (2nd century); Brodribb *et al*, 1971, fig. 31.53 (3rd century). Leaded bronze. Ditch 32 (VII).

Fig. 10.6 Spoon, 100 mm long. The shaft is a continuation of the base of the shallow bowl. There is a simple grooved flange where the shaft joins the bowl. For a parallel from Camerton, see Wedlake 1958, fig. 60.95, and p.265.9. Leaded bronze. Pit 75 II (V.1).

Fig. 10.7 *Ligula* (cosmetic spoon) of usual type. Length 71 mm. Leaded bronze. Pit 83 (V.1).

Fig. 10.8 Needle. Length 121 mm. Leaded bronze. 302. A fragment of another came from GH 83A (VI).

Fig. 10.9 Pin with decorated slashed head. The shaft is slightly swollen-waisted. Length 78 mm. Gunmetal. 141 (IV.1).

Fig. 10.10. Pin with simple round head with a groove beneath it. Length 73 mm. Leaded bronze. 41 III (IV.2).

Fig. 10.11. Finger ring, internal diameter 18 × 15 mm. There is a smashed setting of black glass. The ring is a 3rd century type. Leaded gunmetal. Pit 76 (V.1).

Fig. 10.12 Oval wire ring with soldering mark. Brass. 302.

Fig. 10.13 Object, very worn. Its use and date are unknown. ?Leaded gunmetal. Unstrat.

Fig. 10.14 Hook. Leaded bronze. Pit 65 I (V.1).

Fig. 10.15 Bar, rectangular in section, length 64 mm. One end is broken off, the other splays out and is flattened. Use unknown. Bronze. 41 I (IV.2).

Fig. 10.16 Stud, with impressed concentric circular decoration. The head is of very thin metal and was probably used for attachment to leather. Brass. Well 79 II (V.1).

Fig. 10.17 Tack, with flat rectangular head and tapering shaft. Bronze. 302.

Fig. 11.18 Thin circular fragment of sheeting, convex in section. Bronze. Unstrat.

Objects of Iron

The catalogue below represents pieces of interest selected from X-rays of the complete assemblage; this was generally in a state of advanced corrosion and comprised, for the most part, unidentifiable scraps of sheeting, strips and bar fragments. Over 900 fragments of nails were recorded, mainly of Manning's Type I, but including seven Type II; the number includes over 90 from 308 (IV.2), 150 from Pit 65, 40 from Pit 75, 170 from Pit 76, and 120 from Well 79 (all V.1). Complete lists are deposited with the archive. I am grateful to Prof. W.H. Manning for his comments on Figs 11.19, 29, 31; 12.41.

Fig. 11.19 Candle-stick; an elaborate form, which could be used in various ways. If the spike is driven into wood, the socket functions; but it could also be stood using the socket as a stand, or hung using the hook, in which case the candle (which was probably of tallow and fairly malleable) was pushed onto the spike. A larger and even more elaborate example comes from Gross-Krotzenburg on the German *limes* (ORL 1914, 24, taf V, 14). Identified by W.H. Manning. Pit 76 (V.1).

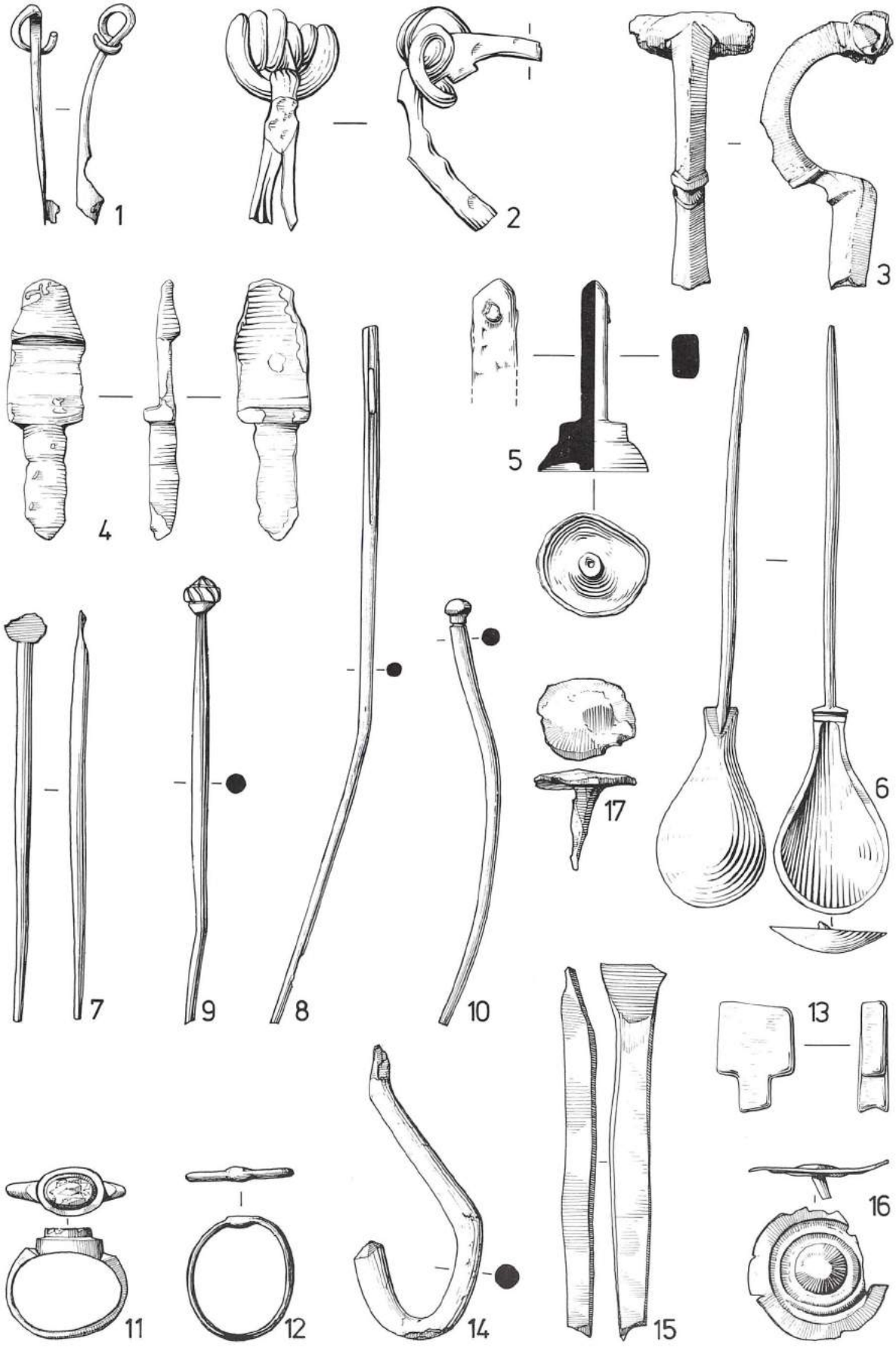

Fig. 10 Heybridge: Objects of copper alloy, 1-17. Scale 1:1.

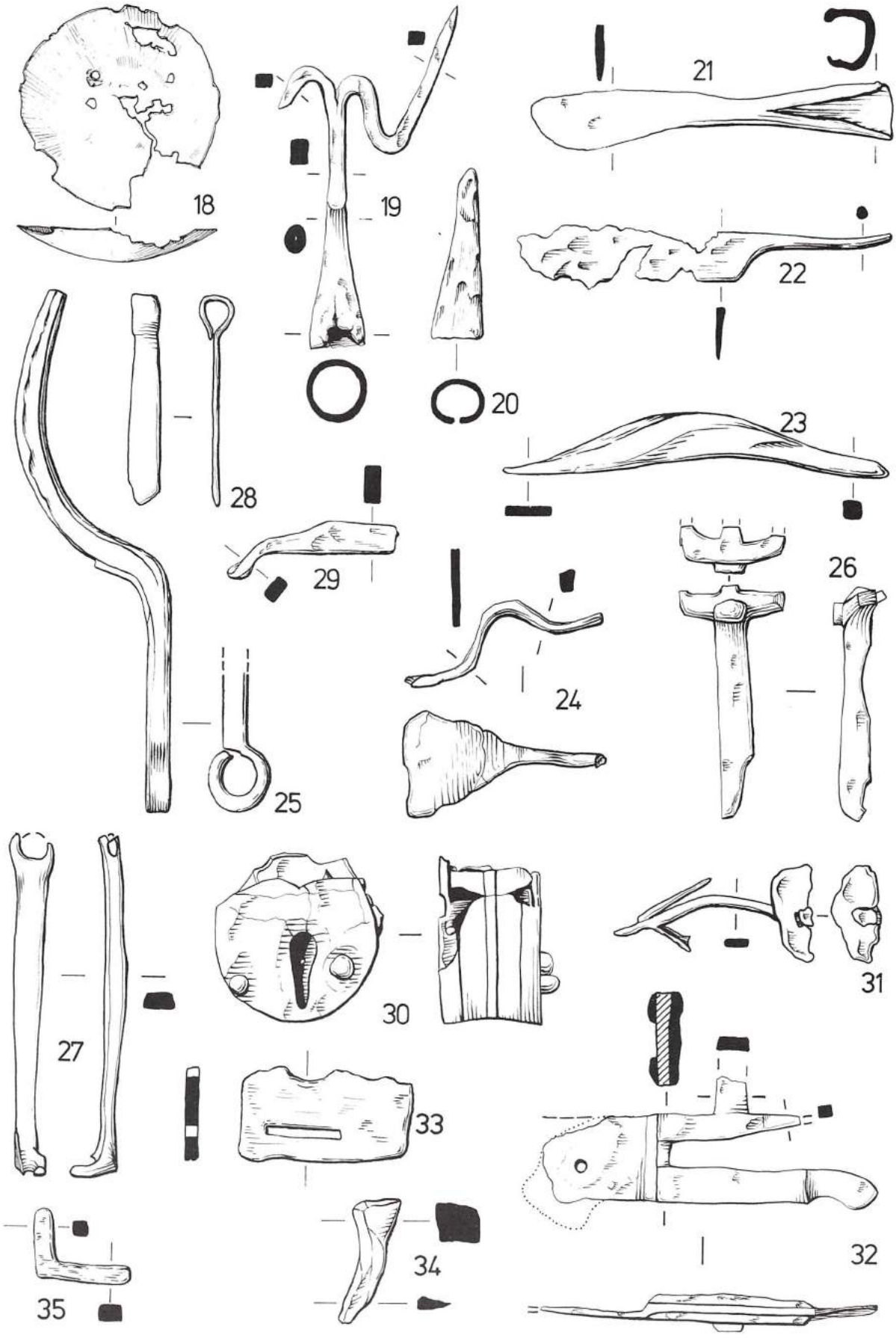

Fig. 11 Heybridge: Object of copper alloy, 18. Scale 1:1; Objects of iron, 19-35. Scale 1:2.

Fig. 11.20 Conical ferrule, 60mm long, with a split socket, suitable for a staff, spear or the tip of an agricultural implement. For similar objects, see Manning 1976, 21. Nos. 24-8, and fig. 13. Pit 65 I (V.1).

Fig. 11.21 Knife, 126mm long, with socketed shaft. Well 79 (V.1).

Fig. 11.22 Knife, 130mm long. The tang continues the line along the back of the blade. Pit 65 I (V.1).

Fig. 11.23 Tool, 124mm in length. The functional end narrows to a chisel-like blade, while the other end, which is assumed to be the tang, tapers evenly along its length, and was probably inserted in a wooden handle. Unstrat.

Fig. 11.24 Cranked tang and start of blade of mason's or plasterer's trowel (see Manning 1976, 27 and fig. 17). Pit 75 (V.1).

Locks and Keys

Fig 11.25 Latch-lifter (incomplete) with loop terminal. For the type, see Neal 1974, fig. 71.394. Pit 65 I (V.1).

Fig. 11.26 Incomplete key consisting of a shaft, square in section and a head at right angles to it, formed by a bar, the ends of which are turned forwards and broken off; there is also a projection behind the centre, and a knob on the front of the shaft at the junction with the head. Traces of copper were detected by X-ray fluorescence. Miss Justine Bayley has suggested this is an accidental deposition (post-burial) since it runs across fractures. AML 810556. Ditch 122 I (V.2).

Fig. 11.27 Incomplete shaft of key for a barrel padlock, with part of a perforated loop terminal remaining, and a fragment of the pierced bit, perpendicular to the shaft. Well 79 (V.1).

Fig. 11.28 Strip, 76mm long, with a rolled end; possibly a key handle. For a similar example from Braintree, see Drury 1976, fig. 16.21. Pit 76 (V.1).

Fig. 11.29 Fragment of a bar, rectangular in section, and bent at the narrower end. Possibly part of a key handle. 302.

Fig. 11.30 Small lever padlock with keyhole, held together by two iron rivets on front plate, bound transversely with three thin copper alloy strips. Ditch 122 (V.2).

Fig. 11.31 Barbed spring mechanism of a barrel padlock. 140, (IV.1).

Fig. 11.32 Object. The lower arm consists of a central flat plate, with two rounded plates attached to it. The end plate is highly corroded, but X-ray revealed a perforation. Use unknown, possibly fragment of mechanism of a large lever lock (W.H. Manning, pers comm). 302.

Fig. 11.33 Plate, 60mm × 34mm, with part of semi-circular opening in one edge and a rectangular slot, 26mm × 3mm, cut out; possibly part of a lock plate. Pit 76 I (V.1).

Miscellaneous

Fig. 11.34 Punch, 22mm long, with stout square head, and shaft narrowing to a wedge. 106 A (IV.1).

Fig. 11.35 L-shaped staple, rectangular in section; a common type, see Cleere 1959, 59, fig. 4 a-h. Pit 65 I (V.1).

Fig. 12.36 T-shaped staple with an incomplete shaft, circular in section, with a cross bar set at its head with the arms curved over, where it has held a curved piece of wood. The technique was derived from ship-wrighting. For a similar example, see Neal 1974, fig. 74.511. Ditch 58 (VII).

Fig. 12.37 Tanged, U-shaped wall hook. For the type see Frere 1972, fig. 68. 86-9; Neal 1974, fig. 70.373. Well 79 II (V.1).

Fig. 12.38 Staple made from a wide strip, with its two ends narrowing to points and bent underneath. Well 79 II (V.1).

Fig. 12.39 Ring, internal diameter 35mm. Well 79 I (V.1).

Fig. 12.40 Barbed fish-hook. Well 79 I (V.1).

Fig. 12.41 Incomplete plate, bent through a right angle at one end, with two iron rivets in place. Pit 75 I (V.1).

Fig. 12.42 Object. One rivet survives, though more are shown in the X-ray. Heavily corroded. Probably a plate used for linking two boards together. Its shape suggests that it was intended to be visible (W.H. Manning, pers comm). 302.

The Ironworking Slags

by J.G. McDonnell

The total quantity of slag from the site weighed 15.16kg. The non-diagnostic slags totalled 0.345kg, all furnace/hearth lining. One piece (F44. Period V.2/VI) was a tuyere mouth, 30mm in diameter. Also recorded was a lump of ferruginous stone (140, IV.1), which could be considered as a possible piece of ore. Of the diagnostic iron silicate slag, only 0.34kg was probably smelting slag. This comprised less than ten pieces of probable tap slag from five contexts; none are considered to be contemporary. The remainder (14.235kg, 94% of the total assemblage) was smithing slag, occurring as either the characteristic hearth bottoms or as randomly shaped lumps. Many of the latter were probably hearth bottoms in the early stages of formation.

Twenty seven contexts produced slag; eight contained less than 100gms, eighteen contained between 100 and 1000gms, and Layer 308 (IV.2) contained 6.695kg of smithing slag (44% of the total), and 0.12kg of furnace/hearth lining. All the slag was of Roman date; the material found in Saxon contexts was probably the result of disturbance of 308 or other Roman contexts.

The quantity of slag probably represents a small local smithing activity, and it is of interest to note its possible association with a pottery kiln (p.46). This report is reproduced in full, with analyses, in MF 1.D.

Objects of Lead

Fig. 12.43-45 Weights, possibly used in fishing. For parallels see Bell parallels see Bell 1977, fig. 84. 22-3; Cunliffe 1975, fig. 123. 167 (described as a net weight).

Fig. 12.43 Sheet partly bent round to form a hollow cylinder; internal diameter 10mm × 8mm. Pit 76 (V.1).

Fig. 12.44 Small strip folded into a cylinder. Ditch 122 (V.2).

Fig. 12.45 Flat sheet, 37mm × 30mm, showing folding creases. This is clearly an unfurled weight, similar to Fig. 12.44. Well 79 (V.1).

Fig. 12.46 Steelyard weight of biconical shape with an iron attachment at the top for suspension, linked to which is a bronze hoop. Pit 65 I (V.1).

Weight 111.51 grams; this is similar to an example from Gadebridge Park weighing 114 grams (Neal 1974, fig. 56.47). It seems likely that these were intended as weighing 4 *unciae*, which should weigh 109.15 grams, based on the traditional weight of the *libra* of 327.45 grams (Boon 1974, 292). The additional 2 grams can be explained as the effects of corrosion of the iron ring, and the supplementary weight of the bronze link.

Fig. 12.47 Much worn steelyard weight of biconical shape, similar to Fig. 12.46. Unstrat.

Weight 102.58 grams. Allowing for its abraded state, it is possible that this too was intended to weigh 4 *unciae*.

Unillustrated Small fragments of cut sheeting, one very thin sheet with adhering pieces of charcoal which had obviously been caught in a fire not hot enough to melt it, and several drips of melted lead.

Objects of Bone and Antler

The only bone objects which survived the acid conditions of the site were found in the fill of well 79, layer II. They were:

Fig. 12.48 Roughly worked antler tine, 83mm in length. The saw marks are visible on the butt end, below which a hole, 5mm in diameter, has been pierced. The shaft has been polished smooth through use, and tapers to a rounded point. It is possible that this was a needle used in making or repairing fishing nets. For some possible lead fishing weights, see Fig. 12.42-44.

Fig. 12.49 Pin, broken, 75mm in length. The head is roughly carved, conical in shape. A further two broken pin shafts were also found.

The Glass

by D.B. Harden and N.P. Wickenden

Dr. Harden kindly reported on Fig. 12.50, 53-57.

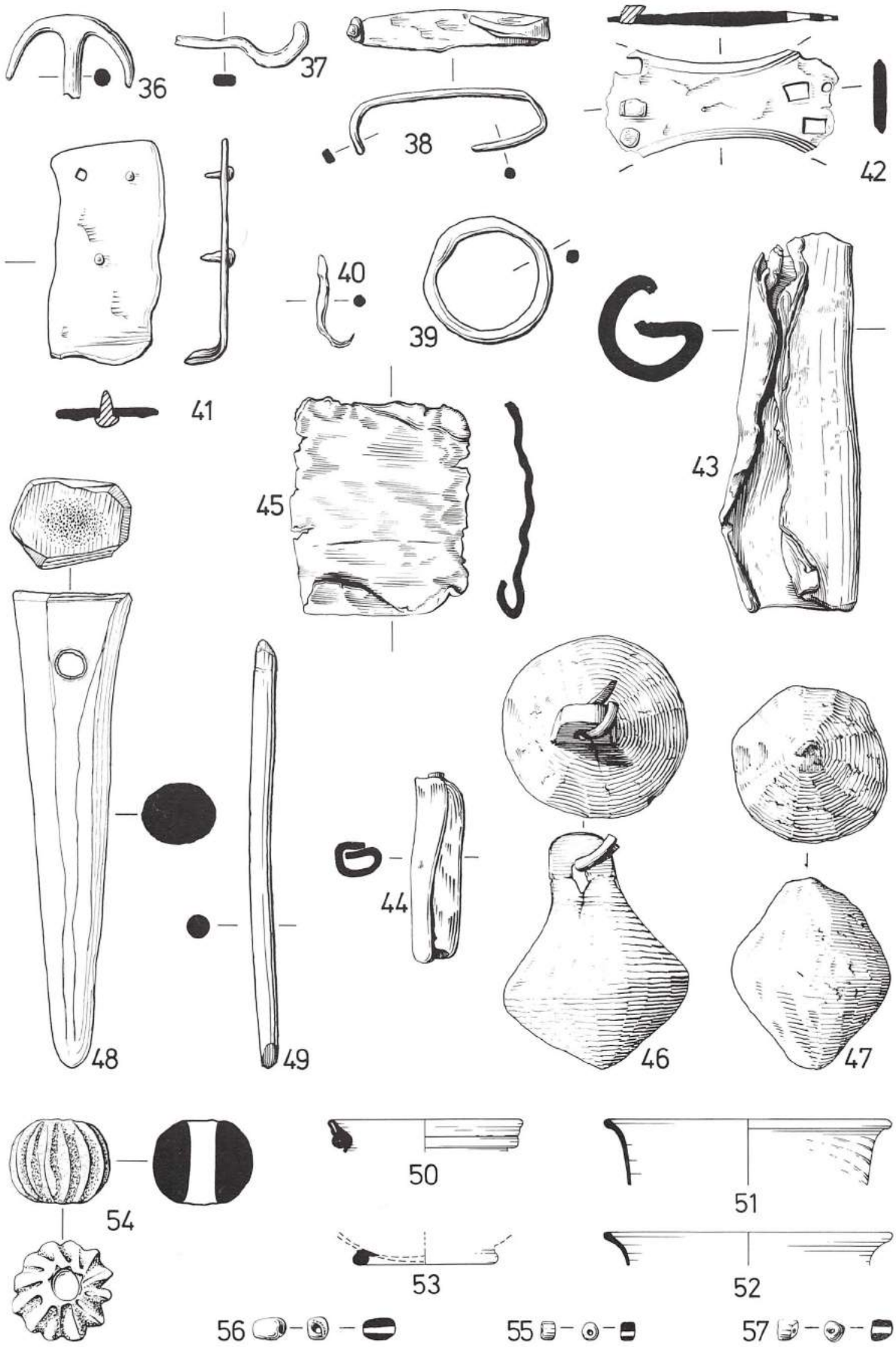

Fig. 12 Heybridge: Objects of iron, 36-42, scale 1:2; Objects of lead, 43-47, scale 1:1; Objects of bone, 48-9, scale 1:1; glass, 50-57, scale 1:2.

The Vessels

Fig. 12.50 Fragment of rim of jar, green, surface dulled, some bubbles and black impurities. Rim folded outwards at two places; the first fold, a closed one (no tubular hollow), now lies outside neck constriction, the second, now forming the lip, has become flattened-tubular in form. Below neck-constriction the sides (now missing) expanded downwards. Diameter *c.*65mm, ht (as extant) 12mm. 3rd-4th century. Isings forms 62 or 67b (1957, 81 and 87). These shapes begin early, but endure, and are not uncommon (especially f 62) in later Roman levels. 302.

Fig. 12.51 Fragment of rim of beaker, light green, very bubbly with black impurities. The rim is everted and flame-rounded; there are traces surviving of the top ends of three lightly-corrugated ribs sloping down from left to right. Diameter *c.*90mm. Subsoil 302.

Fig. 12.52 Fragment of rim of beaker as Fig. 12.51. Diameter *c.*95mm. Subsoil 302.

There is little doubt that flame-rounded rims, as Fig. 12.51-2, replace the characteristic knocked-off rim of the standard late Roman cylindrical/ truncated conical beaker (Isings 1957, form 106 b-c) in the last quarter of the 4th century; they further continue into the post-Roman period on other drinking vessel forms. The classic group of late Roman cups and beakers with similar flame-rounded, everted rims comes from Burgh Castle (Harden 1983, 81-88, fig. 37 and pl. XII); Harden now believes this to have been deposited in the first quarter of the 5th century, or very shortly afterwards (*ibid*, 88).

A variety of this late Roman form, always with a flame-rounded rim, has spiral trails below the rim, and/or twisted corrugations on the body, similar to Fig. 12.51. Examples occur at Mayen, in graves dated AD 370-410 (Haberey 1942, 253 f) and Trier, in late 4th century graves (Goethert-Polaschek 1977, 73).

The diameters of Fig. 12.51-2 are, however, extremely large (*c.*90-95mm) for cones. The fragments are tantalisingly too small for firm identification. Indeed Dr. Harden has argued (pers comm) that they may belong to squat jars of the late 6th-7th century, a date which is not impossible considering the contexts, although they would be the only finds of this date from the site.

It seems reasonable to conclude that the pieces are fragments of cone beakers, belonging to a late Roman tradition which continued into the pagan Saxon period. As such, they should perhaps be seen as belonging to the late Roman, or more probably the Saxon occupation of the site in the first quarter of the 5th century (Drury & Wickenden 1982).

Other undecorated fragments are known from Essex: Chelmsford (Charlesworth in Drury forthcoming, fig. 75.15); Great Dunmow (Wickenden forthcoming), associated with a late 4th century shrine; Ivy Chimneys, Witham (Allen, in prep).

Fig. 12.53 Fragment of base-ring of vessel, yellow, no weathering, bubbly. Enough preserved to show that the base-ring was pushed in and then tooled into a solid ring; the side of the vessel probably spread outward to start with (none of it is preserved), the bottom probably had a slight kick, or at least a deep concavity at its centre. Probably from a dish or a bowl. 3rd-4th century. 154 II.

Unillustrated Fragment of a two-ribbed bottle handle, blue-green, 75 I (V.1); fragment of hollow tubular base ring, blue-green, pinhead bubbles, 250 II (V.1); fragment of transparent hollow tubular base ring, 122 II (V.2).

The Beads

Fig. 12.54 Bead, faience, 'melon' type, bluish-green. Globular, with twelve vertical ribs. Thread-hole cylindrical and very regular. Diameter 17mm, ht 13mm. Diameter of thread-hole 6mm. 302.

Fig. 12.55 Bead, translucent greenish-blue, very bubbly. Square in cross-section, and wider at one end, the narrower end being regular, the wider end irregular and very uneven. Length 6mm, width 3-4mm. 302.

Fig. 12.56 Bead, translucent light blue, very bubbly. Shape in general as Fig. 12.55 but shorter. Length 3mm, width 3-3.5mm. 155 (V.2).

Fig. 12.57 Bead, opaque greyish-green, very bubbly and rather unglasslike, owing to insufficient firing. Cylindrical in cross-section. Ends uneven and clearly one of a series knocked off from a drawn tubular rod. Length 2mm, diameter 3mm. 122 II (V.2).

The Window Glass

There were fragments of window glass from Period IV.1 onwards, all of the standard moulded matt/glossy type, except for one blown fragment from GH 82 which is glossy on both sides. The colour varies from blue-green to near transparent. There were several rounded edges present, but no grozed pieces. Pit 65 and the adjacent GH 64 both contained many fragments.

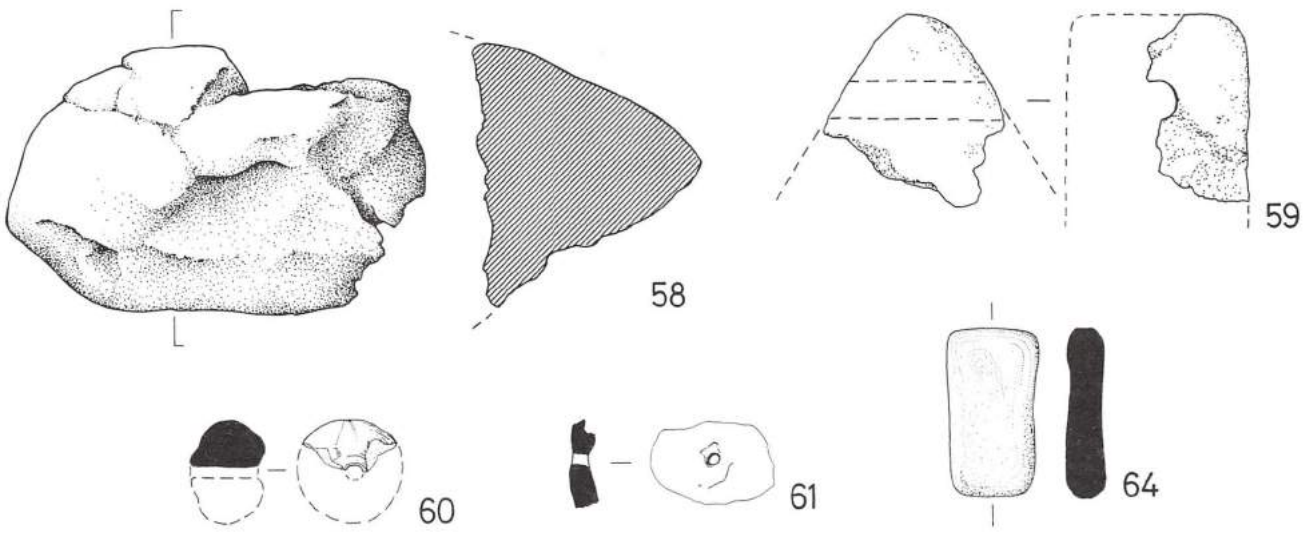

Fig. 13 Heybridge: Objects of fired clay, 58-61; stone, 64. Scale 1:3.

Objects of Fired Clay

Fig. 13.58 Large shapeless lump of fired clay in a soft, sandy fabric, black in colour, with an oxidised upper surface. Possibly part of a kiln pedestal. Ditch 24 (VII).

Fig. 13.59 Fragment of triangular Iron Age loomweight, pierced by a hole, 16mm in diameter, and bearing a groove in the centre of the ridge. 302.

The fabric is hard and sandy, with some large flint inclusions; the clay is not very compact. Other fragments in the same fabric were recorded from 302; 41 II (pierced: IV.2); 308 (end IV.2); 41 (III.2-IV.1); 121 (III.1); 180 (II).

Loomweight fragments in a finer, vegetable-tempered fabric were recovered from 70 (pierced, VI); 79 III (abraded, IV.2); 180 (pierced, II).

Fig. 13.60 Fragment of Iron Age spindle whorl. Fine orange clay, with no visible inclusions. 120 (IV.1).

Fig. 13.61 Belgic grog-tempered sherd, pierced and re-used as a spindle whorl. Ditch 41 V (III.2).

Objects of Stone

Amorphous, abraded fragments of Rhenish lava were found in the Roman levels and in GH 64 (presumably residual).

No. 62 (Unillustrated) Several large pieces of an upper quern of Rhenish lava were reconstructed. Thickness at rim 57mm. Much spalling of the surfaces has taken place, but the typical vertical grooving on the edge and zones of opposed diagonals on the upper surface are still clear. Well 79 (V.1).

Three amorphous fragments of Millstone Grit come from the site. There was one undiagnostic piece of quern from GH 82 (? residual).

No. 63 (Unillustrated) Re-used fragment of Millstone Grit quern, with both faces worn smooth by grinding and rubbing. Thicker on one side. One edge is worn smooth and forms an arc of a circle, *c.*460mm in diameter. Pit 179 (IV.1).

Fig. 13.64 Well-smoothed hone, 67 × 37 × 14mm. This is a ferruginous, slightly micaceous sandstone of unknown provenance. Pit 75 II (V.1).

No. 65 (Unillustrated) Small fragment of worn stone with a flat bottom, probably used for rubbing in a similar way to modern pumice stones. Post-hole 164 (II).

Martyn Owen writes, "a dark green crystalline rock consisting almost entirely of the mineral hornblende. It could be a fragment of amphibolite or hornblende-gneiss, the nearest possible locality being the Malvern Hills." The presence of such a stone in an Iron-Age post-hole could be explained if this were an abraded fragment of a Neolithic stone axe.

The Lithic Material

by Elizabeth Healey

187 lithic artefacts were recovered from residual contexts. They are in a fresh, unrolled condition, but about 75% have irregular sporadic chipping along their edges and arrisses, probably due to taphonomic and other post-depositional conditions rather than to deliberate use, although it is sometimes difficult to distinguish this from deliberate retouch. The typological content of the assemblage is summarised in Table 2. The artefacts seem to represent more than one industry although the only certainly datable piece is an oblique arrowhead.

Table 2

Cores: 0 (1 struck nodule)	Serrated piece: 1
Unretouched flakes: 147	Arrowheads: 2
Scrapers: 1 + ?3	Piercers: 13
Knives & edge dressed flakes: 3	Misc. Retouch: 16

Raw Material

All the lithic artefacts are made of flint, which ranges in colour from a dark grey-brown through a mid grey-brown (the majority) to a lighter grey-brown (about 11%). Cortex is present on about 53% of the pieces. Variation in the type of cortex may indicate that two different types of flint were selected: a) a flint with unabraded cortex (just over 40%) and b) a similarly coloured flint, but with an abraded cortex (about 55%). (The other 5% are indeterminate). Examples of both types of flint have areas of greenish brown or orange-brown staining and some have truncated, corticated scars (sometimes thermal) on their butt ends or on their dorsal surfaces, perhaps suggesting that flint artefacts on or near the site were re-used or that the raw material was taken from secondary geological contexts such as boulder clays and river gravels.

Cortication of entire pieces is rare; two blades and two blade-like flakes have a definite whitening of the surface and five other flakes show what may be incipient cortication. One flake had been burnt.

Technology

Whilst it would be unwise to comment in detail on the core reduction process from an obviously incomplete and culturally mixed assemblage the main types of removal together with their platform remnants are summarised in Table 3:

Table 3

Removal	*Cortex*	*Plain*	*Linear*	*Faceted*	*Other*	*NOB*	*Total*
Flakes	44	30	4	7	1	7	93
Small flakes	10	3	2	2(?)	1	5	23
Blades & bl./fl.	6	5	5	3	2	9	30
Prep. fl.	—	1	—	—	—	—	1
Trimming flakes	7	6	—	—	—	3	16
Uncl.	3	1	2	—	—	13	19
Thermal	—	—	—	—	—	4	4
Totals	70	46	13	12	4	41	186

NOB = Not observable

There are no cores present but there is one struck nodule. The patterning on the dorsal faces of the flakes suggest that cores struck from at least two different directions were used. The edge between the core striking platform and the core face was also trimmed in the majority of instances. Other preparation of striking platforms seems to have been minimal, only a very few flakes having faceted platform remnants.

No flaking tools were recovered; indirect evidence suggests that hard hammers were predominantly used: the bulbs of percussion are generally prominent and terminations thick with a marked tendency towards hinging, whereas features associated with the use of soft hammers such as lipped striking platforms, diffuse bulbs of percussion and thin edged flakes are rare; only 10 examples were recorded (*cf.* Newcomer 1971, 88-90; Tixier *et al* 1980, 105).

Morphology of Retouched Pieces

The typology of the retouched pieces have been summarised in Table 2 and more detailed information can be found in the archival catalogue (MF 1.A). The discussion that follows is therefore at a general level. Many of the pieces are edge-damaged so that exact numbers in some categories are uncertain. None of the terminology necessarily has any functional significance.

Scrapers

Fig. 14.1 is the only typical scraper and although damaged shows heavy wear on the corners at the distal end. The other three possible scrapers have minimal abrupt marginal retouch on a suitably rounded blank (Fig. 14.2,3). None are of diagnostic type.

Knives and other edge-retouched pieces

Fig. 14.4 is the distal fragment of a blunted-back knife; the type is found throughout the Neolithic (Smith 1965, 97-99 and 237; Wainwright & Longworth 1971, 260). Two other pieces, Fig. 14.5-6, have abrupt marginal retouch along one long edge, which on Fig. 14.5 has been worn smooth.

Serrated flake

This artefact, Fig. 14.7, has coarse denticulations (about 6-8 per cm) along one side and a characteristic band of gloss on the edge of the teeth. Although a single denticulated flake in isolation is not closely datable similar coarse examples were noted as a feature of the later neolithic industry at West Kennet Avenue (Smith 1965, 91 and 239).

Arrowheads

There is one oblique arrowhead, Fig. 14.8, (Green 1980, 36-37) and an unfinished arrowhead, Fig. 14.9, made on a blade-like blank with a facet-

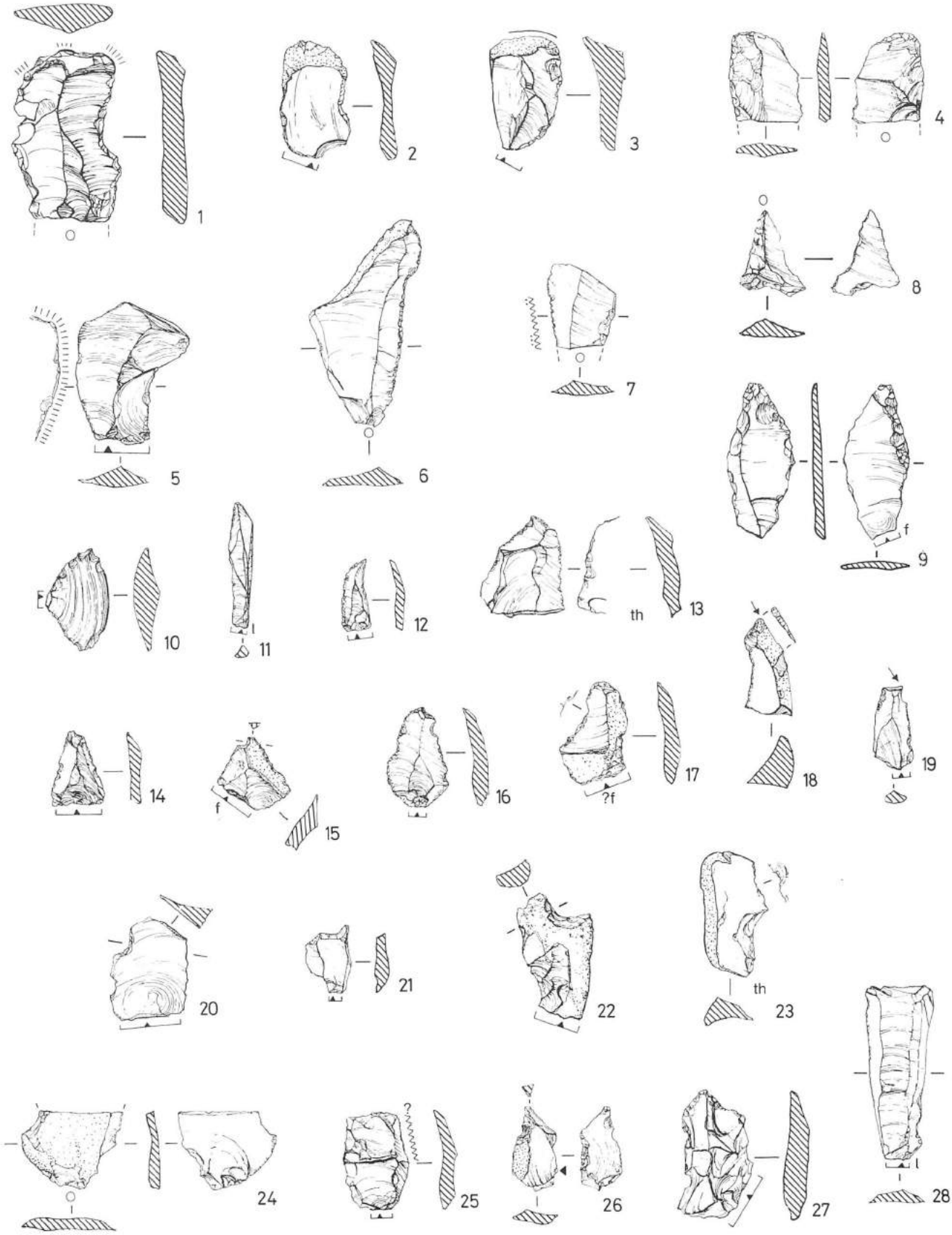

Fig. 14 Heybridge: The lithic material, 1-28. Scale 1:2.

ted butt; it has marginal retouch on both sides constricting the proximal end, apparently prior to its removal or shaping. Oblique arrowheads are characteristic of second millenium contexts (Green 1980, 114-115).

Piercers
All the artefacts in this category (Fig. 14.10-17) have abrupt but marginal retouch on the sides of the blank which converge to form a point usually at the distal end; the point may be off-set by a small notch as in Fig. 14.15-16. The minimally retouched points are characteristic of earlier neolithic assemblages (*cf.* Smith 1965, 9; Saville 1981a, 136), although the presence of a relatively high number is more typical of late neolithic-early Bronze Age industries (*cf.* Saville 1980, 20-2). However in this category it is particularly difficult to distinguish accidental damage on a point from deliberate retouch or utilization damage so that numbers may be artificially inflated.

Others
The other 'retouched' artefacts can be less certainly categorized, some probably being the result of accidental damage, but with this *caveat* in mind they can be grouped as follows:

Broken, unclassifiable:	2
Notched pieces:	6 (Fig. 14.20-23)
Pieces with possible burin facets:	3 (Fig. 14.18-19)
Edge retouch:	5 (Fig. 14.24-27)

Discussion

The flint assemblage from Heybridge is clearly incomplete, partly due to subsequent disturbance on the site but also possibly due to collection bias. The technological features suggest that the assemblage is largely one of *ad hoc* flake production but that there are four blades or blade-like flakes, for example Fig. 14.28, which may belong to a different technology (see catalogue). These blades are also the only heavily corticated artefacts in the assemblage and whilst cortication itself is not a reliable criterion for separating industries, in this instance, where it is also associated with different technological features, it does seem to indicate a separate industry.

The other industry is probably of later neolithic date and is identified as such largely on typological grounds, and in particular by the presence of the oblique arrowhead. The practise of facetting core striking-platforms is also more frequent in later neolithic technologies (*cf.* Smith 1965, 95; Saville 1981b). The other retouched pieces, especially the worn edge piece, Fig. 14.5, the scraper, Fig. 14.1, and the relatively high number (but not the typology) of the piercers, do not contradict such an attribution.

The Prehistoric Pottery

by N. Brown

A small quantity of prehistoric pottery was recovered from the excavations (1637 sherds weighing 12.887kg). Earlier prehistoric pottery is sparsely represented: Fig. 15. 1-2 may be rolled rims of plain Neolithic bowls, whilst Fig. 15.3 is an abraded sherd of beaker decorated with horizontal rows of twisted cord.

Pottery from pit 93 seems likely to belong to the Late Bronze Age (LBA) and finds close parallels in the assemblage from Aldermaston Wharf (Bradley *et al* 1980). Fig. 15.4 is of Aldermaston form 4 (*ibid*, fig. 18.163) and Fig. 15.5 is similar to form 5. However, both may also be paralleled in Neolithic contexts, particularly amongst the assemblage from Orsett Causewayed Enclosure (Kinnes 1978, figs 31.30, 32.58, 33.73). Moreover pit 93 contained 15 sherds in a grog tempered fabric very like that of local examples of grooved ware, whilst large assemblages of LBA pottery from Lofts Farm, Heybridge, and Springfield Lyons near Chelmsford are devoid of similar fabrics. Therefore a neolithic date cannot be ruled out.

Much of the remaining pottery appears to be of Late Bronze Age date. Typical decorative motifs are applied finger-impressed cordons like Fig. 15.6-7 (*cf.* Jones & Jones 1975, fig. 48.1); rims with internal finger-impressions like Fig. 15.8 (*ibid*, fig. 48.2); and external finger-impressions on the side of a squarish, often expanded rim, like Fig. 15.9-10 (*ibid*, fig. 48.4, 6), or upright like Fig. 15.11. Figure 15.12 may be contemporary with this LBA pottery, but finger-tip decoration of the shoulders of jars is also a trait of the early Iron Age, as the 6th-5th century groups from Orsett show (Barrett 1978, figs 33-42). Figure 15.13-16 are typical of plain rims, not closely dateable; nor unfortunately, is Fig. 15.17.

LBA fine wares may be represented by occasional burnished sherds in a fine flint-tempered fabric (e.g. the carinated shoulder Fig. 15.18) and by the large sherd of a jar with incised decoration on the neck (Fig. 15.19). The decorative scheme of this sherd has general parallels at North Shoebury (N. Brown forthcoming) whilst hatched triangles occur at Runnymede Bridge (Needham & Longley 1980) and possibly Knights Farm (Bradley *et al* 1980, fig. 35.37).

Early Iron Age Darmsden-Linton pottery has been recovered locally at Lofts Farm (N. Brown, in prep.) and Chigborough (N. Brown in Priddy 1986). However, the Heybridge assemblage contains little which seems to belong to this ceramic style, although the sherd with grooved decoration (Fig. 15.20), and the lid (Fig. 15.21) may relate to Darmsden-Linton material.

The Middle Iron Age pottery is characterised by a range of fabrics and forms comparable to those from Little Waltham (Drury 1978b). Typical of this phase are the rims (Fig. 15.22-26). The shell tempered fabric of Fig. 15.22 is of interest; there are few local examples of shell tempered MIA vessels. However, shell tempered fabrics commonly occur in EIA/MIA Contexts in south Essex (N. Brown forthcoming). Footring bases are also present (Fig. 15.27-29). Two examples of omphalos bases (Fig. 15.30-31) may belong in this phase; they could however equally relate to the LBA/EIA material. The base sherd with part of an incised? cross (Fig. 15.32) may be of Middle Iron Age or later date.

Of particular interest is Fig. 15.33. This sherd has been published and discussed at length (Drury 1978b, 131-133) particularly with regards to its continental affinities. Little need be added to that discussion although it is worth noting that similar stabbed decoration occurs in the Darmsden-Linton assemblage from Lofts Farm (N. Brown, in prep.). Thin sectioning of Fig. 15.33 by Dr D. Williams suggests a local origin, the fabric being similar to Little Waltham Fabric H (Drury 1978b, 58-59).

The form and decorative scheme of Fig. 15.34 clearly relate to Glastonbury ware and this attribution has been comfirmed in thin sectioning by Dr. D. Williams who places it in Peacock's (1969) Group 2 Glastonbury ware,

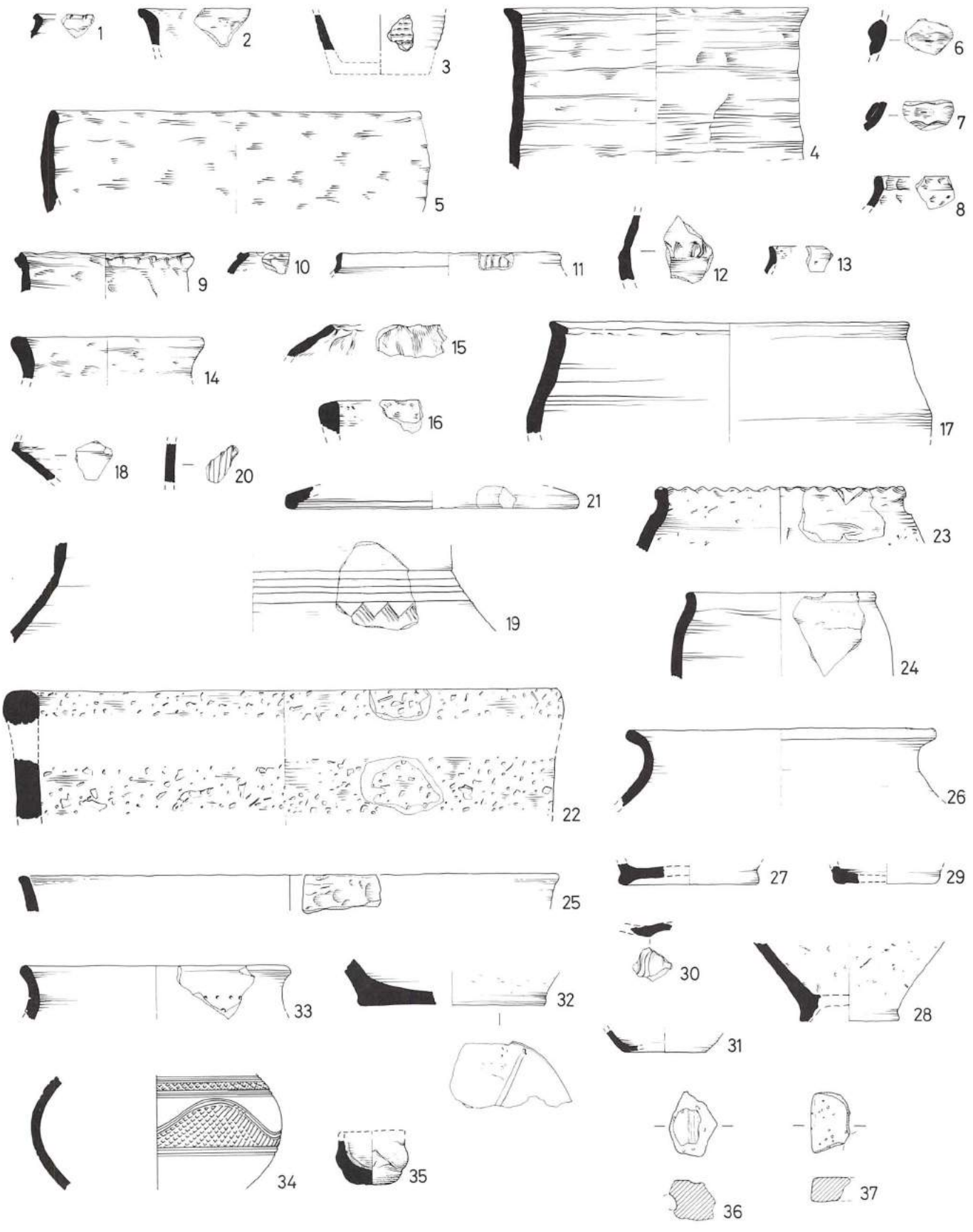

Fig. 15 Heybridge: The Prehistoric Pottery, 1-37. Scale 1:4.

probably originating in the Mendip Hills. The recovery of this sherd from Heybridge, on the other side of the country, is remarkable. In view of the coastal position of the site the possibility of transportation by sea seems likely. From the same stake-hole came a crude, miniature, sand-tempered cup (Fig. 15.35).

Two Fragments of Fired Clay Perforated Slabs

by M.U. Jones

Two battered fragments of fired clay were referred to the writer as possible perforated slabs, a type of artefact which occurs frequently in LBA ceramic assemblages at Mucking, Essex (Champion 1980, figs 8-9 and p.237-8; Jones & Bond 1980, 475-6).

Figure 15.36 is in a coarse, flint-gritted fabric, *c.*25mm thick. Enough survives of one edge to show the grooving which is characteristic of these objects. So even though perforations are lacking, this can be identified with reasonable confidence. Fig. 15.37 is in a sandy fabric with fewer and smaller (up to 2mm) flint grits. Traces of a reduced surface suggest a possible perforation, 28mm from the edge, which is square in section. This therefore, could be a perforated slab.

Heybridge fits well into the known distribution along the Lower Thames, the nearest findspot being North Shoebury. Indeed its coastal siting can be seen as strengthening the idea that the function of perforated slabs might relate to salt production. Written September 1981.

Fabrics, contexts and phases of illustrated material (Fig. 15)

Key to fabric codes (not all represented):

A Flint, S 2, well sorted.
B Flint, S-M 2, well sorted.
C Flint, M-L 2.
D Flint, L 2, poorly sorted.
E Flint, and sand, S-M 2.
F Sand, S-M, 2-3, with addition of occasional L flint.
G Sand, S 3.
H Sand, S 2.
I Sand, S-M, 2-3.
J Sand, S 2, with vegetable voids particularly on surfaces.
K Quartz, flint and grog (often with deep rounded or sub-angular voids), S-L, 1-2.
L Quartz, sometimes with some sand, S-L 2.
M Grey, often with some sand or flint and occasional small rounded or sub-angular voids.
N Vegetable temper.
O Quartz and flint and some sand, poorly sorted, S-L 2.
P Sparse, very fine sand, occasional M-L flint, and sparse irregular voids.
Q Flint, S-L, grey, S-M, 2.
R Shell temper, soft fabric, M-L 2.
S Glauconite.

Where S = <1mm diameter; M = 1-2mm diameter; L = >2mm diameter; 1 = <5 per sq cm; 2 = 5-10 per sq cm; 3 = >10 per sq cm.

No. 1 Fabric B, Context 302 (late Roman +).
2 D, 115 (IV.2).
3 L, 58 (Post Roman).
4 D, 93 (I).
5 D, 93 (I).
6 E, 154 (IV.1-VI).
7 I, 129 (III.2).
8 D, 140 (III.1).
9 D, Unstrat.
10 B, 156 (IV.1).
11 B, 123 (IV.1).
12 D, 118 (VI).
13 B, 115 (IV.2).
14 D, 303 (start V.1).
15 D, 41 I (IV.2).
16 D, 302 (late Roman +).
17 D, 302 (late Roman +).
18 A, 103 (II).
19 A, 156 (IV.1).
20 B, 103 (II).
21 A, 146 (III.2).
22 R, 180 (II).
23 J, 180 (II).
24 G, 110 (Post Roman).
25 F, 3 (II).
26 B, 41 I-III (IV.2), 121 (III.1), 303 (start V.1).
27 E, 145 (III.2).
28 J, 183 (II).
29 I, 195 (III.2).
30 H, 85 (II).
31 B, 41 III (IV.2).
32 H, 41 (IV).
33 H, 75 (V.1).
34 Glastonbury ware, 94 (II).
35 I, 94 (II).
36 Subsoil clearance.
37 Hollow 141 (IV.1).

The 'Belgic' Pottery

by I. Thompson

The LPRIA grog-tempered pottery is largely composed of comparatively small sherds, with a little more substantial material, but all well broken up. The fabric is typically grey, micaceous, containing black, buff, and red grog inclusions; it is not romanised in any way, and there are no admixtures with obvious sand or shell tempering. Very little of it (14 sherds) came from contemporary stratified contexts. For forms and zones referred to, see Thompson 1982.

Fig. 16.38 Pedestal base, form A1. Wheel-made, very thick micaceous grey fabric with much black grog and some paler inclusions; dark grey surfaces worn to brown-red at bead rim. Neatly made. Ditch 41 (III.2-IV).

Fig. 16.39 Massive pedestal base, form A1; fabric as Fig. 16.38, with patchy grey-brown surfaces. 115 (IV).

Fig. 16.40 Odd pedestal base, similar to several others from the site but with a curious angle on the outside upper surface that has, so far, no parallel. Burnt dark grey grog, inside worn, outside shading to brown-red at the angle, with red grog showing at the surface. GH 64 (VI).

Fig. 16.41 Pedestal base, A1, the ubiquitous 'quoit-shape'. Coarse hard palish grey grog, patchy grey-brown surfaces, not burnished, quite gritty to touch. Subsoil 302.

Fig. 16.42 An A4 pedestal base, usually 1st century AD and connected with the A5 Essex form, the trumpet base. Grey-brown grog-tempered core, patchy dark grey surfaces showing some red grog, not burnished. 120 (IV.1).

Fig. 16.43 Neck sherd from a rippled jar, grey-brown grog, darker grey surfaces, smooth inside, burnished outside. A B2 form but no indication of size. Well 79 (V.1).

Fig. 16.44 Bead rim, grey-brown grog, dark grey surfaces, burnished lightly outside and over rim. Could be possibly B5-1 (a bead-rimmed burnished barrel jar) or C1-2 (plain coarse bead-rim jar). Subsoil 302.

Fig. 16.45 Small coarse thick jar rim, reddish-brown fabric, grog, worn rough red inside, some dark grey burnish left on outside. Form C2-3 (plain coarse everted jar rims); not very common, with Essex parallels only at Sheepen, Danbury and Kelvedon (Rodwell 1976, no. 21). It does not long survive the conquest. 303/Ditch 41 I (IV.2-V.1).

Fig. 16.46 Shoulder of rilled jar, C7-1, good native grey with black rounded grog inclusions, dark grey surfaces, smoothed on the neck, and faint shallow rilling below. The standard pre-conquest coarse ware form in Hertfordshire but rare elsewhere. Essex parallels are usually Roman (including most of the Sheepen examples, *Cam* 260), but there are native Essex examples from Kelvedon and Danbury (Hull 1935-37, no. 13). Pit 121 (III.1).

Fig. 16.47 Sherd from a small cup, probably E1-1 (simple carinated cup with one cordon constricting the waist) with a more rounded carination than usual: one similar occurs in the Roots Hall collection from Prittlewell, Essex. Otherwise it could be E2-1, a class of less well defined cups still clearly related to the carinated series. Fine grey grog, grey surfaces, burnished dark grey outside worn somewhat to brown. E1-1 is commonest in the early 1st century AD, and occurs in romanised versions later. 147 (VI).

Fig. 16 Heybridge: The 'Belgic' Pottery, 38-52; Roman Pottery 1-17, Period III.2/IV.1; 18-24, Period IV.2. Scale 1:4.

Fig. 16.48 Rim scrap from some sort of cup, from its size; perhaps one of the carinated cup forms. Grey-brown fabric, smooth, small black grog inclusions; grey-brown surfaces, burnished outside. 123 (IV.1).

Fig. 16.49 Spout, hand-made of lumpy grey-brown grog, dark grey surfaces, burnished to black outside. This is not, apparently, one of the S4 strainer-spouted vessels, which are based on a Roman carinated bowl form, have perforated strainers behind the spout, and do not have the rise in the rim visible here, as if for a lug or suspension hole; the fabric of this piece is softish native ware, whereas the S4s are usually romanised and much neater, and not hand-made. It may be an earlier (pre-conquest) version of S4, but there is very little to indicate its whole form. 117 (III.2).

Fig. 16.50 Unusual large everted jar rim with rippled profile. Palish grey grog, pale brown surfaces, smoothed outside. No good parallel for the rim form, which is oddly flaring. 303/Ditch 41 I (IV.2-V.1).

Fig. 16.51 Tiny rim scrap, apparently hand-made; red-brown core, dark grey surfaces, smoothed outside and showing grog. Not as neatly detailed a shape as in the drawing and impossible to assign to a form. 141 (IV.1).

Fig. 16.52 Plain beaded base, common but this example more neatly made than usual. Grey-brown grog, reddish inside, dark grey smoothed outside showing many red grog particles. Subsoil 302.

The remaining assemblage comprises 231 sherds, including a small fragment of a bead rim, a few cordons and some burnishing, but mostly featureless and grey.

Conclusions

Almost without exception the pottery is similar in fabric, wheel-made good native ware. The range of forms is small but so is the sample; there is no Gallo-Belgic influence. The pedestal bases illustrate as usual the local nature of pottery manufacture: 3 of the 5 have the bead rim to the foot which is apparently a Heybridge fashion. A large pedestal urn of A1 form from the Fitch Collection (in sherds; upper half missing) is similar. (Two of these A1 bases were assigned previously to form A5, but I have changed my mind). The sample and range of forms as a whole are too small to provide much indication of the area's affinity to belgic pottery zones, but it does appear that Heybridge should belong to zone 1, closer to Colchester and N.E. Essex forms than to the different range of zone 2, S.E. Essex. There is nothing definitely romanised or necessarily late; and there are no A5 pedestal bases, although the A4 is part of the typological development of A5, the trumpet base typical of Essex in the first half of the 1st century AD. There are no A2s, the 1st century BC form. The rippling of Fig. 16.43 can often be a reasonably early feature. On balance it appears that the belgic pottery belongs to the early part of the 1st century AD, from the evidence available. A possible Dressel 1 amphora spike is noted on p.50.

The Roman Pottery

by N.P. Wickenden, with the terra sigillata by Warwick Rodwell, the roller-stamped pottery by B.A. Ford, mortaria stamps by K. Hartley, and a discussion of the late group from ditch 122 by C.J. Going.

Introduction

Some 15,300 sherds, weighing over 181 kg, were quantified by fabric, form and context in accordance with the system for recording Roman pottery devised by Chelmsford Archaeological Trust (Going forthcoming). The majority of sherds are small, abraded and residual, as one might expect from the nature of the archaeological deposits. There are, however, four mid to later 3rd century pit groups which probably represent products from a nearby kiln (not itself located); this is discussed with reference to the kilns at Mucking and in Central Essex. There is also a quantity of late 4th century material.

The catalogue has been arranged by phase to include contemporary pottery and those coarse wares, residual in later phases, which can be assigned to any particular one. A summary of the dating evidence follows each section. The last group includes those undated residual coarse wares and all residual fine wares, arranged by fabric.

Whilst references to Going's exhaustive treatment of pottery from the *Mansio* at Chelmsford and his study of pottery evolution in Essex have been included here, this report was written before his draft was available; hence many of his valuable conclusions have not been included.

The complete quantified pottery proformae are deposited in the archive.

The Fabrics

The fabrics are here numbered and listed using the system devised for Chelmsford. For a detailed discussion of the fabrics and their incidence in central Essex, see Going forthcoming. For the incidence of fabric by phase, see Table 4.

1 Colchester Colour-coat (Figs 16.24; 17.53-6; 18.70; 21.128-131; 23.180, 181).

2 Nene Valley Colour-coat (Figs 18.71; 19.89, 90; 21.147, 148; 22.163-169; 23.182-188).

3 Oxfordshire Red Colour-coat (Fig. 23.191-198).

4 Hadham Oxidised Red Wares (Figs 17.52; 21.?126, ?127; 22.160-162; 23.175-179).

8 Central Gaulish Rhenish Ware.

12 ?Local Mica-dusted Wares (Fig. 16.16).

13 Oxfordshire White-slipped Red Wares.

15 Miscellaneous White- or Cream-slipped Sandy Red Wares.

21 Miscellaneous Oxidised Red Wares.

24 Nene Valley 'Self-coloured' Wares.

25 Oxfordshire White Wares.

26 Brockley Hill Wares.

27 Colchester Buff Ware (Figs 16.17; 17.57; 18.72, 73; 19.19; 21.132, 133, 135, 136; 23.189, 190).

30 Oxfordshire 'Parchment' Wares (Figs 21.134; 22.170).

31 Unspecified Buff Wares.

32 ?North Kent Grey Wares (Fig. 16.6, 7).

33 'London' Wares (Fig. 16.14).

36 Hadham Grey Wares.

39 Fine Grey Wares.

40 Black-Burnished 1 (Figs 18.69; 21.138; 22.152).

41 Black-Burnished 2 (Figs 16.5, 18; 21.120).

Table 4 Incidence of Fabrics by Phase (Excluding Samian)

	Period III.2-IV.1		Period IV.2		Period V.1		Period V.2		Saxon		Unstratified, Post Saxon		Total		%
FABRIC	No. sherds	Weight (gms)	No. sherds	Weight (gms)	No. sherds	Weight (gms)	No. sherds	Weight (gms)	No. sherds	Weight (gms)	No. sherds	Weight (gms)	No. sherds	Weight gms	%No. sherds
'COLOUR COATED' FABRICS															
Romano-British															
1. Colchester colour-coat	20	80	60	155	318	1585	21	105	85	335	58	310	562	2570	3.67
2. Nene Valley colour-coat	1	10	8	85	108	870	130	1010	23	355	46	540	316	2870	2.06
3. Oxfordshire red colour-coat					1	05	32	210	49	550	27	390	109	1155	0.71
4. Hadham oxidised red ware	1	25			3	10	12	130	3	30	28	175	47	370	0.31
Imported															
8. Central Gaulish Rhenish ware					1	05	3	15					4	20	0.03
MICA-DUSTED WARES															
12. ?Local mica-dusted wares	2	10			2	20							4	30	0.03
WHITE-SLIPPED RED WARES															
13. Oxfordshire white-slipped red ware									4	85	3	55	7	140	0.05
15. Miscellaneous white or cream-slipped sandy red wares	15	150	2	20	87	1705	2	10	14	245	19	205	139	2335	0.91
RED WARES															
21. Miscellaneous oxidised red wares	4	20	10	50	57	535	33	255	47	250	21	200	172	1310	1.12
WHITE WARES															
24. Nene Valley 'self-coloured' ware					3	35	1	30			1	15	5	80	0.03
25. Oxfordshire white ware							1	10	1	50	2	15	4	75	0.03
26. Brockley Hill ware											5	55	5	55	0.03
BUFF WARES															
27. Colchester buff ware	12	260	38	575	103	2980	30	375	23	350	31	685	237	5225	1.55
30. Oxfordshire 'parchment' ware					3	25	4	70			1	5	8	100	0.05
31. Unspecified buff wares	2	5	1	5	10	70	5	250	1	5	6	45	25	380	0.16
GREY WARES (NB Fabrics 32 and 36 quantified as 39)															
33. 'London' ware											1	10	1	10	0.01
39. Fine grey wares	32	155	34	155	61	665	30	505	10	90	20	265	187	1835	1.22
40. Black-burnished 1					1	60	4	140			1	25	6	225	0.04
41. Black-burnished 2	2	20	7	70	9	110	4	90	7	55	5	90	34	435	0.22
43. Alice Holt ware							2	60					2	60	0.01
44. Storage Jar fabrics	82	2000	74	2865	243	16380	74	4775	56	2610	107	6025	636	34655	4.15
45. Romanising grey wares	95	530	42	200	120	1225	97	525	27	200	102	985	483	3665	3.16
47. Sandy grey wares	783	4705	858	7710	5085	59810	1889	15555	1349	9880	1991	17615	11955	115275	78.10
48. Rettendon ware	2	10	3	20	3	60	91	1165	15	145	53	845	167	2245	1.09
MISCELLANEOUS TEMPERED FABRICS															
50. Early shell-tempered							1	15			1	15	2	30	0.01
51. Late shell-tempered							73	1050	9	80	19	155	101	1285	0.66
54. Mayen ware											1	85	1	85	0.01
AMPHORA FABRICS															
55. South Spanish amphorae	2	145	11	1250	19	1335	15	805	2	190	23	940	72	4665	0.46
58. Origin uncertain							1	20					1	20	0.01
ADDENDA															
b), c) ?Local (miscellaneous) mortaria	1	30			6	245	2	140	1	25	5	140	15	580	0.10
d) Campanian Amphora	1	60											1	60	0.01
e) Pompeian red ware											1	10	1	10	0.01
TOTAL	1057	8215	1148	13160	6243	87735	2557	27315	1726	15530	2578	29900	15309	181855	

43 Alice Holt Ware (?Fig. 22.151).

44 Storage Jar Fabrics (Fig. 16.23).

45 Romanising Grey Wares (Fig. 16.1, 3).

47 Sandy Grey Wares (Figs 16.2, 4, 8-13, 19-22; 17.50-51; 18.68; 21.121-125, 139-146; 22.149, 150, 171; 23.172-174).

48 Rettendon Wares (Fig. 22.153, 154).

50 ?South Essex Shell-tempered Ware (Fig. 16.15).

51 Late 'Shell-tempered' Ware (Fig. 22.155-158).

54 Eifelkeramik (Mayen-type ware) (Fig. 22.159).

55 South Spanish Amphorae.

58 Amphora fabric of Uncertain origin.

Addendum

The following fabrics appear at Heybridge, but were not present in the sites reported on at Chelmsford.

a) Hadham grey wares with cream slip. As Fabric **36.**

b) Miscellaneous reddish-brown mortaria, miscellaneous grits; a possibly local source.

c) Miscellaneous hard, off-white mortaria, miscellaneous grits, possibly local source (Fig. 21.137).

d) Campanian amphora, 'black sand' fabric (Peacock 1971, 164, fabric 2).

e) Pompeian red ware.

The Catalogue

Information is presented primarily by period and phase, and subsequently by fabric. The vessel type is also given, where a corresponding form from Chelmsford exists (*cf.* Going forthcoming), and the context and its phase. A short summary of dating evidence follows each phase.

Periods III.2 and IV.1: 1st and 2nd Centuries (Fig. 16)

45 (1, 3): 1, A2, 123, IV.1; 3, 41V, III.2.

47 (2, 4, 8-13): 2, A2, residual in 41 III, IV.2; 4, B4, burnished on the interior, 106, IV.1; 8, G15, 156, IV.1; 9, G8-9, burnished on the exterior with vertical burnished lines on the shoulder, a possible imitation of a BB1 jar in an orange-brown oxidised fabric, 106, IV.1; 10, G29, coarse sandy fabric, burnished on rim, black to orange in colour, 79 III; 11, G4.5, abraded, residual in 302; 12, G3, unstrat; 13, burnished on exterior and on rim, 91, IV.1.

41 (5): B4.2, faint burnished vertical lines, 92, IV.1.

32 (6-7): 6, dark grey core with light grey-brown margins and dark grey surfaces (abraded on the exterior), unstrat; 7, H6.3, a poppy head beaker rim with two barbotine dots surviving, dark grey fabric with a lighter grey core. Another similar rim came from the same context, residual in Well 79 II, V.1.

33 (14): C10, copy of Drag f37, unstrat.

50 (15), ?L1, abraded, orange core, residual in Ditch 122 I, V.2.

12 (16): A4.5, residual in Well 79 II, V.1.

27 (17): J8, the handles are three-ribbed, residual in Ditch 41 II, IV.2. Another handle of similar form came from the same layer.

Dating Evidence

The poppy head beaker (Fig. 16.7) is a form produced at Highgate, dated *c.*AD 100-160, and probably at Brockley Hill and Upchurch (Marsh & Tyers 1978, 569-70: Type III F.5-6). The London ware bowl (Fig. 16.14) is similar to examples from Southwark dated *c.*AD 90-130 (*ibid*, 573-74: Type IV E.1) and to one from Verulamium in a context dated 130-150 (M Wilson 1972, fig. 119.694). The shell-tempered jar rim (Fig. 16.15) is from a common type of cooking pot on LPRIA sites in southern Essex (e.g. Gun Hill, Drury & Rodwell 1973, 80, fig. 16.74).

Period IV, Phase 2: Late 2nd to Early 3rd Century, Pre 225-250 (Fig. 16).

41 (18): B4.2, *Cam* f37 with cross-hatched burnished decoration, varying in colour from black to buff-orange. Ditch 41 I, IV.2.

47 (19-22): 19, G5.6, Ditch 250 IV; 20, G5.5, sandy fabric, Ditch 41 II; 21, H41-2, abraded, 308; 22, H34.2, 308.

44 (23): G42, 308.

1 (24): H24.2, 77.

Dating Evidence

The BB2 latticed pie dish with the triangular section rim (Fig. 16.18) is characteristic of the Hadrianic-Antonine Period (Going forthcoming, Section III. B2.3). Fig. 16.22 is a grey ware version of *Cam* 407A and should be *c.*AD 180/90-230/50. Fig. 16.24 is a very wide-bodied version of *Cam* 391-2 and is probably late 2nd century (Hull 1963, 105).

Period V, Phase I *c.*AD 225/50-300

Pit 65 (Fig. 17)

a) The Kiln Products Fabric **47**: F, M and S
(see discussion, p.46 F).

B1 Straight-sided pie-dish (Mucking type A). Fig. 17.25-29. 25, F, burnished overall; 26, F, burnished on exterior; 27, M, one sherd from it was found in Well 79; 28, F; 29, M, traces of burnishing overall.

B2-4 Beaded-rim pie-dish (Mucking type B). Fig. 17.30-34. 30, M, joins sherds from GH 64; 31, M, burnished overall; 32, M; 33, F; 34, F, burnished on rim and exterior.

B6.1 Incipient flanged pie-dish (Mucking type C). Fig. 17.35, F, burnished overall.

Rebated-rim jars (Mucking type F). Fig. 17.36-37. 36, G5, S, orange core; 37, G24, S.

Undercut-rim jar (Mucking type J). Fig. 17.38, S, bifid rim with slashed decoration on lower part.

E5-7 Wide-mouthed cavetto-rim bowls (Mucking type K). Fig. 17.39-40. 39, E5.4, M, burnished exterior except a band below the rim decorated with a single wavy burnished line; 40, E7, S, small cordon below rim.

G9 Everted-rim jar (Mucking type P). (Fig. 17.41-42) 41, M; 42, F, vertical sets of burnished lines, cracked in firing.

H34 Folded beaker (Mucking Type Q). (Fig. 17.43-46) 43, S; 44, M; 45, M; 46, F.

H14 Conical-necked beaker (Mucking type R). Fig. 17.47, F, joins sherd from Pit 76.

Miscellaneous (Mucking type V). (Fig. 17.48-49) 48, E6, M, burnished on exterior and on rim; 49, F, decorated with zones of rouletting.

b) The Other Pottery

47 (Fig. 17.50-51): 50, traces of overall burnishing. Joins sherd from Pit 75; 51, H27.2, sandy, abraded surfaces.

4 Fig. 17.52, G36-40, sandy orange with traces of cream slip; decoration on the lower part of an essentially bifid rim, cordon below neck. Joins sherds from GH 64. See also Fig. 22.168.

1 (Fig. 17.53-56): 56, H22.1, *Cam* 308 with applied underslip overlapping scales and a lower zone of rouletting. See Hull 1963, fig. 58.25.

27 Fig. 17.57, D4.1, *Cam* 498, bead rises above level of rim.

Pit 75 (Fig. 18)

a) The Kiln Products Fabric **47**, F, M and S.

B1 Straight-sided pie-dish (Mucking type A). (Fig. 18.58-59) 58, F, burnished overall; 59, M.

B4 Beaded-rim pie-dish (Mucking type B). (Fig. 18.60-61) 60, F; 61, M, burnished overall.

B5 Incipient flanged pie-dish (Mucking type C). Fig. 18.62, F, burnished black and orange surfaces.

E2.3 Cupped-rim bowl (Mucking type G). Fig. 18.63, S, burnished externally.

G23-4 Undercut-rim jar (Mucking type J). Fig. 18.64, S.

G36 Large narrow-necked jar (Mucking type N). Fig. 18.65, S, burnished zones and wavy lines on exterior.

Miscellaneous (Mucking type V). (Fig. 18.66-67) 66, S; 67, H32-3, F, funnel-necked folded beaker, burnished externally.

b) The Other Pottery

47 Fig. 18.68, G23-4, sandy. See also Fig. 17.50.

40 Fig. 18.69, B6.3, handmade, burnished, surface colour varies from black to orange-buff, very sandy.

1 Fig. 18.70, H20.3, clay roughcast decoration.

2 Fig. 18.71, K7, castor-box lid with rouletting, type 89 (Howe *et al* 1980).

27 (Fig. 18.72-73): 72, D3, *Cam* 499, wide groove in flat top of rim; 73, D2, *Cam* 498; for the stamp and fabric discussion see Fig. 24.199.

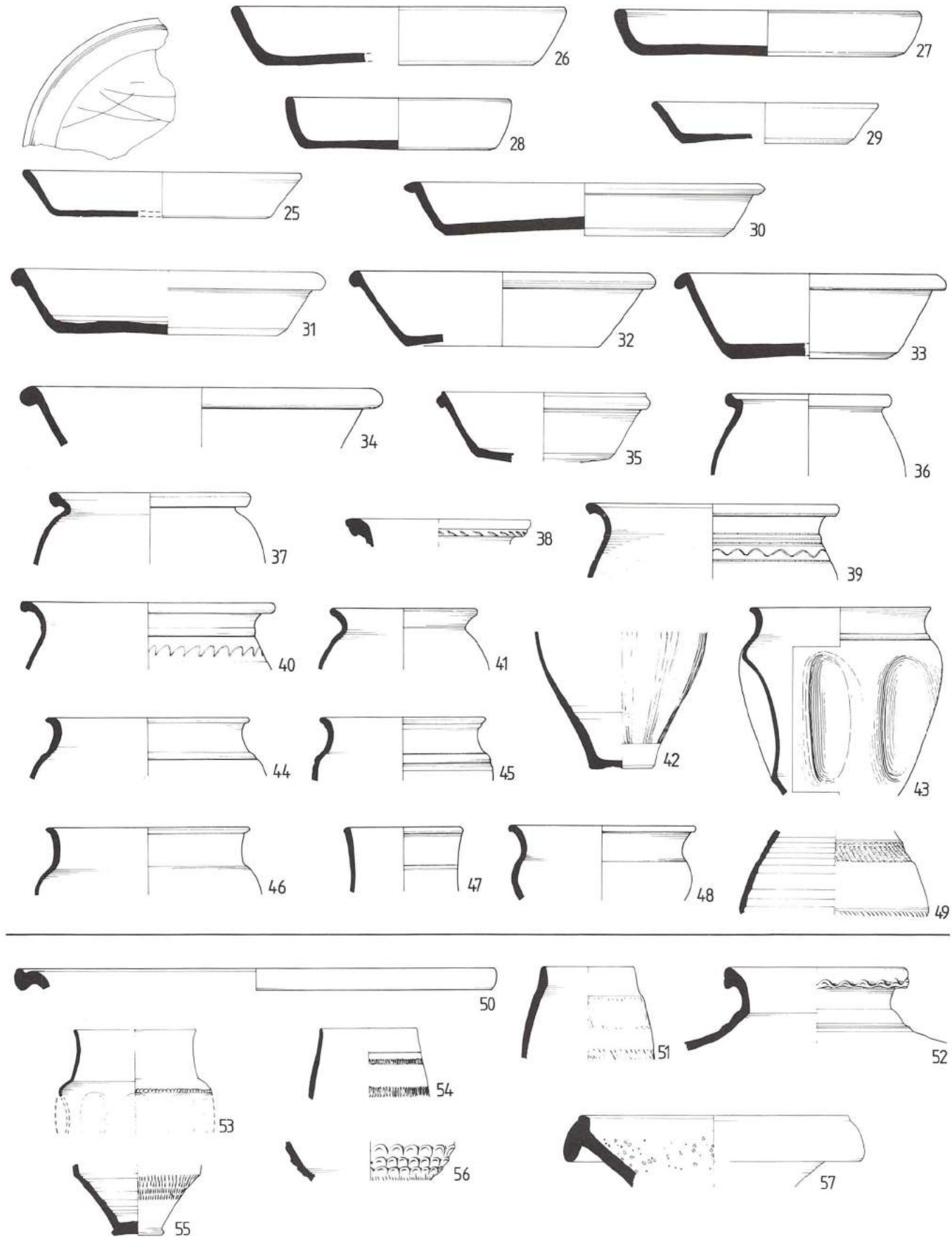

Fig. 17 Heybridge: Roman Pottery, 25-57, Pit 65. Scale 1:4.

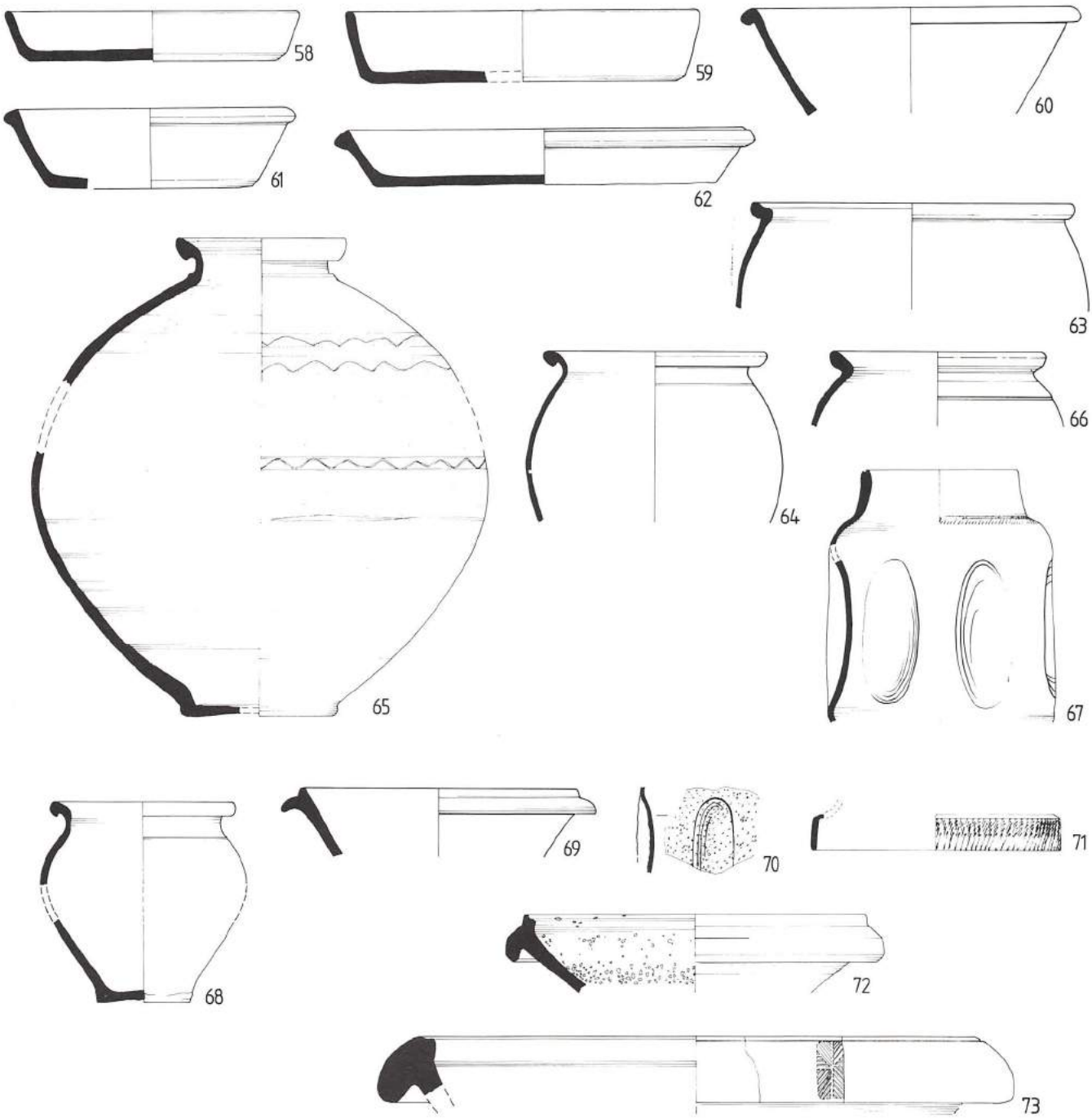

Fig. 18 Heybridge: Roman Pottery, 58-73, Pit 75. Scale 1:4.

Pit 76 (Fig. 19)

a) The Kiln Products Fabric **47**: F, M and S.

B1 Straight sided pie-dish (Mucking type A). (Fig. 19.74-76) 74, F, burnished overall; 75, B1, S; 76, B3.2, F, grooved beneath rim.

B4 Beaded-rim pie-dish (Mucking type B). (Fig. 19.77-79) 77, F, burnished overall; 78, F, burnished overall, fired hard grey; 79, F, burnished on the exterior, fired hard grey.

G5.5 Rebated rim jar (Mucking type F). (Fig. 19.80-81) 80, S; 81, M, burnished externally.

E2 Cup-rim bowl (Mucking type G). (Fig. 19.82-83) 82, E2.3, F, burnished on the exterior, grooved, fired hard light grey; 83, M, burnished on the exterior.

G23-4 Undercut-rim jar (Mucking type J). (Fig. 19.84-85) 84, S, zone of grooving below rim; 85, S.

H14 Conical necked beaker (Mucking type R). See Fig. 17.47.

Miscellaneous (Mucking type V). (Fig. 19.86-88) 86, S, wasted rim; 87, H32-3, F, funnel-necked rim of folded beaker, burnished externally; 88, H34-5, S, folded beaker (?Type Q).

b) The Other Pottery

2 (Fig. 19.89-90): 89, H32.1, applied under-slip scale decoration, Type 38 (Howe *et al* 1980); 90, H32-3, diagonal under-slip barbotine strokes, 'funnel' neck.

27 Fig. 19.91, D11, *Cam* 498, sandy with white, grey and pink trituration grits.

Well 79 (Figs 20-1)

a) The Kiln Products Fabric **47**: F, M and S (Fig. 20).

B1 Straight-sided pie-dish (Mucking type A). (Fig. 20.92-94) 92, B1, M, highly burnished on interior and traces on exterior; 93, B1, M, traces of burnishing on wall interior; 94, B3.2, F, grooved beneath rim. See also Fig. 17.27.

B4 Beaded-rim pie-dish (Mucking type B). (Fig. 20.95-97) 95, M, for graffito see Fig. 24.211; 96, M, diagonal burnished strokes on wall exterior; 97, B4.2, M, burnished overall with vertical strokes on exterior.

G5 Rebated-rim jars (Mucking type F). (Fig. 20.98-101) 98, S; 99, C5.4, M; 100, S, rim badly wasted; 101, G5.5, S.

G24 Undercut-rim jar (Mucking type J). (Fig. 20.102-105) 102, S; 103, S; 104, S, sandy; 105, S, bifid rim.

E5 Wide-mouthed cavetto rim bowl (Mucking type K). (Fig. 20.106-107) 106, E5.4, M, burnished wavy line in zone below cordon on neck; 107, S, burnished overall on exterior, shoulder zone left blank.

G9 Everted-rim jars (Mucking type P). (Fig. 20.108-111). 108, S; 109, M, vertical burnished strokes on body; 110, M, shoulder and rim burnished with burnished vertical and diagonal strokes beneath; 111, F, burnishing on shoulder, vertical strokes beneath.

?H34 Folded beakers (Mucking type Q). (Fig. 20.112-113) 112, F; 113, F, rim and exterior burnished.

Miniature vessel (Mucking type U). Fig. 20.114, F.

Miscellaneous (Mucking type V). (Fig. 20.115-119) 115, M; 116, G45, S, burnished rim, sharp angle of shoulder, line of stabbing beneath. 117-119, Lids, M.

b) The Other Pottery (Fig. 21)

41 Fig. 21.120, B4.2, sandy, decorated with cross-hatched burnished lines.

47 (Fig. 21.121-125): 121, sandy; 122, line of stabbing below neck; 123. G36-40, bifid rim, worn internally; 125, flanged lid, worn, soft.

?4 (Fig. 21.126-127): 126, micaceous orange-brown fabric; 127, hard orange red, white slip. *Unillustrated* body sherds and wide, three-ribbed handle of large flagon, hard grey with orange grey surfaces. White external and partial internal slip, also from Ditch 32 (VII).

1 (Fig. 21.128-131): 128, H20.2, light orange brown fabric and slip, clay roughcast decoration, also from Ditch 32 (VII); 129, clay roughcast decoration; 130, overall external 'cut-glass' rouletting.

27 (Fig. 21.132, 133, 135, 136): 132, thick abraded base of unguentarium, *Cam* 389 (Hull 1963, fig. 72.29); 135, D13, *Cam* 497, bead rising above rim level, layer III (intrusive). For the stamp, see Fig. 24.200; 136, hard pink fabric variant, tempered with much sand, buff pink surfaces and large distinctive, white and red rounded quartzite grits. *Cam* 497, bead level with rim, probably later 2nd to early 3rd century.

30 Fig. 21.134, red painted decoration.

Addendum c): Fig. 21.137, fine hard fabric, off-white to grey in colour, mixed quartzite and sand grits. Not thought to be a Colchester product, possibly from an Essex kiln. Date range: *c.*AD 170-230, probably early 3rd century. Identified by K. Hartley.

The Remaining Pottery, Period V. Phase 1 (Fig. 21)

41 (Fig. 21.138): B1.4, burnished wavy lines on exterior, residual in 302.

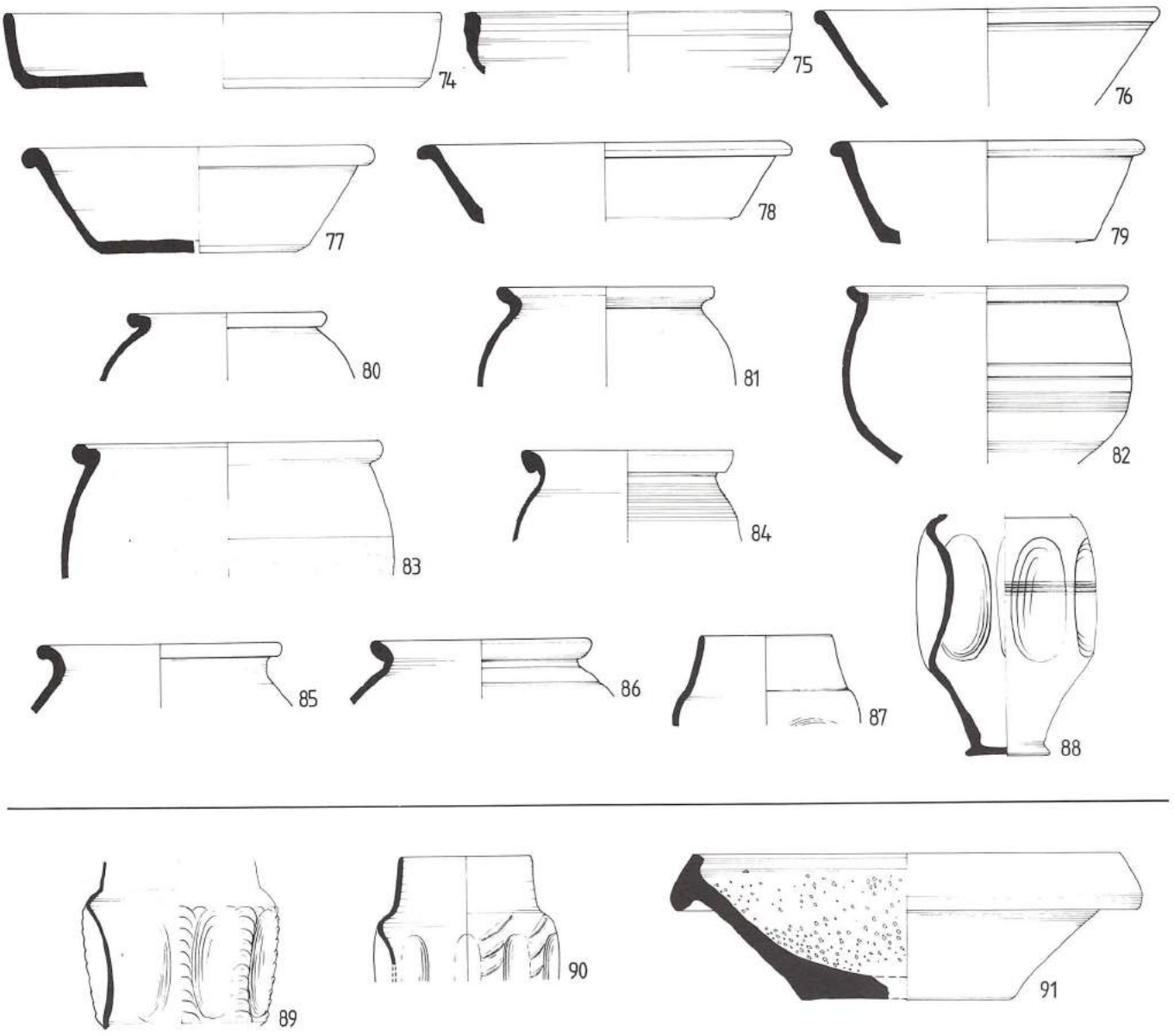

Fig. 19 Heybridge: Roman Pottery, 74-91, Pit 76. Scale 1:4.

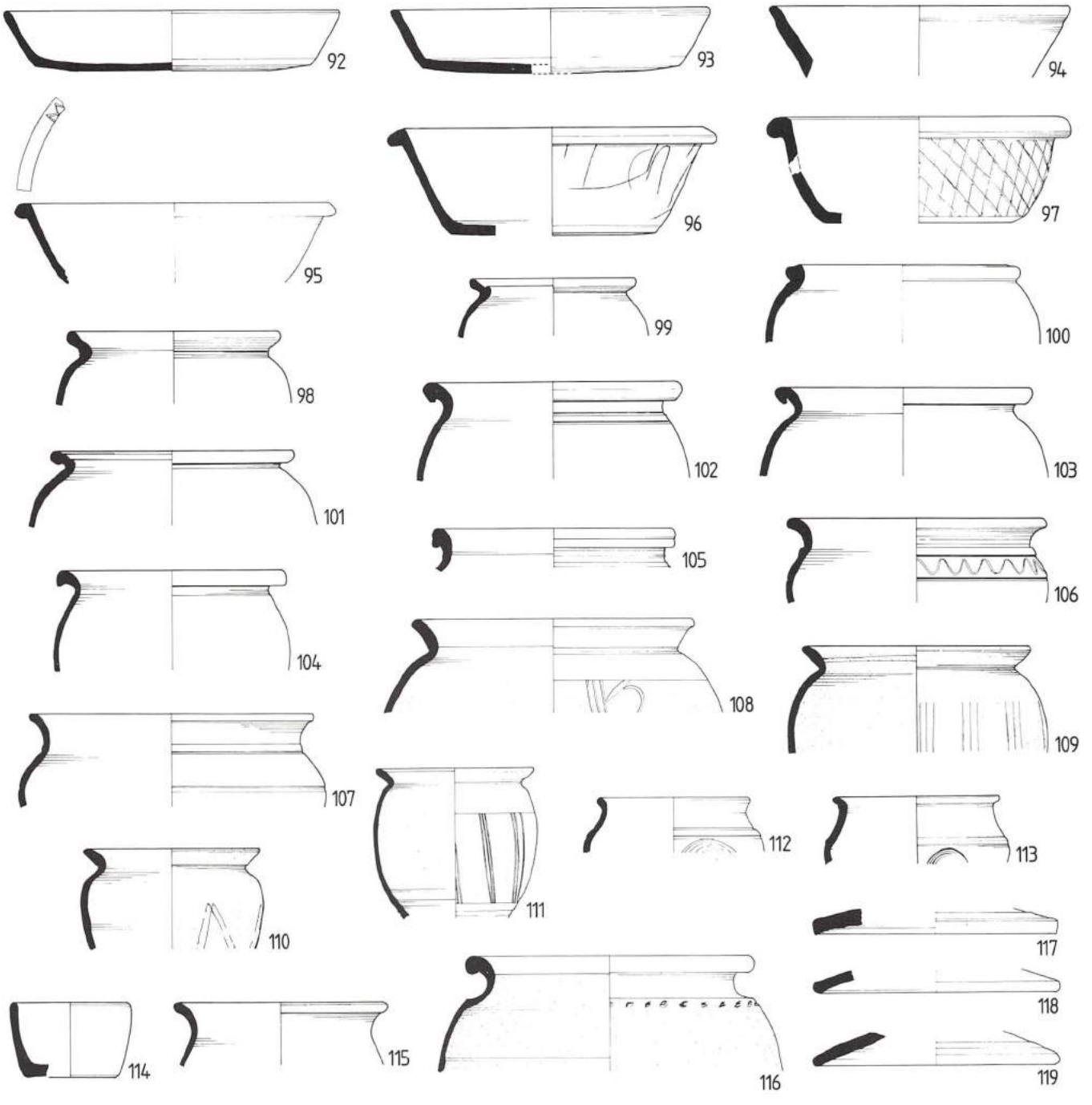

Fig. 20 Heybridge: Roman Pottery, 92-119, Well 79 (Kiln products). Scale 1:4.

45 (Fig. 21.145), externally burnished with roller-stamped decoration on cordon formed by several overlapping impressions of a panel style roller. (See below). Ditch 122 IV.

47 (Fig. 21.139-144, 146): 139, B6.1, burnished zones on interior and exterior, bifid rim, Fabric F, similar to a variety of Rodwell's type A at Mucking (1973, fig. 4.7), unstrat; 140, coarse bowl with an out-turned rim, upturned at tip, unstrat; 141, E5.4, Mucking type K, zone of wavy line burnishing on neck, burnished externally, Fabric M, residual in 163 (V.2); 142, band of square notched rouletting, residual in 95 (V.2); 143, Mucking type J, rilled zone below neck, Fabric S, residual in GH 64; 144, bifid rim, similar to example at Mucking (Rodwell 1973, fig. 6.52), Fabric M, 302. Further examples come from 106, Ditch 58 (VII); 146, H27, grey slip on exterior with drip marks on the interior of rim, Fabric F, Pit 83.

2 (Fig. 21.147-148): 147, H32.1, creamy pink fabric, applied under-slip scale decoration, Type 38 (Howe *et al* 1980), 83; 148, K7, Castor-Box lid fragment, grooved and rouletted, as Type 89 (*ibid*), Pit 83.

Dating Evidence

For a discussion of the kiln products see below. The funnel neck of the Nene Valley 'scale' beaker is thought to have appeared in the second quarter of the 3rd century (Howe *et al* 1980, 18) and to have grown taller and narrower with time. The development of the Castor Box is still not fully understood (*ibid*, 24); the example illustrated here (Fig. 21.148) might be 3rd century.

Period V, Phase 2: 4th Century (Fig. 22)

Coarse Wares

47 Fig. 22.149-150: 149, B6, sandy fabric, Pit 163; 150, simple pie crust decoration and start of applied handle, Pit 155.

?43 (Fig. 22.151): zone of wavy combed lines with row of finger-tipping above, separated by groove, Pit 155.

40 (Fig. 22.152): G9.4, flaring cavetto rim, burnished overall externally and internally on rim, 163. Similar rims came from 205 and Ditch 58 (VII).

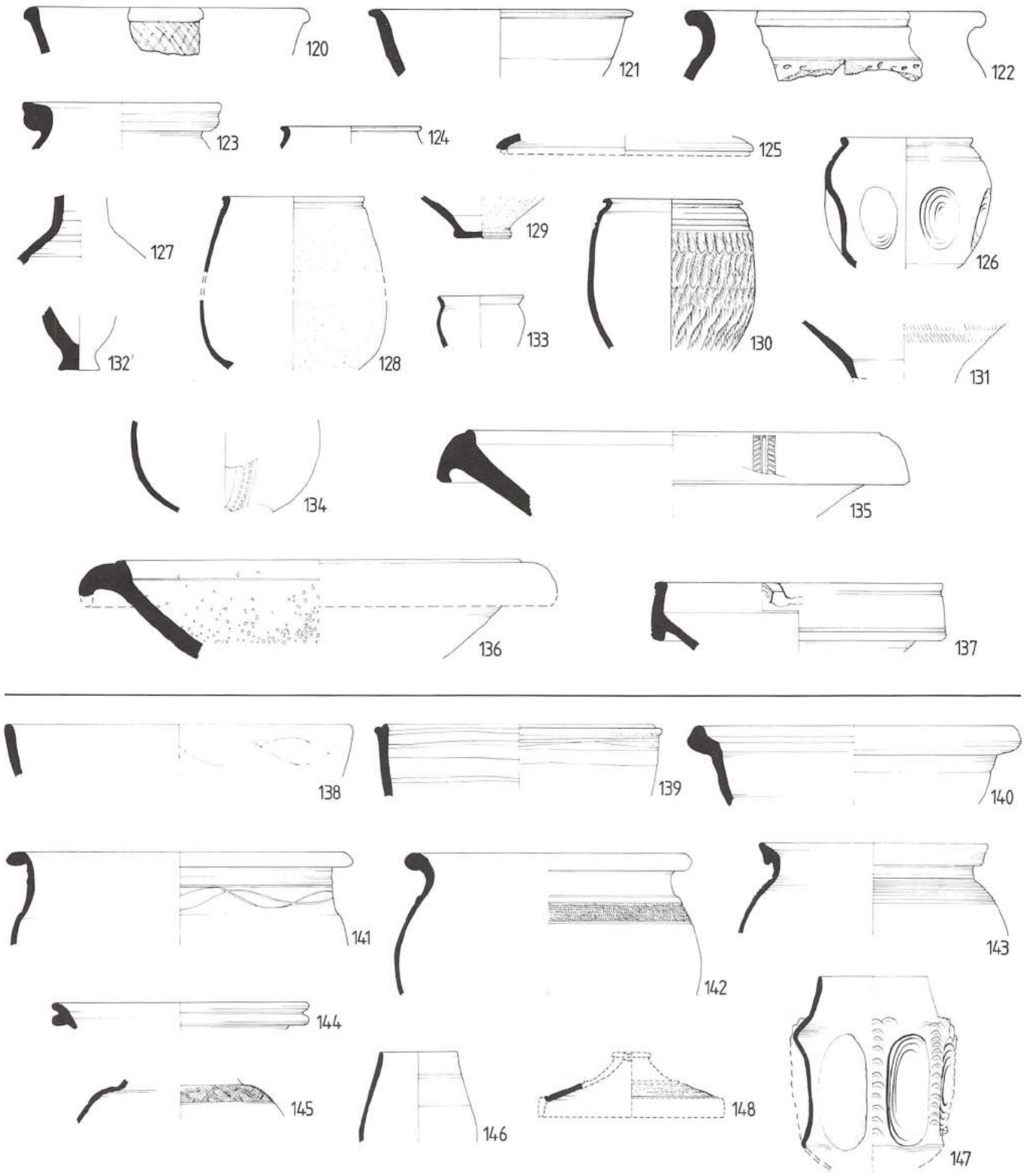

Fig. 21 Heybridge: Roman Pottery, 120-137, Well 79 (Non-Kiln products); 138-148, Period V.1. Scale 1:4.

48 (Fig. 22.153-4): 153, B6, flint and sand tempering, grey core and surfaces, orange margins, Ditch 122 II; 154, G24, dark brown, black surfaces, Ditch 122.

51 (Fig. 22.155-58): 155, sooted on rim and neck externally, Ditch 122; 156, G27.2, Ditch 122 I: 157, G27.2, sooted rim, residual in Ditch 58 (VII): 158, G27.2, residual in GH 118.

Imported Coarse Ware

54 (Fig. 22.159): hard buff fabric with a pimply surface, soapy to the touch with laminated breaks, contains various tempering. Compare Fulford & Bird 1975, fabric 2, type 8, though Dr. Fulford (pers comm) suggests that it might be a product of kilns at Speicher in the middle Rhineland (Eifel) in the 4th century, 302. For a jar rim of Mayen ware from Crescent Road, Heybridge, see p.59, Fig. 26.36; for other recent finds of the ware in Essex, see Drury *et al* 1981, 68.

Fine Wares

4 (Fig. 22.160-162): 160, distinctive hard orange-red fabric with overall external burnishing, Ditch 122 I and II and 302; 161, micaceous, fine, orange-red, burnished on exterior, 173; 162, micaceous, dull orange, band of external burnishing, Ditch 122 I.

2 (Fig. 22.163-69, for typology referred to, see Howe *et al* 1980): 163, Type 87, Ditch 122 II; 164, abraded, Ditch 122 I-II; 165, lustrous red-brown slip, Ditch 122 II and 58 (VII); 166, two grooves on shoulder, as Type 70, with an everted beaded rim, brick red slip, Ditches 122 II and 58 (VII); 167, C18, 'Castor Box', *Cam* 308B, Ditches 122 II and 58 (VII); 168, traces of rouletting, Ditch 122 II; 169, decorated with white barbotine over-slip blobs. Ditch 122 II.

30 (Fig. 22.170): traces of red paint, Type P 24 (Young 1977), Ditch 122 II.

Mortarium

Add. b (Fig. 22.171): thick grey core, pink-brown surfaces with small flint, quartz and red-brown trituration grits; probably a local kiln product (verified by K. Hartley), *c.*AD 250-4th century. Ditch 122 II.

Dating Evidence

The BB1 jar with its flaring cavetto rim (Fig. 22.152) is probably mid to late-4th century (Going forthcoming). The 'Rettendon' wares were produced in the later 3rd and 4th centuries (Drury 1976b, 253-258; Tildesley 1971). The late shell-tempered fabric is thought to have appeared in the south-east from *c.*AD 360-370 onwards (Drury 1976b, 45). The Mayen are rim (Fig. 22.159), as has already been seen, was produced in the 4th century. The Oxfordshire parchment ware sherd is from a type dated *c.*AD 240-400+ (Young 1977). Finally the thick white Nene Valley wares are generally 4th century in date. For Fig. 22.150 see Howe *et al* 1980, Type 87; Fig. 22.167 is a late version of *Cam* 308 B, the Castor Box.

The Late 4th Century Group from Ditch 122 (9.19 Eves)
by C.J. Going (Fig. 22.153-6, 160, 162-71)

In terms of its origins the group from Ditch 122 (Table 11) is closely comparable with other later 4th century assemblages from the county (e.g. Chelmsford, Going forthcoming; Dunmow, Going & Ford forthcoming). But there is too little data available at present for supply trends to be discussed other than in broad outline.

The proportion of colour-coats (12.73%), while low by comparison with Chelmsford phase 8 deposits (*c.*21%) — and substantially lower than the 48% recorded from the Great Dunmow shrine phase 1 group (9.83 Eves) — is higher than the *c.*7% from Wickford well 1 group C (20.02 Eves; Going in prep). Whether these differences are the result of locational or site factors (both Heybridge and Wickford are somewhat isolated 'small towns') is uncertain. The most important of the colour-coats is Nene Valley, which comprised 95% of the fabric group — a similar high total is present in the blacksoil levels at *Othona* (Going, in prep). In general, Nene Valley wares dominate other late Roman assemblages in Essex, yet whether the apparently greater preponderance of the fabric on coastal sites (such as Heybridge and Bradwell) is a result of a limit of maritime transportation, is as yet impossible to say.

Of the coarse wares, reduced fabrics form a high total (*c.*75%) by comparison with Chelmsford and Dunmow. In the group from the latter site shell-tempered pottery formed a higher total than grey wares (21% as opposed to 18%). Here, late shell-tempered pottery formed 10.77% of the group. To the east at Bradwell, the total was smaller, and further south, at Wickford, less than 1%. The composition of these groups strongly suggest that local grey ware production was sustained throughout the later 4th century.

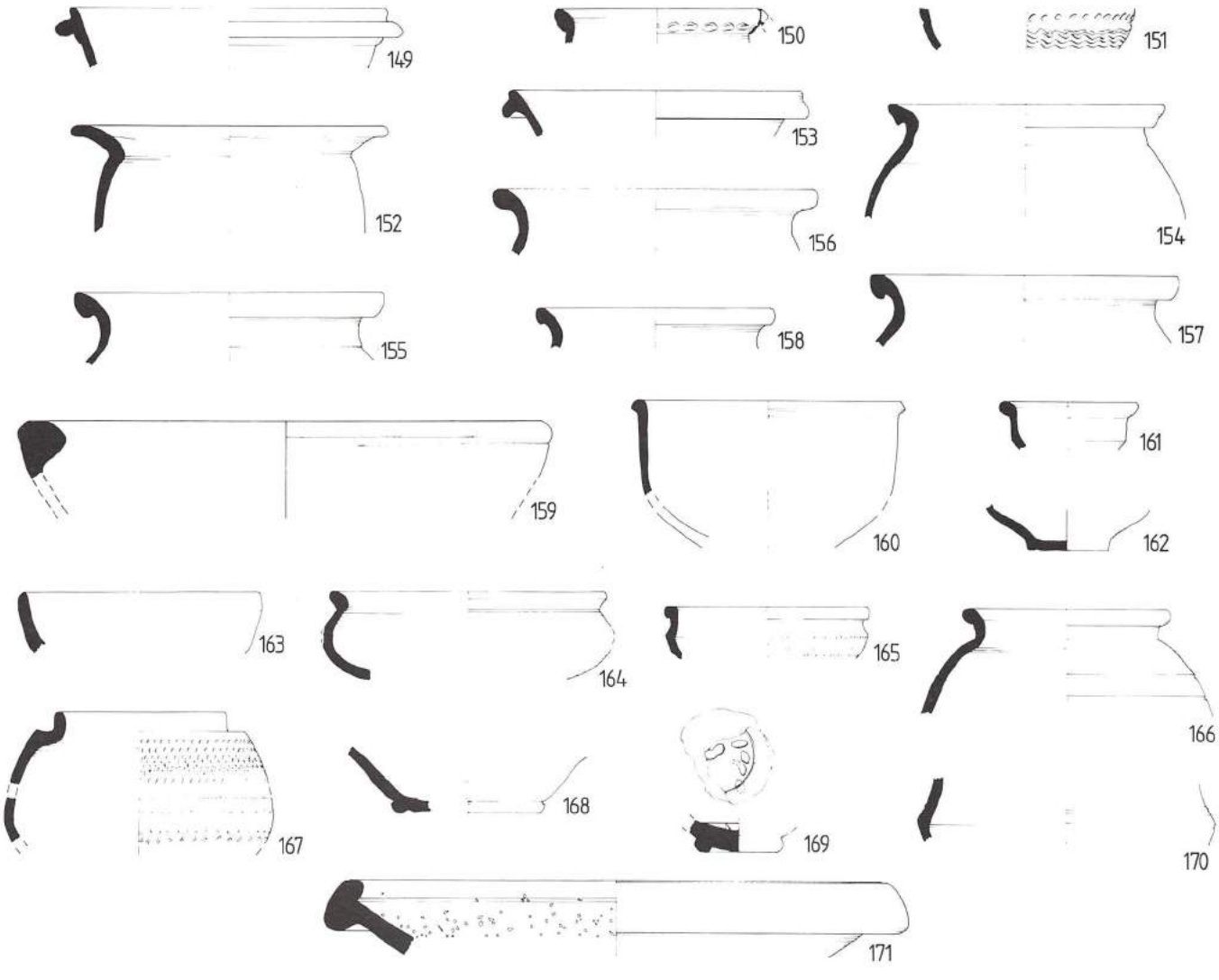

Fig. 22 Heybridge: Roman Pottery, 149-171, Period V.2. Scale 1:4.

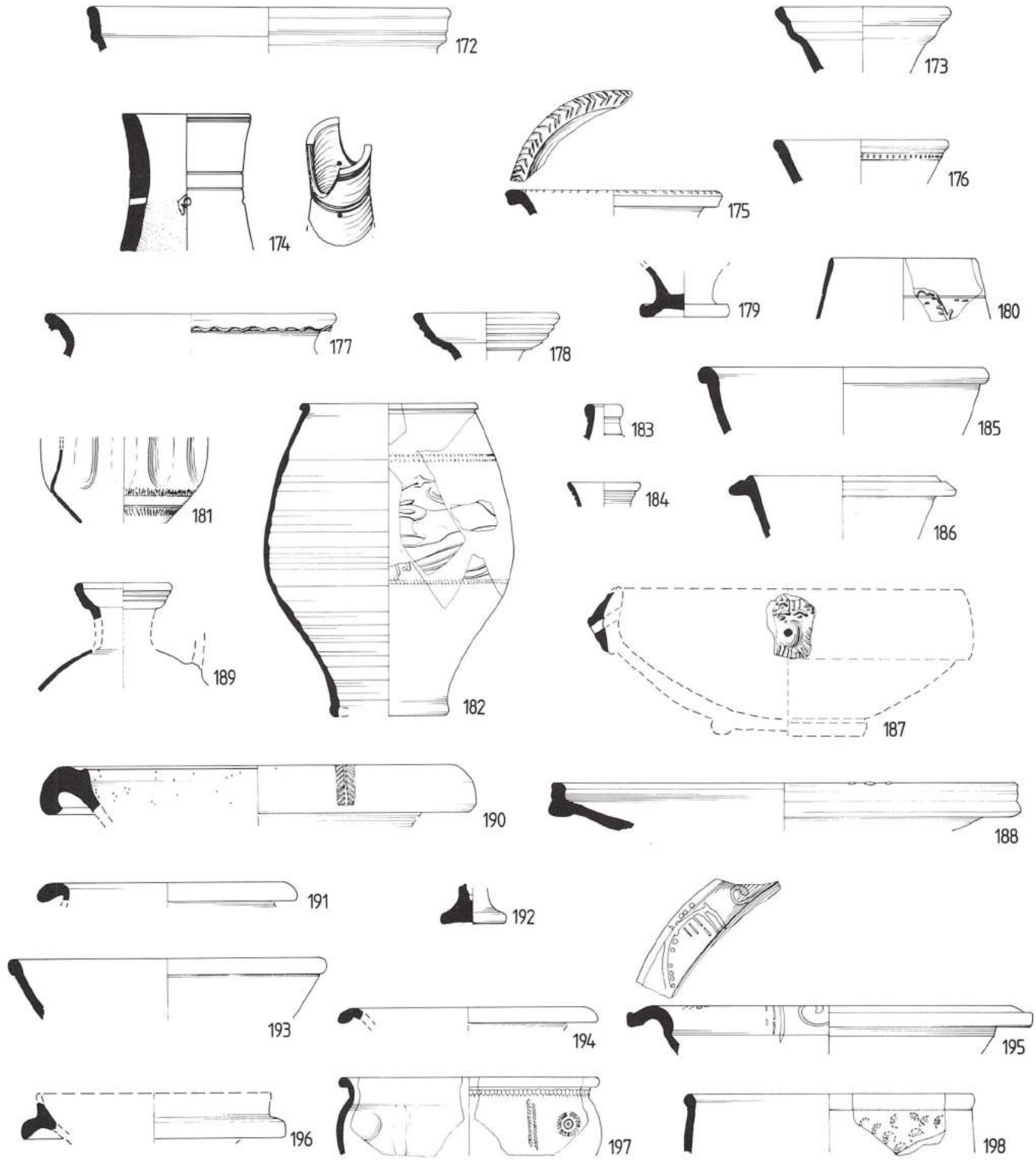

Fig. 23 Heybridge: Roman Pottery, 172-198. Scale 1:4.

Unphased Coarse Wares and Residual Fine Wares (Fig. 23)

Coarse Wares

47 (Fig. 23.172-74): 172, 302; 173, unstrat; 174, pipe with pierced holes and two opposing semi-circular, knife-cut apertures. Use unknown; the interior below the pierced holes is discoloured, though analysis by John Evans failed to identify anything. GH 119.

Fine Wares

4 (Fig. 23.175-179): 175, incised herringbone decoration around rim, sandy orange fabric, unstrat; 176, B3, decorated with a row of stamped dimples on a small cordon, fine sandy orange fabric, 302; 177, G26.1, pie-crust decoration on the lower part of a bifid rim, sandy orange fabric, GH 64 (see also Fig. 17.50). A further example comes from 302; 178, J3, hard grey fabric with red core and thick white overall slip, 72 (VI). A three-ribbed handle in the same fabric came from Ditch 32 (VII); 179, sandy orange fabric, traces of a cream slip, Ditch 250 V.

1 (Fig. 23.180-1): 180, H24.1, barbotine under-slip decoration, in 'Hunt Cup' style, depicting deer antlers, Ditch 32 (VII). For a similar example from Colchester see Hull 1963, fig. 97.3-4; 181, H33, GH 64.

2 (Fig. 23.182-88, for typology referred to, see Howe *et al*, 1980): 182, H23, 'Hunt Cup' beaker, creamy orange fabric, under-slip barbotine animals, Type 26, Ditch 122 IV; 183, 302 (*cf.* Hartley 1972, fig. 4.8-13); 184, unstrat in Ditch 154; 185, unstrat; 186, B6, abraded Type 79, unstrat. Further examples come from 302, Ditch 250 and 70 (VI); 187, D12, spout in the shape of a lion's head from mortarium copying Drag 45, dark brown external slip only, Type 84, 302; 188, three white barbotine dots on rim, as Type 88, 302.

For illustrations of a lid knob with 'steam-hole' and a funnel from GH 118, see Drury & Wickenden 1982, fig. 8.64-5.

27 (Fig. 23.189-190): 189, J3, Ditch 58 (VII): 190, D1, *Cam* 497, bead level with rim, unstrat. For stamp, see Fig. 24.201.

3 (Fig. 23.191-198, for typology referred to, see Young 1977): 191, Young C18, unstrat in Ditch 154; 192, H16.1, thick grey core, hard lustrous surface, Young C36, uncommon, unstrat; 193, B3-4, copy Drag f31, brown colour coat, Young C45, Ditch 58 (VII); 194, Young C47, 302; 195, B10.2, white painted decoration, Young C50, unstrat; 196, Young C51, very common, C8, 302. A further three examples from 302, GH118 and unstrat may be of this type; 197, soft orange fabric, traces of red slip, rouletting round neck with two stamps, a rosette and a cigar-shaped herringbone, see Fig. 24.208-9, Young C78, unstrat; 198, C25, abraded, stamped with demi-rosettes, Young C83.6, Ditch 154 I.

Unillustrated, abraded rim of shallow bowl, Young C49, unstrat; Young C71, Ditch 58 (VII).

For illustrations of Oxfordshire wares found in contemporary association with pagan Saxon pottery in the *Grubenhauser*, see Drury & Wickenden 1982, fig. 9.66-80. Forms (Young 1977) include C50, 51, 54, 68.3, 69.2, 71, 75, 77.4, 78, 81, 84, 97, 100; M22.16; WC7.

Dating Evidence

The Nene Valley 'Hunt Cup' beaker should be later 2nd to early 3rd century (Howe *et al* 1980, Type 26). The flanged bowl and the wide-mouthed bowl (Fig. 23.186, 188) should both be 4th century (*ibid*) whilst the lion-headed mortarium spout should be later 3rd to 4th century (*ibid*). Oxfordshire red colour-coat does not appear in Essex before the mid 4th century (Going forthcoming, Section II.**3**).

The Stamps (Fig. 24)

Mortaria by K. Hartley

Fig. 24.199 Trademark on two mortaria in fine-textured, cream fabric with a very little quartz flint and iron-rich temper; lumps of pink clay occur in the fabric of one vessel; trituration consisted of flint, quartz and iron-rich material. Only one other stamp of this die is recorded, from Brampton, Norfolk (TG 2255 2384). The fabric fits with production anywhere in Essex and quite possibly other parts of East Anglia (i.e. Brampton) but the fact that there are two mortaria at Heybridge with the same rare stamp probably indicates local production, in an area like Essex, which has many small workshops; its absence from Colchester could well be significant. The large pinkish inclusions have not been noted in mortaria

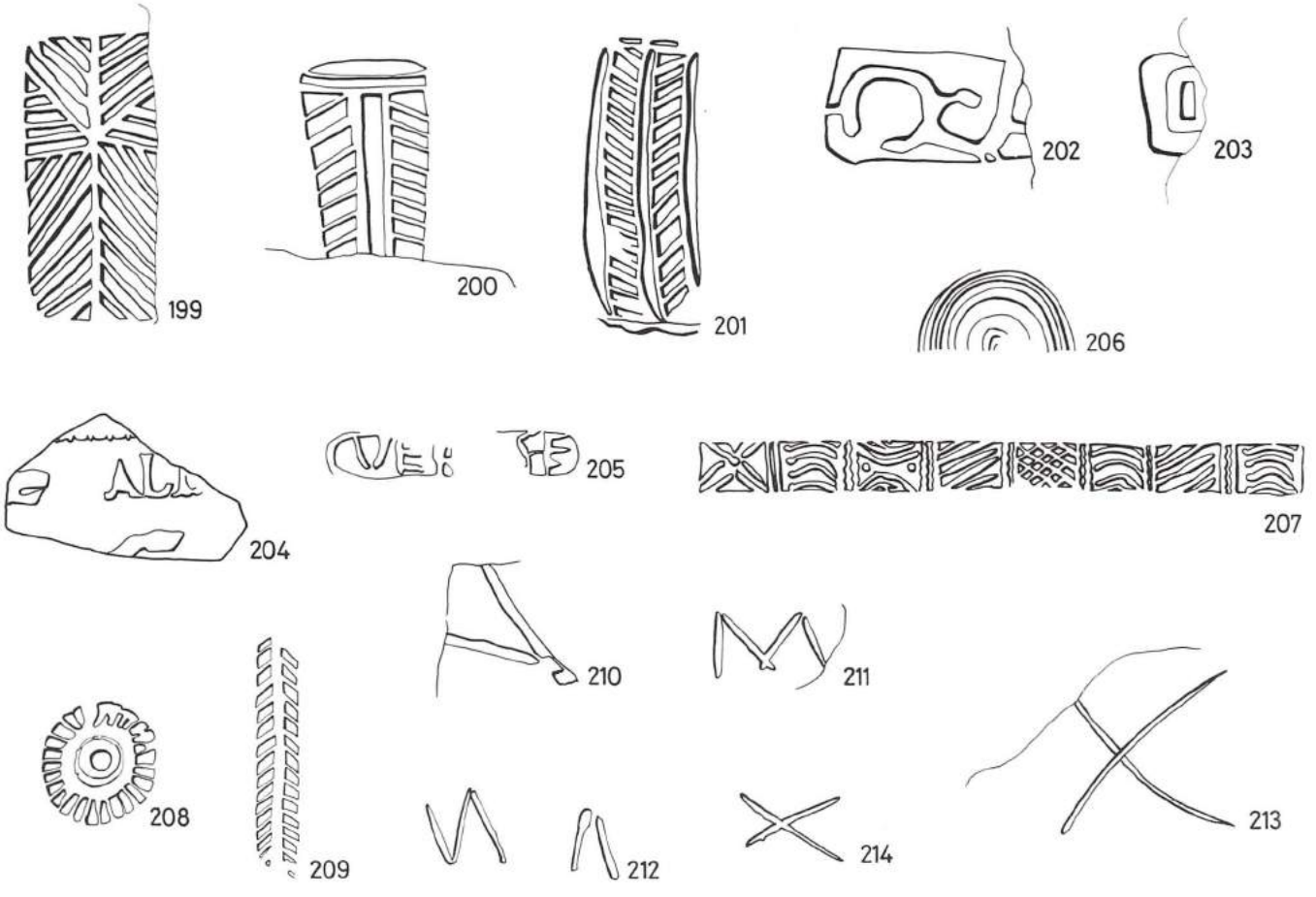

Fig. 24 Heybridge: The stamps and graffiti, 199-214. Scale 1:1.

known to have been made at Colchester but they have been recorded in similar mortaria found at Witham. The rim-forms point to a date within the period AD 160-200. (For the nearest parallels, *cf.* Hull 1963, fig. 67.11-12; *Cam* 498). Pit 76 (Fig. 18.73) and Pit 83 (not illustrated).

Fig. 24.200 Herringbone stamp from the Colchester potteries (Hull 1963, fig. 60.30). This is the most commonly recorded of the Colchester herringbone stamps both in England and in Scotland. The main dating evidence for this and the other Colchester herringbone stamps comes from the large numbers found at sites on the Antonine Wall but a stamp from the same die, recorded from Verulamium is from a deposit dated AD 150-155 (Hartley 1984, 291, 116). The evidence for this stamp-type and other herringbone stamps from Colchester fit with a date *c.*AD 135-175. Well 79 III (Fig. 21.135).

Fig. 24.201 Herringbone stamp from the Colchester potteries (Hull 1963, fig. 60.29); a much less common type than Fig. 24.200, but attributable to the same date. The stamp is recorded from Colchester (many); Sheepen; Dover; Canterbury; Richborough (2); Great Wakering; and Corbridge. Unstrat (Fig. 23.190).

Amphorae

Fig. 24.202 Q.A.[(?), with triangular stop. Fragmentary, possibly Q. Antonius Ruga, AD 40-90 (Callender 1965, No. 1422). Reading might be Q.F, see Callender No. 1451. Unstrat in topsoil above Ditch 154. Fabric **55**.

Fig. 24.203 O[. . . (?) Too fragmentary for identification, unstrat. Fabric **55**.

Terra Sigillata by W.J. Rodwell

Details of the dies and dates of manufacture have kindly been supplied by Mr. B.R. Hartley. The superscript 'a' attached to the factory name indicates a die attested at the named pottery.

Fig. 24.204 Albucius ii, Die 6h, f37, Lezoux[a], *c.*AD 150-80; Stamped ALB[VCI] in the mould, just below the ovolo. 308.

Fig. 24.205 Verus vi, Die 3f, f32, excoriated sherds; stamped VE[RVS]FE. Rheinzabern[a], late 2nd-early 3rd century. Pit 65.

Fig. 24.206 Deep impression of unusual concentric-ring stamp inside centre of base, f.38. This has a neat double outer ring and a small central one with an ill-defined, slightly raised area between. The stamp has been partially double-impressed, giving the appearance of three rings on one side. CG?, Ditch 122.

Fig. 24.207 Two joining sherds of a small bowl of Argonne ware, f37, showing parts of the five lowest bands of roller stamping. Chenet (1941) die number 132 (duplicated as 264) originating from the kilns at Les Allieux. Chenet also records finds from this roller at Coblenz, Cirencester, Pevensey and Silchester. Probably 4th century, Ditch 122 and subsoil 302.

Another stamped sherd (from the same die) of Argonne ware came from the Fitch Collection (No. 32, p.58).

Oxfordshire Red Colour Coat

Fig. 24.208 Rosette stamp from Young type C78, see Fig. 23.197. Unstrat.

Fig. 24.209 Cigar-shaped herringbone stamp from same vessel as Fig. 24.208.

The Graffiti

Fig. 24.210 Incomplete V scratched after firing on underside of base of bowl, Fabric **47**, unstrat.

Fig. 24.211 M scratched after firing, on rim of bowl, Fabric **47**, see Fig. 20.95, Well 79 I, V.1.

Fig. 24.212 ⋀⋀ scratched after firing on chamfer of base of bowl, Fabric **39**, burnished, Well 79 II, V.1.

Fig. 24.213 X scratched *before* firing on underside of base, Fabric **47**, Well 79 II, V.1.

Fig. 24.214 X incised deeply after firing on body sherd, Fabric **1**, GH 119.

The Terra Sigillata by W.J. Rodwell

An incidence of forms is given in the Context Archive.

The material is clearly all residual, except possibly a f31 from Well 79. The pieces are small and heavily abraded, giving the impression that they have been lying about for many years on fields or paths. It seems certain that none of these sherds is contemporary with the deposit from which it was excavated.

Apart from a handful of Flavian sherds (all small), the collection is solidly Antonine, and it contains nothing of great intrinsic interest. The only unusual piece is the ring-stamped form 38 (Fig. 24.206). There are only half a dozen decorated sherds, and these are of undistinguished form 37s from Central and East Gaul; none are worth illustrating. The Heybridge material bears out a general observation that there is a much higher proportion of East Gaulish sigillata in the coastal regions of Essex than there is inland. Thus in this collection approximately 30% of the Antonine wares are of East Gaulish origin, whereas a few miles inland, at Kelvedon, the figure is only 5%. The fragment of Argonne ware (Fig. 24.207) is a welcome addition to the handful of pieces from Essex to date; it, like the East Gaulish samian, is normally found in coastal regions.

The Roller-Stamped Pottery by B.A. Ford

There are seven sherds with roller-stamped decoration. Among these three distinctive styles can be seen: 'Chevron' (2 examples), formed by a series of interlocking triangles; 'free' (1 example), an incoherent crisscross of lines; and 'panel' (4 examples), a number of separately defined panels of diagonal lines. None show a complete roller impression. There are examples of jars and beakers.

Fabrics represented are sandy grey ware (**47**) (five examples) and Romanizing grey ware (**45**) (two examples). Two sherds were thin-sectioned: one in fabric **45** (260) and one in fabric **47** (122 I). Both appear to have links with Colchester: 260 with kiln 27 and 122 I with kiln 7 (Ford in prep), where similar examples have been noted (Hull 1963, 5-9 and 162-174).

Five of the pieces are residual in 4th century or post-Roman contexts; two, however, come from pit 65 (V.1, deposited *c.*AD 270).

The Kiln Material (Tables 5-9, Figs. 17-20)

Four pits, 65, 75, 76 and 79, filled in Period V.1, contained 88.3% (4489 sherds) of all Fabric **47** in that phase. Of that total, 3890 sherds were divided macroscopically into three fabric groups. Fine (**47/F**); medium (**47/M**) and sandy (**47/S**) (Table 5), although an examination of X-rays of a sample of each fabric suggested that these were not wholly distinctive and tend to overlap. However, the general nature of the fabric groupings, together with several other pertinent facts suggested that the four pit groups represented the discarded products from a nearby kiln, not itself located but probably in the immediate vicinity. Firstly, an amorphous fragment of a possible kiln pedestal was found redeposited in Ditch 24 (VII) (see Fig. 13.58). Secondly, the shape of Pit 65 is reminiscent of that of a kiln, and it is feasible that the pit was dug for this purpose but was rejected because of the unstable and soft condition of the surrounding soil (308). Thirdly, the homogenous nature of the fills of Pits 65, 75 and 76 and Well 79 (following the collapse of its structure (79 III)), the density of the pottery within the pits and the similarity in forms all suggest a dumping of pottery manufactured nearby. Indeed in at least two instances,

sherds in different pits join together: i.e. Fig. 17.27 comprises 13 sherds from Pit 65 and one from Well 79; Fig. 17.47 comprises two sherds from Pit 65 and two from Pit 76. Fig. 17.50, whilst not thought to be a kiln product, also comprised sherds in both Pits 65 and 75. (It is also worth pointing out that in eight instances, vessels from Pit 65 also comprised sherds recovered from the adjacent *Grubenhaus* 64). Finally, there are four instances of badly wasted rims, as well as several badly cracked and spalled sherds (e.g. Figs 17.42; 19.86, 20.100).

Table 5 The Grey Wares from Pits 65, 76, 76 and 79

Fabric	F		M		S		Non-Kiln	
Pit	No	Grammes	No	Grammes	No	Grammes	No	Grammes
65	168	2890	514	6750	428	5015	337	2680
75	137	2030	126	1400	287	4195	36	495
76	117	1705	257	2330	274	2780	61	935
79	144	1405	675	7560	763	8730	165	2030

N.B. The final column includes all grey wares not thought to be kiln material and includes some residual Fabric **45**.

The Fabrics

The three kiln fabrics noted are as follows:

Fine (**47/F**): Fine with little or no inclusions, generally underfired and softish, with a pink core and black surfaces. Harder firing and slightly different firing conditions seem to result in a hard, light grey variant. Tables 6, 7 and 8 show the range of forms produced in the fabric. Pie-dishes, with both plain and beaded rims, clearly predominate and are of a high quality with burnished exterior surfaces. Folded jars and beakers also occur as well as occasional examples of jars more frequently made in the coarser fabrics.

Medium (**47/M**): This fabric is not as distinctive as the other two, and falls between the two extremes. Generally with light-grey cores and darker grey surfaces; slight underfiring, surfaces often abraded, giving a mottled effect; sand-tempered, varying from sparse to moderate inclusions. Forms include the same range of pie-dishes and folded vessels as Fabric **47/F**, though not of the same quality, jars with rebated, undercut and sharply everted rims and wide-mouthed bowls with cavetto and rebated rims.

Sandy (**47/S**): Hard, coarse fabric, moderate to abundant sand tempering, often with gritty surfaces; orange to grey in colour. Used for cooking vessels, predominantly for jars with rebated, undercut and everted rims, with occasional examples of pie-dishes, folded vessels and wide-mouthed bowls being made. There is a single example of a large narrow-necked jar.

The Forms

It will be clear from Tables 6, 7 and 8 that the forms have been largely equated with those produced in the Mucking kilns and published by Jones and Rodwell (*cf.* Rodwell 1973, 13-47). The similarity in the range of forms is striking and though it is true that several types are very common and would form a basic part of any potter's repertoire, others are more egregious. The repetition of detail and decoration at Mucking and Heybridge cannot be mere coincidence; indeed, one can add further kiln sites with a similar range of products to this group, notably Orsett (Rodwell 1974, 25-31), Palmer's School, Grays (K. Rodwell 1984, 11-35) and Witham (Turner 1982). On the basis of the similarities in detail between the kiln products at Mucking and Orsett, Rodwell (1974, 35) postulated that the same potters worked on both sites. He went on to suggest 'that professional itinerant potters moved around the countryside, constructing kilns and producing pottery wherever it was required in sufficient quantity' (*ibid*). His interpretation of miniature forms at Mucking (1973, 34-5) as possible travellers' samples, and the presence of one at Heybridge (Fig. 20.114) might add weight to this hypothesis. The industry was not a short-lived affair either, since the two kilns at Orsett are a century apart in date, whilst the six at Mucking range from the 2nd to the 4th centuries.

Table 6: The Kiln Material: Minimum Number Vessels by Fabric and Pit Group

		MUCKING TYPES														*Cam* 407A	*Cam* 407A	Carinated		
		A	B	C	F	G	J	K	N	P	Q	R	S	U	V	Rim	Base	Lid	Jar	Waster
	F	5	9	2	1		1				1	1			1	2	3			
65	M	8	7	2	6	1	5	1		5	3				1	4	1			1
	S				16		10	1			1						1			1
	F	4	3	1							1					1				
75	M	2	3		3		4													
	S		3		2	1	5		1						2					
	F	3	4	1	2	1						1				1	3			
76	M	4		4	6		2			1						1	1			
	S	1			4		4			1					1	1				2
	F	5	7							1	2			1			3			
79	M	8	9		13		7	1		12	1					1	1	3	4	
	S	1	1		19		21	1		7			1		1				1	1

Table 7: The Kiln Material: Minimum Number of Pie Bowls/Dishes by Form, Fabric and Pit Group

		TYPE A — PLAIN RIM				B — BEAD RIM			BASES	
		Rim Only	Dish: Straight walled	Dish: Curved walled	Bowl	Rim Only	Dish	Bowl	Chamf.	Flat
65	F	1	3	1		5		4	6	2
	M		6	1	1	3	2	2	6	2
	S	-	-	-	-	-	-	-	-	-
75	F		2		2			3	3	4
	M		1		1	2		1	3	1
	S					1		2	1	1
76	F		1		2			4	4	1
	M		1		3				3	1
	S			1					1	
79	F	1	2		2			7	1	2
	M	1	3	1	3	1		8	16	2
	S	1						1		

Table 8: Presence or Absence of Forms from Essex Kiln Sites. ( ) Denotes form is rare. Based on Rodwell 1973

		A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V
HEYBRIDGE	F	X	X	X			(X)	(X)		(X)						(X)	X	(X)	?		X	
	M	X	X	X			X	(X)		X	X					X	X		?			
	S	(X)	(X)				X	(X)		X	X			(X)		X	(X)		(X)			
MUCKING	I		X				X				X					X						
	VI		X				X				X					X						
	II	X	X	X		X	X	X	X	X	X	X	X	X	X	(X)	X	X	X	X	X	
	IV	X	(X)	X	X			X		X	X		?	X	X		X	X	X	X	?	
	V	X	(X)	X	X			X		X	X		?	X	X		X	X	X	X	?	
	III	X	?		X			X		X	X		?	?			?	X	X	?		
ORSETT	I		X				X		X	X	X				X	X						
	2	X	X		X			X		X	X			X			X	?	X			
WITHAM			X	?			X			X	X											
CHELMSFORD		X					X			X				X								flanged rim jar, lid
BILLERICAY		X	X				X			X				X	X	X			X		(X)	
PALMER'S SCHOOL		X	X				X				X			X		X						

Table 8 gives the form incidence of Rodwell's Mucking types at those sites mentioned here. At Heybridge, Types A and B have been further sub-divided (Table 7) to show the presence of several different variations (also present at Mucking). There are ten examples of pie-dishes with incipient flanges (C) but none with full flanges or rebated rims. The bases of all the types of pie-dishes are generally burnished and chamfered (in a proportion of three to one plain base). In many instances the bases have become detached from the vessel walls. Jars with rebated rims (F) and undercut rims (J) are plentiful, the latter often with one or two grooves below the neck. One example, Fig. 19.84 has multiple grooving and is very similar to Type J.45 (Rodwell 1973, fig. 6); a further two examples (Figs 17.38; 20.105) have bifid rims, similar to Type V.123 (rim slashed) and Type J.52 respectively. There are three examples of the cupped-rim bowl (G), one with a probable slip and grooving on the lower half of the body (Fig. 19.82). Type H, the cupped-rim jar, rare at Mucking, does not occur at Heybridge. There are four examples of the wide-mouthed cavetto-rim bowl (K), three with a single burnished wavy line, set in a reserved zone between two grooves below the neck, and one apparently lacking the wavy line in the same way as the Witham example (see below). There are no examples of Types L, M or O present, and only one of Type N, a large narrow necked-jar (Fig. 18.65) with burnished rim and neck and body zones and wavy lines, similar to Type N.69 from Mucking (Rodwell 1973, fig. 8). Type P, a jar with a sharply everted rim, is common with the majority of vessels coming from Well 79. The majority are burnished down to the shoulder and then have sets of vertical or angled burnished strokes running down the body (*cf.* Mucking: Rodwell 1973, fig. 10.95; Orsett: Rodwell 1974, fig. 7.43). There are nine examples of the Mucking-type folded beaker (Q) with its characteristic fairly wide mouth, everted rim, and cordoned neck; all are very closely paralleled by Type Q.96 at Mucking. There is one conical necked beaker (R).

It is uncertain whether any large storage jars of *Cam* 273 were made at Heybridge. Fragments were certainly found in all four contexts, in the standard storage jar fabric (**44**), many decorated with shoulder stabbing. Their mere presence alone, however, cannot indicate manufacture, as storage jar sherds are ubiquitous on the site. But there is one vessel (Fig. 20.116) which is a smaller version of the type and also recorded at Mucking (Rodwell 1973, 33), with undercut rim, burnishing on the rim and neck, a sharply angled shoulder and line of stab marks beneath it. There were no grey ware mortaria found in the pits and it is assumed that none were being manufactured at this date, though see p.50; two rare trademarks on cream mortaria were also found, dated *c.*AD 160-200, and may be local products, following publication of a cream-ware mortarium kiln at Palmer's School, Grays (K. Rodwell 1984, 22). The miniature bowl (Type U, Fig. 20.114) has already been mentioned. Finally, Fig. 17.49, though of uncertain form, is decorated with a zone of rouletting, similar in style to examples at Mucking (Rodwell 1973, fig. 9.80-2).

The Palmer's School kiln material is in two fabrics, a coarse sand-tempered one and a fine, dense, very slightly micaceous fabric with little visible sand (K. Rodwell 1984, 26). Forms made were ledge-rim jars (both fabrics); pedestal urns with multiple zones of burnished lines (fabric 2); cordoned bowls (fabric 2; Mucking type K, my wide-mouthed cavetto-rim bowl); everted-rim jars (fabric 2); flasks; and pie-dishes, both straight sided and bead-rimmed (fabric 2).

The Witham kiln material, in a sandy grey fabric, contains pie-dishes with plain, beaded and incipient flanged rims, a wide-mouthed, cavetto-rim bowl with plain reserved zone, and jars with rebated and undercut rims. The only decoration used appears to be lines and zones of finger-tipping.

Discussion

The evidence would suggest the presence of a pottery industry, the core of which was based on the Thames-side, perhaps as a seasonal concern, perhaps alongside salt production (K. Rodwell 1984, 35), to complement the agricultural year. Kilns manufacturing the same products are also recorded in southern central Essex, though it cannot be proved as yet whether these are the work of the same potters or whether merely the styles are being imitated. If the latter is the case, the details are surprisingly accurate. Several studies of the distribution of pottery kilns in Essex have recently been published (Toller 1979, 50-1; Marsh & Tyers 1978, 533-546; Rodwell 1983).

It is clear that in east and south central Essex, there are not only the Mucking-type kilns, but also a small group of kilns producing flint and sand-tempered pottery in the late 3rd and 4th centuries at Rettendon, Sandon, Chelmsford and Inworth (see Going forthcoming, Section V). Drury (1976b, 257-8) has suggested that Rettendon ware production was organised on a similar basis to that of the Thames-side kilns. Furthermore Heybridge is geographically nearer to Colchester and Chelmsford than to Mucking and the kiln products also reflect this, some forms being clearly derived from Colchester and Central Essex and not part of the Thames-side tradition at all. This is most true of the folded beaker with the funnel neck and plain rim, a more slender form than its Mucking counterpart. The form is common at Colchester (*Cam* 407A) in the 3rd century, and at Heybridge where the rims and pedestal bases are clear indicators. At both places, the vessels can be decorated with a band of two or three median grooves (e.g. Fig. 16.22). Another such form is a jar with an everted rim, thickened on the exterior, with one or two grooves below a short neck (e.g. Fig. 18.66). While similar to Type J at Mucking, it bears more relation to jars from the Moulsham Street kiln in Chelmsford, manufactured in a 'Rettendon' fabric (Going forthcoming, fig. 10, Type G24.1/1). Next there are four lid fragments in Well 79. Three of them (Fig. 20.117-19) are in the medium sandy fabric and seem to reflect the high proportion of lids found at Chelmsford (Going forthcoming). A fourth (Fig. 21.125) has an abraded bifid rim and is in a fine, soft fabric; it resembles a 1st century example from Chelmsford (*ibid*, K2.1/1, fig. 17). Another problem is the carinated bowl. An example from Well 79 III (Fig. 16.10) is thought to be 2nd century on the grounds that it is similar to early forms at Chelmsford, and this would agree with an early date for the construction of the well (see page 15). However four sherds, clearly all from different vessels, also appear in the filling of Well 79 with a rim (Fig. 20.115) which is very similar to Fig. 16.10. Either these sherds are residual, or they indicate a unique form being made at Heybridge whose closest parallels are early in date at Chelmsford (Going forthcoming, G29). Two further vessel types remain. Firstly, a wide mouthed bowl (Fig. 17.48) which can be given no definite provenance, except that it is not an obvious Thames-side or Colchester product. Secondly, a wide mouthed vessel (Fig. 17.50), of which only the rim survives; it is everted but turned up at the tip, and is probably a copy of Drag 36.

Dating Evidence

It is assumed that the four pit groups are contemporary, since it has already been noted that several sherds from different pits come from the same vessels. It is, however, possible that the material was deposited somewhat later than its manufacture. This would explain the degree of abrasion and indeed sooting on some sherds.

Pit 65 contained two coins, a burnt and worn denarius of Septimius Severus (193-211) and a bronze of Claudius Gothicus in good condition (268-70). It also contained Colchester colour-coated beaker fragments, some folded, with both cornice and funnel-neck rims; fragments of a *Cam* 308, in the same fabric, decorated with overlapping scales; sherds of Nene Valley colour-coated jars and beakers. All should probably be dated in the late 2nd to mid-late 3rd centuries.

Pit 75 contains, amongst the more usual domestic debris, a bronze spoon (Fig. 10.6); folded beaker fragments in both Colchester and Nene Valley colour-coated fabrics, decorated with rough casting and barbotine scales respectively; and a BB1 flanged bowl, a form which appears in Essex from the mid 3rd century.

Pit 76 contained a worn dupondius of Marcus Aurelius (161-180); a 3rd century copper alloy finger ring (Fig. 10.11); an iron candlestick (Fig. 11.19); Nene Valley colour-coated folded beaker fragments with barbotine scales and lines (Fig. 19.89-90) and Colchester colour-coated beaker fragments with funnel-necked rims. Both these forms can be dated to the mid 3rd century (Howe *et al* 1980, 18 and fig. 4).

The fill of Well 79 contained a sestertius of Marcus Aurelius, dated to 170-171. This is in excellent condition, showing slight wearing on the obverse and on the wreath on the reverse, but no signs of weathering, which suggests a date for its deposition soon after minting, perhaps a decade or so. This clearly is at variance with the pottery evidence and it is tempting to see the coin as coming from Layer III, that is the collapsed packing of the well (see p.15), therefore providing a fairly close date for the well's construction. The pottery from the main fill includes two poppy beaker rims and several sherds; very little Nene Valley pottery but many very abraded fragments of Colchester colour-coated beakers, mainly with cornice rims. Decoration includes rough-casting (Fig. 21.128), overall rouletting (Fig. 21.130) and folding; a squat beaker with oval folds in a miscellaneous red fabric (Fig. 21.126); and a BB2 beaded rim pie-dish with cross-hatched burnishing (Fig. 21.120).

The external dating evidence, then, suggests a date of around the middle of the 3rd century for the manufacture of the pottery and perhaps a date of *c.*AD 270 or soon after for its deposition (based on the presence of the coin of Claudius II). This agrees well with the evidence for the kiln forms themselves. The beaded rims of the pie dishes (B2-4) do not run on much into the latter half of the 3rd century. Grey ware folded beakers (H34) seem to have their *floruit* in Essex around the middle of the century, whilst jars with rebated rims (G5) are common at Mucking in Kiln II, redated in the light of new work on the Colchester mithraeum to 200-230/50 (but see Going forthcoming, Section XII.3). They are absent, however, from Kiln IV, the next in the Mucking sequence. The incipient flanged bowl (B5) can be dated to *c.*AD 230/50-260/80, when it is replaced

by the fully flanged bowl. Table 8 shows that the range of forms present at Heybridge is closest to that of Kiln II at Mucking with some absences.

Table 9 The Kiln Material

Quantitative analysis by form and fabric (base on Table 6)

BY FABRIC

Fabric F

Mucking type	A	25.0%	N	0
	B	33.8	P	1.5
	C	5.9	Q	5.9
	F	4.4	R	2.9
	G	1.5	S	0
	J	1.5	U	1.5
	K	0	V	16.2

N.B. Type V includes all non-Mucking forms mentioned in the text.

Fabric M

Mucking type	A	16.5%	N	0
	B	14.3	P	13.5
	C	4.5	Q	3.0
	F	21.1	R	0
	G	0.7	S	0
	J	13.4	U	0
	K	1.5	V	11.3

Fabric S

Mucking type	A	1.8%	N	0.9
	B	3.6	P	7.1
	C	0	Q	0.9
	F	36.6	R	0
	G	0.9	S	0.9
	J	35.7	U	0
	K	1.8	V	9.8

BY FORM

Mucking type	A	13.1%	N	0.3
	B	14.7	P	8.6
	C	3.2	Q	2.9
	F	23.0	R	0.6
	G	1.0	S	0.3
	J	18.9	U	0.3
	K	1.3	V	11.8

The quantitative analysis by form alone shows the predominance of jars with rebated rims (23%), followed by jars with undercut rims (18.9%) and the pie-dish forms A and B (13.1% and 14.7% respectively). When separated by fabric, however, it is clear that the burnished pie-dishes, bowl and beaker forms are made in the finer fabrics, whilst the unburnished jar forms (used for cooking) are made in the grittier, harder fabrics.

Summary

The three main groups of unspecified grey wares (**39, 45, 47**) account for over 82% of the total assemblage (by sherd count), and there is no doubt that they include pottery from several different kilns in the Essex region. The accumulated evidence above indicates the manufacture of grey ware pottery at Heybridge in the middle of the 3rd century.

Imports

All but two of the amphora sherds are in Fabric **55**. One is from an unknown source (163, V.2), also found at Braintree, Raweth and Chelmsford (Fabric 58) in 4th century contexts. The other is a fragment of a spike (146, III.2), possibly from a Dressel I, in Peacock's 'black sand' Campanian fabric 2 (1971, 164). For two amphorae stamps, see Fig. 24.202-203.

Some trade with the Rhineland is affirmed by a bowl rim of Mayen-type ware (Fabric **54**; Fig. 22.159) and by four small sherds of Rhenish ware (Fabric **8**). The sherd from Ditch 122 (V.2) has a band of rouletted notches; another is from a folded beaker (Pit 155, V.2). There is one small sherd of Pompeian red ware (1st century AD, pre AD 80), residual in Ditch 58 (VII).

The mortaria

A selection of the more unusual fabrics was submitted to Mrs. K. Hartley, whose comments have been incorporated below, and in the catalogue for Figs 21.136, 137 and 22.171.

Most of the sherds are Colchester-type products (Fabric **27**). Fragments of Lower Nene Valley mortaria (Fabric **24**), apart from the lion's head spout (Fig. 23.187), included a footstand base, Form 45 (Howe *et al*, 1980, fig. 7.84); and a late 3rd-4th century reeded rim with vestigial spout, burnt grey. Both came from 302. Other sherds come from Pit 83 (V.1) and unstrat in Ditch 154. White ware sherds from the Oxfordshire kilns (Fabric **25**), with the typically rounded, translucent pink trituration grits, came from Ditch 154 I, 302 (burnt) and GH 83A. There were six fragments of white slipped oxidised Oxfordshire mortaria (Fabric **13**) from GH 64, GH 82, GH 118, 302 and Ditch 58 (VII), the latter fragment being a possible WC4 form (Young 1977, 120-22). Ten sherds of Oxfordshire red colour-coated vessels (Fabric **3**) were present, coming from GH 82, Ditch 122 (V.2), 302 and unstrat.

Finally, several fragments seem to be of local origin. Part of a flat base, unstrat within Ditch 154, is in a grey, sand-tempered fabric (**47**) with assorted rounded quartzite grits. A date post *c.*AD 250 is suggested. Sherds in a similar fabric have been found at Braintree (Drury 1976a, 46), Rawreth (Drury 1977, 41) and in a 4th century kiln at Inworth, only 10km from Heybridge (K. Rodwell in Going forthcoming, Section V.2). Secondly a hammer-headed rim fragment came from 302; it is in an orangey-buff sandy fabric, not earlier than the 3rd century, and must be either a local kiln or a Colchester product. Thirdly a footstand base from 179, in a soft buff-light brown flint-tempered fabric with assorted crushed flint trituration, is probably a 2nd century local kiln product, perhaps from a source nearer to Heybridge than Colchester. For two more Essex kiln products, see Figs 21.137 and 22.171. For a kiln producing cream-ware mortaria at Palmer's School, Grays, see K. Rodwell 1984, 22.

Regional Imports

There is a distinct, though fairly small, presence of 'Rettendon' ware (Fabric **48**). The most common form is a jar with a rounded or undercut everted rim, e.g. Fig. 21.141, though flanged bowls also occur (e.g. Fig. 22.153). Both types were made at the Rettendon kilns (Tildesley 1971, 35-51) in the 4th century, and elsewhere in central Essex, notably Moulsham Street, Chelmsford (Going forthcoming, Section V.1), Inworth (K. Rodwell, *ibid*, Section V.2) and Sandon (Drury 1976b, 253-58). At Heybridge, the majority of sherds came from Period V.2 or later contexts, supporting

the 4th century date. Four sherds in 2nd century contexts are assumed to be intrusive; three sherds from Period V.1 might suggest that the ware was in use in the later 3rd century, as at Little Waltham and Braintree (*ibid*). Decoration is rare, one sherd having a raised cordon stabbed with diagonal slashes.

Only one sherd of early shell-tempered pottery (Fabric **50**) was recovered (residual in Ditch 32), apart from Fig. 16.15. The remainder was all of the late type (Fabric **51**) and came from Period V.2 and later features. Evidence from London, Verulamium, Shakenoak, Chelmsford and Braintree suggests that it first appeared in south east England from *c.*AD 360-370, and continued into the 5th century (Drury 1976a, 45).

Evidence of more distant trade is indicated by the presence of two sherds from the Alice Holt kilns (Fabric **43**; Fig. 22.151, and Ditch 122 I). There are also six examples of BB1 (Fabric **40**), see Figs 18.69; 21.138; 22.152. The source of the bowls in BB2 (Fabric **41**) is not clear, but may be the Thames Valley (Drury & Rodwell 1973, 84.118; Rodwell 1973, 22).

Table 10: Incidence of Colour Coats by Period and Context

PERIOD & CONTEXT		COLCHESTER (1)		NENE VALLEY (2)		OXFORD RED (3)	
		Number Sherds	Weight (gms)	Number Sherds	Weight (gms)	Number Sherds	Weight (gms)
Period III.2-IV.1	100	2	05				
	106	6	20				
	179	11	45				
	190			1	10		
	212	1	10				
Period IV.2	77	52	105				
	115	1	05	2	10		
	131	1	05				
	177	1	05				
	185	1	05				
	308	4	30	6	75		
Period V.1	65	173	800	48	315		
	75	33	140	8	120		
	76	13	55	19	210		
	79I	7	35	8	25	1	05
	79II	62	345	1	10		
	83	9	35	9	40		
	250	18	110	12	105		
	303	4	65	3	45		
Period V.2	17	1	05				
	33			1	05		
	39	1	05				
	88	4	10				
	122I-II	2	10	41	465	8	70
	122III-IV	1	25	57	395		
	154I-III	7	30	9	45	14	90
	155	3	15	16	65	9	45
	163	1	05	4	15	1	05
	205			2	20		
Period VI (Saxon)	64	68	245	3	20	2	20
	70			1	30	1	05
	72	2	10				
	82	2	10	6	75	32	345
	83A	1	05				
	118	2	10	6	165	11	120
	119	7	35	6	60	2	55
	150					1	05
	199	1	05				
	210	2	15				
	304			1	05		
Residual, Unstratified		58	310	43	495	27	390
TOTAL		562	2570	313	2825	109	1155

Table 11: Ditch 122: Roman Pottery Quantification by Eves and Weight

	Eves	% Eves	Weight (gms)	% Weight
Colchester colour-coat (**1**)	—	—	10	0.10
Nene Valley colour-coat (**2**)	1.07	11.64	520	5.52
Oxfordshire Red colour-coat (**3**)	—	—	70	0.74
Hadham Oxidised Red wares (**4**)	0.10	1.03	95	1.00
Central Gaulish Rhenish ware (**8**)	—	—	05	0.05
Miscellaneous White- or Cream-slipped Sandy Red wares (**15**)	—	—	05	0.05
Colchester buff wares (**27**)	—	—	25	0.26
Oxfordshire 'parchment' wares (**30**)	—	—	65	0.69
Unspecified buff wares (**31**)	0.05	0.54	315	3.34
Fine Grey wares (**39**)	—	—	130	1.38
Alice Holt wares (**43**)	—	—	50	0.53
Storage Jar fabrics (**44**)	—	—	545	5.78
Romanising Grey wares (**45**)	0.05	0.54	40	0.42
Sandy Grey wares (**47**)	5.71	62.13	5510	58.49
Rettendon wares (**48**)	1.13	12.29	725	7.69
Late 'Shell-tempered' wares (**51**)	0.99	10.77	1010	10.72
South Spanish amphorae (**55**)	—	—	125	1.32
?Local mortaria (**Add. b**)	0.09	0.97	105	1.11
Total:	9.19	99.91	9420	99.93

There were four major centres from which fine wares originated, namely Oxfordshire, Colchester, the Nene Valley and Hadham. Other fabrics which appear are London ware (Fabric **33**: Fig. 16.14); mica-dusted pottery (Fabric **12**: Fig. 16.16 and Fs 106, 179 (IV.2)); Brockley Hill (Fabric **26**), of which there are five abraded sherds from 302.

For the incidence of Oxfordshire red colour-coated sherds, see Table 10. This agrees with the general 4th century dating (Young 1977), though it is likely that many forms were still being manufactured and distributed in the early 5th century. For a discussion of this, based on the presence of a quantity of sherds in the Saxon *Grubenhäuser*, see Drury & Wickenden 1982, 20-24. The mortaria products have already been discussed. There is also a small group of sherds of Parchment ware (**30**) probably from the Oxfordshire kilns, e.g. Figs 21.134 and 22.170 (Young 1977, 80f).

It is difficult to be conclusive about the quantity of pottery from the Hadham kilns (Fabrics **4**, **36**) present, since the fabrics can vary greatly, and little has as yet been published. C.J. Going, currently working on a corpus of the kiln products, has suggested (pers comm) that a much higher percentage of Hadham fabrics, particularly the reduced wares, may exist in excavated assemblages of the region than is at present recognised. Nonetheless, it is apparent at Heybridge that there is a greater proportion of Oxford red colour-coated wares, compared to the Hadham oxidised fabrics. In the absence of thin-sectioning, it is possible that some of the sherds, described in the catalogue as Hadham ware, come from a more local source, and vice-versa.

The greatest quantity of any fine ware fabric present is the Colchester colour-coated pottery (Fabric **1**). This local industry seems to have flourished in competition with the Nene Valley pottery kilns, until its collapse some time in the 3rd century; see Table 10. It is certainly only in Period V.1 that there is any marked quantity of Nene Valley colour-coats (Fabric **2**), and in the 4th century the thick white wares totally replaced those from Colchester.

The Briquetage

The assemblage of fired clay from the site includes some pieces which contain a high percentage of chopped vegetable material, with small amounts of chalk; there are only occasional rounded grains of quartz and flint. The fabric is soft and soapy to touch; the colour varies from brick red to orangy brown, with occasional white or purplish surfaces. Identical material has also been noticed at the Chelmsford Temple site (in prep). It is not certain that all of this fired clay was used in the production of salt; all the pieces are far too fragmentary and abraded to be able to reconstruct any shapes. Some of the fragments are probably from pans of the type illustrated by Rodwell (1979, 149, fig. 8), since they are of a uniform width, *c.*10mm (147 (VI), 79 (V.1), 130 (IV.1), 302). Other pieces are up to 30mm thick.

Pieces occur in all periods from the Iron Age onwards, with a predominance in Period IV.1. The one Iron Age fragment is possibly a piece of clay luting used for filling gaps between components of the process. It is 60mm long, curving slightly, and triangular in section. From Post-hole 84 (II).

Salt-making debris was also found at Palmer's School, Grays, in association with Romano-British pottery kilns. A seasonal link between the two industries is suggested (K. Rodwell 1984, 35), and the hypothesis put forward that salt-impregnated briquetage debris was transported inland to serve as salt-licks for cattle (*ibid*, 34).

For a distribution of Red-Hills in north east Essex, see Rodwell 1979, fig. 13. The nearest known Red Hill to Heybridge is at Osea Road, Maldon (TL 887 075; *ibid* 169, No. 83).

A Post-Medieval Mercury Jar (Fig. 25)
by R. Thomson (Southampton Museum)
This pot belongs to a small but widely distributed class of ceramic import of which examples are known from London, Leicester, Coventry and Waltham Abbey, Essex (Huggins, in Musty 1978, fig. 16.39-40). In addition there are six from Southampton. The majority are in an unglazed, micaceous fabric, similar to the Heybridge example, and are typical of Iberian imports. The examples from Waltham Abbey, and three from Southampton, however, are in a harder, red fabric with little or no mica, and have a green glaze, which, in the case of a single example, is alkaline and therefore probably an import from the Middle East. The single stratified vessel from the whole group is in a deposit of *c.*1500 (SOU 124.C312) at Southampton. The small capacity (800-1200ml), and their very strong construction, suggests that the original contents were extremely valuable, and it is here suggested that they are mercury jars. It is

Fig. 25 Heybridge; The mercury pot. Scale 1:3.

known that mercury was imported in small vessels from the Mediterranean via Southampton in the 15th and early 16th centuries. The only known medieval mercury mines are in Andalusia in Southern Spain, and mercury also came via the eastern spice trade. From Pit 53 (VII). The feature also produced brick, probably 15th-16th century in date, and pegtile (MF 1.I).

The author would be interested to hear of any other examples of such vessels.

Environmental Evidence

Survival of animal bone was limited to only a few features, especially Pits 75, 76 and Well 79 (Period V.1) and comprised mainly non meat-bearing waste bones. A report by Dr. R.M. Luff is reproduced in microfiche (MF 1.K). Oysters were recorded surviving in the same three features.

An Archaeological Gazetteer of Heybridge

With contributions by Dr. P.M. Kenrick, Dr. W.J. Rodwell and Dr. J.P. Wild

The purpose of this gazetteer is to place the excavations in their proper context within the Iron Age and Roman settlement. For this reason, only finds of these periods are included, although single Roman finds from within the town of Maldon are not exhaustively listed. Numbered sites are shown on Fig. 2.

The following abbreviations are used:

CHMER: Chelmsford & Essex Museum.
COLEM: Colchester Museum.
CMR: Colchester Museum Annual Report.
CV Arr: A. Oxé & H. Comfort, *Corpus Vasorum Arretinorum* (Bonn, 1968).
O-P: F. Oswald & T.D. Pryce, *An Introduction to the Study of Terra Sigillata* (London, 1920).
Pc: Price Catalogue, 1888, Colchester Museum.
PEM: Passmore Edwards Museum.
TEAS: *Transactions of the Essex Archaeological Society.*

1 Belgic Cremation Cemetery (late 1st century BC — early 1st century AD)

The grog-tempered cinerary urns have already been well published (Thompson 1982, 729-732; Birchall 1965; Rodwell 1976) and are not reproduced here. Forms and figure numbers are after Thompson 1982.

Material obtained from Heybridge Parish Council via Mr. Lewis Belsham by Colchester Museum in 1912. From the New Cemetery

1. Urn (fig. 44.1100, Type B2-4). Contained bones and covered by the arretine lid, Fig. 26.9. COLEM 2470.12.
2. Urn (fig. 44.1102, Type B2-4). COLEM 2471.12.
3. Lid (fig. 44.1148, Type L5). COLEM 2472.12.
4. Lid (fig. 44.1094, Type L5). COLEM 2473.12.
5. Wide-mouthed cup (fig. 44.1074, Type E2-1). COLEM 2473.12.
6. Rim (fig. 44.1150, probably Type E1-2). COLEM 2473.12.
7. Pedestal base (fig. 44.1149, Type A1). COLEM 2473.12.
8. Fig. 26.8. Storage jar sherd, softish orange fabric with rusticated surface (Rodwell 1976, fig. 15.Ia). COLEM 2473.12.

Fig. 26.9 Base of Arretine Platter *by Dr. P.M. Kenrick*
A part of a large arretine platter at least 35cm in diameter, with flat floor and broad, low ring-foot; a broad band of rouletting on the floor above the line of the foot enclosing four radial, rectangular stamps. Fine pink clay without obvious inclusions, and with lustrous red-brown slip all over. The platter had been deliberately cut down for use as a lid, and was found covering the burial No. 1 (above).

Despite the absence of any rim, this piece may confidently be placed early in the history of Italian Sigillata production and parallels may readily be found amongst the material from Bolsena (Goudineau 1968). The low, broad profile of the foot and the concave moulding on the outer face where it joins the floor are closest to the sherd no. B-3-18 (*ibid*, 108, 111), found in a layer dated before 30 BC (*ibid*, 278 f) and to nos. B-2C-15 and B-2C-16 (*ibid*, 122, 125) both of which carry radial stamps and were found in a layer dated between *c.*30 and 15/12 BC (*ibid*, 286). Radial stamps are characteristic of early plates in Italian Sigillata, being a direct inheritance from the Hellenistic black-glazed wares of the region; a single central stamp is generally preferred after about 15/10 BC (*ibid*, 353), and this piece is probably to be dated *c.*20 BC. All four of the stamps are damaged, and only one is at all legible (Fig. 27.9b). The reading is PHERT(ORI) between lunate ornaments, listed in *CVArr* as no. 788.118, P. Hertorius of Arezzo. This precise form of stamp is not illustrated in *CVArr* (the vessel was known to Oxé only through a reference in *O-P*, 5), but the many ornate examples figured on pp.221-222 show that it is typical. Most of the stamps of Hertorius are impressed radially and accompany early foot-profiles; products of this potter are attested plentifully in Italy, also in Africa, Spain, Gaul and Germany. The present example is the only one listed in *CVArr* from Britain.

The vessel is listed and (poorly) illustrated by Birchall (1965, 308 and fig. 16, no. 139). COLEM 2474.12.

Material donated by Heybridge Parish Council to Colchester Museum in 1920. From the New Cemetery

10. Highly decorated urn (fig. 44.995, Type B3-7). Contained bones. COLEM 3979.20.
11. Urn (fig. 44.1091, Type B2-3). COLEM 3980.20.

Miscellaneous

Fig. 26.12 Rim of large, handmade vessel (Thompson 1982, Type S7) in a coarse brown fabric, with a loop handle springing from the top of the rim and imitation rivet heads on the side. Skeuomorph of a

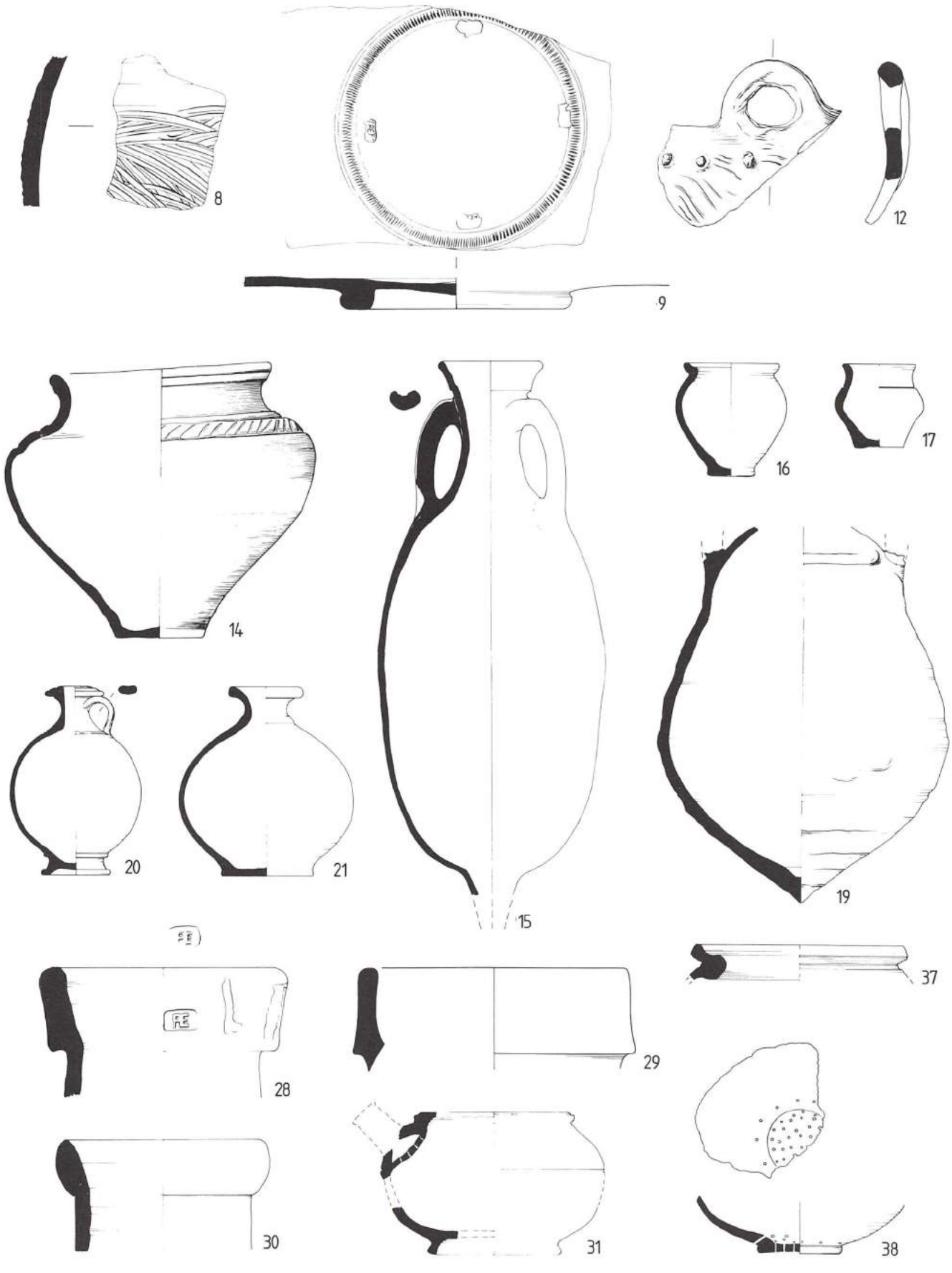

Fig. 26 Heybridge: The Gazetteer: Pottery, 8-38. Scale 1:4, except 15, 19 scale 1:8.

bronze couldron. Said to have been found at Heybridge in 1913, probably with Nos 1-9 above, and donated by Dr. P.G. Laver in 1920. (May 1930, pl. 53A). COLEM 4013.20.

Unillustrated Small Langton Down brooch with traces of gilding (illustratedin Hawkes & Hull 1947, pl. 95.103; type 12, p.317 f). COLEM 4013.20.

13. Fragments of a flagon of tile-red ware with a buff slip, almost certainly of *Cam* 165. Found at Heybridge, possible with Nos 10-11, and donated by Heybridge Parish Council (CMR 1922, 10). Not now locatable. COLEM 4069.21.

Fig. 26.14 Jar (Going forthcoming, type G17), Romanizing grey ware (fabric **45**), thick cordon on shoulder, decorated with oblique incised strokes, pre-Flavian to Flavian. Found containing cremated remains in 1928 or 1929, 'when digging housing foundations, approximately 400 yards south west from the gate of Bentall's Works.' Donated to Colchester Museum in 1966 by Mrs. M. Austin. COLEM 101.66.

2 Cremation Cemetery, Bouchernes Farm

Fig. 26.15 Amphora, Haltern 70 (Cam fl85A) from Baetica; probably originally containing syrups (*defrutum* or *sapa*) made from boiled grape juice, and olives preserved therein. The spike is broken and missing its clay plug. Light grey core, reddish margins, with a light buff slip; mixed tempering, rough surfaces. Data range *c.*50 BC-*c.*AD 50, though probably early-mid 1st century AD; for a discussion of the type, see Parker & Price 1981, 223-4 (information, Dr. P.R. Sealey). Presented by Mr. Isaac Belsham in 1875 to the Essex Archaeological Society and deposited in the Chelmsford and Essex Museum (CHMER B18552). (*TEAS* ns **I. ii** (1875), 128).

Fig. 26.16 Small jar with rebated rim, in reddish-brown fabric found by Mr. I. Belsham near the spindle amphora (Fig. 26.15). Probably late 1st-2nd century AD. Presented to Colchester and Essex Museum in 1908 along with half a small jar in a hard, micaceous, buff grey fabric with beaded rim and sub-globular body (not now locatable) from the same source. (CMR 1909, 15). COLEM 1693-4.08.

Fig. 26.17 Small jar in black fabric (not now locateable) found with Fig. 26.16 and donated to Colchester and Essex Museum by Mrs. R. Beckett via Mr. I. Belsham in 1909. (COLEM Reg *sa* 1909; CMR 1909, 15). COLEM 1707.09.

Fig. 27.18 Stamp on base of samian f33, MVXTVLLI.M. This is the work of Muxtullus of Lezoux, die 1a, *c.*AD 155-175 (May 1930, 218). Identified by W.J. Rodwell. Found with Fig. 26.17. COLEM 1708.09.

Fig. 27 Heybridge: The Gazetteer: Pottery stamps, 9b, 18. Scale 1:1.

3 Gravel Pit Opposite Bouchernes Farm, Adjoining Excavated Site

Fig. 26.19 Baetican amphora, form Dressel 23. These amphoras develop from Dressel 20 in the 3rd quarter of the 3rd century AD and remain current until at least the early 5th century. One presumes they too held olive oil, although the few painted inscriptions on the form only specify olives (Keay 1984, 140-6). The neck is missing. Light red fabric, mixed tempering. Originally contained burnt bone when found by Mr. I. Belsham during gravel digging in a field opposite his farm in 1875. Donated to the Essex Archaeological Society and deposited in the Colchester and Essex Museum (*TEAS* ns **I. ii** (1875), 128; CMR 1926, 14). Pc 703.

I am grateful to Dr. P.R. Sealey (Colchester Museum) for his comments.

Fig. 26.20 Small samian flagon, East Gaulish, with finely moulded mouth and footring; one handle. 3rd century. Rare in Britain; for an exact parallel from York, see Oswald & Price 1920, pl. 83.2. Compare also similar flagons in Hadham ware from the Minories, Aldgate (Harden & Green 1978, 172 and footnote 41). Found near the pear-shaped amphora (Fig. 26.19) and presented to Colchester and Essex Museum by Mr. Lewis Belsham in 1926. (CMR 1926, 14 and pl. V.1). COLEM 5193.26.

Fig. 26.21 Globular jar; the exterior is covered with a buff slip. Found with Fig. 26.20. COLEM 5194.26.

4A The Towers (TL 852084)

22 (Unillustrated) Wine Amphora, *Cam* 183b (Dressel 2-4) of Koan Type, fabric 3 (Peacock 1971, 184; Hawkes & Hull 1947, pl. 71). Found by E.H. Bentall, some years before 1873 (TEAS os **V** (1873), 323). Pc 699.

Fig. 28.23 Solid-cast handle of bronze flagon (*oenochoe*) in the shape of a harpy clasping the rim, and the lower attachment in the form of a crouching harpy. Notes by M.R. Hull indicate that there were originally fragments of the rim, showing that it was trefoil-mouthed, and of the neck and shoulder, which appears to have been flat on top, then sharply angled. These pieces no longer survive. The figure is taken from an original by Hull, possibly a reconstruction based on the Pleshey flagon (May 1916, 227-232).

The handle is closely paralleled by a vessel from Grange Road, Winchester (Biddle 1967, 240-242, fig. 8 and pl. 44) which Professor Toynbee suggests was made in Campania during the first half of the 1st century AD. Donated to Colchester and Essex Museum by E.H. Bentall. Pc 1239.

Fig. 28.24 Handle and basal fragments of a shallow bronze patera. The handle is tubular, with horizontal fluting, transversely moulded at each end. The terminal, probably in the shape of a ram's or dog's head, is missing. A fragment from the centre of the base of the vessel is elaborately incised with an eight-pointed star set within three concentric circles. The patera is closely similar to the example from Pleshey, associated with a bronze flagon (see above) and also apparently with Tibero-Claudian pottery (May 1916, 227-232, pl. 1. 31, b; Moore 1973, 159). Donated to Colchester and Essex Museum by E.H. Bentall. Pc 1204.

There is a strong probability that the patera and flagon (described above) belong to a rich Belgic burial, conforming to a *genre* widespread in South-east Britain in the mid-1st century AD. If they were associated with the Koan amphora (No. 22), as seems likely (though not proven), then the group would seem genuinely to belong to this date; for a similar group from Stanfordbury, Beds., see Stead 1967. However, the possibility remains that the two bronze vessels come not from the Towers, but from Mr. Bentall's private collection. A third bronze vase, with two handles, Greek in character, is mentioned in Price's catalogue of 1888 (Pc 1250) as having been presented by E.H. Bentall, though the word 'modern' has been entered alongside, and no further mention of such a vessel appears in print. I am grateful to Kirsty Rodwell for supplying parallels to Fig. 28.23-24.

4B The Towers: Inhumation Cemetery

Between 1873 to 1874, four stone coffins and one of lead were found in Barn Field, opposite the Towers, on ground owned by Mr. E.H. Bentall (see Drury & Wickenden 1982, 30).

Fig. 29.25 Fragments, surviving in Colchester Museum store, of lead-veneered coffin. A side piece (Fig. 29.25a) is divided into lozenge-shaped compartments by raised corded lines; each compartment, including the half-lozenges at ends and sides contains a raised ring, 57mm in diameter. A second piece (Fig. 29.25b), 0.3m wide and broken at both ends, is decorated near one end with a transverse raised moulding of astragals (alternate round and long beads). The original dimensions are thought to have been *c.*1.74m x 0.3m x 0.3m. (Toller 1977, 33. No. 68). The coffin was described as 'roughly bent into shape and covered on the top with a slab of wood', possibly the remains of the actual coffin to which sheets of lead were fixed (Piggot 1873, 323). It was finally presented to Colchester Museum by Mr. Bentall in 1875 (COLEM Register; TEAS ns **1.ii** (1875), 128).

Fig. 29.26 Double-sided composite bone comb with horse head terminals. The tooth segments were held together between two connecting plates with iron rivets of which three survive. One of the plates survives and is decorated with two rows of incised ring and dot. Characteristically late Roman. Found in a leaden coffin at Heybridge, presumably Fig. 29.25. Pc 1382.

27 Coffin, of Ancaster stone, found in 1873 in Barn field, close to the lead coffin, described above. It was found 0.76m (30in) below the

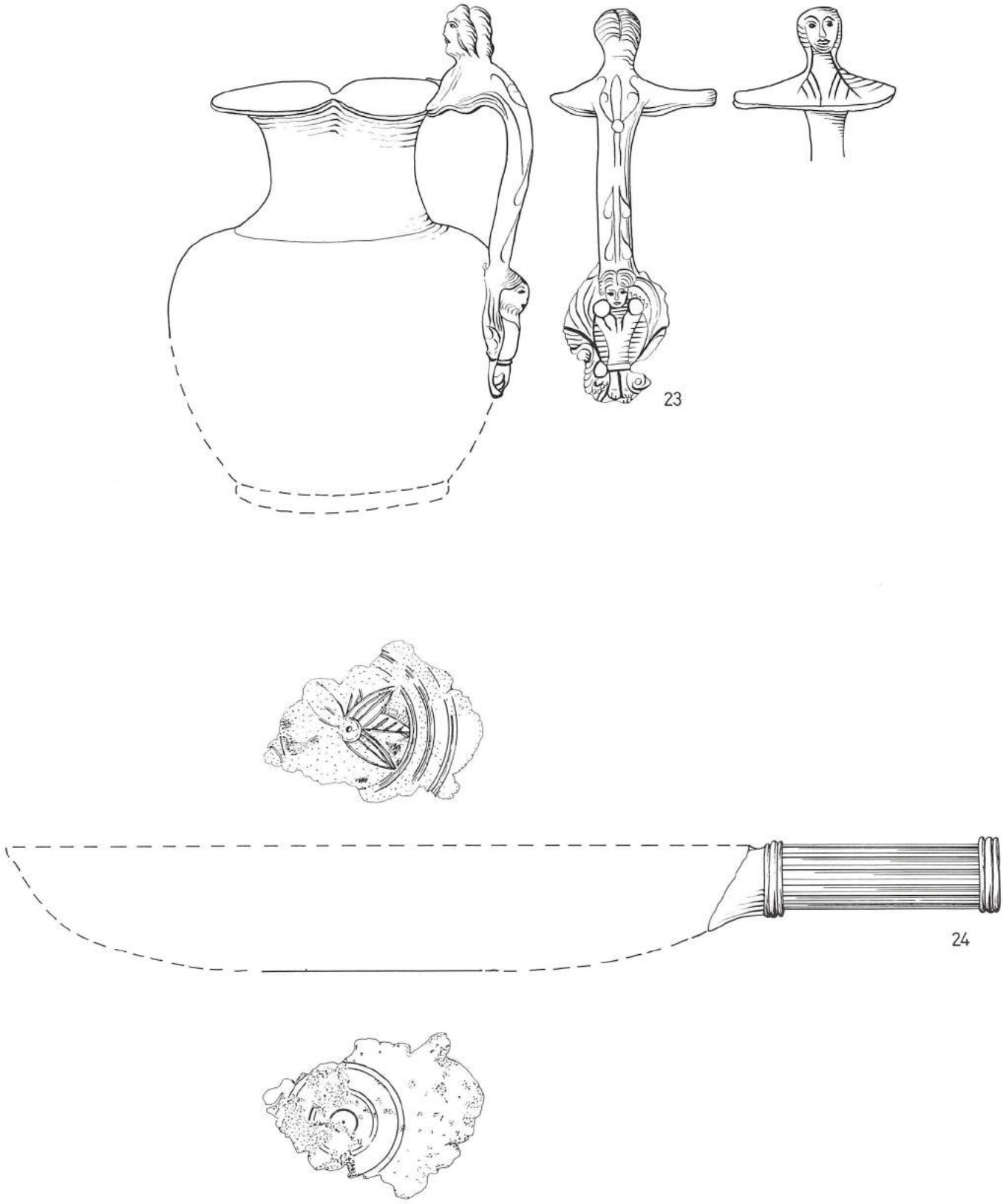

Fig. 28 Heybridge: The Gazetteer: The patera and ewer (23-4). Scale 1:2.

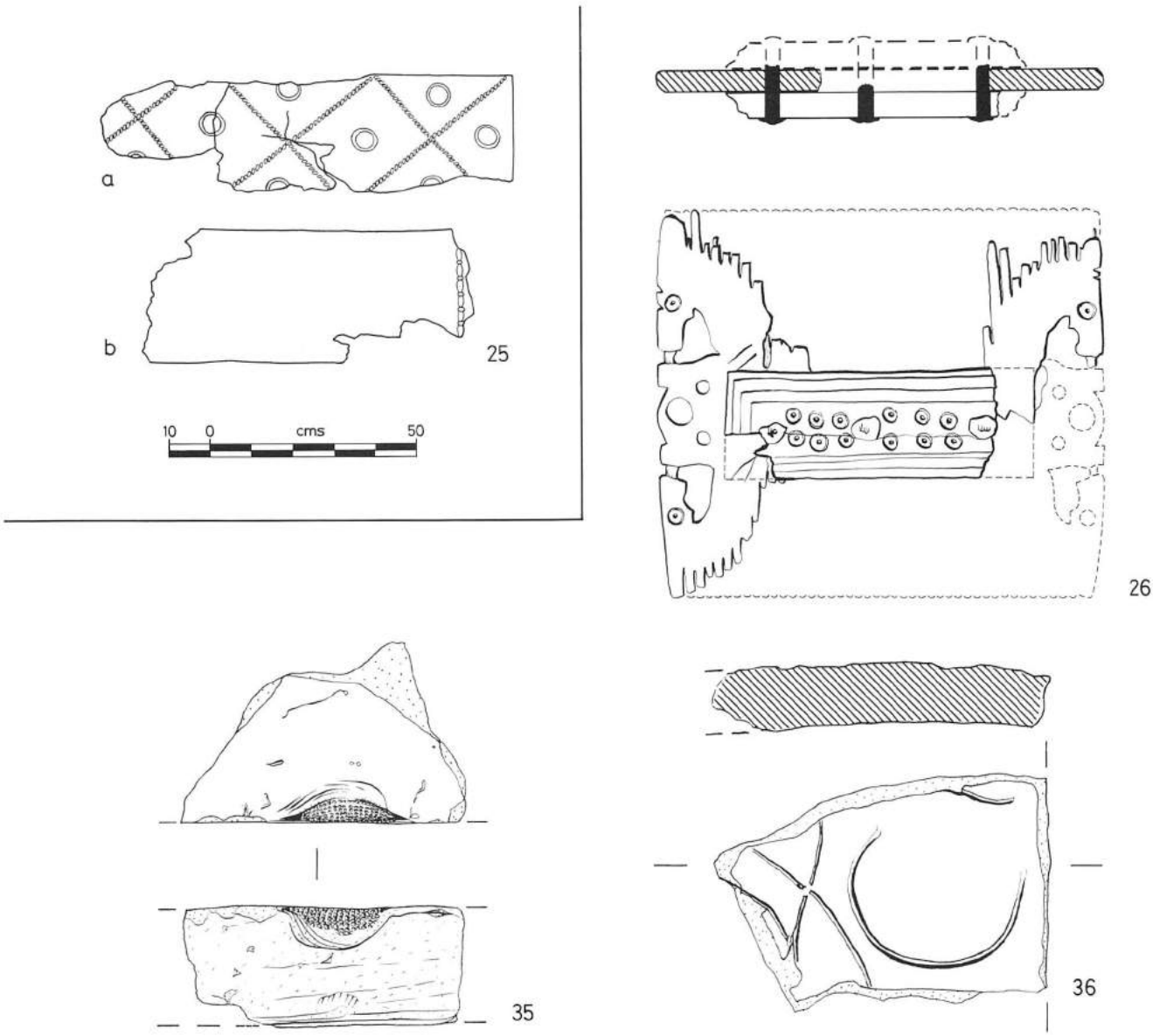

Fig. 29 Heybridge: The Gazetteer: Lead coffin (25), Scale 1:8; bone comb (26), Scale 1:1; tile (34, 35), Scale 1:2.

soil, and measured internally 1.93 m (6 ft 4 in) x 0.72 m (24½ in) at the head x 0.45 m (17½ in) at the foot. It contained a well-preserved skeleton of a man, *c.* 1.69 m (5 ft 6-7 in) tall and about 25 years old. The only object found inside was a fragment of a wooden comb, now lost (Piggot 1873, 323). The coffin lid is now in the Roman vaults in Colchester Museum.

In 1874 (TEAS, ns **1. 1**, 60), Mr. John Piggot, FSA, reported the discovery of three more stone coffins of a similar type, and from the same site. Each contained the remains of a human body but nothing else. Two of the total of four stone coffins were presented by Mr. Bentall to Colchester Museum in 1875 (COLEM Register *s.a.* 1875), but their present whereabouts is not known.

5 Langford Junction: The Fitch Collection (TL 848079)

In 1887, during work on the new railway line from Maldon West Station to the East Station, many Roman remains were found in a deep cutting for a ballast pit, which still exists, as a pond, in the triangle of railway lines at Langford Junction. The finds were collected by Mr. E.A. Fitch, one-time President of the Essex Field Club and Mayor of Maldon, and were later bought and deposited in Colchester Museum on two different occasions. According to the COLEM Register, *s.a.* 1913, fragments of pot from the Fitch Collection from Maldon were purchased from Mr. W. Muskew, Clacton (COLEM 2668.13). A summary of the main acquisition, purchased in 1915, appeared in the Colchester Museum Annual Report (1915, 12).

According to Fitch (in an address to the Field Club in 1888), barrow-loads of pottery and other material were recovered. His collection contains much early pottery, including *Cam* ff 1, 2, 21, 22, 23, 26, 56, 84, 94A, B, 95, 108, 112, 113, 114, 115, 119, 154, 161, 249. The samian assemblage included 27 potters' stamps (listed below), and ff 15, 18, 24, 27, 29, 31, 33, 35, 37, 38, 44, 45, 51 and Ritt 12, though the bulk appears to have been extracted and lost at a later date. Some of the samian fragments are included in May's catalogue of Roman pottery in Colchester Museum (1930, 89 no. 221; 73, no. 156; 104, no. 88a). One (*ibid*, 59

and plate 19, no. 3214) is a f37, decorated with a frieze of lions chasing stags, and bearing a retrograde stamp 'CR' in relief below the ornamental zone (see below, stamp no. 7). There is also much 4th century pottery, including thick white Nene Valley forms, some abraded Oxfordshire red colour-coated bowls with semi-rosette stamps, and two sherds of stamped Argonne Ware (Nos 32-33).

Fig. 26.28 Complete rim of Dressel 1B amphora, buff-pink in colour, with fine sand inclusions (Peacock 1971, 184. Fabric 1). The rim is stamped 'PE' twice on the collar (Callender 1965, fig. 12.45. No. 1307). The outside of the rim has traces of dribbles of black pitch, also residual on the interior; this has always previously, but erroneously thought to be a painted inscription. (COLEM 2668.13).

Fig. 26.29 Rim fragment of Dressel 1B amphora. Soft powdery fabric, laminated fracture, reddish yellow in colour. The inclusions are common, well-sorted, rounded to sub-rounded with an average size of 0.5mm. The surface, including fractures, has black blotches. The sherd is now lost (information and drawing kindly supplied by Dr. P.R. Sealey).

Fig. 26.30 Rim fragment of Dressel 2-4 amphora in fabric 2 (Peacock 1971, 184), hard, orange in colour, with characteristic inclusions of black sand; from the Pompeii/Herculaneum region of Campania.

Fig. 26.31 Rim and base of spouted strainer in dark grey-brown fabric with rough surface. There is a vestigial inward flange to stop spillage during pouring. Such vessels are found in the south-east of Britain, at Camulodunum (Hawkes & Hull 1947, fig. 57.12); Ardleigh; Prae Wood (Wheeler & Wheeler 1936, fig. 22.2) and Sheepen. The latter example has a larger extended inner flange. The form is a copy, of an insular metal strainer, probably used for straining a native brew and not wine, as is often thought. I am grateful to Dr. P.R. Sealey (Colchester and Essex Museum) for his comments.

32 (Unillustrated) Sherd of Argonne ware, fine micaceous orange-brown fabric, from lower part of bowl, f 37, decorated with three bands of roller-stamping (Chenet 1941, die number 132). 4th century. See Fig. 24.207. I am grateful to Dr W.J. Rodwell for identifying this and number 33.

33 (Unillustrated) Sherd of Argonne ware from the lower part of the body of a bowl of f 37, decorated with at least six concentric bands of simple square rouletting. Each band comprises three adjacent lines of square notches. The roulette wheel was carelessly applied to the vessel, so that the bands are both irregular, and frequently only two of the lines of notches actually registered. This appears to be Chenet's triple square roulette No. 304 (1941, Pl. XXXVII), originating from the kilns at Les Allieux.

34 (Unillustrated) Small sherd impressed with a block stamp of Rodwell's Group 2C, Type B2A, consisting of three dots in a lattice with three cross bars (Rodwell 1978, 282 and fig. 7.5.28). The stamp is also found at Mucking, and is probably a recut of Type B2. Possibly from the kilns at Hadham, mid to late Flavian in date.

The Samian Stamps compiled by Dr. W.J. Rodwell

Details of the dies and dates of manufacture have kindly been supplied by Mr. B.R. Hartley. The superscript letters attached to the factory names indicate the following:

a this die attested at the pottery named.

b other dies of the same man attested at the pottery.

c assigned to the pottery on fabric and distribution.

1 Albucius ii Die 3a, form 31R. Stamped A.ꝺ/CI.OF Lezoux[b], *c.*AD 150-180. (May 1930, 194 and 238/2).

2 Anaillus Die 5a, form 18/31. Stamped AN[A]ILLI Lezoux[b], *c.*AD 125-150. (*ibid*, 194).

3 Aprilis ii Die 2a, form 33. Stamped APRI.LIS.F Lezoux[a], *c.*AD 155-180. (*ibid*, 195).

4 Avitus iii Die 7a, form 31. Stamped AVITV.SF Lezoux[b] *c.*AD 130-150. (*ibid*, 196).

5 Catus iii Die 1a, form 38. Stamped CATVS.FEC+ Rheinzabern[a]. Antonine. (*ibid*, 200).

6 Celsianus Die 8a, form 33. Stamped CELSIANIF Lezoux[a] *c.*AD 165-200. This item has not been seen by us, but only die 8a would fit this reading (*ibid*, 200). COLEM 799.04.

7 Criciro v. Retrograde cursive signature on plain band below decoration, on form 37. Vessel three-quarters complete. Signature ЯƆ. Lezoux[a], *c.*AD 135-165. (*ibid*, 202) COLEM 3214.15. (For decoration see May 1930, plate 19.3214).

8 Curcus Die 1a, form 31. Stamped CVRCI.MA. Lezoux[c] Mid-to-late Antonine. (*ibid*, 204) COLEM 3214.15.

9 Cue . . . Unidentified stamp recorded by May as reading CVE["in a roulette wreath". Not seen by us. (*ibid*, 235).

10 Felix form 27. Stamped FELIXFE. Probably Felix ii of Lezoux, *c.*AD 130-160. Not seen by us. (*ibid*, 207). Pc 159.

11 Gippus Die 2a, form 33. Stamped GIPPI.M. Lezoux[a], *c.*AD 150-180. (*ibid*, 209).

12 Helenius ii Die 1a, form 31. Stamped HELENIVSFII.C Rheinzabern[a], late 2nd or perhaps early 3rd century. (*ibid*, 209, listed as being from Colchester, but certainly in error).

13 Iustus form 33, stamped IVSTIM. Probably Iustus ii of Lezoux. Not seen by us. (*ibid*, 211) Pc 166.

14 Macrinus iii Die 6a, form 33. Stamped MACRINUS.F Lezoux[b], *c.*AD 150-180. (*ibid*, 212).

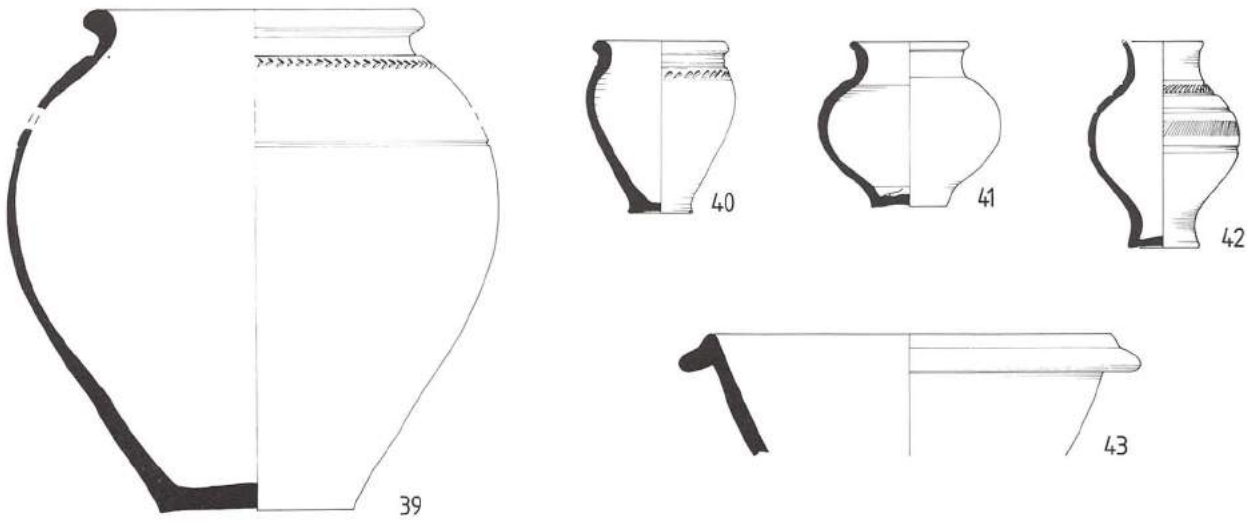

Fig. 30 Heybridge: The Gazetteer: Pottery, 39-43. Scale 1:4.

15 Marcus v Die 9a, form 31. Stamped MΛRCI. Lezoux[a], *c.*AD 160-200. (*ibid*, 214) COLEM 3214.15.

16 Martius vi Die 3b, form not noted. Stamped MΛRTIVS(F) Rheinzabern[a], *c.*AD 160-180. (*ibid*, 214.) COLEM 3214.15.

17 Materninus iii Die 2b, form 33. Stamped MΛTERNINVS Rheinzabern[b]. Late 2nd or 3rd century.

18 Maximus form not recorded. Stamped MAXIMIFI according to May 1930, 215. Not seen by us, and no further identification possible.

19 Murranus form 27 Stamped ꟽRRANI. La Graufesenque, *c.*AD 45-65. Not seen by us. (*ibid*, 217) Pc 151.

20 Quintilianus i Die 1b, form 37. Stamped [M.IИAIꞖIT]ИIVQ Lezoux[a], *c.*AD 125-150. Not seen by us, but identifiable from May (*ibid*, 224). Pc 168.

21 Respectus Die 5a, form 38. Stamped RIISPIICTVS Rheinzabern[a], late 2nd century. (*ibid*, 225).

22 Sacer-Vasil Die 1a, form 18/31. Stamped SACER. \ASILI Les Martres-de-Veyre[a], *c.*AD 100-120.

23 Severus iv Die 3e, form 31R. Stamped SEΛERIM Lezoux[a], *c.*AD 165-200. (*ibid*, 229).

24 Sextus form 18/31 or 31. Stamped SEXTIMA. Not seen by us, and not closely identifiable since there are many possibilities for dies. (*ibid*, 229).

25 Suobnus form 18/31. Stamped SVO[B]NIM. Les Martres-de-Veyre, Hadrianic to Antonine. Not seen by us. (*ibid*, 230).

26 Tituro Die 1a, form 33. Stamped TITV[RONISCF] Lezoux[b], *c.*AD 160-190. (*ibid*, 232) Pc, p.69.

27 Unidentified stamp, not seen by us, recorded as reading]IVSVS.F. (*ibid*, 237).

The Other Finds

According to Fitch (1905, 3-4), the coins recovered included 'silver of the Republic (*c.*65 BC), Vespasian, Trajan and Caracalla, and bronzes of Augustus, Claudius, Nero, Vespasian, Titus, Domitian, Nerva, Trajan, Hadrian, Antoninus Pius and others . . . one vessel being completely filled with coins of Vespasian, apparently of one type'. Their present location is unknown.

Other small finds in the Fitch Collection included a Colchester-derivative brooch, a sandal-brooch with blue enamel inlay, two bronze pins, a needle, a stud and the handles of two spoons. None of these objects is now traceable (COLEM 3214.15).

Summary

Mr. Fitch's collection from Langford Junction was an important assemblage of pottery and other finds from what was clearly a densely occupied area of the small town (Fig. 2. No. 5), though it is not clear whether the collection is in any way contaminated by extraneous finds. The early nature of the Roman settlement is indicated by the Dressel 1 amphorae and the high number of native pottery forms similar to those from Camulodunum, largely post-conquest in date, whilst the Argonne ware sherd indicates occupation continuing into the late 4th century.

6 No. 35 Crescent Road

In May to July 1967, 2 trenches, 10ft square, were opened in the garden of 35 Crescent Road to examine a feature which might have been of archaeological significance because of discoveries made during the building of houses in Elizabeth Way. Mr. I.G. Robertson, now Curator of the Passmore Edwards Museum, Stratford, London, discovered a spread of Roman material and came to the conclusion that it was possibly associated with a ditch.

Building Materials

Textile Impression by J.P. Wild

Fig. 29.35 A fragment of flat building tile carries the negative impression of a medium-fine half-basket weave cloth. The shallow impression measures *c.*30mm by 18mm and the cloth had been applied obliquely to the right-angled edge of the tile while the clay was still wet.

System (1), singles, Z-spun, fine yarn, wide spaced, 6 threads per cm, maximum length 30mm.

System (2), doubles, loosely Z-spun, 9-10 pairs per cm. maximum length 15mm.

Identification of the fibre is not possible. Disturbance at the centre of the impression suggests that the cloth was damaged.

The impression was presumably caused accidentally. The tilemaker may have touched a fresh tile with a well-worn sleeve. The area of the impression seems too small to imply that he had been using a rag to hold tiles while stacking them.

If we had no tile impressions, we would not realise how common half-basket weave was in Roman Britain. Recently discovered tile impressions in this weave may be quoted from Beauport Park, Sussex and Binchester, Co. Durham (Wild, unpublished). For a full discussion of the significance of half-basket weave, see Wild 1970, 46 and forthcoming.

Fig. 29.36 Graffito (after Hassall & Tomlin 1982, 411-2, 19) Fragment of tegula, 95 x 62 x 19mm; graffito, cut retrograde before firing, reads .]CXX[., perhaps a batch total C]CXX[, *c.*220, (or more)', since 220 seems to have been the regular daily output of tile workers at Siscia (*ibid*).

Pottery

Prehistoric

Several sherds of flint-gritted pottery were found.

Roman

Form and fabric codes follow the system established at Chelmsford (Going forthcoming).

Apart from miscellaneous grey wares, the group includes the following (fabrics in bold):

Colchester colour-coat (**1**), Nene Valley colour-coat (**2**, including folded beaker sherds with barbotine scales, H32.1/1), Oxfordshire red colour-coat (**3**), Hadham oxidised red wares (**4**), Oxfordshire white wares (**25**, mortarium), Colchester buff ware (**27**, mortarium), Hadham grey wares (**36**), Black-Burnished 2 (**41**), Storage jar fabrics (**44**, G44.5/1), late shell-tempered ware (**51**, bowl B1), Mayen-type ware (**54**, see Fig. 26.37).

The grey wares include a poppy-head beaker (H6.2/1), folded beaker sherds, flanged bowls (B6) and a collander (see Fig. 26.38).

Fig. 26.37 Rim fragment of a lid-seated jar of Eifelkeramik (Fabric **54**). Hard with a pimply surface, grey with a light purplish tinge, and various tempering. See Fulford & Bird 1975, fig. 1.3-4. 4th century, imported from Germany. For a recent note on findspots of Mayen-type ware in Essex, see Drury *et al* 1981, 68. A bowl rim was also found in the 1972 excavations, see Fig. 22.159.

Fig. 26.38 Perforated base of ?bowl in a Romanising fabric (**45**, form M2).

The Terra Sigillata by Dr. W.J. Rodwell

The collection is, on the whole, in larger pieces than the excavated site material, and is likely to be derived from settlement features.

It includes the following forms:

18 SG (Flavian, x 2); 15/17 or 18 SG (1st century); 18/31 CG (burnt, probably Hadrianic); 18/31 CG (2nd century); 18/31R, CG (earlier Antonine, x 2); 31 CG (x 8); 31R CG: 31R EG; 32 EG (late Antonine, partly burnt, fragment of illiterate stamp); 33 CG (x 7); 33 EG; 36 CG; 37 CG (Sacer Group, mid 2nd century); 37 CG (Cinnamus Group); 37 CG (x 2); 38 CG (x 2); 38 EG (x 2); 79 CG (late Antonine, stamped M[); 79 EG (late Antonine).

Also found was an unidentified stamp reading JNVS, f32; badly abraded and slightly burnt. East Gaulish, late 2nd-early 3rd century.

The Small Finds

Some iron nails were found; a polished fragment of bone, and half a lower quern of Rhenish lava with central hole and grooving on the grinding surface.

7 Crescent Road (TL 850083)

First or early 2nd century AD burial group (Fig. 30.39-41), found by Mr. Ernest Lewis in his garden in Crescent Road

in 1913, and donated to Colchester Museum (CMR 1913, 23).

Fig. 30.39 Storage jar, in fine grey fabric, with brown exterior, decorated with an impressed band of chevrons. COLEM 2673.13.

Fig. 30.40 Miniature vase, in fine grey fabric, decorated with a band of impressed notches around base of neck. COLEM 2674.13.

Fig. 30.41 Small jar, in fine grey fabric, burnished externally. COLEM 2675.13.

8 Crescent Road (TL 848084)

Fig. 30.42 Buff jar, grey surface, pedestal foot and globular body; neck and rim lost. Decorated with band of diagonal incisions on shoulder, two grooves on body widely separated by faint bands of incisions. Donated to Colchester Museum in 1965 by D.W. Claydon of Claydon Construction Company, Ulting. COLEM 132.65.

9 Bouchernes Farm, Recent Watching Briefs

Three building plots between Bouchernes Farm-house (TL 852084) and Wood Lane, on the north side of Holloway Road, were investigated during housing development by the Maldon Archaeological Group, who are undertaking publication of their results. A brief summary only of their finds is attempted here.

Virtually no finds, other than pottery and tile, of any kind were found; no metalwork (except for 3 iron nails), slag, glass or fired clay were recorded, and only a few scraps of animal bone. The lack of metalwork may be due to the activities of metal detectors, since it is known that a Roman copper alloy fibula (Colchester B Type, similar to N. Crummy 1983, fig. 6.50) was found by Mr. M. Nutt on the site, as well as a medieval copper alloy cased mirror (Bayley *et al* 1984).

Plot 3, on the eastern side adjacent to Wood Lane, was observed by Maldon Archaeological Group in September 1982; a shallow ditch running across the site parallel with Holloway Road was located, but was devoid of finds. Plot 1 on the west was observed from August to October 1983 and a quantity of pottery and tile was found on the contractor's spoil heap. The bulk of pottery and tile, however, came from the central plot. A limited investigation in April 1984 located a substantial ditch, running approximately north-south, at least 2 metres deep, filled with a black loam, and showing several recuts in section. Pottery includes a quantity of LPRIA multi-cordoned bowls and jars in a black, grog-tempered, burnished fabric, as well as 'native' platters, a tazza, and shell-tempered cooking pots with inturned, thickened rims (*Cam* 254) and one ledge-rimmed jar with a new triangle graffito (*cf.* Jones 1972, 335-8). Roman finds included some tegulae and bonding tile fragments, 3 purplish vegetable-tempered briquetage fragments, a large quantity of storage jar sherds and grey ware pottery, as well as small amounts of samian, Colchester buff ware, Colchester colour-coated beakers with rough-cast and rouletted decoration, oxidised London ware, a mica-gilt sherd, fine grey ware poppy-head beakers, Dressel 20 amphorae sherds and part of a Dressel 1 (or 2-4) spike in the 'black sand' fabric (Peacock 1971, 164, fabric 2). In general, very little fine ware was present, with the grey wares and storage jars forming approximately 85-90% of the total assemblage.

Late Roman pottery of the 3rd-4th centuries was almost wholly absent. A rim of a flanged bowl in the thick white Nene Valley colour-coated fabric was present; large portions of a grey ware folded beaker and a flanged bowl were found together 'at the bottom of the ditch', probably in a later pit, whose cut was not noticed.

It is probable that the ditch represents one side of a LPRIA enclosure in existence at the time of the Roman conquest, to which the nearby cremation cemetery might relate. Roman pottery on the site testifies to occupation there in the 1st-2nd centuries; thereafter the site appears to have reverted to agricultural use. The area lies on the suggested limits of the Roman small town (Fig. 2), but it is not inconceivable that the ditch in some form or other formed part of a town boundary.

10 Saltcotes Hall (TL 871079)

In 1963 (VCH 1963), three or four large vessels, resembling Roman globular amphorae, were recorded by Hull as standing outside the Hall. At least one was genuine, though the others had flat bases and glaze, and were post-Roman. All had been discovered together just east of the house. (VCH 1963, 147).

11 Heybridge Hall (TL 859076)

A middle brass of Domitian was found here. Now in Bristol Museum, but not locateable (VCH 1963, 147).

12 St. Andrews Church (TL 855081)

Roman brick incorporated in structure.

13 St. Mary's Church, Maldon

Incorporates re-used Roman material in the south wall of the nave.

Fig. 30.43 Flanged bowl, *Cam* 305A, smooth, fine grey ware, dark grey core, brown margins, light grey burnished surfaces; *c.*AD 250-275. From the church foundations during restoration work in 1886, at a depth of 6 feet. Chancellor Collection, Chelmsford and Essex Museum.

14 St. Giles' Leper Hospital, Maldon (TL 84400645)

Contains Roman brick. (VCH 1963, 156). A limited excavation adjacent and to the west of the site took place in 1958-9 in advance of building development. Most finds were dated to the 14th century by Rex Hull, although a BB1 pie-dish fragment and a sherd from a BB1 cavetto-rimmed jar with obtuse lattice decoration were found. The latter can be dated to post *c.*AD 350. I am grateful to Mr. S. Nunn for drawing my attention to this information.

15 Rear of 42 London Road, Maldon (TL 84630715)

by S.R. Bassett

Two areas were excavated, both extensively disturbed by post-medieval features. In one of the areas part of one wall of a substantial timber building was found, not less than 3.5m long. In its original form the wall consisted of vertical timber planks, earth-fast and set edge to edge in a continuous line. Later on it was strengthened and repaired in several ways, and then systematically dismantled. Part of an internal partition may also have been found. These features, and many other less significant ones in the same area, contained

Iron Age and Romano-British pottery (the latter mainly of later 2nd and 3rd century date).

Although no post-Roman material was found, the timber building is more likely to be of 6th-8th century date (or later) than Romano-British. Nothing was found, however, which can certainly be associated with the supposed presence of the Edwardian *burh* of AD 916 in this part of Maldon (S.R. Bassett, in prep).

16 Langford Place (TL 844085)
The rim of a 1st century *olla* was found in 1913 in a pasture near the house (VCH 1963, 152).

17 Lofts Farm, Great Totham (TL 86670906)
A multi-period site recorded by the Maldon Archaeological Group in advance of gravel extraction. The project comprises excavation, watching briefs, field-walking and plotting a complex of ancient crop marks from air photographs. Results so far include Neolithic and Bronze Age features, and a system of rectangular fields (Middle Iron Age through into the Roman Period) on which a Roman Road had been superimposed. See Fig. 2, L, M, and below, p.62. (Brown 1983).

Discussion

Early Settlement by P.J. Drury
The Blackwater estuary forms a good natural haven on the east coast, and at the same time a barrier to overland movement north-south along the coast. These factors weigh heavily in favour of a settlement of some significance growing up at the head of the estuary, i.e. at the limit of navigation and lowest easy crossing point.

In the medieval period and later, such a settlement is represented by the town of Maldon, on the south bank; in the Roman period and earlier, it lay on the lower ground on the north bank, at what is now Heybridge. The excavations at Crescent Road, and the review of past finds, have contributed substantially to our understanding of the Romano-British small town, and have brought into clearer focus its late pre-Roman Iron Age predecessor. They have also shed some light on the earlier prehistoric settlement pattern in the area; recent excavations at Lofts Farm, however, have much more to contribute in this respect (Brown 1983), making a detailed consideration of the early prehistoric context of Heybridge premature.

Nonetheless, it is clear from aerial photographs, the excavations at Lofts Farm, and indeed the assemblage of artefacts from the 1972 excavations, that the low gravel terrace north of the River Blackwater was as intensively used as the more extensively excavated terrace at Mucking (Jones & Jones 1975).

The record begins on the 1972 site with a lithic industry of late neolithic date, and the likelihood of an earlier, but undiagnostic, flake industry. The ceramic evidence also begins in the neolithic, with plain bowl forms, and also part of a corded beaker (p.31). The lack of early prehistoric features is no more than a reflection of the relatively small size of the site in relation to the prehistoric landscape. Odd features of the late Bronze Age and early Iron Age, and a more substantial assemblage of pottery of these periods (especially the former) suggest that the excavated area was peripheral to contemporary settlement foci, which, on the evidence of sites like Mucking, tend not to remain static through the earlier prehistoric periods.

Middle pre-Roman Iron Age activity is better represented, by a four-post structure, a semi-circular structure, and a concentration of small post- and stake-holes indicative of intensive activity of some unknown kind. The excavated area evidently lay within, or, from the low density of features and the absence of a house, more likely on the periphery of, a settlement which could range in potential size from a farmstead to a central place in the settlement hierarchy comparable to the Period II settlement at Little Waltham (Drury 1978b). The round house, contrived in an interim report (Drury 1978a, fig. 3) from what have turned out to be largely later features, must be discarded, and with it the notion that the excavated area represents a small cohesive settlement unit (*ibid*, 46). Associated artefacts are generally unexceptional, briquetage (p.52) being now expected on Iron Age sites near the coast. Only one artefact — the sherd of a Glastonbury ware bowl — points to the potential significance of Heybridge as an early focus of maritime trade, which it clearly became in the later Iron Age.

Its date within the Middle pre-Roman Iron Age — which spans approximately the 3rd to the mid 1st centuries BC — is also problematical. The pottery assemblage is too small to provide statistics which could be compared to those for the various phases of Little Waltham. However, there are tentative clues. The radiocarbon date, calibrated according to the current half-life estimation, places the destruction of the four-post structure at 211 ± 80 BC, i.e. in the 3rd century BC. There is also a hint of a date early in the period, i.e. in the 3rd rather than the 2nd or 1st centuries, in the use of posts set in discrete holes rather than in bedding trenches in the construction of the semi-circular building. This technique is associated in this area primarily with early Iron Age and earlier round houses (Drury 1978a, 73-4), being completely absent from the houses at Little Waltham, which appears to have originated around the middle of the 3rd century BC.

The Late Iron Age
The Late Pre-Roman Iron Age clearly heralds the establishment of a considerable settlement at Heybridge. The 1972 excavations revealed only a quantity of Belgic grog-tempered pottery, of early 1st century AD date, residual in later features (p.33); a fragment of an amphora spike in black sand fabric, possibly Dressel 1 (p.50); and a potin coin (Allen class II, Type O, p.22). The bulk of the evidence, however, appears in the gazetteer. At Langford Junction (Fig. 2, Site 5), much material was discovered in 1887, mainly Roman, but including many pre-Claudian Gallo-Belgic forms (p.57), and two rims of Dressel 1B amphorae, of 1st century BC date (Peacock 1971, 165). These finds clearly indicate that people of some wealth and status were living at Heybridge, and were importing Roman goods from the Continent before the conquest of AD 43. This can

also be seen in the small cemeteries found to the east of the Romano-British small town. Decorated burnished and cordoned Belgic jars were found in 1913 and 1920 in the New Cemetery (Fig. 2, Site 1), many containing cremated bones, and one with a lid made by cutting down an Arretine platter of *c.*20 BC. Interestingly, three of the four maker's stamps on the platter appear to have been deliberately obliterated. Isobel Thompson has dated the group to the late 1st century BC-early 1st century AD (1982, 729-732). Aerial photography has revealed crop marks of tracks and field boundaries in the immediate vicinity, as well as a small ditched enclosure, *c.*50m square, of unknown date.

Some 200m to the north, at the Towers (Fig. 2, Site 4), a complete Koan-type amphora was found before 1873. This has an approximate date range of *c.*50 BC-AD 150 (Dr. P.R. Sealey, pers comm), but is possibly associated in a burial with a bronze patera and ewer, of a type made in Campania in the 1st half of the 1st century AD. A source for the amphora's granitic fabric in the toe of Italy has been suggested by Peacock (1971, 164-5) and discussed by Sealey (1985, 137-8). The distribution of Fabric 3 is markedly rare north of the Alps; indeed, none of the 44 Dressel 2-4 amphorae found at Sheepen, near Colchester, were in this fabric, which has led Sealey to suggest that imports from the toe of Italy had ceased by the time of Claudius (*ibid*). If the association with the patera and ewer is genuine, then the group can be regarded as a Late Iron Age Welwyn-type burial, similar, for instance, to one from Stanfordbury (Stead 1967). The two Dressel 1B rims, already mentioned, take on added significance in this light. Other findspots of Dressel 1B amphorae are listed by Rodwell (1976, fig. 18 and Appendix 2), and include a pair from Sandon (11km from Heybridge), likely to be the remnants of a Welwyn-type grave, and a rim from the nearby red Hill at Osea Road, as well as a recent find from Tolleshunt Knights, and from Bouchernes farm itself (below).

Finally, at Bouchernes Farm (Fig. 2, Site 2), a nearly complete South Spanish amphora (Haltern 70) might well represent another Late Iron Age Welwyn type burial (Rodwell 1976, fig. 43 and Appendix IIb). Its exact provenance and associations are uncertain, since there are Roman discoveries from the gravel pit opposite Bouchernes Farm (Site 3), including a cremation in a Baetican oil amphora, dated to between the third quarter of the 3rd century and the early 5th century. It is possible that the Welwyn-type burial is associated with an LPRIA ditched enclosure, traces of which were examined in 1984 by the Maldon Archaeological Group (Fig. 2, Site 9). Finds from their watching brief included a Dressel 1 or 2-4 spike in the 'black sand' fabric (Peacock 1971, 164).

The distribution of amphorae from the Mediterranean in pre-Roman contexts in Essex has been used to map the sphere of influence of the Trinovantes (Peacock 1971; Rodwell 1976). The evidence, whilst not conclusive, strongly suggests that Heybridge was already important in the Late Pre-Roman Iron Age, and acting as one of the ports through which Roman luxury objects were being brought into south-east Britain.

The Iron Age and Roman Landscape by P.J. Drury

On Figure 2, an attempt has been made to plot the principal crop marks and selected features of the modern (i.e. *c.*1840, tithe map) landscape which appear to be related to them. What follows can only be a preliminary overview of the development of the historic landscape; detailed analysis will only be possible with the publication of the work in progress at Lofts Farm, and of excavations within the historic centre of Maldon, particularly of the burh/hillfort.

The head of the estuary is dominated by a ridge which drops steeply from 35m to sea level adjacent to the river. On the end of the ridge is a sub-rectangular earthwork traditionally identified as the burh built by Edward the Elder in AD 916. However, early Iron Age pottery has been found in the vicinity (Fig. 2, Site 15), and its site is typical of the small number of hill-forts extant in Essex, which, in commanding views down river valleys or towards the coast, seem to be a reaction against a threat of sea- or river-borne invasion or raiding (Drury 1980, 47). The heavy clay of the ridge on which it stands means that crop mark evidence from this side of the river is scant.

To the north, however, crop mark evidence is abundant on the low gravel terrace. Salvage excavations and recording at Lofts Farm (Brown 1983), during gravel extraction, have made clear the broad framework of landscape development in that area (Fig. 2, Site 17). The north-south trackway A-B is of early, perhaps Bronze Age, origin. The field system based on this to the east developed during the middle and late Iron Age, associated with a substantial settlement at C, but survived in use through the Roman period. The general alignment of the trackway is reflected in another to the east, also with associated enclosures, and further south their alignment is continued by recently extant field boundaries consonant with others recorded as crop marks. This suggests continuity of agricultural use since the late Iron Age or Roman period in the latter area, but further north it is clear that there was a complete break, the modern pattern being unrelated to the earlier one except possibly in the survival of the trackway A-B itself.

The evidence from Lofts Farm suggests a relatively early, accretive, origin for the Iron Age pattern of land division in this area, in contrast, for example, to the late Iron Age system at Little Waltham (Drury 1978b, 134-6), and this is borne out by the lesser degree of consistency in the alignment of its constituent elements. A closer parallel is with the evolution of the landscape around Gun Hill, West Tilbury (Drury & Rodwell 1973, esp fig. 21). Early meandering trackways are continued by surviving lanes both there and at Heybridge, trackway D on Fig. 2 branching south-west from A-B to join a postulated east-west route (E-F) along the north side of the river. The latter substantially survives in modern roads, and its antiquity is suggested not only by its relationship to trackway D and its surviving continuation southwards, but also to the trackway G known from crop marks further west. The form of the southern end of the latter clearly anticipates the existence of a route on the line of E-F. North-west of G, many of the crop marks relate to the alignment of E-F, although the complexity of the palimpsest attests to a long period of

development. In one area, centred on H, this alignment has survived in field boundaries to recent times. The presence of a slightly sinuous road or track following the basic alignment of the river valley is a conspicuous and distinctive feature of the later Iron Age field systems at Little Waltham, Saffron Walden and elsewhere in Essex (Drury 1978b, fig. 74; Drury & Rodwell 1980, 59; Bassett 1982, 4-8); and is indeed the obvious basis for any early pattern of land division in a river valley.

The framework provided by these prehistoric features clearly remained in use through the Roman period, and in some areas has formed the basis of land division down to recent times. However, it is clear from Fig. 2 that a strategic pattern of virtually straight roads was superimposed on this landscape in the Roman period. The most obvious is that which survives as Maypole Road (J), and whose continuation northwards is attested by a crop mark of parallel ditches (K; Couchman 1979, 153; NMR TL 5409/6/211-491). Projected southwards, the line bisects the site of the Romano-British 'small town' as defined by past finds, and aims directly for the most obvious crossing point of the two rivers, at what was their closest conjunction. Within the 1972 excavation, the north-south ditch, presumably a plot boundary, extant throughout the Roman period, is parallel to the axial road. This suggests a high degree of order in the layout of the settlement, and thus its deliberate laying out.

The east-west boundary running through the excavation, originating as a ditch but ultimately defined merely by a building fronting it, is more suggestive of a street frontage. This is borne out by the observation of crop marks at L and M, which seem to represent its continuation north-eastwards. Its alignment is reflected in some of the crop marks south of Site 16, suggesting that the planning of the 'small town' was based on the alignments of this road and the north-south axial road, which meet at about 120°. The excavation unfortunately yielded no precise dating evidence for the origin of either alignment; it is clear only that their definition belongs sometime between the Roman conquest and perhaps the end of the third quarter of the 1st century AD. The context of this road-building is probably the construction of strategic additions to the existing communication system, either in the wake of the Conquest itself, or the Boudiccan revolt of AD 60/1. The latter seems probable for the main London-Colchester road through Chelmsford (Drury forthcoming), which implies that subordinate routes like these are unlikely to be earlier.

The road leading north-eastwards seems to have generated no associated field system. However, between the northern road and the River Blackwater to the west there is clear evidence of enclosures (e.g. west of J) related to the road, overlying presumably earlier, Iron Age, features aligned on the river valley route E-F. On the south side of the river, however, the pattern so far as it can be discerned is very different. Over much of the area, a rectilinear pattern is discernible in the field boundaries as they existed in the mid-19th century. There is a change of alignment to the north and south of an east-west line partly represented by an extant track, and which can be traced much further west, beyond the plan area towards Chelmsford, as Old London Road. The alignment of this projected eastwards would enable it to pass just south of the south-east corner of the putative hill-fort; turning north at this point, around the fort, would bring it directly to the river crossing suggested by the axial road of the small town. From the south-east another road, partly surviving as Mundon Road, and conforming exactly to the dominant alignment of land division in the area, is also aligned on the putative crossing point of the two rivers. The overall appearance of the southern part of this area is of a pattern of land division based on the Roman roads, of which that from Chelmsford may well be the primary, strategic route. It is in fact the northern limit of a consistent rectilinear pattern of land division which covers a vast tract of land in southern Essex, and the whole of the non-marshland area of the Dengie peninsula (Drury & Rodwell 1980, 63-4 and fig. 22). In the latter area, an origin in the Roman period is clear (Drury & Rodwell 1978). The scale of planning involved, and the virtual absence of villas from the area, continue to suggest that we may be dealing with Imperial estates (Drury & Rodwell 1980, 64).

Finally, it is worth commenting on a probable reason why the road from Chelmsford no longer survives in the vicinity of the river crossing. It ceases to be a feature of the landscape where it is crossed by a track or lane traceable for some considerable distance through the landscape (shown by a dotted line on Fig. 2). It seems possible that this is related to the defence or demarcation of the environs of the Saxon burh or town.

The Roman Occupation

The invasion of AD 43 probably had little immediate cultural impact on a settlement already in contact with the Mediterranean. One battered legionary apron strap is the only indicator of any military presence. However, as discussed above, during the mid 1st century AD strategic roads were built through the area based on the obvious crossing point of the rivers, and the topographic framework of the Romano-British small town generated from the angle of intersection of two of them. It is not inconceivable that a fort was positioned at Heybridge to command the estuary, though there is no direct evidence for one; the most obvious position would be the site of the Iron Age hillfort on the high ground to the south of the river, even though no evidence exists for a 1st century refortification. Early Roman occupation has been found not only on the 1972 site, but also at Langford Junction (Site 5), 35 Crescent Road (Site 6) and Bouchernes Farm (Site 9), all probably within the main settlement area. A small cremation group, dated to the 1st or early 2nd century AD, found in Crescent Road (Site 7), agrees with the accumulating evidence from other small towns in Essex for the practice of allowing *cremations* around the fringes of these settlements. These can be both family plots and individual graves, but are consistently found in the backlands of towns, as at Braintree (Drury 1976a, 126), Dunmow (a small family cemetery within an enclosure; Wickenden forthcoming), and Wickford (over 50 individual graves, scattered both spatially and temporally; in prep). The distribution of *inhumations*, on the

other hand, where these survive, suggest an adherence to the law forbidding burial within towns; thus at Heybridge, inhumations are known only at the Towers (Site 4); similar evidence from Kelvedon, Braintree and Wickford is discussed in Drury & Wickenden 1982 (p.34, with refs). Chelmsford alone appears to break this rule, with a small family inhumation cemetery from Site T (Drury forthcoming). The reason for this general differentiation is probably medical; the Romans were aware that cremated remains, unlike inhumations, were no longer health hazards and could thus be tolerated within urban areas.

The small town itself was laid out straddling the north-south Roman Road for *c.*1 km to the north of the river crossing, in a large meander of the Blackwater. It probably covered *c.*50 ha. This tendency to develop primarily along the frontages of a single road is characteristic of Trinovantian small towns (Rodwell 1975, fig. 2). Further development along the river frontage would be likely, given its probable function as a port, most clearly suggested in the Roman period by the pattern of samian supply (p.46). The density of development was, on present evidence, very variable in the small towns of the region, depending among other things on whether a site was central or peripheral, and its date within the Roman period. The peak of prosperity was probably the 2nd century, with a clear decline in density of occupation generally in the 4th century (Drury & Wickenden 1982, 32-3).

On Site S in Chelmsford (Drury forthcoming), the street frontage was densely built up, predominantly with strip houses between *c.*AD 120/30 and *c.*160/75. Conditions of this sort may have prevailed at Heybridge on the north-south road frontage, near the river, to judge from the immense quantity of finds from Langford Junction (Site 5). Elsewhere, for example in Braintree, development was less intense, a site on the Braintree-Dunmow road frontage being occupied by buildings with their longitudinal axes set parallel to the road, in plots more than 16 m wide (Drury 1976a, 124). The 1972 site in Heybridge was probably comparable, for the location of only one north-south boundary ditch implies a plot at least 40 m wide, whose side boundaries were defined by ditches (rather than something more urban, like fences or buildings) throughout the Roman period. Since most buildings of this period in small towns were constructed on the surface (Drury forthcoming), it is likely that their remains would have been destroyed by ploughing over most of the site, but there is nothing to suggest that the frontage was densely built up at any time in the Roman period. Indeed, there is clear evidence that it was not, in the extensive 2nd century gravel digging (Period IV), the metalling, perhaps a continuation of the road metalling, laid on the frontage at the start of Period V.1, as well as the nature of the frontage building in Period VI, with its long axis parallel to the street.

Frontage buildings in Trinovantian small towns, i.e. the houses and shops, were normally of timber-framed construction with wattle and daub infill, thatched or occasionally tiled roofs, and timber or gravel floors. On the 1972 site, tile and burnt daub first appear in Period III:1 (mid 1st century) contexts. The existence, however, of *opus signinum* (some attached to tiles), red tile tesserae, box-flue tiles, and imported building stone, such as Wealden sandstone and Kentish ragstone (one piece squared up), strongly suggest the presence of a masonry building somewhere in the settlement. It may have originated in Period IV.1, when such materials first occur on the site. Its function is wholly unknown, though a port might well be expected to have some form of official rest house, or *mansio* (Drury & Wickenden 1982, 33). The material (308, Fig. 8.S2) brought in to level up Ditches 41 and 115 prior to laying the gravel metalling contained rubble, perhaps indicative of a phase of alteration of the masonry structure. For comparison, the primary timber *mansio* at Chelmsford was rebuilt in stone *c.*AD 130, and altered after a fire *c.*AD 150 (Drury forthcoming).

The same fill, 308, also contained much industrial debris, iron smithing slag, and vitrified clay, the usual debris of iron smithing which seems to have been important in all the small towns of the region. There was also briquetage, fragmentary and abraded, but typical enough in fabric, colour and texture to be positively identified. It is presumably evidence for the transportation of salt in containers from coastal salt evaporation sites, the nearest known 'Red Hill' at Osea Road being only 4 km away. Fishing must also have played an important part in the economy of Heybridge, and some evidence for this was found in the form of lead weights (Fig. 12.43-5), a possible antler net needle (Fig. 12.48), and a barbed fish hook (Fig. 12.40).

Evidence for 2nd and early 3rd century activity on the 1972 site is largely confined to amorphous, shallow gravel diggings, possibly for metalling the adjacent road. Once the metalling of the extended road was laid *c.*AD 225-50, the gravel extraction ceased, and the area evidently reverted to more domestic use, with a well and several storage and refuse pits. The presence of a pottery kiln nearby in the middle of the 3rd century is indicated by, firstly, the discovery of a possible kiln pedestal in a later ditch; secondly the shape of Pit 65 (Fig. 8.S2; Fig. 9), which suggests that it was intended for a kiln, until the unsuitable nature of the make-up (308) underneath the gravel was realised; and thirdly, and most significantly, the homogenous deposit of pottery kiln products simultaneously in the well and pits, as discussed above (p.46 F). There may also have been a tile kiln in the vicinity, since a high proportion of tile fragments on the site are overfired, badly blown, and reduced grey; one piece had a totally vitrified surface.

The 4th century was a period of decline (on coin evidence, post 325/330), with soil building up on the now-disused gravel metalling on the street frontage, the contemporary line of which is suggested by the late Roman or Saxon ground level building (Fig. 7). The boundary ditch, 154, continued to silt up. The function of Ditch 122 is uncertain. Its silt contained a typical assemblage of late 4th century pottery. Fourth century pottery and other finds also occur on other sites examined in Heybridge, for instance Langford Junction (Site 5; Argonne ware, Oxfordshire red colour-coated wares); Crescent Road (Site 6; Mayen-type ware) and the Towers (Site 4b) where a small inhumation cemetery

was discovered in Barn Field in 1873-4. This consisted of four stone coffins and one of lead, clearly indicative of people of some wealth and standing. Some evidence for similar rich cemeteries near small towns, in the form of single stone coffins, exists at Braintree (Drury 1976a, 112) and Runwell, near Wickford (VCH 1963, 175). At Heybridge, it is likely that three Saxon cremation urns were found in the cemetery alongside the coffins; the significance of these is discussed in Drury & Wickenden 1982, 30, 34-5.

The early Saxon phase of occupation on the excavated site at Heybridge and its relationship with the late Roman small town, evidently in economic decline in the 4th century, has been published elsewhere (*ibid*), though a summary appears here (p.000). The decline of the 'small town' is seen *not* as a consequence of Saxon incursions in the 5th century, but rather as originating in the social and economic changes of the 4th century; the development of *latifundia* at the expense of smaller landholders, leading to a reduction in the demand for the services of artisans who must have largely constituted the settlement. Instead, their economic basis was probably reduced to long-distance trade. As a port, Heybridge may therefore have suffered a less significant decline than some inland small towns whose main function was to service the surrounding countryside, for instance Kelvedon and Braintree. The wealth and Roman influence that Heybridge accumulated in the late pre-Roman Iron Age, and the subsequent Roman port with a *floruit* in the 2nd and first half of the 3rd century, supplying the inland small towns, was unable to resist the change. By the time a small group of Saxons settled on the 1972 site in the first quarter of the 5th century, Heybridge was evidently contracting. Even the Saxon settlement appears to have lasted no more than a single generation, the site reverting to agriculture. To this phase belongs the ditched trackway, devoid of domestic detritus and thus undateable save for the fact that it cuts the *grubenhäuser*, and one ditch seems to have filled by the 14th-15th centuries (MF 1.G). It may well be of middle Saxon origin.

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Mark Duncan drew Figs 1-7; John Callaghan Figs 8-9, 16-30; Susan Holden Fig. 15; F.J.H. Gardiner (HBMC Illustrations Section) Figs 10-14; Dr. P.M. Kenrick Fig. 27.9b.

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Postscript (November 1986)

1) Mr E.W. Black has kindly informed me of correspondence between Rex Hull and A. Lowther, indicating the existence of a Die 16 roller-stamped box flue tile from the Fitch Collection (p.57), *cf.* Lowther, A.W.G., 1948, *A Study of the Patterns on Roman Flue-Tiles and their Distribution*, Surrey Archaeol. Soc. Res. Pap., 1, though Hull adds a caveat that the fragment could come from Chelmsford. Such a find adds credence to the existence of a large masonry building at Heybridge, and possibly a Hadrianic *mansio* (p.64).
2) Work by Mr Pat Adkins on the north shores of the Blackwater Estuary in advance of large scale gravel extraction has revealed a multi-period occupation site, including mid Saxon iron smelting, at Chigborough Farm (TL 879082), a Bronze Age and EIA settlement at Rook Hall (TL 878088; Priddy 1986, 94-9), and the continuation of the Roman road heading eastwards towards Mersea, beyond Lofts farm (p.63).

The Excavation of 3 Ring Ditches at Broomfield Plantation Quarry, Alresford, Essex, 1984

by Owen Bedwin

A group of three closely-spaced ring ditches was excavated in advance of their destruction by sand quarrying. The ring ditches were c.7.5m across, each with a central grave. No bone survived in these graves, because of the acidity of the soil, and finds were minimal. The dating of these features is problematical, but a Saxon origin is preferred.

Introduction

The Broomfield Plantation quarry at Alresford contains a series of archaeological sites known only as cropmarks on aerial photographs (Figs 1 and 2; Plate I). These are situated on a broad sand ridge at, or just above, the 15m contour, and overlook Alresford Creek and the River Colne to the south, and an unnamed stream to the north. The latter runs round the east end of the sand ridge and drains into the upper part of Alresford Creek.

At the eastern end of the ridge are two rectangular enclosures, overlapping one another slightly (Fig. 2). Within the south-east corner of one of these is a smaller oval enclosure. Salvage excavation early in 1984 revealed that the western of the two rectangular enclosures was Roman (Priddy 1984/85). It is probable that the oval enclosure, which is right at the end of the ridge, belongs to the Iron Age, by analogy with the enclosure sequence established for Woodham Walter (Buckley and Hedges 1987).

The westernmost cropmark consists of a group of three similar ring ditches, to which various shorter lengths of ditch are attached, plus a long, linear ditch running east-

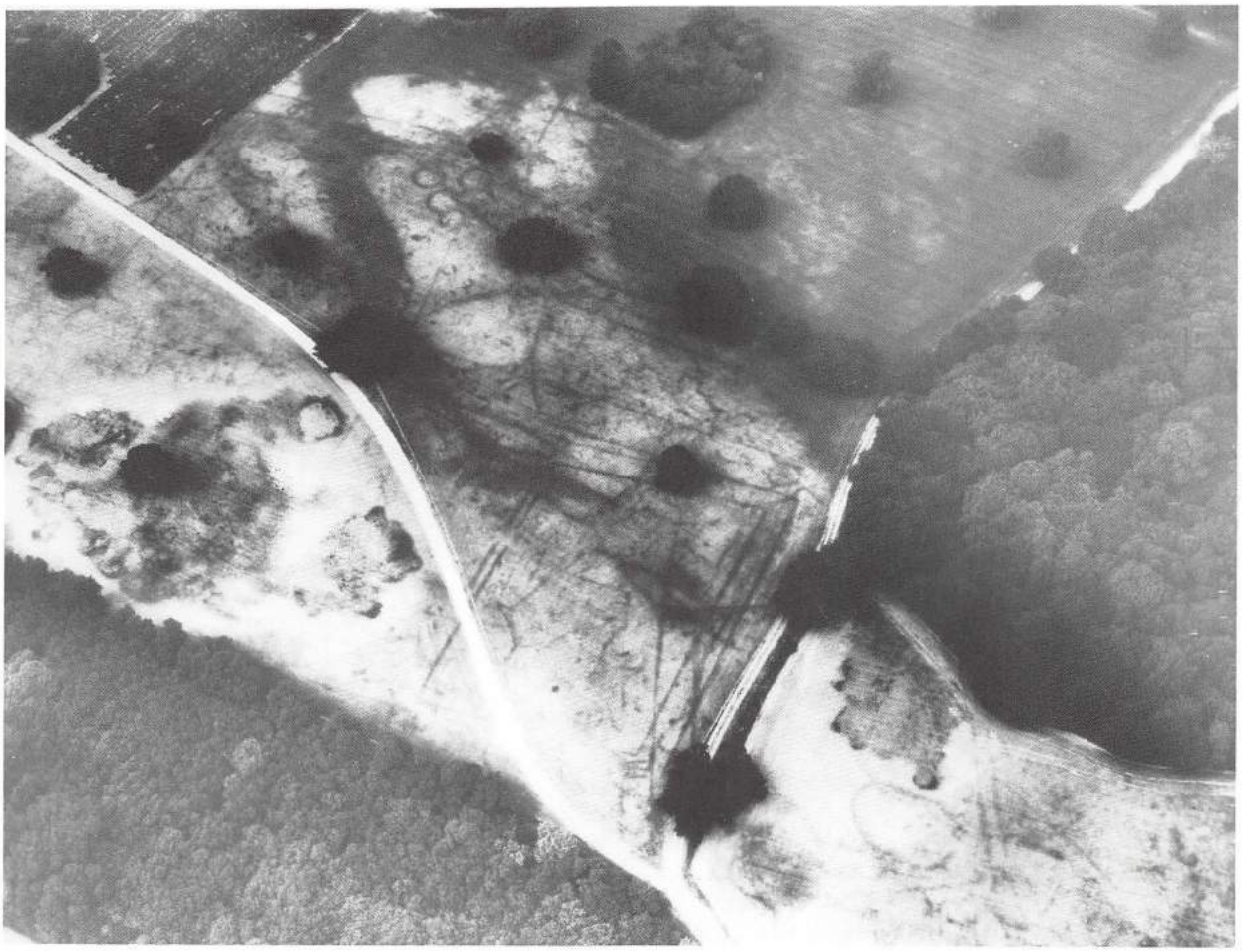

Plate I Alresford 1984. Aerial photograph of quarry area showing cropmarks. Photograph shows whole quarry area, with the Broomfield Plantation across the bottom left corner (refer to Fig. 2). The three ring ditches are in the upper left quadrant; the rectangular enclosures are lower centre. *(Cambridge University Collection: copyright reserved)*

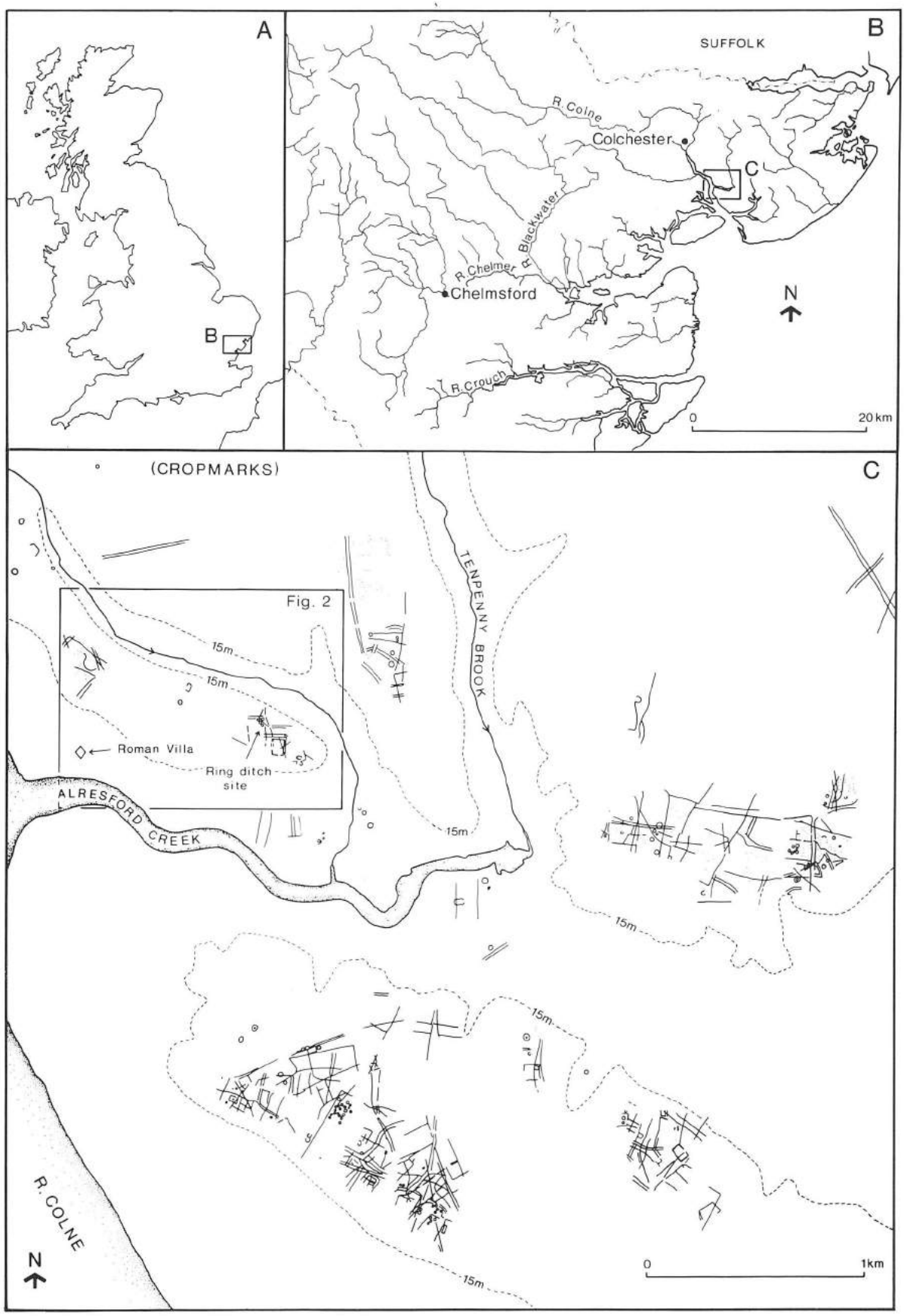

Fig. 1 Alresford 1984. General site location and cropmarks. Note relation of cropmarks to the 15m contour.

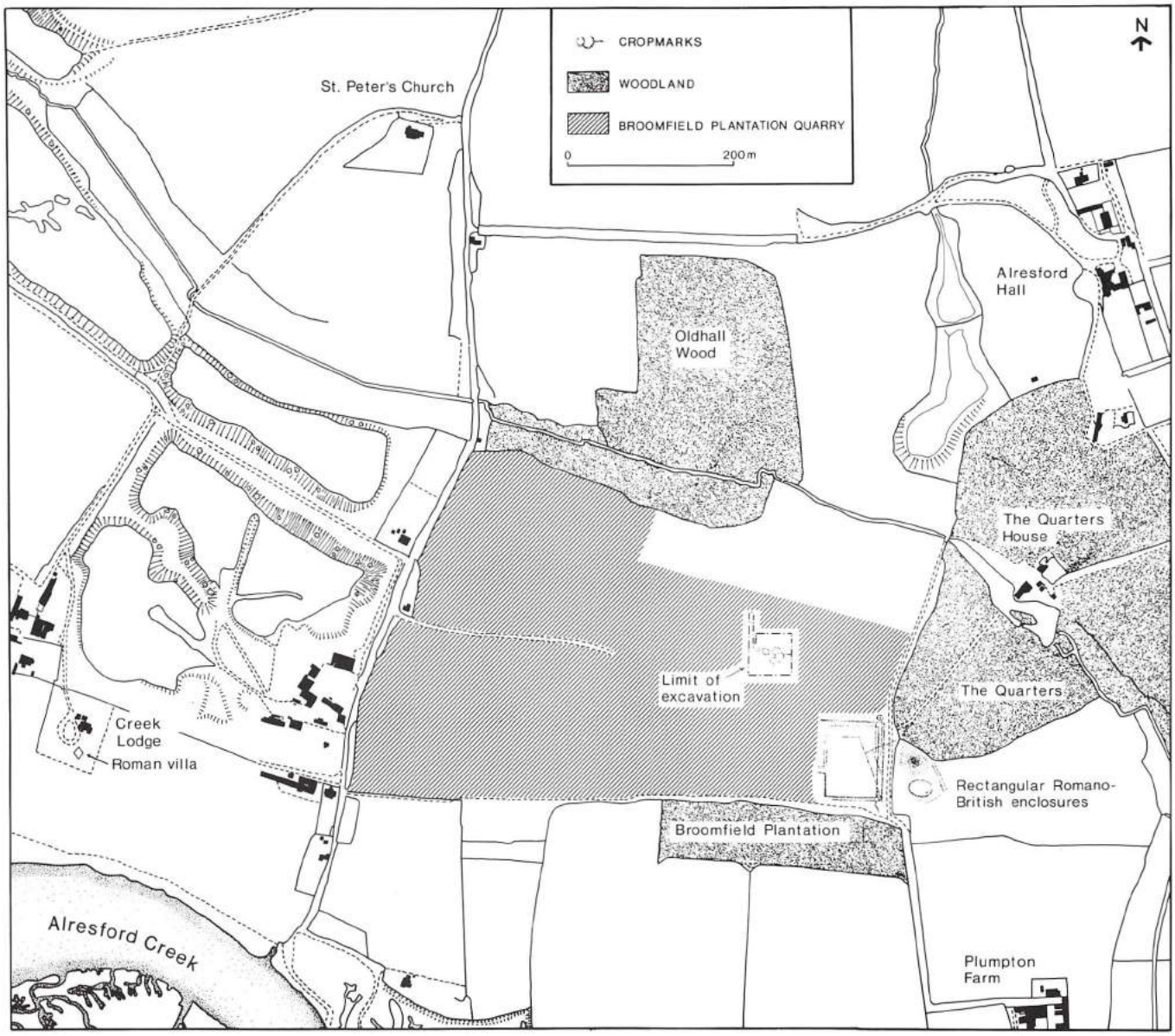

Fig. 2 Alresford 1984. Plan of quarry area with sites.

west through the centre of the ring-ditch group. It is the excavation of the three ring ditches, plus associated features, which forms the subject of this report. The site is centred on TM 071 199, and is Essex S.M.R. No. TM 01/127.

The entire sand ridge on which the cropmarks are situated (i.e. most of Plate I) has now been quarried away, but Essex County Council Archaeology Section was able to investigate the area of the ring ditches for four weeks in November 1984. The excavation was funded by English Heritage and was carried out under the direction of the author.

Excavation (Figs 2-4)

Topsoil was stripped by D6 and scraper provided by Hall Aggregates Ltd. The removal of topsoil revealed a subsoil of soft yellow sand with variable gravelly patches. All archaeological features were immediately and clearly apparent as a range of grey-brown fills contrasting with the yellow subsoil. Each feature was investigated by trowel, though the three graves (contexts 4, 54 and 88) were almost entirely excavated by plasterer's leaf.

The excavated features are defined as follows:-

A. Three ring ditches (contexts 2, 28 and 32) each with a central rectangular feature, interpreted as a grave (contexts 4, 54 and 88).

B. Rectilinear ditches: contexts 30 and its smaller offshoot, context 62. In addition, there is the small ditch, context 96.

C. Cobbled trackway, this was a linear feature revealed at the extreme northern end of the excavation.

D. Miscellaneous pits and post holes. A considerable number of these were distributed more or less randomly across the site. Most were either sterile, or contained one or two pieces of burnt flint and the odd flint flake. The only exception was the pit, context 18, which contained most of the pottery found on the site, i.e. 43 out

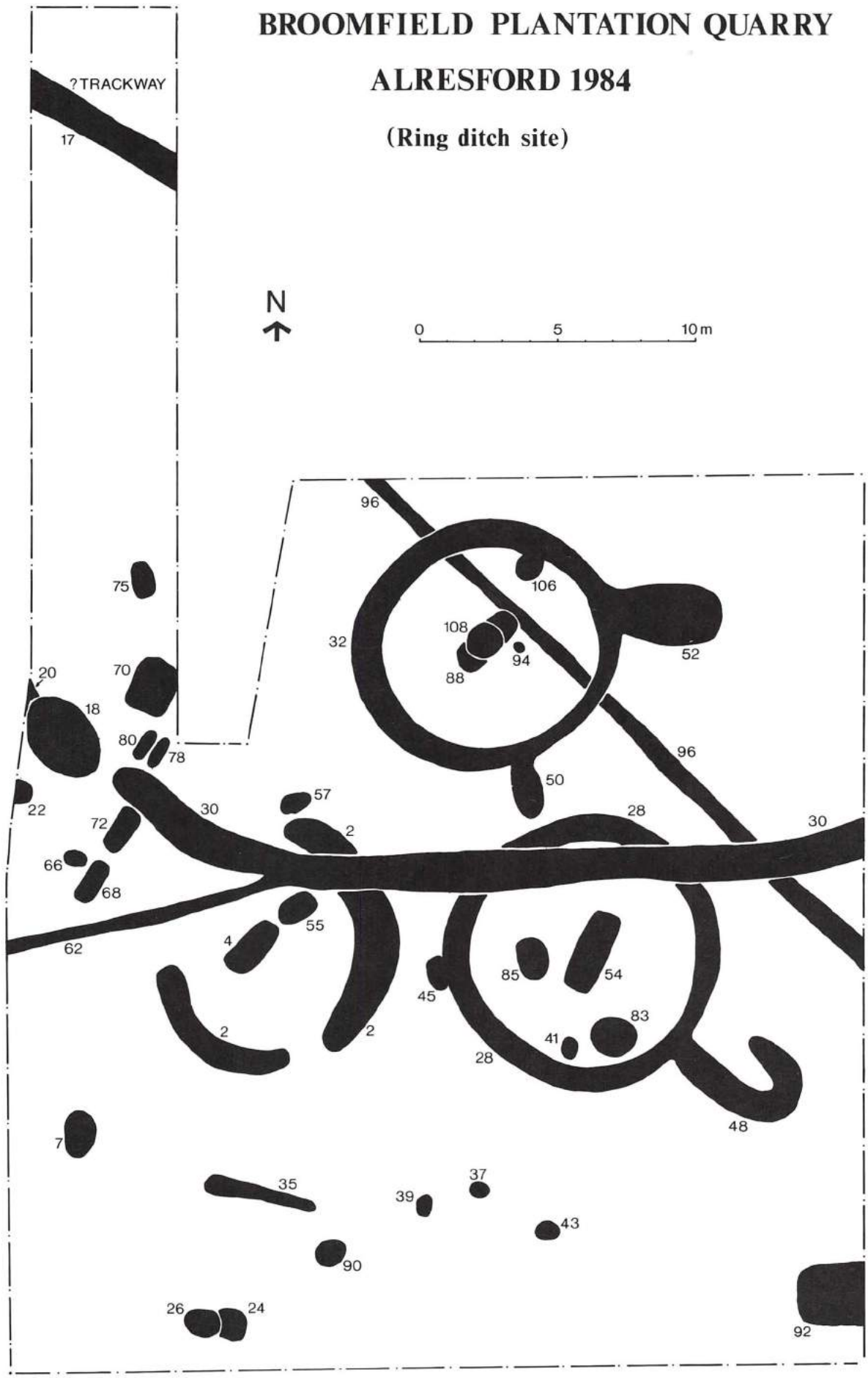

Fig. 3 Alresford 1984. General site plan.

of 52 sherds. It might be argued that the pits found within the perimeter of the ring ditches (contexts 55, 83 and 85) should be linked with them. However, the absence of finds to provide a date makes this problematical.

Each of these groups of features will now be considered in more detail.

A. The ring ditches and central graves

These were of similar diameter, *c.*7.5m, but otherwise differed in detail.

Ring ditch, context 2 This was the shallowest of the ring ditches, being cut up to a maximum of only 25cm into the subsoil. Although apparently continuous on the aerial photograph (Plate I), it resolved into two separate segments on excavation (Fig. 3). It seems more likely, however, that the ring ditch was cut as a continuous feature. Either the earth-moving machinery used to remove topsoil cut slightly into the soft subsoil, removing the shallowest stretches of ditch, or these stretches were entirely within the topsoil. The ditch profile varied slightly around its perimeter, with the western side being rather more V-shaped than the eastern side (Fig. 5). The ditch silts were remarkably uniform, with only minor variation in stoniness. There was no indication of more rapid silting into the ditch from one side rather than the other.

Finds were minimal, consisting only of three pieces of worked flint. These were a barbed-and-tanged arrowhead (Fig. 12, No. 4), a micro-burin (Fig. 12, No. 1), and a single waste flake. The ring ditch was cut through on its northern edge by the linear ditch, context 30.

Central Grave, context 4 This was a rectangular feature, 2.1m by 1.0m, with rounded corners (Fig. 6). Initially, the grave fill presented a fairly uniform appearance, apart from a fine, stone-free, black fill (context 6) running around just inside the margin of the grave, and with a slight narrowing at the centre.

Excavation took the form of removing the innermost fill, context 5, which revealed the whole of context 6 as a continuous, uniform, stone-free layer, dipping in the centre by about 12cm (Fig. 6). The maximum thickness of context 6 was about 2cm. After careful removal of this black layer, the grave was emptied by removal of context 9.

No bone was present (not surprising in this very acid

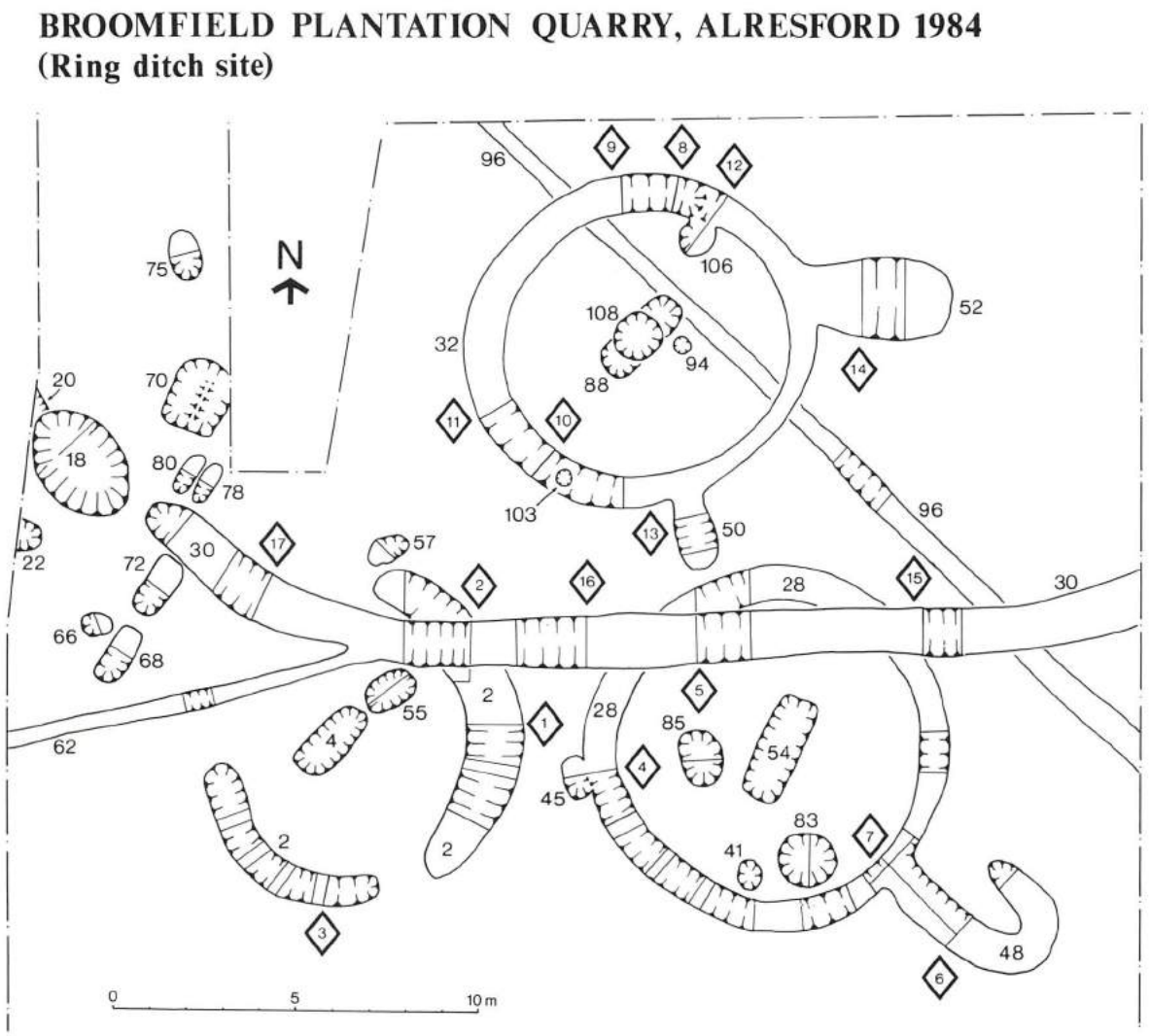

Fig. 4 Alresford 1984. Detailed plan of central part of excavation. Numbers in diamonds refer to sections in Figs. 5 and 11.

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Ring ditch sections

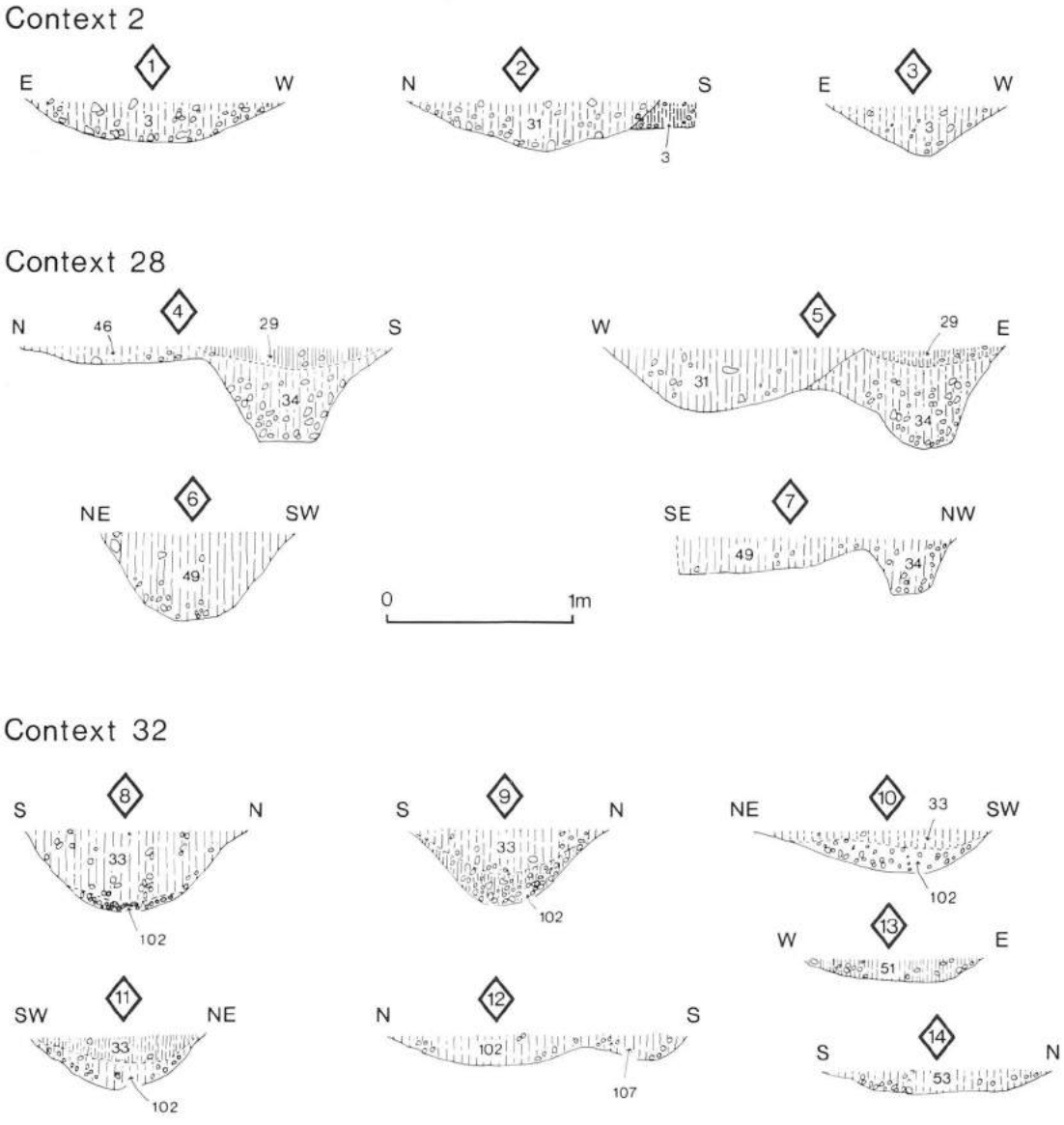

Fig. 5 Alresford 1984. Ring-ditch sections. See Fig. 4 for locations.

soil), and the only finds were two flint flakes, plus a flint blade with fine retouch. Flotation of soil samples from each of the contexts within the grave produced nothing.

The interpretation of this rectangular feature as a grave depends crucially upon the smooth, continuous, black layer, context 6. This seems best understood as the decayed remains of a thick blanket or winding sheet from beneath a corpse. The lack of finds which could be interpreted as grave goods is nevertheless puzzling.

Ring ditch, context 28 This was a continuous ditch, with a hook-shaped addition, apparently contemporary, at the south-east corner. This extra length of hook-shaped ditch was also visible on the aerial photograph (Plate I). In addition, there was a small, shallow pit, context 45, contiguous with the western edge of the ring ditch. Because of the similarity of the fills of pit and ring ditch at this point, it was impossible to judge which (if either) was the earlier.

The ring-ditch fills were divided into a lower, stonier deposit (context 34) and an upper, almost stone-free layer (context 29). Neither fill contained many finds. There were 14 flint flakes plus a blade-core side-trim piece from the two fills, a single fragment of Roman tile (? *tegula*), about 12 cm

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Grave 4; Plans and sections

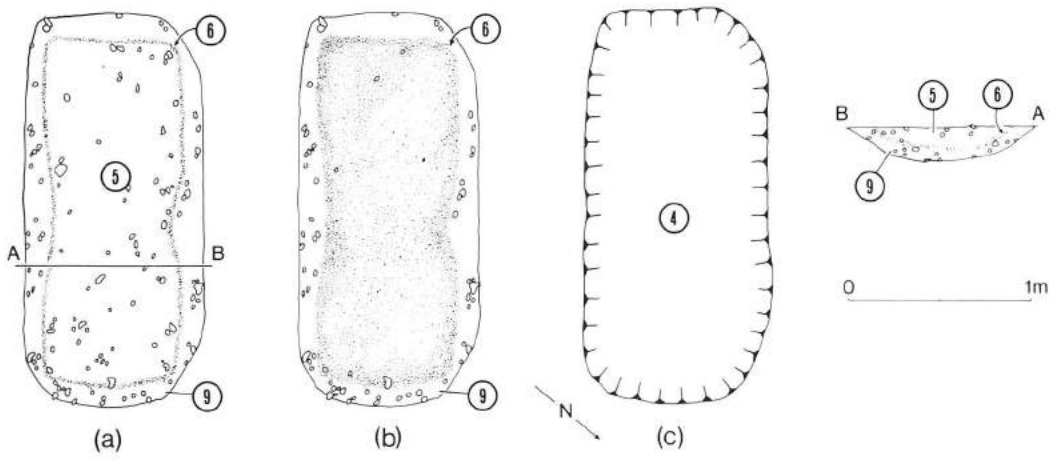

Fig. 6 Alresford 1984. Detailed plans and sections of grave 4.
(a) Pre-excavation; (b) After removal of context 5 to reveal context 6; (c) Post-excavation.

BROOMFIELD PLANTATION QUARRY, ALRESFORD 1984

Grave 54; Plans and sections

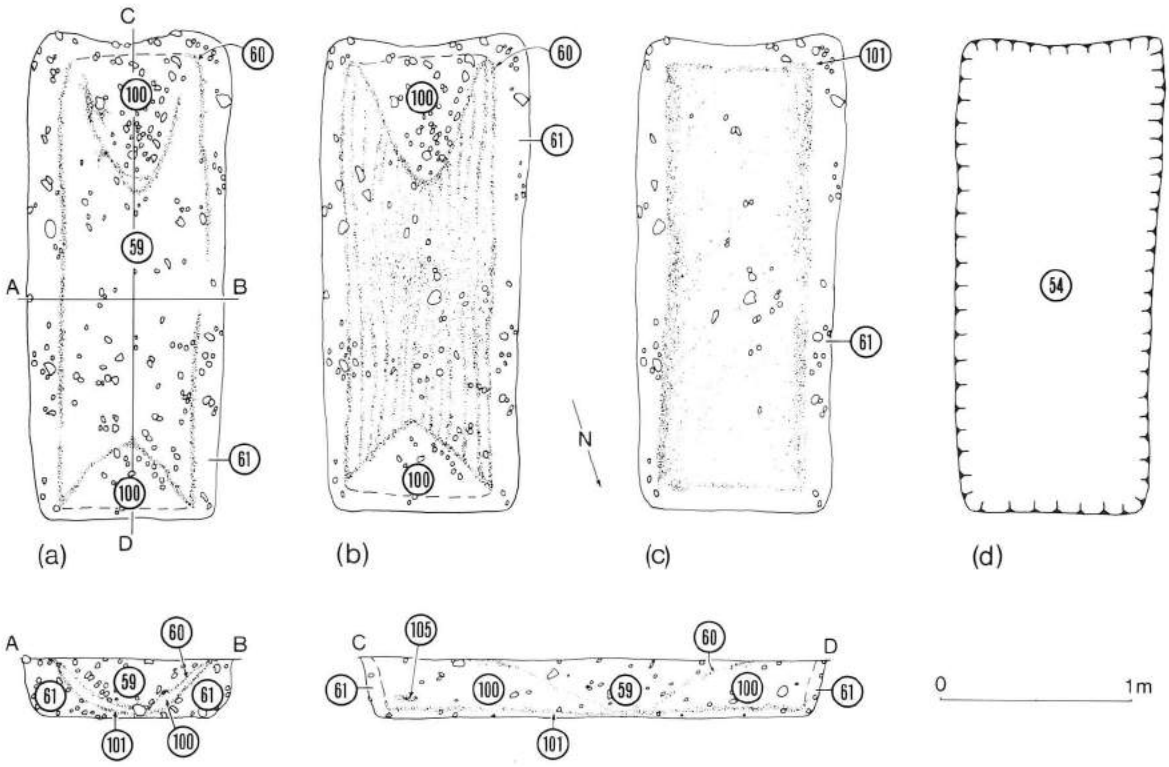

Fig. 7 Alresford 1984. Detailed plans and sections of grave 54.
(a) Pre-excavation; (b) After removal of context 59 to reveal linear structure in context 60;
(c) After removal of contexts 60 and 100 to show context 101; (d) Post-excavation.

across, from the lower fill, 10cm above the ditch floor, and two small sherds of flint-gritted prehistoric pottery.

Sections placed at the junction of the ring ditch and its hook-shaped addition (context 48), indicated that the two had silted up under similar conditions. The hook-shaped stretch of ditch had no finds and became gradually shallower towards its tip.

Central grave, context 54 As with context 2, this was a well-defined rectangle (2.40m by 1.0m), with rounded corners. It was slightly larger in plan than context 2, and on excavation proved to be rather deeper.

The initial appearance presented by the grave was of an homogenous, rather stony fill, with a conspicuous black line following the two edges of the grave, but with substantial indentations at each end (Fig. 7; Plate II). The next step was to remove the fill, context 59, which revealed a pattern of stone-free, black lines running longitudinally through the grave (Plate III). The central black lines slumped markedly down into the centre of the grave, where the linear pattern was lost. (This is best seen in the longitudinal section in Fig. 7). Each of the lines was of a slightly harder but siltier texture than the surrounding gritty sand. This feature was then painstakingly removed, revealing the dark outline of context 101, which defined context 100. Removal of the latter, which was very shallow, and in places almost non-existent, uncovered the continuous, uniform, stone-free, black layer, context 101, which was very similar to context 6 in grave 4 (above). Within context 100, at its southern end, was a soft dark grey step-like feature, 25cm long by 10cm wide by 2cm thick (context 105 in Fig. 7, longitudinal section). Context 101 was next removed, followed by the lowest fill of the grave cut, context 61. There were no finds from the grave, and flotation of soil samples from all contexts added nothing either, and it is clear that the very dark colouring of contexts 60 and 101 was due to staining and not to charcoal. There were no traces of bone or teeth.

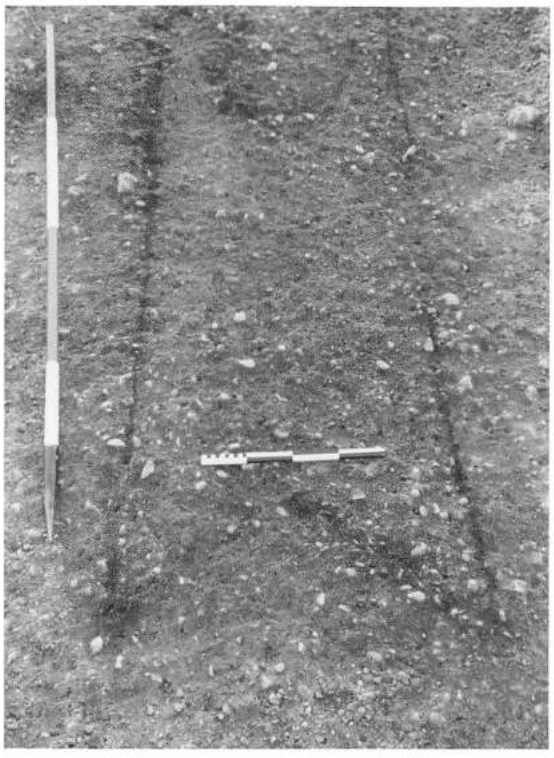

Plate II Alresford 1984. Pre-excavation view, from the north, of context 54, showing outline of context 60. Longer scale 2m.

How are these complex features to be interpreted? It seems likely that the lower continuous black layer, context 101, represents the stain derived from a winding sheet or blanket beneath the body. The small dark grey step (context 105) may represent a (?) wooden support for the head. The upper black layer with its linear structure probably represents a series of narrow wooden poles laid along the grave above the body. Following the rapid decay of the corpse, these must have collapsed under the weight of the overlying soil, the collapse being greatest in the centre of

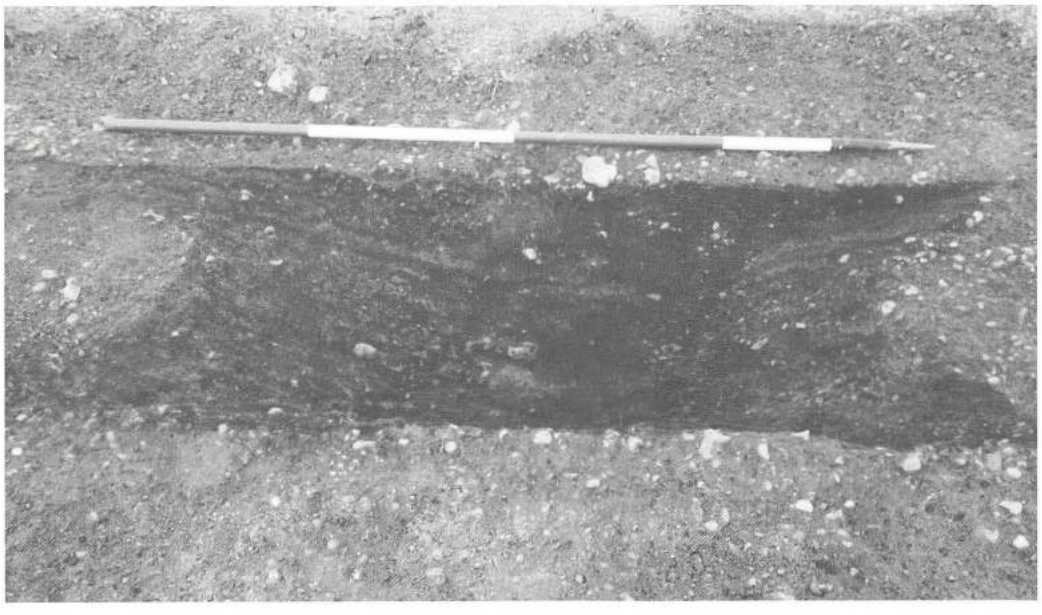

Plate III Alresford 1984. Context 54, from the east, showing linear detail in context 60. Scale 2m.

Fig. 8 Alresford 1984. Reconstruction of burial rite based on excavation of context 54.

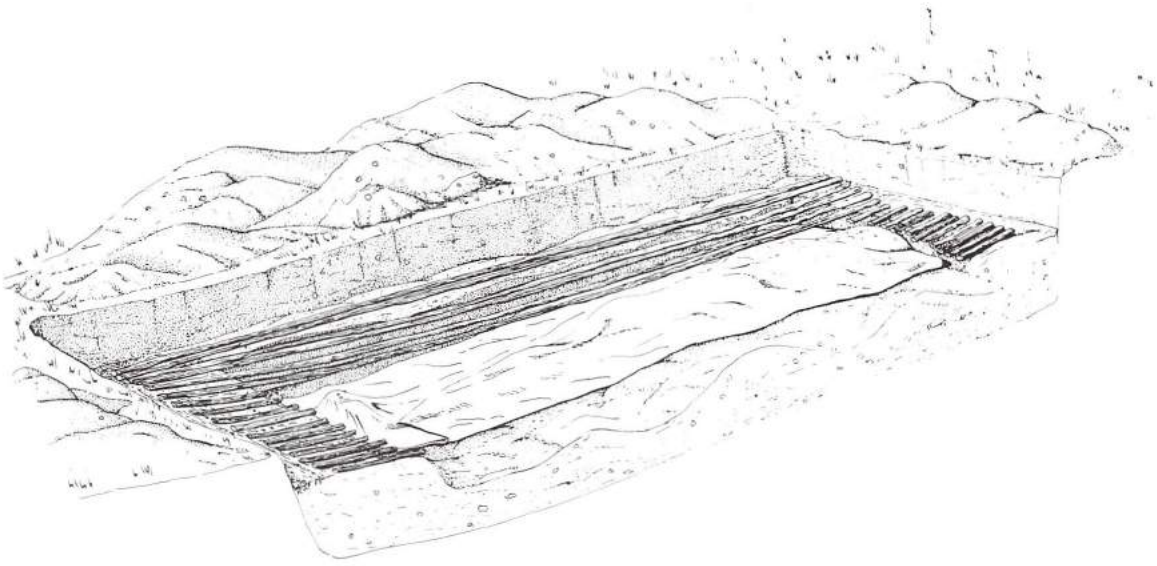

Fig. 9 Alresford 1984. Cut-away drawing of grave, based on excavation of context 54.

the grave, where the linear pattern of poles is lost (or merges with context 101 beneath). It is likely that these poles were of 'green' wood, as the collapse in the centre of the grave has pulled the poles in from each end (hence the indentations in context 60) without snapping them and dislocating the pattern. A reconstruction of the burial rite and of the grave are shown to make this interpretation clearer (Figs 8 and 9).

Ring ditch, context 32 This was a continuous ditch with a U-profile. It had two short linear extensions running radially outwards (contexts 50 and 52). The profile of these two extensions was considerably shallower than the ring ditch, but all appeared to have silted up in a similar manner. A small, shallow pit, context 106, was contiguous with the inner edge of the ring ditch, but the relationship was obscure (Fig. 5, section 12). Cut into the floor of the ditch in its south-west sector was a small, round post hole (context 103). Its fill was similar to that of the ring ditch.

As with ring ditch, context 28, two silts were identified. The upper was almost stone-free, but the lower contained variable amounts of small gravel. Finds were minimal, consisting of four flint flakes, a single tiny sherd of flint-gritted pottery, plus a piece of Roman *tegula*, *c.*8 cm across (this last from the lower silt).

Central grave, context 88, with pit, context 108 This grave was again a rectangular shape with rounded corners, but was longer, at 2.60 m, and narrower, at 0.80 m, than the other two graves. The fill was a gritty sand, with a dark, stone-free line (context 98) within the grave, but set asymmetrically, unlike the other two graves (Fig. 10). More significantly, there was a substantial disturbance, context 108, in the centre of the grave. This disturbance turned out to be a straight-sided, flat-bottomed pit, 50 cm deep. Given its position through the centre of the grave, and the fact that it was clearly later, this pit could well be interpreted as a robber trench. The fill of the pit was hard-packed and stony. If it was indeed a robber trench, it certainly does not appear to have been a recent one, and may have been dug quite soon after the burial itself.

The grave was the shallowest of the three, being barely 12 cm deep, again with a continuous, black, stone-free layer, context 98, dipping down across its centre. The only finds were two pieces of worked flint. Flotation of soil samples from each context within the grave produced nothing further.

B. Rectilinear ditches

Context 30 This shallow ditch, visible on the aerial photograph (Plate I) ran east-west across the centre of the excavated area. It was up to 50 cm deep, but became gradually shallower at its western end. This ditch clearly cut through two of the ring ditches (contexts 2 and 28), and also the linear ditch, context 96 (see below). The fill was a uniform, grey-brown silty sand, slightly stonier at the bottom. There was no sign of any re-cutting, and finds were few, consisting of three flint flakes, plus a fragment of Roman flue tile. The latter was found c.10 cm above the ditch floor. There were also some worn, rounded lumps of chalk (up to 15 cm across) in the upper part of the ditch. It is difficult to account for the presence of these except as resulting from an attempt to marl this very acid soil and thus to improve its arable productivity. The dating of this

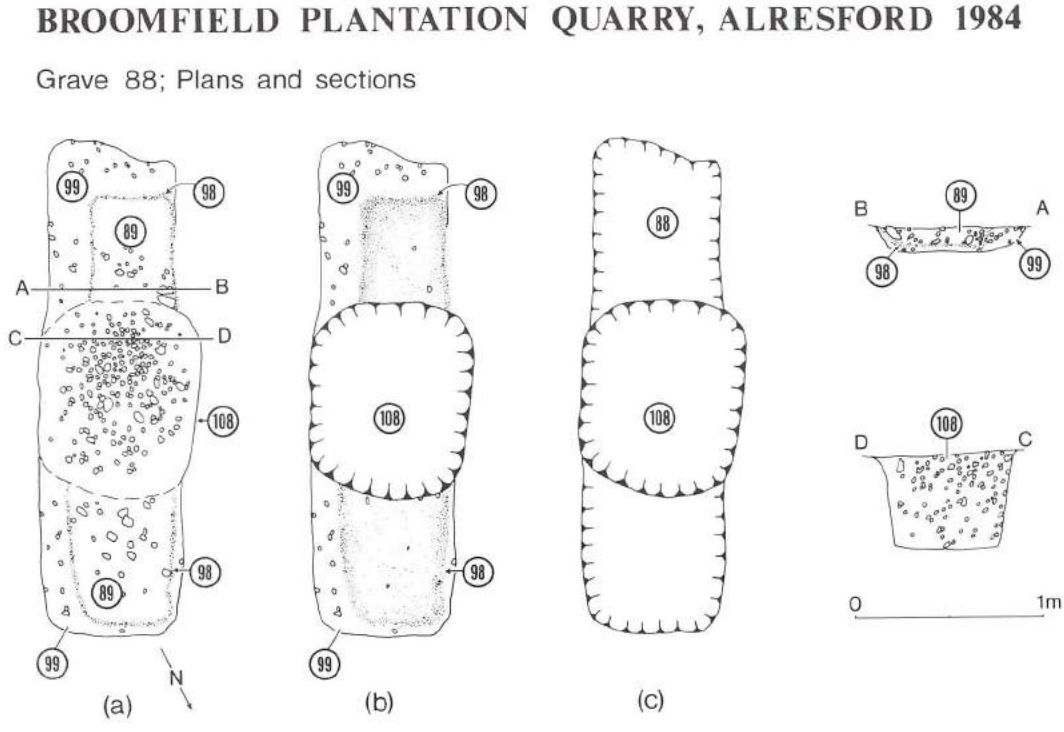

Fig. 10 Alresford 1984. Detailed plans and sections of grave 88.
(a) Pre-excavation; (b) After removal of context 89 and fill of ?robber trench; (c) Post-excavation.

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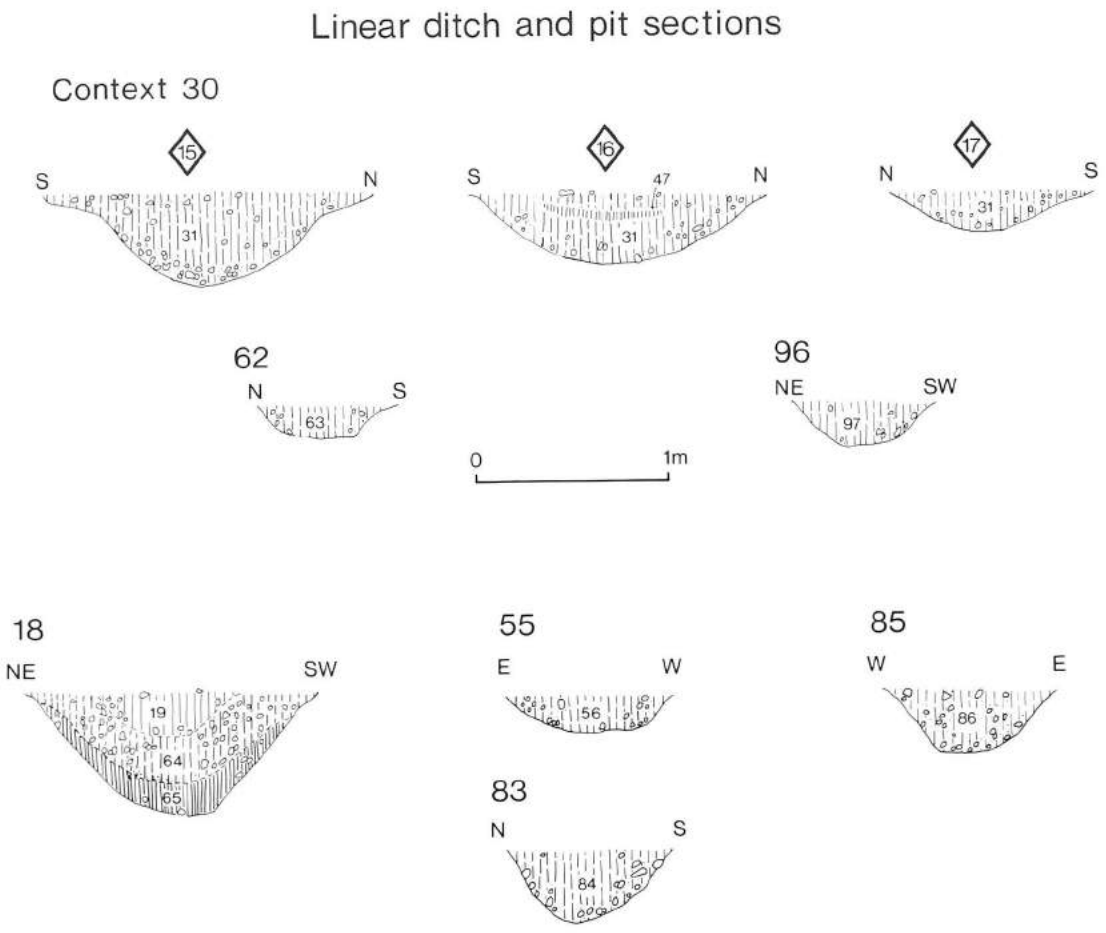

Fig. 11 Alresford 1984. Sections of pits and linear ditches. See Fig. 4 for locations.

episode is uncertain. Perhaps the fact that the chalk has survived in spite of the acid conditions implies that it is fairly recent.

Context 62 This small shallow ditch, up to 15cm deep, joined the western end of ditch, context 30. There were no finds in the small excavated section, but there were a few small, rounded pieces of chalk visible in the top few centimetres of the fill. It seems likely therefore that contexts 30 and 62 belong to the same phase.

Context 96 This was another small ditch, up to 25cm deep, running north-west/south-east across the site. It was cut by both the linear ditch, context 30, and the ring ditch, context 32. There were no finds from the excavated section.

C. Cobbled trackway (Fig. 3)

This consisted of a stretch of gravel flint cobbling at the extreme northern end of the site. Most of the cobbles were *c.* 15 to 20cm across, and were covered by a layer of red fired clay. The clay had not been burnt *in situ* as none of the gravel flints showed signs of heat-cracking. Presumably, the burnt clay was spread over the cobbling in order to level up a rough area. There were no finds from the cobbling, or from the layers immediately above or below it. Consequently, it cannot be dated or related to any of the other features.

D. Miscellaneous pits and post holes

There was considerable diversity among these features. Some of the shallower, more irregular ones with no finds may have been natural geological features (contexts 20, 22, 24, 25, 35, 37, 39, 43, 57, 66, 68, 72, 78, 80 and 90). The remainder are sub-divided as follows:-

Features (apart from graves) inside ring ditches Contexts 55, 83 and 85 were well-defined pits cut into the subsoil (Figs 3 and 4). The only finds were two flint flakes from context 55. Context 41 was a shallow scoop and 94 a small post hole. Neither of these contained any finds. Relating these features to the ring ditches or graves is virtually impossible without dating evidence.

Pit, Context 18 This pit was 45cm deep, and contained the bulk of the pottery from the site, i.e. 43 out of 52 sherds. The three diagnostic sherds (Fig. 13), all rims, point to an early Iron Age date (i.e. 6th/5th centuries BC) and this

pit seems to be the only definitely Iron Age feature on the site. In addition, there were 27 pieces of worked flint (out of 77 for the whole site), the diagnostic pieces being Neolithic/Bronze Age, and hence residual (see flint report).

Pits 7, 70, 75, 90 These disparate features are grouped together simply because they each contained a few artefacts, though all of these could be residual. Pits 7 and 92 both yielded a single flint flake, pit 70 had four flint flakes plus a single small sherd of flint-gritted pottery, and pit 75 had one flint flake and a small sherd of flint-gritted pottery.

Discussion

Finds were minimal, consisting of 52 sherds of pottery, 77 pieces of worked flint, three fragments of Roman tile, and two small pieces of burnt daub. Furthermore, much of the material may be residual, though this in itself is useful for dating some of the features.

The crucial dating evidence comes from the three pieces of Roman tile (two *tegula* fragments and one of combed flue tile). The likely source of this material is either the Romano-British enclosure just to the south-east (Fig. 2; Priddy 1984-5), or the Roman villa, *c.* 1 km to the west (Figs 1 and 2). One piece of tile came from ring ditches 28 and 32, and one from the linear ditch 30. Both fragments came from the ring ditches well down in the lower silts. The fragment from the linear ditch came from its upper fill, 10 cm below the top. Each of these fragments was worn and therefore probably residual.

On the basis of finding residual Roman material well down in the ring-ditch fills, it seems more likely that these features (and the graves) belong to the Saxon period, rather than the other alternative, the Bronze Age. A second pointer towards a Saxon date for the ring ditches is their diameter, which is similar to those of the definitely Saxon ring ditches at Orsett and other East Anglian sites (summarised in Hedges and Buckley 1985). It has to be admitted, however, that the evidence for a Saxon date for these ring ditches is far from compelling.

Whether there was ever a mound of any kind covering the graves is difficult to assess. There was little evidence from the silting-up ditches for any preferential deposition from the inside of the ring ditch, i.e. from the erosion of a mound. Perhaps the presence of an apparent robber trench, context 108, of some antiquity (see above) should be taken to indicate that there was a low mound, which was used to guide the position of the robber trench.

The unusually well-preserved details of the grave structure in context 54 have no parallels in East Anglia and therefore cannot be used to date the site. If the Saxon date for the ring ditches is correct, the sequence of activity within the excavated area may be summarised as follows:-

(1) *Early prehistoric*
Slight, (?) casual use of the site, perhaps as a woodland resource during the Mesolithic, Neolithic and Bronze Age.

(2) *Iron Age*
The digging of a single pit, context 18, for purposes unknown.

(3) *Saxon*
Three broadly contemporary ring-ditch burials were carried out, possibly with low mounds over the graves. There was no evidence that these graves formed the nucleus of a larger flat cemetery, and they should therefore be seen as an isolated group of burials.

(4) *Later Saxon/Medieval(?)*
The linear ditch, context 30, and its offshoot, context 62, were dug. It is impossible to judge by how much this episode post-dates the ring ditches.

Again, if a Saxon date is accepted for these ring ditches, the location of the contemporary settlement is of interest. It may be that there was some continuity of occupation on either the Roman villa site to the west, or on the nearby enclosure to the south-east (Fig. 2). Alternatively, it is possible that the settlement was somewhere else along the sand ridge on which the ring ditches were located. It is therefore unfortunate that no recording of this large area was possible, apart from three days' salvage excavation of one of the rectangular enclosures (recorded in Priddy 1984-5).

The Finds

The flint (by Hazel Martingell)

Seventy seven pieces of worked flint were found. Some of the 59 waste flakes could be modern — either gravel or the trimming flakes of flint used for walls.

The raw material is mostly light grey with inclusions and with some light brown staining. Most flakes retain varying amounts of thin smooth cortex, the type usually associated with the cortex of river gravels.

The earliest pieces are the Mesolithic micro-burin (Fig. 12, No. 1) and the blade from the upper fill of ring ditch context 2. One of the barbed-and-tanged arrowheads (Fig. 12, No.4) also came from this fill.

The remaining retouched pieces are all probably Neolithic or Bronze Age tools. Two of these, a broken scraper and a ventral retouched piece, are on well-made blade supports.

An interesting naturally-backed knife (Fig. 12, No. 2) came from the Iron Age pit (context 18). It has evidence of two-period working. The blade is stained pink and brown, but later flake removals have thinned the

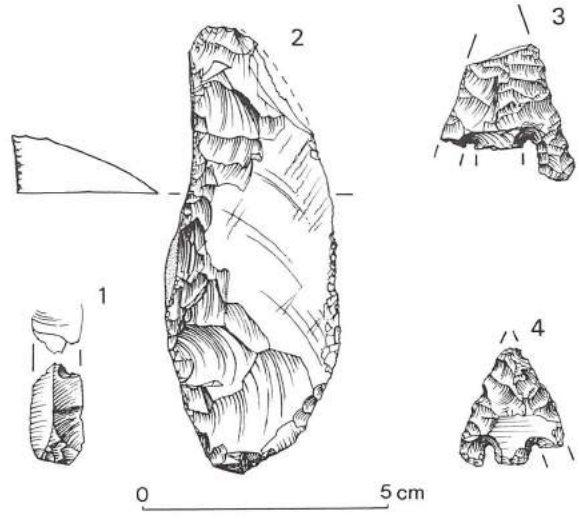

Fig. 12 Alresford 1984. Flintwork.

back edge across the ventral surface (uppermost in Fig. 12) and removed the staining. There is much original retouch/wear along the 'cutting' edge. The bifacial disk, also from context 18, is either a knife or a rough-out for an arrowhead. The scraper was also found in this context.

The two barbed-and-tanged arrowheads, one (Fig. 12, No. 3) from the topsoil, and the other (Fig. 12, No. 4) from the ring ditch, context 2, are both of Green's Sutton B type (Green 1980). The smaller, measuring 27 mm when complete, has retouch on the ventral surface at the top. The larger example, *c.* 44 mm when complete, has ripple flaking covering both surfaces.

The pottery

Given the size of the area excavated and the number of features found, the amount of pottery was surprisingly small, i.e. 52 sherds weighing 345 g. Fabrics were classified into three types, as follows:

Fabric 1: Fine/medium flint grits (up to 5 mm across). The concentration of grits was variable, from sparse to abundant even within small sherds. Colour varied from orange-brown to black. In some instances, the surface had been worn down to leave flint grits standing proud of the surface. This was the commonest fabric, accounting for 48 out of the 52 sherds.

Fabric 2: Fine flint grits (up to 2 mm across) with a little sand. Harder fired than fabric 1. One sherd only.

Fabric 3: Fine, sparse flint grit (up to 2 mm across), plus some grog, giving a soapy feel. Three sherds only.

(No Roman pottery was found in spite of the presence of a Romano-British enclosure 50 m away to the south-east; Fig. 2).

The three fabrics described above would generally be regarded as earlier than the middle Iron Age, but precise dating is difficult because of the few diagnostic sherds. Of the 52 sherds found, 43 came from various layers within a single pit, context 18. Two of these were rim sherds (Fig. 13) and would fit well within a broad early Iron Age date range (6th and 5th centuries BC). The remaining nine sherds, found in contexts other than pit 18, were all undecorated body sherds, and probably residual.

Fig. 13 Alresford 1984. Pottery.

Roman tile

Three fragments were found, one each from ring ditches 28 and 32, and one from the linear ditch 30. The pieces from the ring ditches were *tegulae*, that from the linear ditch a piece of combed flue tile. Although none of the fragments can be precisely dated, their presence, apparently as residual Roman material, has been used (Discussion, above) to argue a Saxon date for the ring ditches.

Acknowledgements

The author wishes to thank the following: Mr. Jeremy Wyatt and Hall Aggregates for permission to excavate, Hazel Martingell for the flint report and Fig. 12, Miranda Gee for Figs. 1, 2, 5 and 11, and Ruth Parkin for Figs. 8, 9 and 13. Thanks are also due to those who helped on site, especially Bill Faram, Sandy Gray and Nick Lavender. The finds, plus a copy of the archive, have been deposited in Colchester Museum. A further copy of the archive is kept in the Essex County Council Sites and Monuments Record.

The Society acknowledges with thanks a grant from the Historic Buildings and Monuments Commission towards the publication of this paper.

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Excavations in Braintree 1980 and 1984

by B.H. Milton

(with contributions by Owen Bedwin, C.P. Clarke, Rhona Huggins and Catriona Turner)

Summary

This report contains the results of three separate excavations in Braintree.

Excavations at the Toft's Garage site (now Sainsburys supermarket) uncovered a prehistoric buried soil, and a number of Romano-British, medieval and post-medieval features. An extensive assemblage of mid-sixteenth century pottery is illustrated.

A trial trench at Sandpit Road revealed Romano-British features dating from the second to the fourth centuries though there were no stratified deposits.

At the Horn Hotel, a trial trench was dug to assess survival of archaeological levels. Although the results were largely negative, they are useful in confirming current ideas about the limits of the Roman and medieval town.

Excavations at Toft's Garage, Braintree, 1980

by B.H. Milton

Introduction

Braintree lies on a ridge situated between the rivers Blackwater and Brain, only about 1.2km apart at this point, at the junction of two Roman roads, Stane Street, which runs from St. Albans to Colchester, and the road from Chelmsford to the north-east.

An excavation was carried out by Essex County Council Archaeology Section in December 1980 of the site at Toft's Garage, Braintree (TL 7580 2313: E.S.M.R. TL 72/36), due to be developed by the building of a supermarket. The purpose of the excavation was to determine the extent and nature of archaeological activity in this area, situated *c.*200m to the east of the supposed centre of the Roman 'small town' and *c.*50m east of the medieval market (Drury 1976, facing p.138).

The subsoil in the area is a pale yellow-brown brickearth and pale grey to brown-yellow silt clay with medium to large flint nodules and chalk flecks.

The Excavations (Figs 2 and 3)

Three trenches, *c.*1.4m wide, each running approximately north to south, were excavated by machine to a depth just below the topsoil. Trench I, was *c.*15m long, later extended a further 3m south by hand. About 0.25m of topsoil was removed except at the north end, where modern wall foundations and construction trenches were over a metre deep. Trench II, south of trench I and further to the east, was *c.*18m long, later extended a further 3m north. Here also the topsoil was stripped to an average depth of about 0.25m. Trench III, situated a further 34m east and slightly to the south of trench II was about 24m long and the topsoil removed was considerably deeper, *c.*0.5m thick. All three trenches were cleaned by hand with hoes and trowels after machining and the features thus revealed were excavated and recorded. In trench III a further 0.2 to 0.3m depth of modern soil layers was removed by hand until natural subsoil or archaeological features were encountered.

Contexts of prehistoric, Romano-British, medieval and postmedieval date were uncovered as well as a number of undated features.

Prehistoric contexts (Fig. 3)

A buried soil layer (270) in trench III produced 5 flint flakes, two of them worked. A pale brown brickearth, it overlay the natural brickearth at the south end of the trench. Its maximum thickness was *c.*0.1m and it tapered out about 1.5m from the south end as the modern contexts became deeper. A flint was also found on the interface (271) of (270) with the layers above. Twelve other flints were found in later or unstratified contexts in all three trenches.

No features of definite Iron Age date were found, though two or three sherds of flint-tempered pottery, one probably Middle Iron Age, the others undatable, were found in later contexts in trench I and III.

Romano-British contexts (Figs 3 and 4)

A total of four definitely Romano-British features were uncovered, two each in trenches I and II.

In trench II a small gully, F112, was found running approximately north to south, *c.*1.0m wide, 0.3m to 0.4m deep (Fig. 4 C-C'), with a varying profile along its length. It may have been recut, since its upper fill (113) is very distinct from its lower fills (114, 115), being virtually pebble-free, and appears to lie in a small, V-shaped cut. The most likely interpretation of the feature is a small boundary ditch. The fills contained pottery of probably 3rd to 4th century AD.

A squarish pit F124, *c.*1.4m across, 0.6m deep (Fig. 4, B-B'), was sectioned by the west side of trench II; its upper fill (125) contained pottery of 3rd to 4th century AD and Roman tile.

At the north end of trench I two deep pits (F5, F45) were found; their total dimensions were not obtained since they were not completely revealed in plan. However, it could be seen that the larger pit, F5 was oval in shape, *c.*2m wide, probably 3m long and 2m deep below the bottom of the modern deposits (Fig. 4, A-A'). It had vertical sides and a flat bottom. It contain several layers all of which appeared to have been deliberately dumped into the pit; many con-

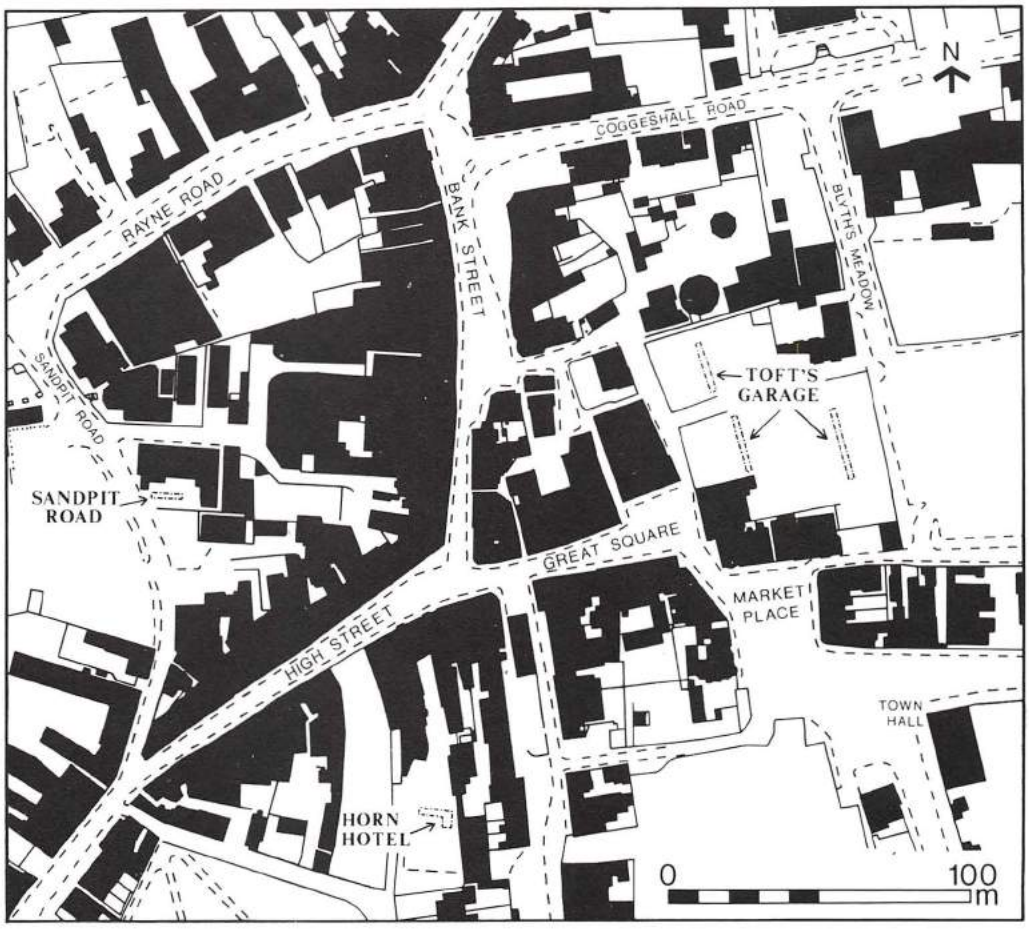

Fig. 1 Location of Sites.

tained cess staining, though others resembled backfilled natural brickearth containing Roman tile and 2nd and 4th century pottery. A later pit F45 cut F5 and was visible in the north and west sections of trench I. Its fill was very uniform, a dark cess-stained olive-grey sandy silt with sparse pebbles and a few Roman tile fragments but no datable finds. It was probably square in plan with rounded corners, smaller in area than F5, but 0.5m deeper. It was almost certainly a latrine pit.

A shallow depression in trench III, F258, produced some 2nd to 3rd century pottery and a few medieval and post-medieval sherds which may be intrusive, considering the amount of modern disturbance in the area (Fig. 4, H-H').

Residual Roman finds were discovered in medieval, post-medieval and modern contexts; the pit F7 (see below) in particular produced pottery of 2nd and 3rd century date.

Medieval contexts (Figs 3 and 4)

Four features in trench I were probably 13th to 14th century in date.

A large feature, F52, probably the butt end of a ditch running north to south, was uncovered at the south end of the trench. The butt end was squarish in plan, with shallow sloping sides and a flat bottom. It was *c.*0.9m deep below the surface of the natural (Fig. 4 G-G'). The top 0.65m appeared to be a recut, F32; its fills (33, 51, 63) were much less stoney than those of F52 (49, 50) and produced more finds, though both ditch and recut produced pottery of 13th to 14th century date.

Two small features, F19 and F34 contained pottery of a similar type to the fill of ditch 32. F19 was a small pit 0.4m in diameter, 0.35m deep, the sides of which had been lined with yellow clay, which in places was burnt to a reddish-orange colour (Fig. 4, F-F'). F34 was small and shallow, *c.*0.8m wide, 0.1m deep and oval, though slightly irregular in plan. It was probably the very base of a small medieval pit. Its fill (35) produced several sherds of 13th to 14th century pottery, as well as pegtile and oyster fragments.

Two features F42 and F46 seemed to cut the upper fill of F32 near its northern edge. Both were small and irregular, possibly postholes. They were sealed by four soil layers (11, 12, 13, 31) which contained pottery of 14th to 15th century date. (Layer 31 produced a fragment of 17th century pot, but this was probably intrusive).

At the south end of trench II, the bottom two layers of a large ditch F122, *c.*1.5m deep, running east to west, were seen, almost entirely re-cut by the post-medieval boundary ditches F129, and later, F118 (see below). It would seem that F122 is the remains of an earlier boundary ditch along the same alignment as the later ditches, and though containing no medieval pottery in its own layers, F129 contained a residual sherd of 13th century greyware which may represent the earliest use of F122. F246 in trench III is probably a continuation of F122; though appearing shallower in section. This is due to the deeper deposits of modern layers

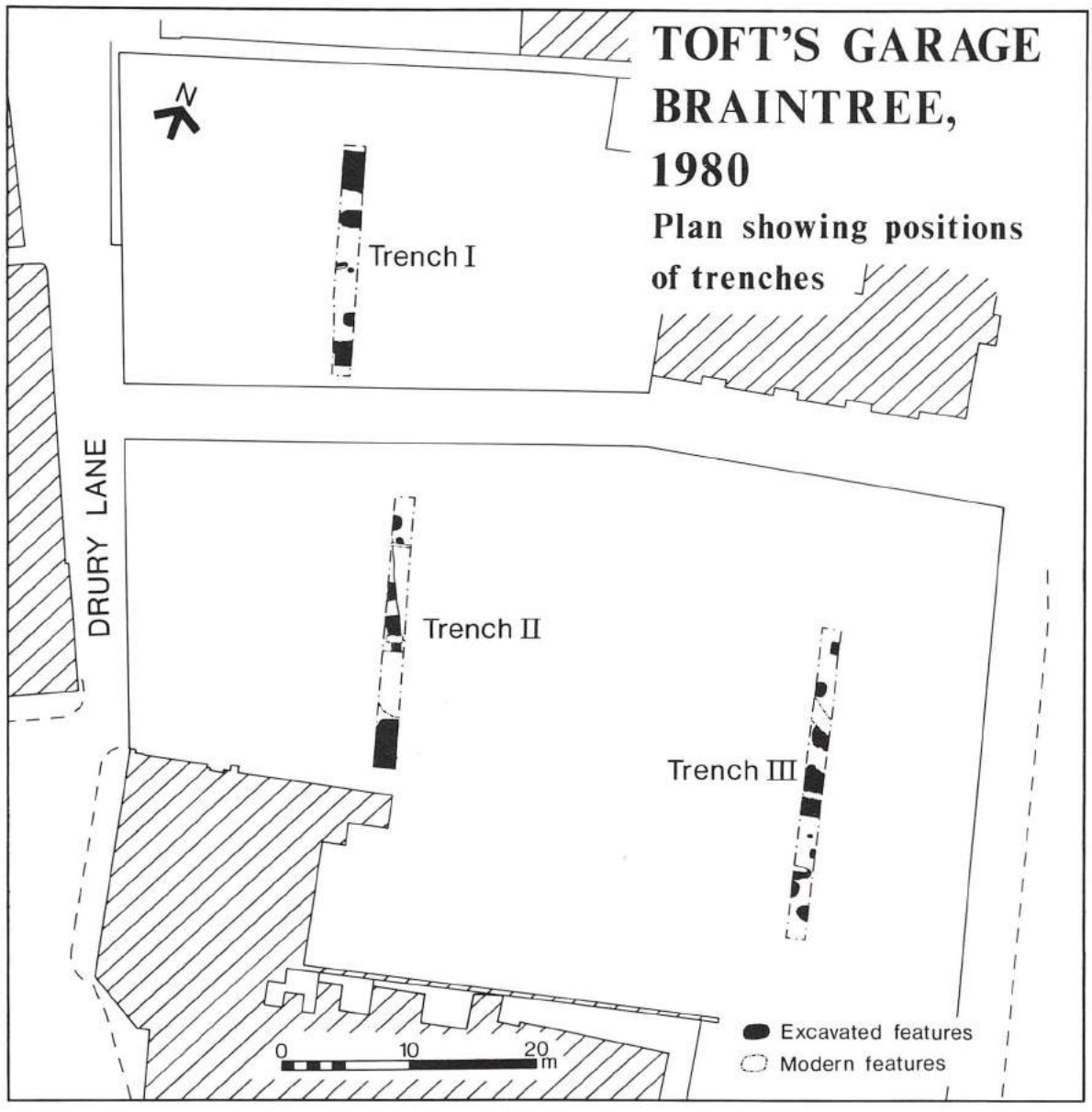

Fig. 2 Toft's Garage, Braintree 1980. Plan showing trench positions.

sealing it which had been removed. Its relationship to F258 could not be determined due to disturbance from modern wall foundations.

F224 in trench III was a square-shaped feature *c.*0.3m deep, probably the base of a pit. It contained pegtile fragments and is therefore medieval or later.

Post-medieval contexts (Figs 3 and 4)

In trench I the soil layer (31) was sealed by a gravel layer (61) varying in thickness from about 4 to 100mm (Fig. 4, G-G'). This was probably bedding for a more firmly cobbled layer (60) and a similar layer (21) above that. These deposits were probably two phases of a 16th century road or cobbled yard surface. Its northern edge was cut by modern features. Several sherds of medieval and post-medieval pottery were found among the cobbles. About 9m to the north of the cobbled surface an oval pit, F7 was found, *c.*1.5m wide, 0.5m deep (Fig. 4, D-D'), which produced 16th century pottery as well as many residual Roman and medieval sherds.

A pit or small posthole, F119, in trench II produced one sherd of *c.*15th century pottery. Near the south end of the trench a large pit, F142, was uncovered. It was *c.*1.0m deep (Fig. 4, E-E'), though its size and shape could not be determined, since most of it had been removed when the ditch F129 was dug to the south. This ditch, in turn, was cut by the ditch F118. The fills of F118, F129 and F142 contained a large amount of debris, including 16th century pottery pegtiles and iron objects. It would seem, therefore, that F142 was backfilled and the two ditches dug and backfilled in fairly quick succession.

Three small features in trench III, F220, F262 and

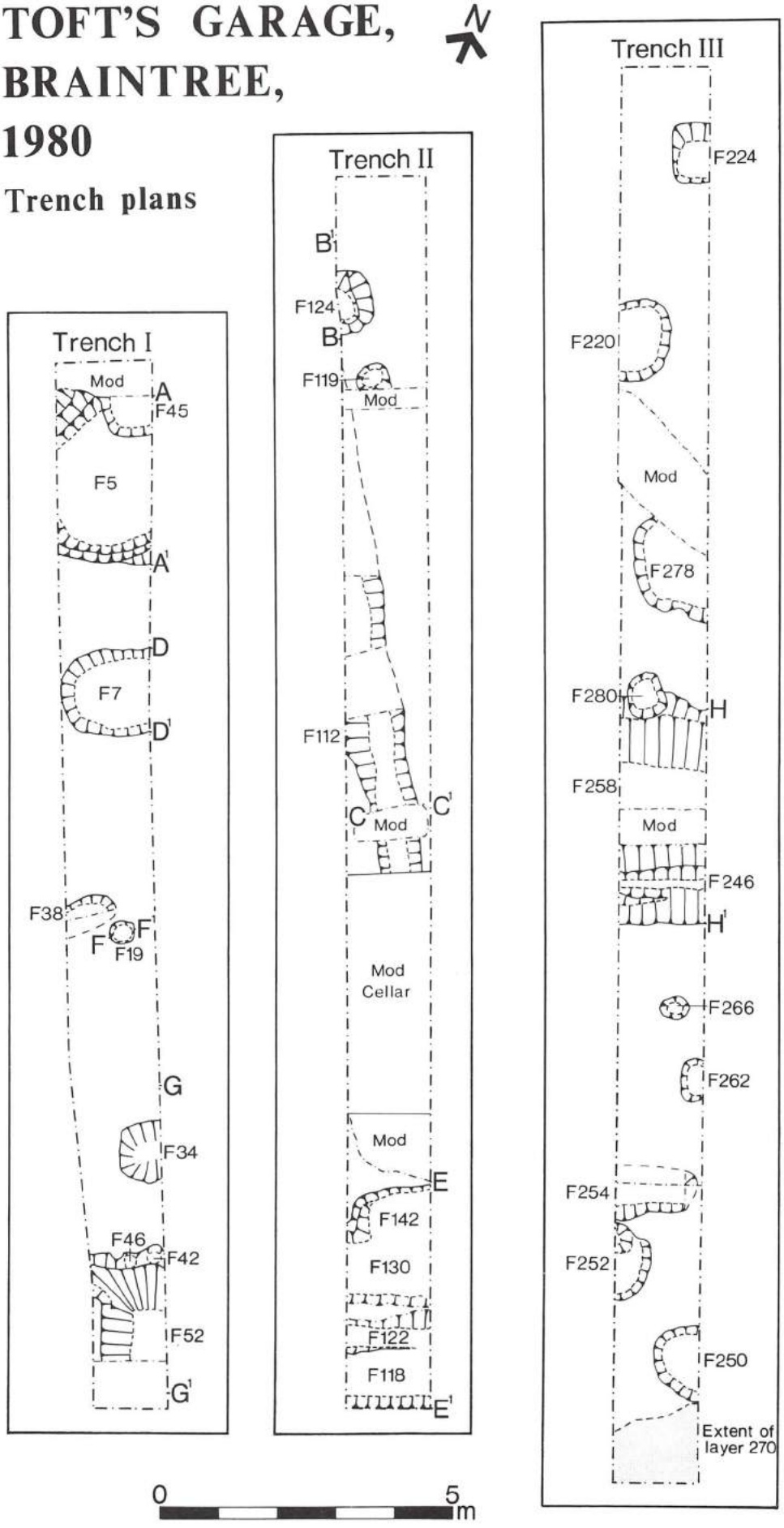

Fig. 3 Toft's Garage, Braintree 1980. Detailed trench plans.

TOFTS GARAGE, BRAINTREE, 1980

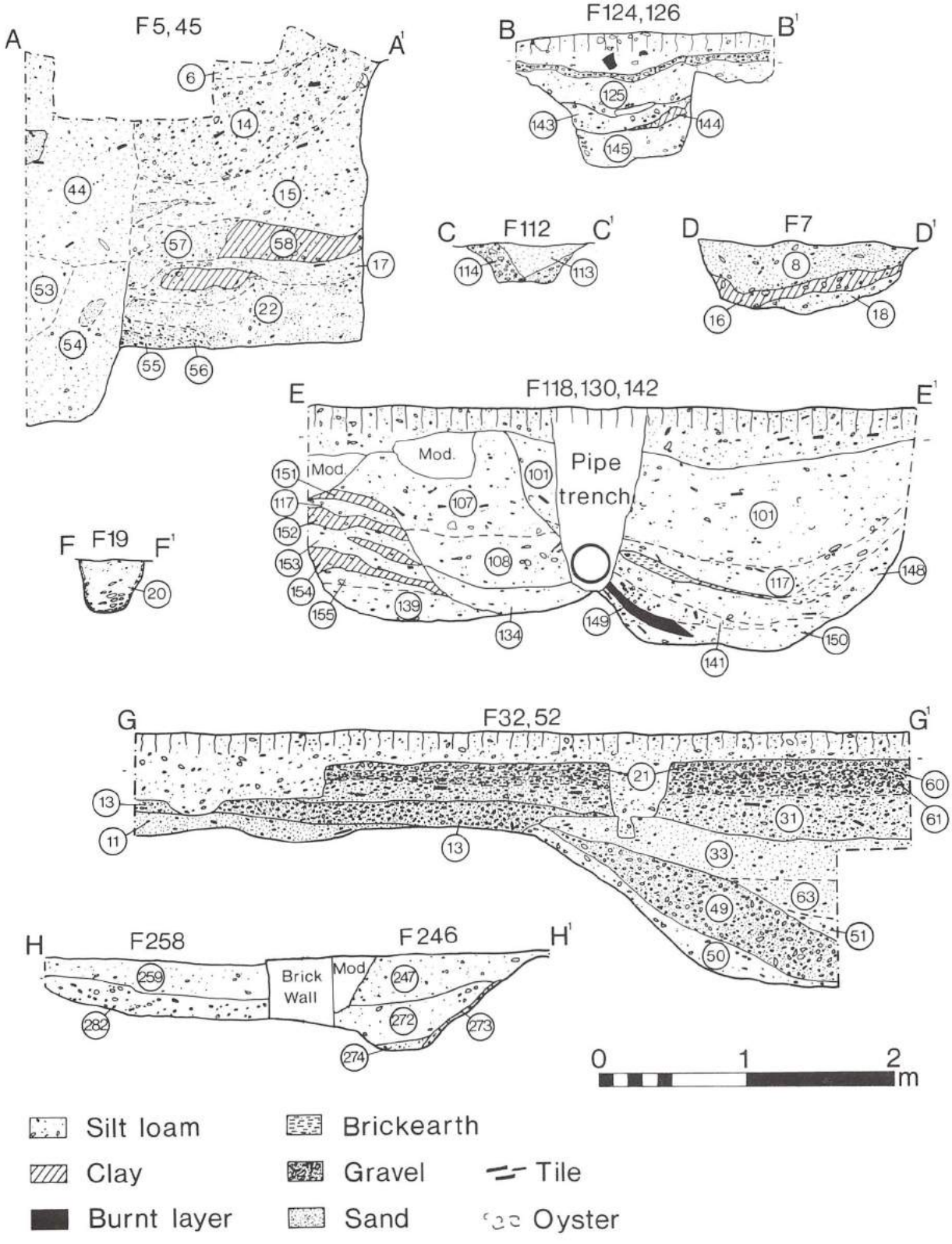

Fig. 4 Toft's Garage, Braintree 1980. Sections.

F266, all very shallow, produced pottery of *c.* 16th century date.

Other Features (Fig. 3)

A number of features were found which contained no datable finds, or had no apparent relationship with other datable features or stratified layers. These included F38 in trench I and F250, F252, F254, F276, F278 and F280 in trench III.

All three trenches suffered a large amount of modern disturbance, especially trench II, where a cellar and an adjacent modern pit took up about a quarter of its length. A variety of modern features were uncovered, including wall foundations, pipe trenches, pits and postholes.

The Finds

I Iron (by Hilary Major)

Thirteen pieces of iron were found, all in post-medieval contexts; a stake, two knife blade fragments, four complete nails and fragments from six other nails.

II The Flint (by Hazel Martingell)

A total of 18 worked flints were recovered during the excavations, consisting of nine unretouched flakes and blades, 3 flakes with fine retouch, 2 scrapers, 1 core, 1 notched piece, 1 denticulate, and a simple nosed/awl piece. Six of these (all flakes, 3 with retouch) were found in the brickearth layer (270) and the layer above (271), the rest were from secondary contexts.

The raw material used was taken from the local river gravels and the clay-with-gravel that is common in Braintree. The core is single-platformed with irregular flake removals; the scrapers are small, *c.* 25 mm long, one is a primary flake with retouch around the distal edge, the other is very fragmentary; the notched piece and the denticulate are well made, irregularities are due to the poor quality of the local flint material.

With the absence of any diagnostic pieces this collection simply adds more general Neolithic, Bronze Age and later flint work to that already recorded from the Braintree area.

Drawings of the flint work and a list of contexts from which they were recovered are available in the archive.

III Quernstone (by D.G. Buckley)

Two fragments of lava quernstone, almost certainly of Roman date were found, one from the fill (114) of the ditch F112, (probably 3rd to 4th century), the other from a modern trench F4 cutting the top of the Roman pit F45 (3rd to 4th century).

IV The Pottery

Pre-Roman and Roman Pottery (by Catriona Turner)

The pottery consists of *c.* 330 sherds (*c.* 6700 grams), all of which, with the exception of two or three small residual prehistoric sherds, appear to be Roman. Apart from the pottery from the fills of pit 5 which contained comparatively large surviving sherds, most of the pottery recovered from the site consists of small sherds or fragments.

The only features for which a Roman date can be suggested on the basis of the pottery are pit 5, pit 124, gully 112, and possibly depression 258. The latest pottery from the two pits is 3rd or 4th century AD. Of the few sherds recovered from gully 112, one may also be late Roman, possibly late 3rd or 4th century AD. Depression 258 contained a disproportionately high number (47) of Roman sherds in comparison with the few (2) medieval sherds present. If the latter are considered to be intrusive it is possible that the fill (259) was also Roman, from which the latest pottery is a samian f.38 sherd, dating to the second half of the 2nd or early 3rd century AD.

Pit 5

Five of the fills of pit 5 contained pottery: fills 6, 14, 15, 17 and 22. The pottery is exclusively of Roman date and sherds from each of the fills have soil deposits (?cess deposits) adhering to their surfaces. The lower three fills (15, 17 and 22) all contained pottery of 3rd or 4th-century AD date, while the latest pottery from the upper fills (6 and 14) dates from early or mid-2nd to mid-3rd century AD. All of the sherds illustrated in Figure 5 were recovered from the lower three fills:

Fig. 5.1 Hadham cream-slipped ware, ?jug or flagon. 2nd century AD. Fill 15.

Fig. 5.2 Black-burnished ware. The wider date range for this form is early 2nd to mid-4th century AD. However, this example may be typologically early within the wider date range since a similar example from Southwark is from a pit-group dated Trajanic-Hadrianic (Hammerson and Murray 1978, 116, fig. 42, no. 230). Fill 15.

Fig. 5.3 Coarse ware jar or bowl in sandy grey ware fabric, with burnished cordons and comb-incised wavy-line decoration below. Jars with this arrangement of wavy-line decoration below shoulder cordons have been recorded from Brampton, Norfolk, from an early 2nd-century AD ditch fill (Green 1977, 71, fig. 31, nos 94 and 97). Fill 15.

Fig. 5.4 Coarse ware bead-rimmed jar with rilled shoulder, in sandy grey ware fabric. The wider date range for jars of this type is 3rd or 4th century AD. A similar jar, also from Braintree, was recovered from layers dated *c.* AD 280-330 (Drury 1976, 52-3, fig. 25, no. 92). This example is distorted and may have been a 'second' or kiln waster. Two joining sherds from fills 15 and 17.

Fig. 5.5 Colchester colour-coated ware, Colch f.391 barbotine scale-decorated beaker. Similar vessels have been recorded from kiln sites in Colchester (Hull 1963, 102, fig. 58, no. 2: Anderson 1980, fig. 13.5), dated *c.* AD 120-180. Fill 17.

Fig. 5.6 Coarse ware straight-sided dish: micaceous black fabric tempered with very fine to fine sand and burnished overall. Possibly a variant of Cam f.13 platter types. 1st century AD. Fill 22.

Fig. 5.7 Coarse ware Colch f.299 type jar or bowl: red-brown core, grey surfaces; tempered with abundant fine sand; burnished externally in a zone above the girth groove, in bands below and on the internal rim surface. 1st or early 2nd century AD. Fill 22.

Fig. 5.8 Grog-tempered ware large storage jar with stab-decorated shoulder. Jars of this type were produced in the Mucking kilns in the 3rd and 4th century AD (Mucking type S; Jones and Rodwell 1973, 33, fig. 10, nos 108-112). Fill 22.

Medieval and Post-medieval Pottery (by Rhona Huggins)

Of the stratified medieval features, the only sherd of shelly ware occurred in pit F7 with later pottery, so no feature can be dated earlier than the 13th century.

Ditch F32 contained in its upper fill large parts of three flanged-rim, grey, sand-tempered cooking pots and jug sherds which are all consistent with a date of *c.* 1250 to 1350. The features F19 and F34 produced four grey sandy ware sherds of a similar date. Layer (50) of ditch F52 produced two medieval sherds. Residual medieval pottery was found in later contexts. Almost all the medieval pottery found was of local fabrics, the only possible import being the sherd with applied strip (Fig. 6.4), probably from the arm of a face urn jug, probably Hedingham ware.

The large group of 16th century ware from the boundary ditches F118 and F129 and the pit F142 consists of large unworn sherds, many of which join to form complete profiles, suggesting deliberate filling. The group includes only two fragments of Rhineland mugs and several fragments of black or dark brown glazed 'Cistercian' ware which are perhaps the commonest imports of the period throughout England. These imports are here copied in local fine redware with orange/brown glaze, the brown sometimes being reduced to produce olive green. These orange-glazed wares have been seen at Waltham Abbey (Huggins 1972, 105, nos 100-2) in a Dissolution context of 1540 together with Raeren and 'Cistercian' wares.

The Braintree group provides a good representative collection of local wares in use in the mid 16th century and the range of pot types in use in the domestic circumstances of the time. Together with these fine ware cups, jugs and chafing dish, which would appear at table, there is a costrel, storage jars and pipkins of the usual Essex redware with brown glaze sparsely applied. Two of the storage vessels have a similar mark scratched on the base of the handle after firing.

Medieval Pottery (Fig. 6)

1 Rim, sandy fabric, reddish with dark surfaces, late 12/13th century. Pit F42, layer (43).

2 Rim, sandy fabric, grey with grey surfaces, 1250-1350. Pit F7, layer (8).

3 Rim, sandy fabric, grey with dark surfaces, 1250-1305. Pit F7, layer (8).

4 Sherd of jug, pinkish buff fabric, fine slightly micaceous, applied strip decoration, possibly an arm of a face jug, pale green glaze outside overall. 1250-1350. Pit F7, layer (16).

5 Handle fragment, sandy ware, red with grey core, 4 deep grooves on back, mottled green glaze. Pit F19, layer (20).

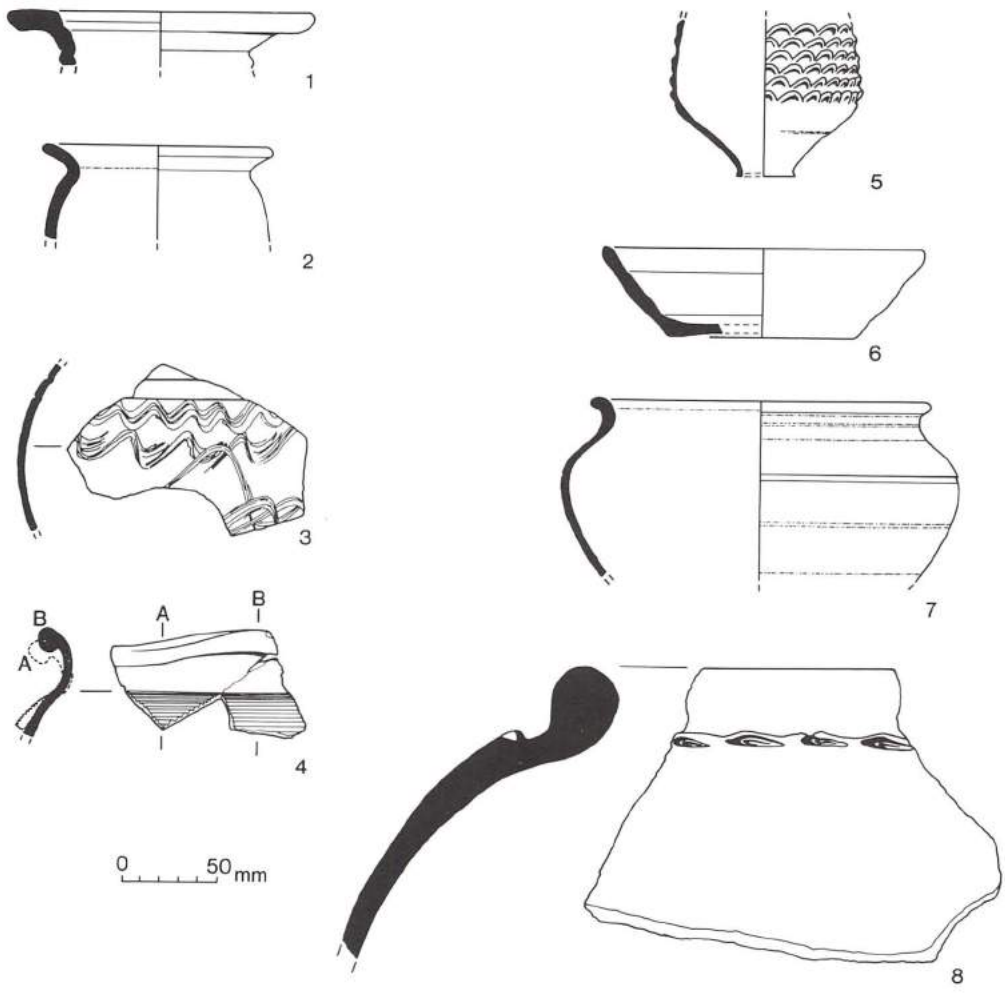

Fig. 5 Toft's Garage, Braintree 1980. Romano-British pottery.

6 Flanged rim, sandy fabric, greyish/red, blackened outside surface, light brown inside; large part of rim found. 1250-1350. Ditch F32, layer (33).

7 Flanged rim, sandy fabric, reddish, darker surfaces on and outside rim. Ditch F32, layer (33).

8 Everted rim, sandy fabric, grey. Ditch F32, layer (33).

9 Jug rim with scar of strap handle, sandy fabric, light grey surfaces, reddish core, unglazed. Ditch F32, layer (33).

10 Rim with pushed out lip, sandy fabric, red with traces of glaze outside. Ditch F32, layer (33).

11 Base with thumbed strip applied to wheel thrown base, sandy fabric, red. Ditch F32, layer (33).

Post-medieval pottery (Figs 6 and 7)
Illustrated sherds 12 to 41 inclusive are mid-sixteenth century material from the fills of boundary ditches 118 and 129 and pit 142.

Fine redware with orange/brown glaze outside and partially inside.

12 Jug with rilling below neck, single handle deeply thumbed at bottom, reconstructed with collared non-fitting neck. 8.5cm base diam.

13 Another similar jug of larger size, similar profile, 10cm diam. base.

14 Chafing dish, deeply thumbed outside base and below bowl, rim with one of three horns, no holes present in bowl, base is hollow with central 5cm hole cut out before firing.

15, 16 Mug with collar.

17 Mug with deeper collar and handle from base, incurving body.

Fine 'Cistercian' type ware, dark brown glaze both sides.

18 Rim of costrel with one of two pierced applied handles, fabric red with grey core.

19-22 Rims and bases of four cups, glazed both sides except partially on outside of bases, applied yellow strip 'blobs' on body. Groups IV & VII (Bellamy 1965, Fig. 38).

Coarser redwares, brown glaze.

23 Large storage vessel with two strap handles and sagging base, glazed outside.

24 Jug rim and handle, two ridges on back of handle. A similar rim was found of another jug.

25 Lid-seated rim, reduced fabric with green glaze on rim only, reddish surface.

26 Rim of small lid, unglazed.

27 Pipkin with flat base and spike handle, glaze inside base, one of three similar pots, all with nearly complete profiles.

28 Small storage vessel, handles missing, worn outside with traces of glaze.

29 Oval dish with spout pushed out opposite spike handle on long sides, glazed outside, heavily blackened on spout side.

30 Small pot with traces of green glaze on reduced grey fabric.

31 Rolled rim pot with brown glaze on top of rim.

32 Angular rim, unglazed.

33 Bowl with thin brown glaze inside.

34, 35 Rim and body sherd with white slip-painted decoration.

36-8 Rims of three flanged plates or bowls, 30cm diam.

39 Rim of large bowl 38cm diam., reddish worn glaze inside.

Stoneware, imported.

40-1 Base and body sherd with handle of two similar jugs (base found in gravel surface (21)), light grey glaze and fabric.

V Bone (by Fiona Taylor)
A total of 183 bone fragments were examined, almost totally from post-medieval contexts, of which 120 (65.5%) could be identified to species. The relative percentages of the total number of fragments found for each species are as follows: cattle; 58.3; sheep/goat, 16.7; pig, 14.2; dog, 5.0;

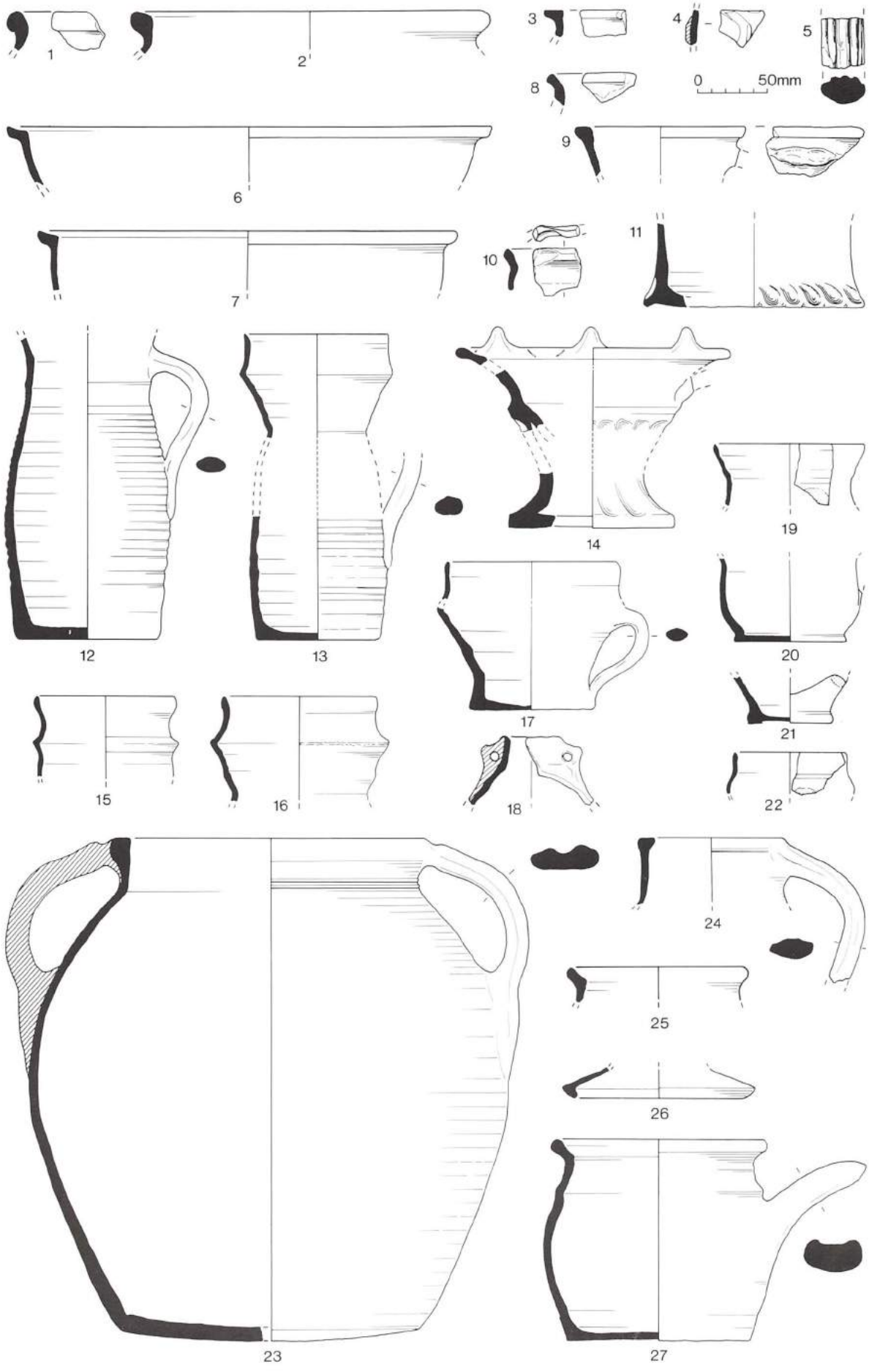

Fig. 6 Toft's Garage, Braintree 1980. Medieval and post-medieval pottery.

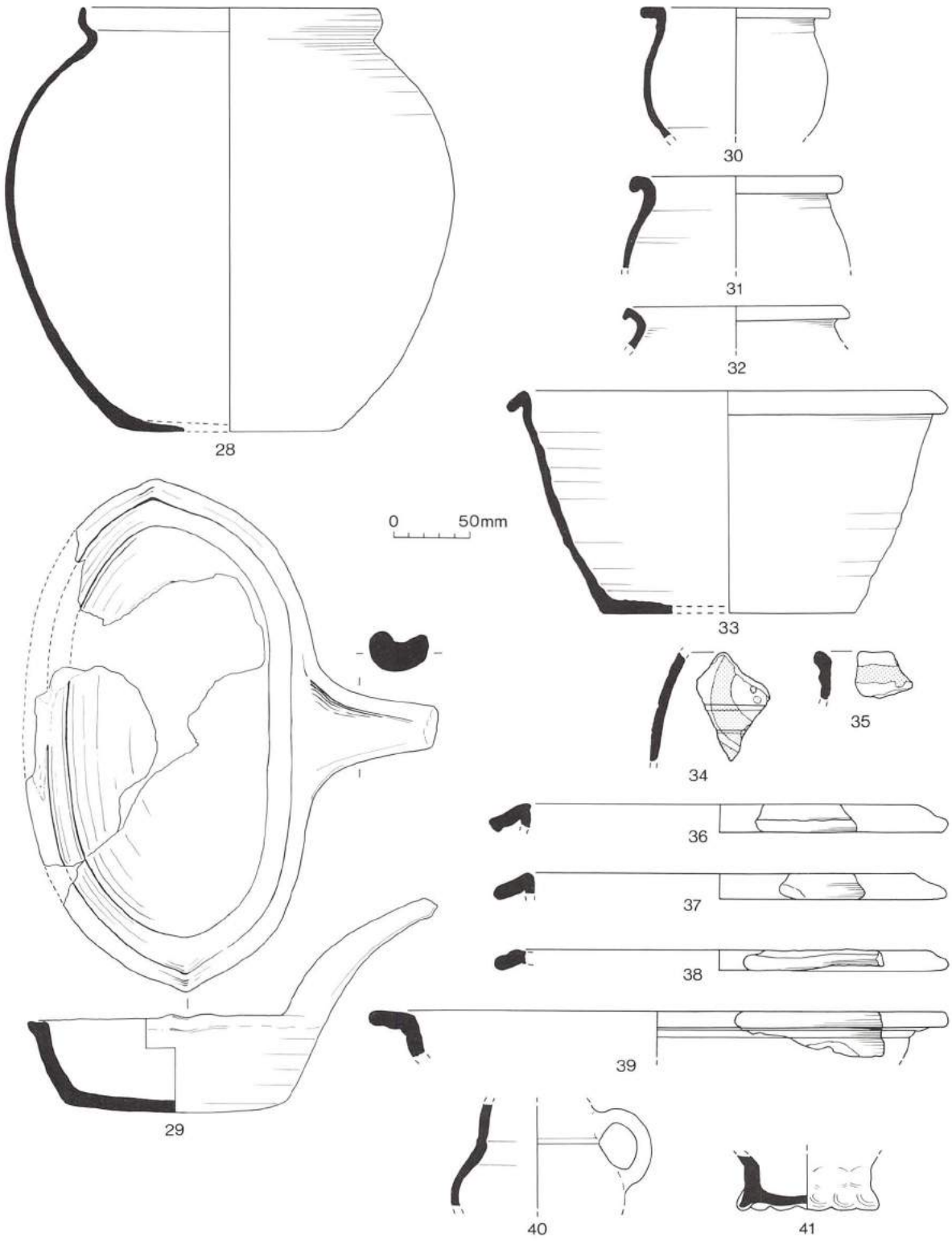

Fig. 7 Toft's Garage, Braintree 1980. Post-medieval pottery.

fowl, 4.2; horse, 0.8; bird (unidentified), 0.8. A full statistical analysis of the bone material is available in the archive.

VI Shell

Oyster shells were found in many Roman and later features, especially concentrated in mid 16th century contexts in trench II and the cobbled layer (21) and underlying layers in trench I. No other species of mollusc was found.

VII Tile

Large fragments of Roman tile were found in the layers of the large pit F5, a few fragments were found in other Roman and some later contexts. Pegtile fragments were found in many of the post-Roman contexts, especially in the 16th century fills of the boundary ditches.

Discussion

The scatter of Neolithic and Bronze Age flintwork in all three trenches and in the buried soil layer (27) would seem to attest to the picture of Braintree as an area of colonisation by the earliest farmers and subsequent development during the Bronze Age. Contemporary prehistoric finds nearby include two pits, one containing middle Neolithic pottery and the other containing late Bronze Age pottery and domestic refuse, excavated during building development in Fairview Estate (Couchman 1977, 70-4); at Skitts Hill an early Bronze Age knife, flint arrowheads and pottery were found in 1899 (E.S.M.R. TL72/40).

The total absence of finds dating to the late Iron Age is worthy of comment, since it adds to the evidence from the excavations at Mount House in 1984 (Bedwin, 1984/85) and Blyths Meadow (Eddy 1983) of sparse late Iron Age activity within or near the Braintree Earthwork, previously thought to be an oppidum. A full discussion of the earthwork is available in Owen Bedwin's report on the Mount House excavation.

The discovery of several Romano-British features and the presence of a scatter of Roman pottery in later deposits suggests a certain amount of settlement activity which would confirm the opinion that the site lay near to, but outside the main area of the Roman town. The features were fairly sparsely distributed and no evidence of buildings was found.

In medieval and post-medieval times the site lay at the back of properties on the east side of the market. The boundary ditches in trenches II and III, (F118, F247), though later backfilled in the 16th century, were probably medieval in origin. The gravel layers (21) and (60) were probably the remains of a gravelled yard surface behind a 16th century property, since there is no evidence from the present street plan to suggest a road in this area.

Acknowledgements

The author is grateful to J. Sainsbury Ltd. for allowing access to the site and to Mike Eddy who made arrangements for, and gave advice during the excavations. Thanks are due to the following specialists for their reports: Dave Buckley (quernstones); Rhona Huggins (medieval and post-medieval pot); Hilary Major (iron); Hazel Martingell (flint); Fiona Taylor (bone); and Catriona Turner (Roman pottery). The digging team consisted of pupils from Bramston school, Witham, supervised by John Hope, who worked unpaid in often sub-zero temperatures; the excavation was supervised by Dave Hosking. The illustrations were drawn by Ruth Parkin and the author. The excavation was funded by Essex County Council. The finds will go to Braintree Town Hall.

Excavations at Sandpit Road, Braintree 1984

by Owen Bedwin

Introduction (Fig. 1)

Previous excavations within the Roman town of Braintree (Drury 1976) have established the presence of a Roman road and contemporary structures (2nd - 4th centuries AD) along the south side of modern Rayne Road. In addition, probable Roman road lines have been found along the Coggeshall Road, High Street and Bank Street. On the evidence currently available, Braintree Roman town was never walled or defended, and so the layout of the town would appear *not* to follow the grid-like pattern familiar from the excavation of many Roman towns. Drury (1976) has suggested an alternative pattern, namely ribbon development along the Roman roads which intersect at Braintree. It was possible to demonstrate the presence of Romano-British timber-framed buildings facing onto a much-renewed gravel road along the line of the modern Rayne Road (Drury 1976), but elsewhere, excavation has not been on a sufficient scale to test the idea of ribbon development thoroughly. If it is correct, then certain areas in the modern town would have been 'backland' in the Roman town. One of these areas is now the Sandpit Road car park, lying between the Roman roads corresponding to modern Rayne Road and the High Street.

The trial excavation at Sandpit Road described here was aimed at evaluating the survival of Romano-British levels in this area, with a view to deciding whether much larger-scale work, to be funded separately by the Manpower Services Commission, would be justified. The excavation took place during the last week in March 1984 under the direction of the author.

Excavation (Fig. 8)

The trench measured 10m by 1.5m, and was cut into the surface of a temporary car park on the east side of Sandpit Road (TL 7559 2310). The stratigraphy was relatively straightforward. Beneath the gravel and compacted hard core (contexts 1 and 2) of the car park surfacing, was a humic layer (context 3), probably an old soil. This contained 19th and 20th century pottery, tile and clay pipe, plus an almost complete dog burial, presumably that of a pet. This soil layer was directly over a subsoil of variable, slightly sandy gravel, into which a number of features were cut. These proved to be either Roman or post-medieval (17th century or later). The exception was gully 5, which contained 30 sherds of pottery, 28 of which were Romano-British, and 2 were medieval. The gully may therefore be the only medieval feature or it could be Roman, with intrusive medieval sherds.

The two substantial pits, contexts 7 and 22, were definitely Roman; post hole 31, which was sterile, may also be Roman. The two pits, cut *c.*1m into the subsoil, both contained substantial amounts of domestic debris, especially large unabraded sherds of pottery and animal bone. There were no surviving Roman occupation levels, unlike the findings at Rayne Road (Drury 1976).

SANDPIT ROAD, BRAINTREE 1984

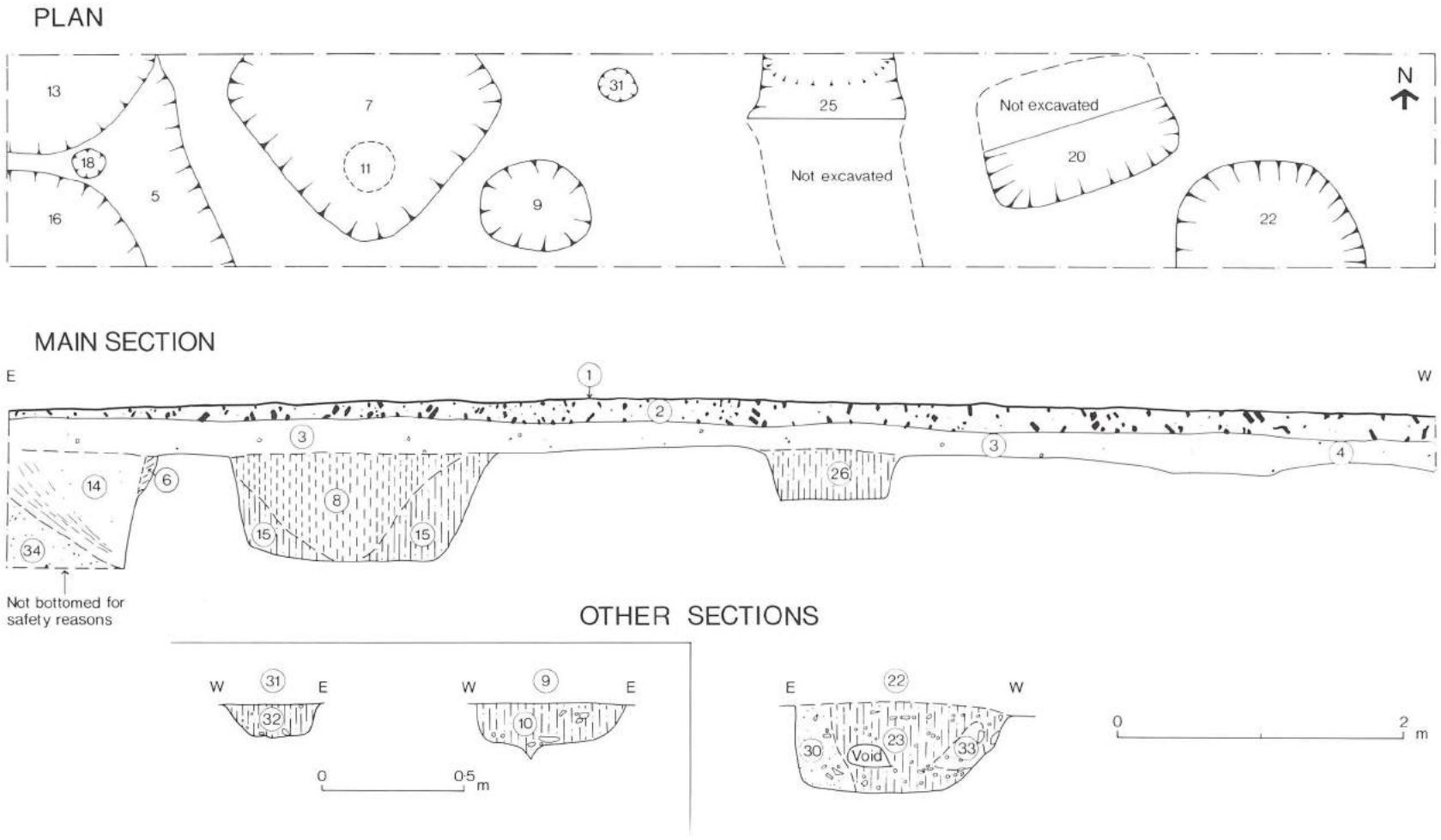

Fig. 8 Sandpit Road, Braintree 1984. Plan and Sections.

Discussion

The trial trench established that Roman features did survive, i.e. there had been no wholesale destruction by cellars, etc. The Roman pottery ranged from 2nd to 4th centuries, thus matching closely the date range established at Rayne Road; both sites lack unambiguously first century material. The animal bones from the Roman levels represented the 3 commonest food species, cattle, sheep and pig, but there were 3 examples of sawn bone fragments from post-medieval levels, suggesting some kind of bone-working establishment nearby.

The trench was too small to assess the status or function of the Sandpit Road area in Roman Braintree. With much larger scale excavation, however, it should be feasible to ascertain whether this area was backland between the Roman equivalent of Rayne Road and the High Street, or whether there was a road network here subsidiary to the main Roman roads already mentioned. Large area excavation would also be helpful in assessing the limits of the medieval town, which at present are not well understood.

The Finds

A. Bronze objects

Five bronze objects were found. Four were poorly preserved indeterminate fragments. The fifth was the pin (45 mm long) from a Romano-British fibula (context 6).

B. Iron objects

Seven badly corroded iron objects were found, all in Roman levels. There were two nails, one L-shaped bracket (135 mm by 60 mm), a ring 34 mm in diameter, two hooks and an indeterminate lump.

C. Pottery (by Catriona Turner)

Introduction

A small amount of pottery (*c.*800 sherds; *c.*10,500 grams) was recovered from the site, ranging in date from Belgic to modern. The comparatively small proportion of post-Roman pottery found is not discussed in this report but is recorded in the archive report. Apart from the larger surviving sherds from Pits 7 and 22 the majority of the Roman sherds recovered are small or fragmentary. Roman pottery was present in thirteen contexts of which only the pottery from Pits 7 and 22 provides useful dating evidence. Both pits contained late 3rd or 4th century AD pottery, with residual earlier material dating from the 1st or early 2nd century AD. The author gratefully acknowledges Brenda M. Dickinson for the identification of the samian in this report, which is extracted from the full specialist report which forms part of the archive.

Pit 7

The two fills of Pit 7 (contexts 8 and 15) contained exclusively Roman pottery. A join exists between a sherd from each fill suggesting the possibility of the fills being broadly contemporary. Most of the datable pottery from the lower fill (15) is not later than 2nd century AD and the latest of these sherds are derived from a flange-rimmed mortarium *cf.* Colch. f.497, dating to the second half of the 2nd century AD. However, this fill also contained sherds from a large jar decorated with comb-incised wavy lines (Fig. 9.5), *cf.* Alice Holt/Farnham Class 1A jars (Lyne and Jefferies 1979, 37-8), which may date to the 3rd or 4th century AD. The upper fill of the pit (context 8) contained late 3rd or 4th century AD wares including late Nene Valley colour-coated wares, a sherd of Hadham oxidised ware and rims of coarse ware flanged-rimmed dishes. Among the residual pottery from this context is a decorated sherd from a Central Gaulish samian f.37 bowl (Fig. 9.1), dated *c.*AD 125-145. Although the lower fill of Pit 7 contains datable pottery predominantly of not later than 2nd-century AD date the presence of the Alice Holt/Farnham-type decorated jar sherds suggest that the pit is of considerably later date and more likley to have been 3rd or 4th-century AD.

Pit 22

Apart from one small residual Belgic sherd in the top fill, all of the pottery from the fills of Pit 22 is of Roman date. Broad contemporaneity of the fills (contexts 23, 30 and 33) is suggested by several instances of either joins or similarities occurring between sherds from all three contexts. Contexts 23, 30 and 33 all contained sherds from a Hadham oxidised ware flagon (Fig. 9.6) of late 3rd or 4th-century AD date. A roller-stamped sherd (Fig. 9.3) from the upper fill (23), with probably a second sherd from the same vessel from context 30, is similarly of late Roman date, and late Nene Valley colour-coated wares were found in all three fills. A small sherd from a barbotine decorated (?folded) beaker (Fig. 9.4), which is possibly also Nene Valley colour-coated ware of the same date range, was found in context 30. Residual pottery of interest consists of joining decorated sherds (from contexts 23 and 30) from an East Gaulish samian f.37 bowl (Fig. 9.2), dated *c.*AD 180-260. The presence of the Hadham oxidised ware flagon sherds and a late Nene Valley colour-coated ware sherd in the lower fill, context 33, suggests evidence for a (?late) 3rd or 4th-century AD date for the infill of Pit 22.

Illustrated Pottery (Fig. 9)

Fig. 9.1 Central Gaulish samian f.37, in the style of Attianus ii of Lezoux. The leaf (Rogers 1974, no. J58), trifid motif and figure with draperies (Oswald 1936, no. 91B) are all on a stamped bowl from Lezoux (Coll. Sauvaget, formerly Coll. Chabrol - Janelle). The spindles are on a stamped bowl from Holt (Grimes 1930, 199 and 121).

Fig. 9.2 East Gaulish samian f.37. The ovolo, warrier, lion, leaf, rosette (Ricken and Fischer 1963, nos E46, M211, T2, P37 respectively) and perhaps the arcade (Ricken and Fischer 1963, no. KB138, but slightly smaller) occur on both bowls and moulds from Rheinzabern in a style which is related to those of Reginus II, Iulius I and Lupus (Ricken 1948, taf. 161, 2-4). These potters worked in the period *c.*AD 180-260.

Fig. 9.3 Dark grey micaceous coarse ware, tempered with abundant fine sand. 3rd or 4th-century AD.

Fig. 9.4 Pale cream fabric (including the barbotine motif) with black colour-coat overall. The colour-coat has a slightly metallic sheen. Possibly Nene Valley ware, ?3rd or 4th-century AD.

Fig. 9.5 Micaceous, sandy, grey to dark grey, coarse ware with comb-incised wavy line decoration. The sherd is distorted and may have been a 'second' or waster. 3rd or 4th-century AD.

Fig. 9.6 Hadham oxidised ware: orange-red external surface, grey-brown internal surface. The external surface has similar directional burnishing to that found on Hadham ware flagons from Aldgate (Harden and Green 1978, 170): executed horizontally on the rim, vertically on the neck, down to the level of the groove (and left untreated on the lower flange surface). Late 3rd or 4th-century AD.

D. Tile

A total of 72 fragments of tile weighing 2895g were found. Exactly half were Roman, the remainder post-medieval. Among the Roman tile fragments, all those big enough to be classified were *tegulae*, except for one large fragment of floor tile, 45 mm thick.

E. Flintwork

A single end scraper came from context 15.

F. Foreign stone

Two fragments of fine-grained sandstone came from context 15. Both were too small for their function to be established.

G. Glass

Only two fragments were found. One was from the base of a post-medieval bottle, the other, a tiny flat fragment, 1.5 mm thick, with faint green patination, was almost certainly Roman.

H. Clay pipe

A total of ten fragments were recovered. All were stem fragments of probable 19th or early 20th century date.

I. Burnt daub

A total of 34 fragments weighing 885g were found, exclusively in Roman contexts. Most were shapeless, but one, weighing 455g, was a large oval piece with smoothed external surfaces and three sockets in a line, for wattles of 10-15 m diameter.

J. Animal bone

Bone was well preserved; 196 fragments of bone, teeth and shell were identified, of which 157 came from sealed Roman contexts. (There were 49 unidentifiable fragments).

Of the Roman material, 89% was *Bos*, 7% *Ovis* and 4% *Sus*. The great preponderance of cattle compares fairly well with the material from Rayne Road (Drury 1976) though cattle there was not quite so dominant.

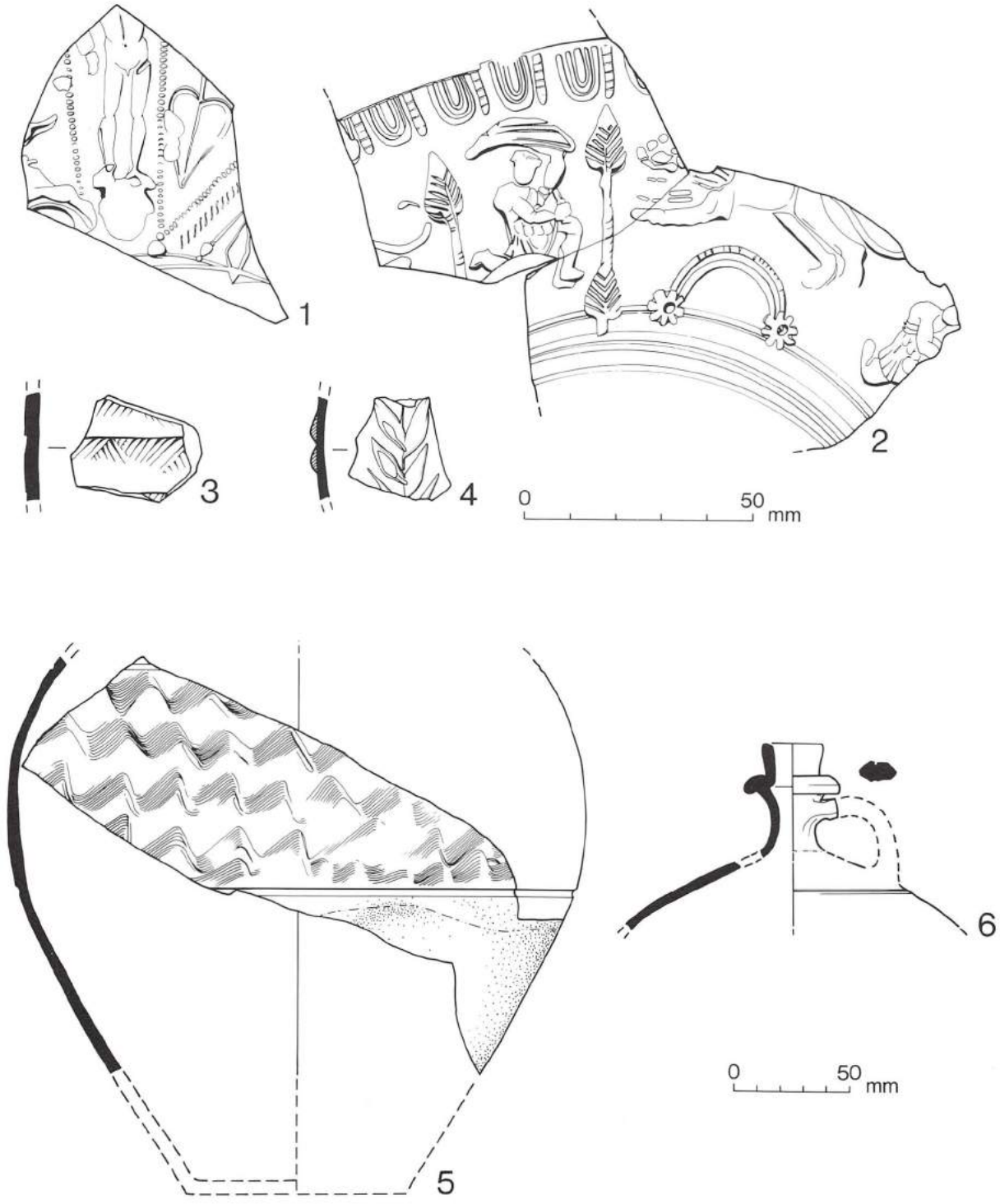

Fig. 9 Sandpit Road, Braintree 1984. Romano-British pottery.

A high proportion of *Bos* limb bones had been split longitudinally for marrow, and one *Sus* scapula had two chopping marks. The absence of horse is slightly surprising.

In addition, there were three examples of sawn *Bos* bones; a parallel-sided section, 16mm wide, through a pelvis, a neatly sawn-off tip of ulna, and another fragment of pelvis. These were all from post-medieval contexts, and are likely to represent some kind of local bone-working industry.

Acknowledgements

The author is grateful to Braintree District Council for permission to excavate, arranged through Derek Taylor. He also wishes to thank those who helped on site; Sandy Gray, Nick Lavender, Bill Faram and Matthew Beamish; also Catriona Turner for the pottery report, Sue Holden for drawing Fig. 9 and D.G. Buckley for general help and encouragement. The finds, plus archive, have been placed in Braintree Town Hall.

Horn Hotel, Braintree, Essex 1984

Reported by C.P. Clarke

Site centred on TL 7568 2299; SMR site no. TL 81-68; Site code BHH 84

An L-shaped trench measuring 10 x 5 x 1-1.5m was excavated by hand at the rear of the Horn Hotel (Fig. 1) in July 1984 prior to redevelopment. Natural subsoil was brown clay which became very pebbly at a depth of 0.65m below the top of natural. Natural clay was overlain by tarmac and hardcore over a disturbed soil containing 18th and 19th century building debris to a total depth of some 0.5m.

With the possible exception of an area of metalling overlying natural subsoil, visible as an area 4 x 2m within the trench and extending beyond the trench in the north-east, all features present were 18th and 19th century in date. The metalling, which was the stratigraphically earliest feature on the site, could be medieval or earlier. The recovery of three residual early Roman sherds is not considered significant: the absence of Roman or medieval features in this small trench, much disturbed by post-medieval building activity, can not be taken as a conclusive indicator that the Roman or medieval towns did not extend this far south of the High Street, nor is it unexpected that small amounts of Roman pottery will be recovered from a trench within 100m or so of the known area of Roman settlement (eg. Hope in Priddy (ed), 1983, 163).

Finds and Archive stored in The Castle Museum, Colchester (accession no. 223.1984).

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Old Copped Hall:

The Site of the Tudor Mansion[1]

by David Andrews

Summary

The site of the mansion built by Sir Thomas Heneage from 1564 has been located in the overgrown gardens of the 18th century house which superseded it. The sunken rock garden seems to be set in the cellars of the east wing, and a fragment of the arcaded loggia is still standing. No traces of occupation earlier than the Tudor mansion were found, but a handful of medieval sherds suggests that the medieval manor was situated nearby.

Introduction

Two of the more architecturally advanced of the many large houses that were built in Essex in the 16th century were to be found in the vicinity of Epping, Hill Hall and Copped Hall (fig. 1). The former, built by Sir Thomas Smith from 1557, was an ambitious exercise in the renaissance style (Drury 1983). Of Copped Hall virtually nothing survives. The mansion begun by Sir Thomas Heneage in 1564 was demolished by Sir John Conyers from *c.*1748, and replaced from *c.*1751 by the existing house which is now ruinous, abandoned after a disastrous fire in 1917.[2] A view of the earlier house was, however, published by Farmer in 1735 (plate 1), drawings were made of it not long before it was demolished, principally by Sir Roger Newdigate, and various descriptions of it are known. It was a large building comprising three wings ranged round a courtyard, linked on the north side by a one storey loggia. This loggia, with an arcade of round arches, seems to have been the most striking feature of a building which otherwise was relatively typical of its period, though it could boast an early example of a long gallery and much renaissance decorative detail (Newman 1970, 20-24). Alterations were carried out by Lionel Cranfield, 1st Earl of Middlesex, who acquired Copped Hall in 1623. These included the remodelling of the loggia so that its arcade was moved to face on to the courtyard instead of adorning the exterior of the building (Essex V, 123; Newman 1970, 24).

The location of Conyers' house was known to be different to that of Heneage's, but the exact position of this was uncertain (*cf.* Newman 1970, 28). It was generally thought to be in the now very overgrown gardens to the north of the 18th century house (fig. 2; plate 2). A length of brick wall revetting the south side of the sunken rock garden, and a fragment of standing masonry not far from the terrace wall which marks the north boundary of the gardens, were rediscovered in 1983 and provisionally associated with Heneage's mansion. In particular, the standing masonry, comprising brickwork and stone ashlar, looked very much as if it formed part of the loggia. It was to test these ideas, and by locating the position of the mansion to help with future site management (the ruin and its grounds were about to be put up for sale), that a programme of survey and excavation was carried out in 1984.

Excavation also had the potential for providing information on the origins of the site. Copped Hall is first recorded in the 12th century, when lands in the manor of Waltham were granted to the Aucher family for services to the Crown. The house stood almost on the boundary of the parishes of Waltham Holy Cross and Epping (the 18th century house was built on the other side of the boundary, in Epping parish), and presumably a sub-manor was created through forest clearance at the edge of Waltham manor. Copped Hall passed in 1350 to Waltham Abbey, which held it until the Reformation, when it passed to the Crown. Edward VI granted it to Princess Mary, and in 1558 it was leased to Sir Thomas Cornwallis. Of the buildings that occupied the site before this date it is only possible to speculate, but a survey made in 1563 recording alterations effected by Cornwallis mentions a hall, a great chamber, a kitchen, a court with a double gate and a moat (Newman 1970, 18). It is believed that Heneage, to whom Elizabeth granted the property in 1564, incorporated some earlier buildings in his new house, such as the hall recorded on a plan made in the 1740's as being in the west half of the south wing (Essex V, 123; Newman 1970, 19).

Survey and Excavation

A detailed survey was made of the rock garden to assess the topography of the area and the structural remains. Excavation concentrated mainly upon the wall along the south side of the rock garden, a number of small trenches being dug against it and a relatively large area opened at the east end where a continuation of the wall was found. In addition, four slit trenches were dug by machine along the eastern edge of the rock garden, and the topsoil was stripped in the area of the presumed fragment of loggia. Generally no more than the overburden was removed and the tops of walls exposed, though in places deeper sondages were made.

The area formerly occupied by the northern part of the gardens, and, as came to be demonstrated, by the Tudor mansion before them, is rectangular, about 65m by 105m, forming a sort of platform, to either side of which, except the south, the ground drops by up to 2m. To the east there is the farmyard, to the north fields, and to the west a walled garden (fig. 2). The ground slopes down from south to north across the site by about 1.5m, and from west to east by in excess of 1m. Despite the dense undergrowth and decades of neglect, the lay-out of the gardens attached to the 18th century house is still fairly clear. A path skirts the edge of the gardens, and another runs down the centre of them,

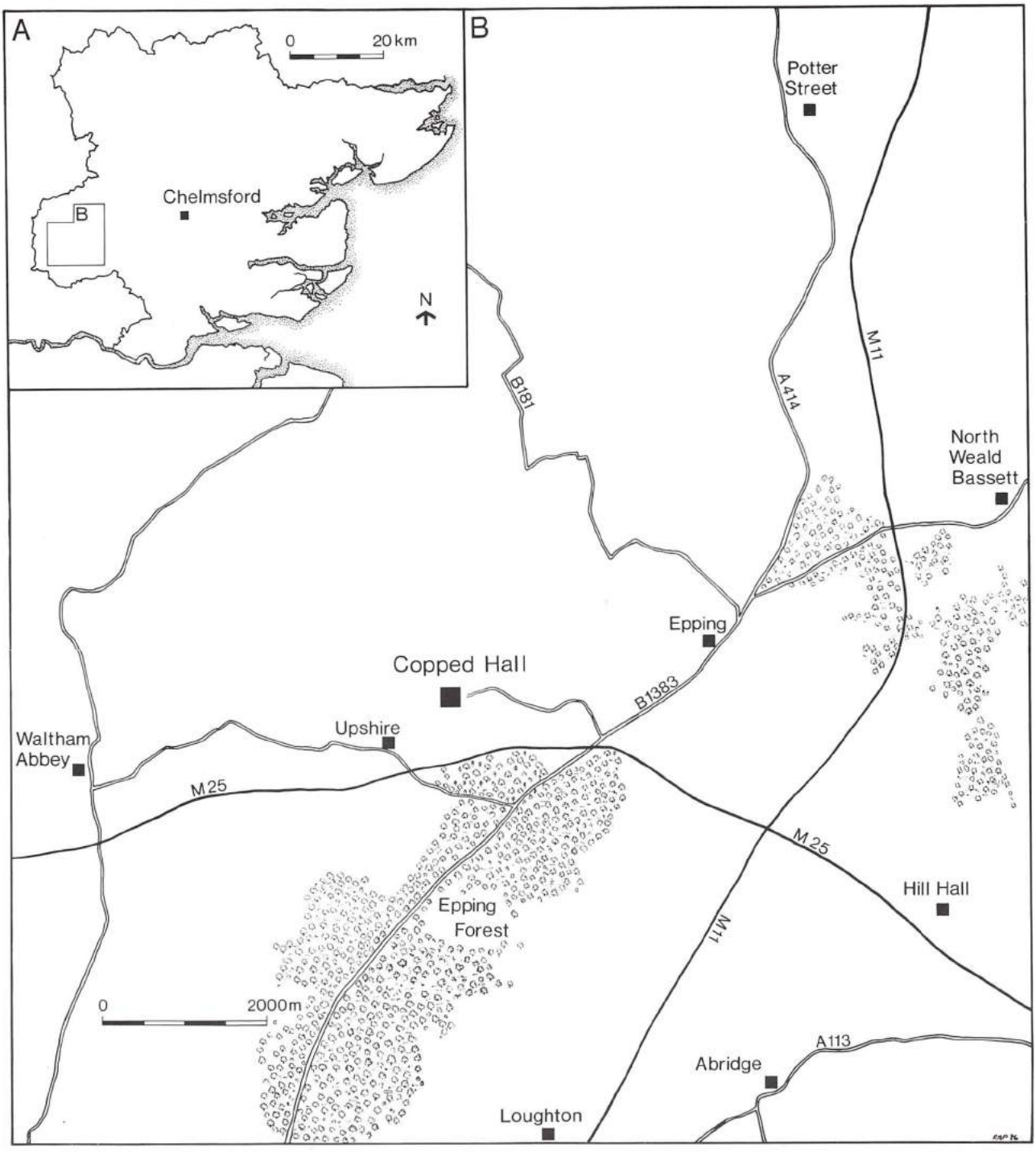

Fig. 1 Location map.

the northern part of this being sunken. Other sunken features are the rock garden, up to 1.5 m or more deep, with a scatter of granite or similar boulders round its sides, and the rose garden.

The survey covered the rock garden and its immediate surroundings (fig. 3). To the east it stopped at the path down this side of the gardens; to the west, there was no such boundary, its extent being determined simply by the position of the presumed fragment of loggia. Since neither the topographical features nor the structural remains, both those evident beforehand and those revealed by excavation, made any obvious sense in terms of the groundplan of the Tudor mansion, a plan made of this in the 1740's was scaled off and superimposed on the 1984 survey, the north-west corner of the courtyard being equated with the fragment of loggia (fig. 3). This revealed that the surprisingly irregular shape of the rock garden mirrors and must therefore have been determined by the plan of the east wing of the mansion. Wall alignments found in two of the slit trenches to the east of the rock garden correspond almost exactly with the projecting bays of this wing, whilst the western end of the revetment bordering the rock garden coincides with the south wall of the mansion. The eastern end of it, however, does not form part of the mansion but

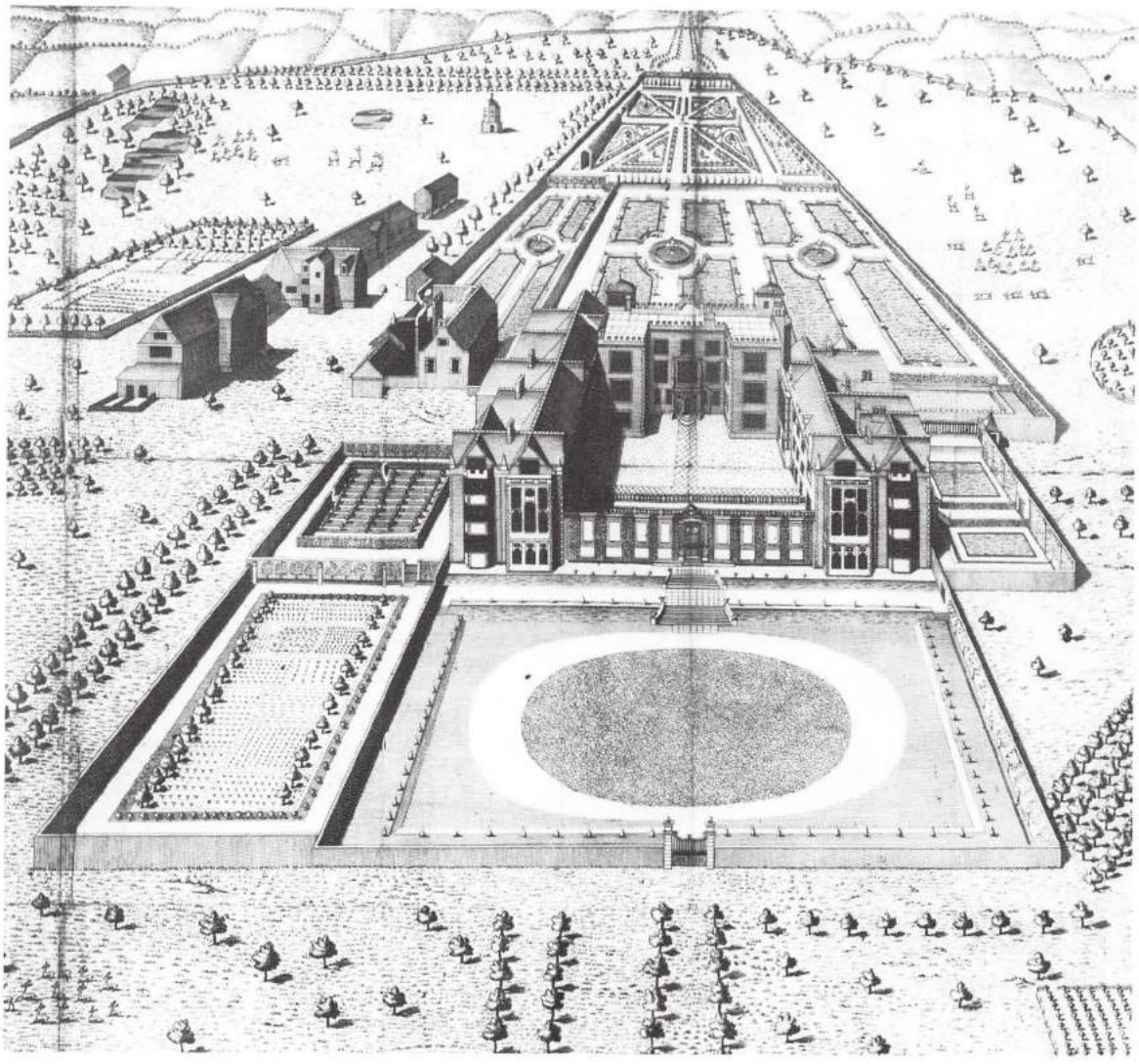

Plate 1 View of Old Copped Hall, from Farmer 1735.

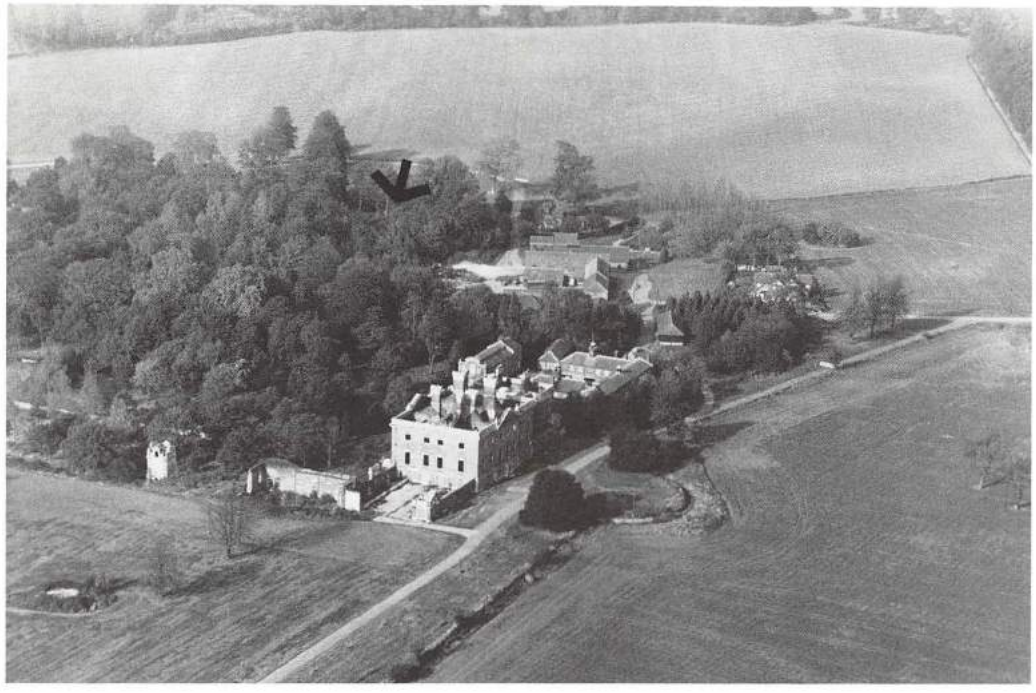

Plate 2 Aerial view of Copped Hall. The site of Old Copped Hall is arrowed. *(Photo: R.A. Parkin).*

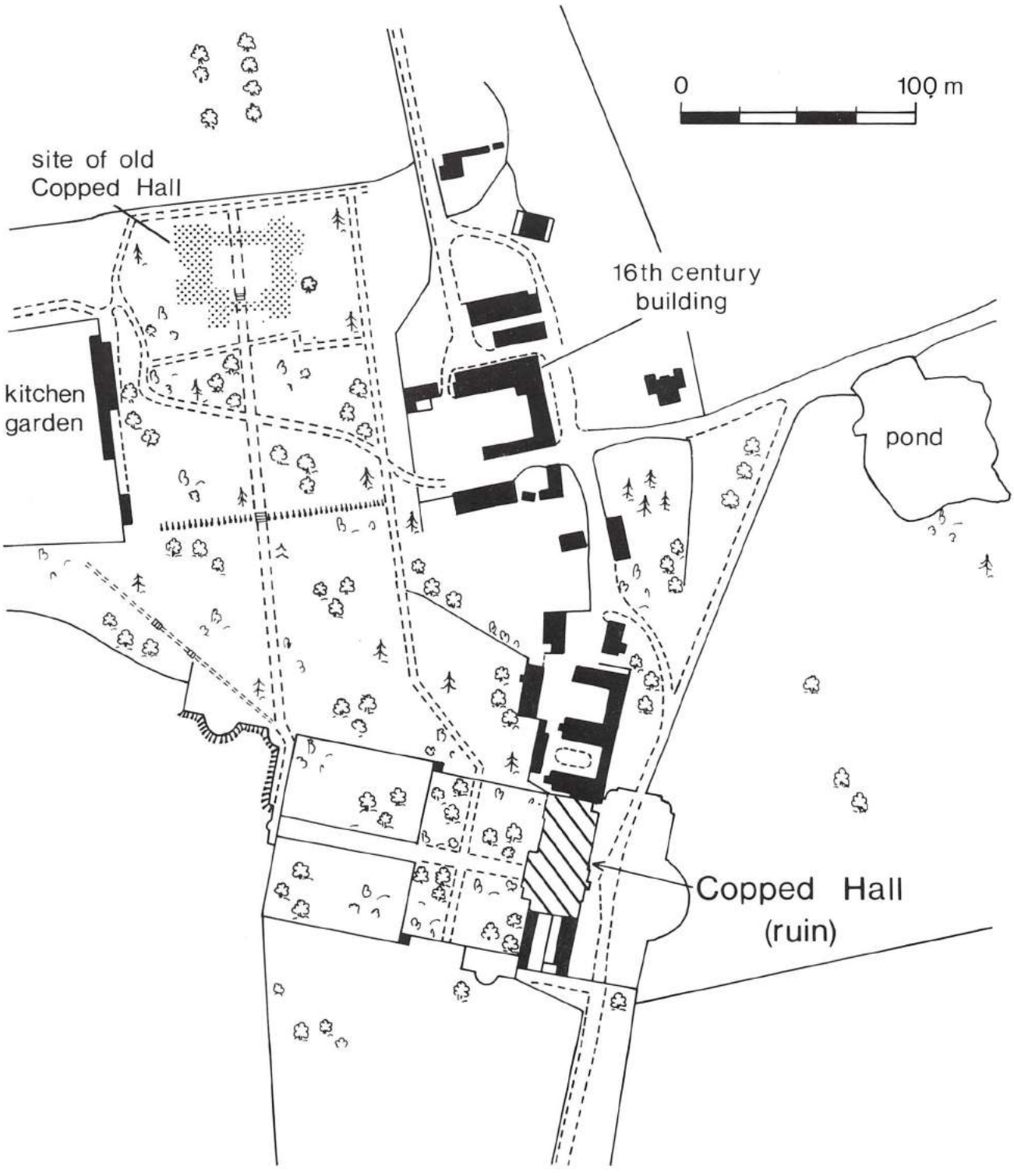

Fig. 2 Plan of Copped Hall and former gardens.

instead must belong to an ancillary building, presumably the one adjacent to it depicted on the Farmer view (plate 1). It should be noted that of the other outbuildings shown on the Farmer view, one survives incorporated in a farm building, and the ruined wall of another exists at the boundary between the farmyard and former gardens.

From the differing levels across the site it is evident that large scale earth moving has taken place at various times from the 16th century if not long before. In particular, the landscaping of the gardens seems to have involved a reduction of the level over much of the site, with the result, for instance, that the fragment of loggia stands on a hummock about 1 m high. In these circumstances, and in view of the limited scale of the excavations, it is not surprising that no obvious traces of occupation earlier than the 16th century were found. Seven medieval sherds were, however, present in later contexts (see below). The natural stiff yellow London Clay was reached at a depth of only 300-500 mm in trenches 200 and 300 on the east side of the rock garden, descending to 600 mm in trench 400 where the ground level was higher. In the area of the loggia, it was also only about 300 mm below the ground surface, whilst in the rose garden it was found at a depth of about 500 mm. Here it was overlain by a layer of dark blue-grey clay, above which there was a thick layer of mid-brown clay containing a few flecks of brick, covered in turn by a layer of peg tile fragments lying horizontally in a clayey matrix. Above this there was a series of layers 100-200 mm deep, mainly clays with some building debris, though one consisting of pebbles in clay may have been a surface. At least part of this sequence must be earlier than the Tudor mansion. Two deposits are especially noteworthy, the blue-grey clay and the layer of tile. The former looked like a gley formed in waterlogged conditions. It is natural to wonder whether it may be associated with the moat mentioned in the 1563 survey. A similar layer was also found at the very bottom of a section cut to the west of wall 52, though otherwise the stratigraphy bore no obvious similarity to that in the rose garden. The layer of tile might possibly be structural, conceivably a cill for a timber building. Otherwise stratigraphy that seemed significantly earlier than the mansion was found only at the base of a section located to the south of wall 51, where there are layers apparently cut by the wall.

The most substantial part of the mansion to be discovered was the wall along the south side of the rock garden. This is a complex structure of several different builds, these being evident from joints rather than any changes in the character of the brickwork itself. The various elements in the alignment, as defined by these joints, are numbered individually in fig. 3. The western part of it (i.e. 51, 50, 49, 46 and 45) became visible when the vegetation had been cleared and forms a revetment about 1.4-1.8 m high bordering the rock garden. Its north face is very weathered, and the walls were almost certainly thicker than they appear to be today. The bricks were usually orange-red or a dull purplish red, mainly the former, and measured 220-230 mm (occasionally up to 240 mm) by 110-112 mm by 60 mm. The mortar is off-white and lime rich, containing small lumps of lime, the percentage of sand being relatively low. However, a quite distinct mortar, also lime rich but yellow or almost orange in colour, occurred in some parts of the wall, but only in those which were of greatest antiquity.

The wall alignment cannot be very satisfactorily analysed chronologically, the relationship at the joints not always being apparent. Thus in the case of 50 and 51, 49 and 50, and 45 and 46, the gaps between the walls may be the result of subsidence (which has clearly occurred in some places) rather than an indication that they are of different builds. Similarly it is not clear from the straight joints between 45, 44 and 42 which are the earlier and which the later. There is, however, no doubt that 36 and 37, orientated east-west and seemingly of one build, comprise one of the earliest parts of the wall. They are bonded with the orangey mortar, and butted by up to five other structures (all built with off-white mortar). The top of 37 curves inwards slightly on its south side as if for the springing of a vault.

To the west, the main wall alignment has several clear additions to it. 51 has been cut into for the insertion of a slab of brickwork (54), the north side of which is inclined and rendered. This feature looks like a light well. Next to it, a wall (52) had been built at right angles to 51. This had a relatively shallow (800 mm) foundation, and terminated abruptly as if it had been robbed. Further east, there were two more north-south walls (47, 42) built against the south side of the main alignment, both of which continued southwards beyond the limits of the areas where the topsoil had been stripped around them. 47 was only 680 mm wide, and had been cut into 45. 42 had unquestionably been built on to 41, though as already noted its relationship to the chute or drainage shaft 44 is uncertain. This chute was built as a separate unit, a brick surround enclosing a vertical shaft about 300 mm square. It had been destroyed almost to the level of the ground to the north of 45. It seems to connect with a drain very little wider than it, possibly aligned north-south. A square mortar-lined hole in the top of 42 may also be a drainage shaft.

Being built over the east end of 36, and making a straight joint against 34, wall 30 looks very much as if it is the latest part of the alignment. This would be consistent with its forming part of an outbuilding. The wall was discovered by excavation, no trace of its existence being evident beforehand. It consisted of an apparently trench-built foundation 800 mm wide, supporting a narrower superstructure above offsets 100 mm wide. The offset is at a higher level on the south side of the wall than on the north. A small projecting 'buttress' (32) seems to be a later addition to 30. A little to the east, two projections structurally integral with the wall itself frame what looks like a window bay. At the base of the eastern projection, there was a curious mass of brickwork (31) with a flat top level with the offset in wall 30, to which it was an addition. Its limited extent suggests it was not a surface. Instead it may have been intended to reinforce or underpin the wall. At its east end, a narrow strip of wall links the main part of 30 to a 'buttress' set back slightly to the south of its main alignment. These elements seem to be of one build with 30, and the recess they enclose on the north side of it may possibly be explain-

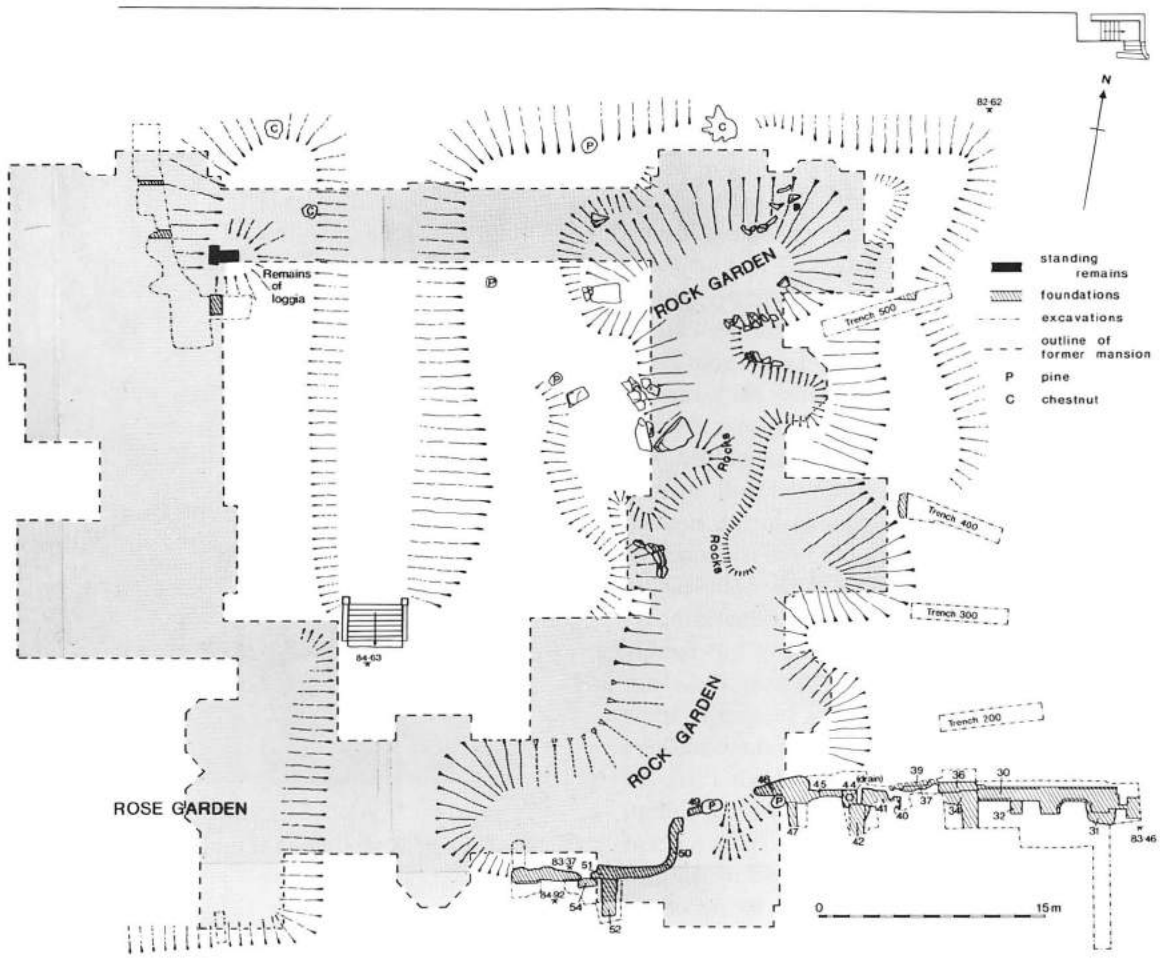

Fig. 3 Plan of the rock garden showing excavated areas, with the 18th century plan of the Tudor mansion superimposed.

ed by the existence of a feature such as a robbed out drainage chute similar to 44. The 'buttress', and thus the wall alignment, continued into the eastern limit of the excavation and must therefore extend at least some way beneath the path on this side of the garden.

Remains associated with the Tudor mansion were found in all the other excavations except for trench 200. A small brick drain aligned north-south and bonded with orangey mortar was discovered at the west end of trench 300. A brick foundation running north-south along the edge of the rock garden was discovered in trench 400. It is at least 1.2m wide, and had been cut through or robbed on its west side where the facing no longer survived. A foundation with straight edges aligned east-west and north-south, forming a corner, was present in trench 500. Against its south side were found the remains of a brick drain running east-west. In the area by the loggia, removal of the topsoil revealed two foundations running east-west, the most northerly of which was only 250mm wide, and a north-south wall which forms a continuation of one of those comprising the ruin. A little to the east of this wall there was a drain on the same alignment.

Because of the limited scale of the excavations, it was often difficult to make an accurate assessment of the stratigraphy, and in particular its relationship to the structures. Most of the layers on the south side of the main wall alignment consist of clays containing variable quantities of building debris which seem to have been dumped to raise the level for the construction of the mansion (only one well-sealed context of this make-up was excavated, at the east end of the wall alignment). Surfaces contemporary with the mansion had either been robbed when it was destroyed, or else removed with subsequent reductions in ground level. They must have been above the offsets which are a characteristic feature of the foundations. In the trenches along the east side of the rock garden, however, pebbly layers were found on about the same level as the offsets and might indicate the existence of paths along the exterior of the building. Alternatively they might have been laid down for the 18th-century garden. The topsoil and superficial layers contained finds dating mostly from the period of the occupation of the mansion, apparently residual material that became spread across the site in the course of the demolition and subsequent landscaping.

In the rock garden, there are layers of clay with building debris at least 800mm deep which butt against the rough brickwork of wall 51. In view of the difference of level to either side of the wall, it was surprising not to find the natural. This fact, together with the great depth of the foundations, points to the existence of cellars in this area. Indeed, the existence of cellars would explain the location of the rock garden and no doubt also its shape, and would also fit in with the interpretation of wall element 54 as a light well.

The Loggia

The surviving fragment of the loggia (plate 3) consists of two ruined stubs of walls set at right angles to each other and standing 3.5 m high. The relationship between them is complicated, apparently the result of Cranfield's alterations which involved moving the arcade from the exterior of the building so that it faced the courtyard. The walls are not bonded and are today separated by a gap of about 120 mm. The north-south element has a good face on its north side which must correspond with an aperture shown on the 1740's plan. The foundations indicate that the wall alignment continued further in this direction. To the south, the wall has clearly been cut through. What looks like a vertical line in its core might mark the position of a former window jamb. Patches of lime plaster still cling to both its faces. On its east side, opposite the adjoining portion of wall, there is toothing 520 mm wide, the header courses in the English bond being recessed. None of the bricks here is broken. It looks as if this marks the junction of an earlier wall leading off to the east, and that when the loggia was changed the re-erected wall was not keyed into the toothing but merely butted against it. This may have been because the south side of it was faced in ashlar, a greensand or similar stone being used. Running along the lower part of the wall there is a cornice, which is interrupted at a point where there is a moulded base which would have supported a column, presumably for the first of those which flanked the arches of the arcade. Beneath the base there is a recessed panel, now very eroded, which on the evidence of a drawing of the loggia was carved with the Heneage knot.[3]

Concealed in the vegetation round the loggia, there were two carved slabs of stone (one fragmentary) bearing the letters 'L' and 'M' (fig. 4), presumably standing for Lionel Middlesex, and a statue of a nude female figure lacking head and limbs (fig. 5). Possibly the slabs were built into the loggia as a record of its rebuilding by Cranfield. The statue must have stood in the gardens of the 18th century house, but may date from the time of the earlier mansion.

Plate 3
The surviving fragment of the loggia, 3.5 m high.
(Photo: D.D. Andrews).

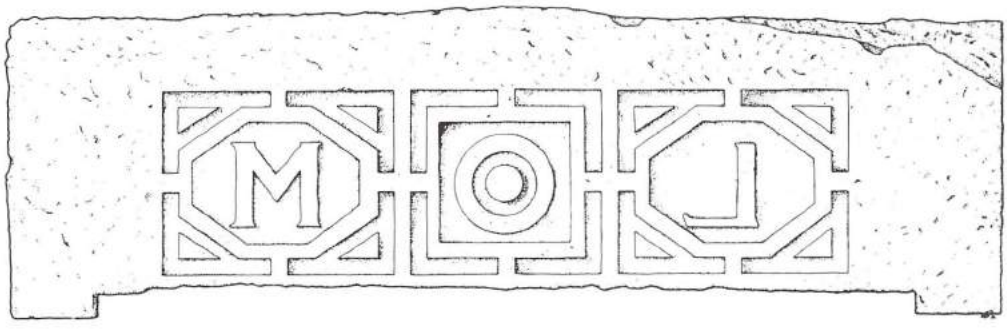

Fig. 4 Relief slab found in the vicinity of the loggia. Dimensions 79 cm by 23.5 cm.

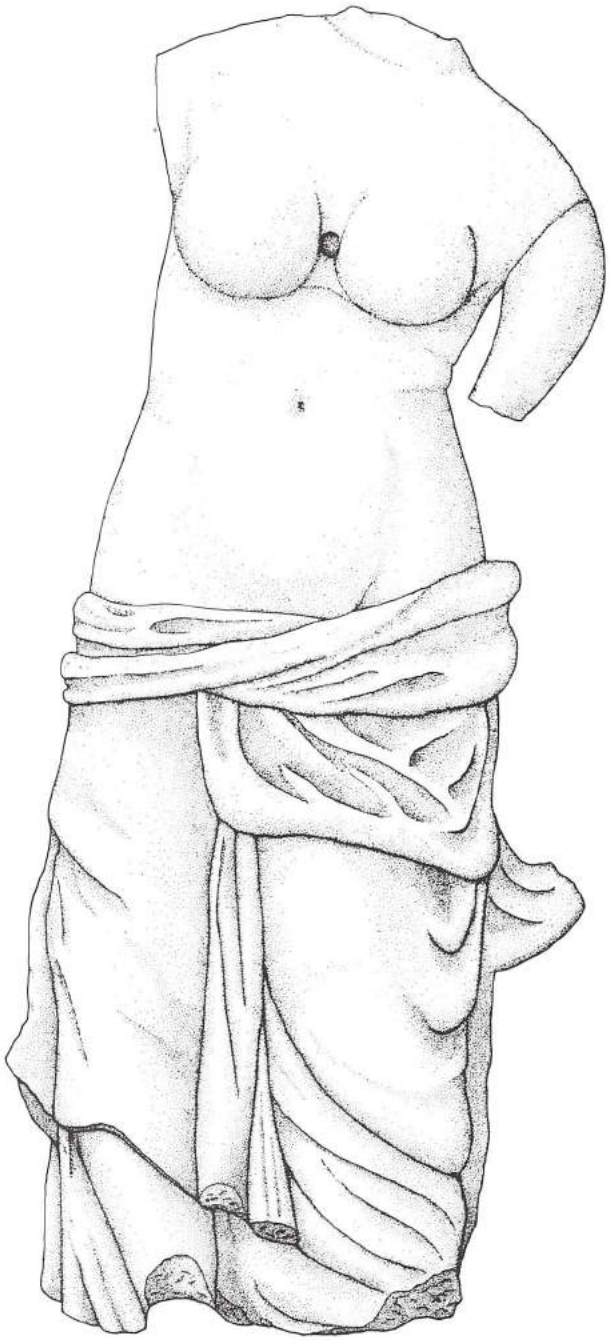

Fig. 5 Statue found in the vicinity of the loggia. Height 70 cm.

The Finds (fig. 6)

These consisted mainly of pottery (about 100 sherds) and building materials, almost all from contexts which represent the cleaning and definition of the structural remains. As already noted, most of the pottery is contemporary with the mansion (i.e. *c.* 1564-1748). Sherds later than the demolition are very few indeed.

Seven medieval sherds were found, comprising shell-tempered wares, sandy grey wares (fabric 20),[4] and a green-glazed sherd with a white fabric. They range in date from the 12th to the 14th centuries.

The most abundant pottery was post-medieval red-bodied earthenware (fabric 40) which characteristically lacks conspicuous inclusions or tempering. This pottery was probably all locally made, the nearest known production centres being Loughton (Clark *et al* 1972), Potter Street near Harlow (Newton *et al* 1960), and Stock near Chelmsford (Cunningham and Drury 1985, 83). The fabric may be unglazed, or covered with a lustrous transparent glaze (nos 1-7), sometimes over a slip (nos 8-9) or slip-painted decoration (Metropolitan Ware, represented by a single sherd), or may have a dark brown to black glaze. The first two types are kitchen wares, amongst which bowls and jars often with thickened moulded rims seem to predominate.

The slipped and glazed pottery comprises what mainly seem to be open forms, and may be yellow, light green or dark green in colour. An unusual form, apparently semi-circular in shape and possibly a Dutch oven,[5] is in a rather sandy fabric and has a thick white slip with a green glaze (no. 8). The majority of these fragments come from a context which seems to form part of material dumped prior to the construction of the outbuilding at the south-east corner of the main house, and would therefore have a *terminus ante quem* of *c.* 1564. Later in date is a flanged rim from a bowl or chamber pot with a good transparent glaze over a whitish slip (no. 9). The black-glazed sherds include three small handles from mugs. Also black-glazed, but almost certainly not a local product, being in a pinky white fabric with white inclusions, is a flat base from a vertical-sided vessel (no. 10).

A single sherd of Southern white ware was found, a fragment from a vessel with a pedestal base (no. 11). The stonewares consist of Frechen or

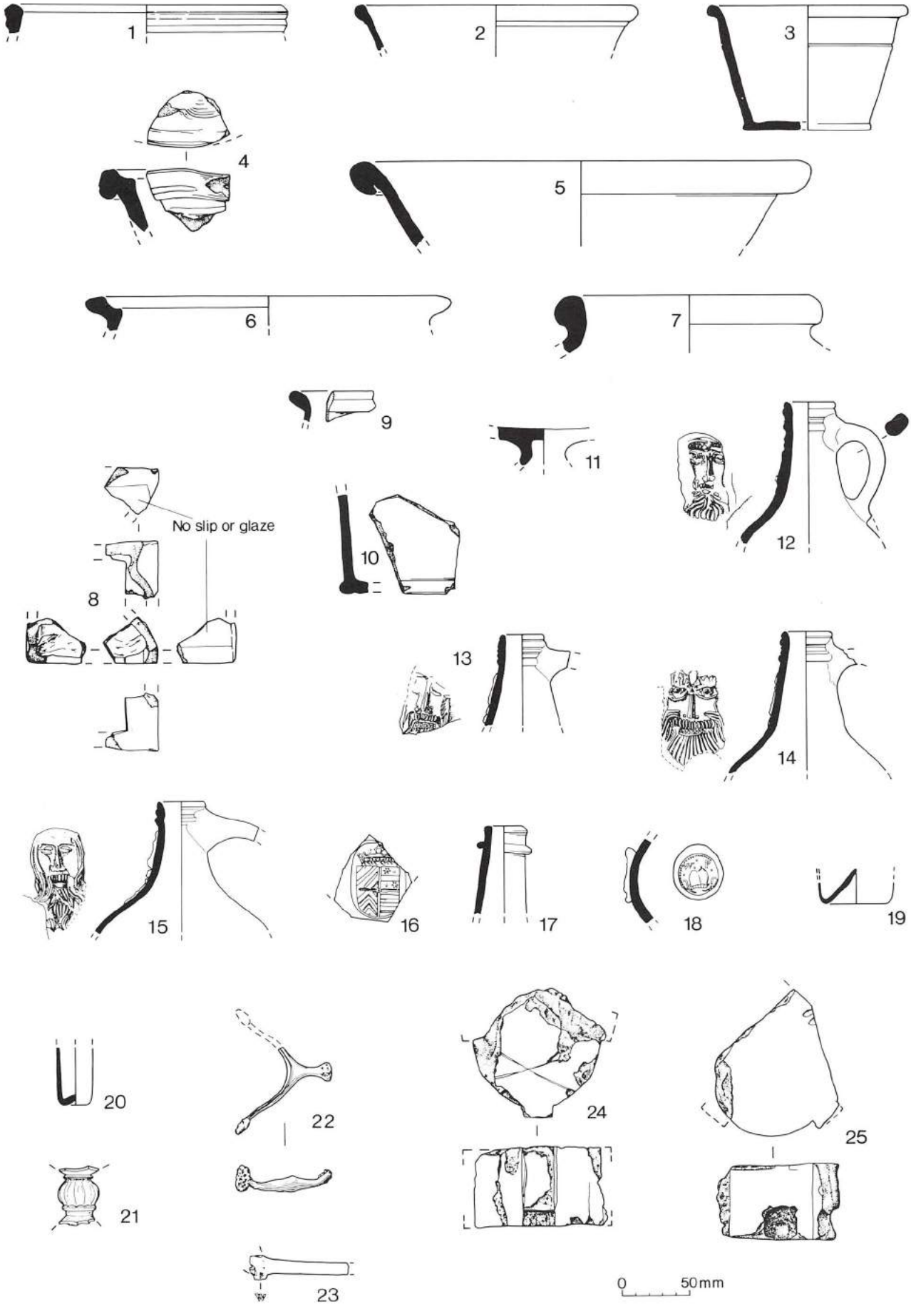

Fig. 6 Finds: 1-7, fabric 40, glazed; 8-9, fabric 40, slipped and glazed; 10, pottery with a black glaze; 11, Southern white ware; 12-16, stonewares; 17-21, glass; 22, bronze; 23, clay pipe; 24-25, terracotta mouldings.

similar bellarmine rims with face masks (nos 12-15), a heraldic medallion from a bellarmine (no. 16), a Frechen jug rim, a fragment from a Nottingham mug, and a very few sherds of white salt glazed stoneware. A small quantity of tin glazed earthenware and porcelain was also found, the latter comprising fragments of teacups or bowls.

Fragments of wine bottles were as numerous as those of pottery, but few were from bases or rims and in no case was it possible to reconstruct the profile of a bottle. Of four bases, three have low kicks, and one a high one. All the rims have single strings (no. 17). A seal was found which bears the initials 'W' and 'P' to either side of an emblem resembling a bishop's mitre (no. 18). Other vessel glass was, typically much less common. Amongst it were a base possibly from a small bottle (no. 19), and the bottom part of a square section phial in green glass, iridescent and slightly laminated (no. 20). In contrast is an item of tableware, a moulded knop in colourless glass with a slight iridescent sheen, possibly of Italian origin (no. 21).

Finds of metal were generally unexceptional, but did include a bronze spur with an iron rowel (no. 22). Fragments of clay pipe were common but mostly consisted of stems, with bore diameters generally measuring 2-3mm. Bowl fragments may be compared to Oswald's G5, G8 and G12 (Oswald 1975). The base of a bowl has the initial 'W' on either side of it (no. 23).

Peg tile and window glass were the most abundant categories of find. The former generally measured about 150mm wide and 11-14mm in thickness. The dimensions of an intact example were 265 x 155 x 11mm. A rather larger fragment with a central nib and about 190-200mm wide is medieval, datable to the 12th-13th centuries (Cunningham and Drury 1985, 39), and had presumably been re-used in one of the later buildings. Several floor tiles were found, being 101-106mm square and 22-25mm thick, and green glazed or with a transparent glaze over a yellowish slip.

The window glass falls into two qualities: relatively thin (0.5-1.0mm) and badly devitrified though originally almost colourless or slightly greenish, and thicker (1.0-1.5mm) better preserved glass with only a strong iridescence or slight lamination, almost colourless but with a bluey green hue. The latter was the more common, and came predominantly from the area of the building at the south-east corner of the mansion. It is reasonable to think it is the later type. It was also observed that whereas the poorer quality had been cut to diamond shaped quarries, the better quality may have consisted of small rectangular panes. These conclusions are borne out by drawings of the mansion, which show the older parts of it glazed with quarreys, whilst Cranfield's work has rectangular panes.[6]

The architectural fragments consisted mainly of pieces of a greensand type stone now so weathered as to be unrecognizable, apart from two small circular shafts 25mm and 80mm in diameter. Two terracotta mouldings from columns or possibly window mullions were also found (nos 24-25). They were built up in courses, the individual elements being 53-58mm high. They are slightly different, but both have vertical fillets. As one came from a layer interpreted as earlier than the outbuilding at the south-east corner of the mansion, it is probable that they predate Heneage's house.

Discussion and Conclusions

Survey and excavation have made it possible to pinpoint the location of the mansion built by Sir Thomas Heneage from 1564. A standing fragment of masonry has been confirmed as part of the loggia, whilst part of the revetment wall along the south side of the rock garden associated with the 18th century house corresponds to the south wall of the Tudor mansion. The rock garden forms a sunken area set into the cellars of the mansion, its lay-out being determined by the groundplan of the east wing. Small scale excavations revealed walls that formed part of the mansion, and the foundations of an outbuilding at its south-east corner, but only afforded a limited insight into the stratigraphy of the area.

Seven residual medieval sherds suggest that the original manor house of the Aucher family and the abbots of Waltham was situated in the same area. Gleyed layers detected at the very bottom of two narrow trenches might have been associated with a moat recorded in a survey of 1563. It is not impossible that this ran east-west just to the south of the rock garden, where there is made-ground at least 500mm deep apparently dumped to create a new level for the construction of the mansion. Whereas the natural London Clay was not reached in the excavations to the south of the wall at the edge of the rock garden, or in the rock garden itself, it was found at a depth of only about 300mm in the trenches opened to east of the rock garden.

The wall bordering the rock garden was of several building phases. There was, however, no clear building sequence that made obvious sense in terms of the development of the mansion, except that the foundation of the outbuilding at its south-east corner seemed to be the latest element. The finds were relatively few, and not very informative. The pottery consists mainly of kitchenwares. Vessels for wine are relatively numerous, comprising sherds from stoneware bellarmines and large numbers of fragments of wine bottles. The architectural fragments provide little information on the building, beyond indicating that it had dressings in a greensand type of stone.

With the demolition of the mansion, parts of it such as the loggia and south wall were left as ruins to create a romantic setting for the gardens of the 18th century house.[7] This was situated outside and to the south-east of the formal grounds of the mansion, presumably to minimise disruption to everyday life whilst it was being built. It was also aligned on a slightly different axis, which was respected by the gardens adjacent to it, but not by those to the north which inherited much of their lay-out from the plan of the mansion and its grounds. Quite apart from the rock garden, the path through the middle of them follows the central axis of the house. Similarly the terrace to the north of the rock garden almost certainly corresponds with that which flanked the loggia, whilst to the south of the former house Tudor brickwork visible beneath a bank where there is a change in level must correspond to a dividing wall shown in approximately this position on the Farmer view. The rock garden in its most recent form, with conifers planted on the line of the ruins, is thought to date from the 19th century.[8]

Acknowledgements

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Notes

(ERO = Essex Record Office)

1. This article is derived from an archive report held, together with the finds, at Epping Forest District Museum, Waltham Abbey. Microfiche copies are available at the National Monuments Record, London, and the County Council's Sites and Monuments Record, Chelmsford. The SMR number is 3838. The map reference for the existing house is TL430014 and the old house TL428016.

2. No attempt is made here to present a detailed history of the buildings at Copped Hall. Published accounts of it comprise Country Life 1910; Essex *V*; Newman 1970; Cassidy 1983; and Andrews 1985. See also O. Pinkney's typescript thesis, Copped Hall, Epping (ERO T/38/43).

3. ERO D/DW E27/8. Newman 1970, fig. 7.

4. The fabric identifications follow those of Carol Cunningham's Essex pottery typology. See Cunningham and Drury 1985.

5. I owe this suggestion to Carol Cunningham.

6. E.g. ERO D/DW E27/6 and E27/12. An inventory taken of the glass in 1748 records 820 feet of 'crown glass in Sashes', 216 feet of 'crown glass in lead work', 471 feet of 'Glass in lead work Squares', and 3929 feet of 'Quarey Work' (ERO D/DW E29/12).

7. Amongst the Newdigate drawings, there is one of 1753 entitled 'Scheme for converting the Old Arcade at Copt Hall into a Magnificent Ruin'. ERO D/DW E28/10.

8. Conclusion based on survey made by the Countryside Section of Essex County Council.

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Deserted Settlement Earthworks at Purleigh

by Steven Potter, Douglas Renton and Patricia M. Ryan[1]

Summary

Carters Pasture, bordering on Purleigh Common, contained slight earthworks. When the field was levelled in 1984 the site of a hall and crosswing house of medieval origin and renovated in the 16th century was discovered. Documentary evidence suggests the field may have been the site of a homestead and the farm one of four properties amalgamated during the 17th and 18th centuries to form Howegreen Farm.

Introduction

Virtually up to the present day Purleigh's economy has been typically agrarian. It's 5500 acres contained farms which varied in size up to about 350 acres, and fell mainly into two groups: large freehold farms over 100 acres leased to farmers; and smaller holdings, generally below 70 acres, mainly copyhold but some freehold, usually owner occupied. Local farmers could easily increase their enterprises by renting additional land, but the 'estates' they created soon dispersed again after their deaths when the leases expired. That of James Brett (see below, p.115) provides a classic example of this. The amalgamation of copyhold land to create larger farms less susceptible to disintegration, such as Howegreen Farm, is not common before the 17th century, unless it had already occurred by the early 15th.

Probably as a result of the recurrent plagues of the late 14th century, the agricultural system became one based on extensive grassland utilised by beef cattle and sheep. Some arable land was necessary, since corn was needed for human sustenance, but only some 25% of the larger farms was under the plough. This percentage rose gradually as farm size diminished, to about 60% on very small units of less than twenty acres. Such a system required little labour above that supplied by the farmer's family, hence its adoption since the plagues would have removed any surplus labour that may have existed. The subsidy of 1524 shows only eighteen names assessed on wages out of forty-nine entries, and five of these wage earners were probably farmers' sons. The tax roll of 1568 shows only ten entries for cottages with up to three acres of land out of a total of eighty-nine entries. Some labour however was always needed above that supplied by the professional labourer, and this was provided by husbandmen with uneconomic holdings. It is evident from their wills that they were labouring as well as farming, since they frequently made bequests to 'my fellow servant' or 'my master/mistress'. The occupiers of the farm known as Gales, which is discussed below, may fall into this category.

The rise in population during the 16th century caused a surplus of labour. Homes with an acre or two of ground were provided by enclosing parts of the common but work had to be found outside agriculture for those who could not rent additional land. Hence we find trades such as tailors, potters, bricklayers and alehouse keepers emerging during the later Elizabethan era.

The period from the 1520's to the mid 17th century is renowned for its rapid inflation. In the 16th century by taking advantage of increasing prices, with costs lagging behind, and with shrewd investment of capital, Purleigh's tenant husbandmen with viable farms could produce descendants of the owner-occupier gentry class in three generations. The surplus of labour created by the population increase however, did little to keep agricultural wages in line with inflation. Thus the same forces which made farming husbandmen wealthier also caused labouring husbandmen extra hardship. It is mainly these families which eventually sold up their smallholdings, either through mortgage foreclosures, or because the heirs did not wish to follow in the family business. From the 17th century it became more and more common for farms to be known by 'double barrelled' names such as Seagers-and-Gales, and by the 19th century many had entirely new names like Howegreen Farm.

The Site

Any field containing earthworks that are inconsistent with modern day activities, and which are suspected to be the remains of a deserted settlement site, deserves close historical, and if possible archaeological study. Such sites are relatively rare in Essex, where many of the dispersed settlements and solitary farms, dating probably from the Saxon period, are either still inhabited, or were destroyed in the wave of arable farming which swept the county in the 19th century, or that of the last decade or so. However, one such field containing suspicious earthworks was known to exist at Farther Howegreen in Purleigh. Howegreen Farm, on which the earthworks lay, had been owned and farmed as a dairy unit by the family of F.C. Byatt and Sons since 1939, but with the retirement of the youngest son, the farm was put up for auction in June 1984. As frequently happens these days, the house, farmstead and a few acres were sold away from the remaining farm. The bulk of the land, which included the earthworks, was purchased by neighbouring arable farmer Mr. Robert Flemming. It was inevitable that the earthworks would come under cultivation, and a bulldozer be employed to level the humps and hollows, so the request was made to Mr. Flemming that a watching brief might be maintained during the operations, which he readily granted. Prior to any major earth movements, numerous land drains were laid across the field. Medieval and post-medieval sherds from the disturbed soil gave a very strong indication that something worthwhile might emerge from the levelling operations. The bulldozer was preceded by a set of heavy disc cultivators to slice up the turf. Although this operation did not cover the entire field, it did just touch

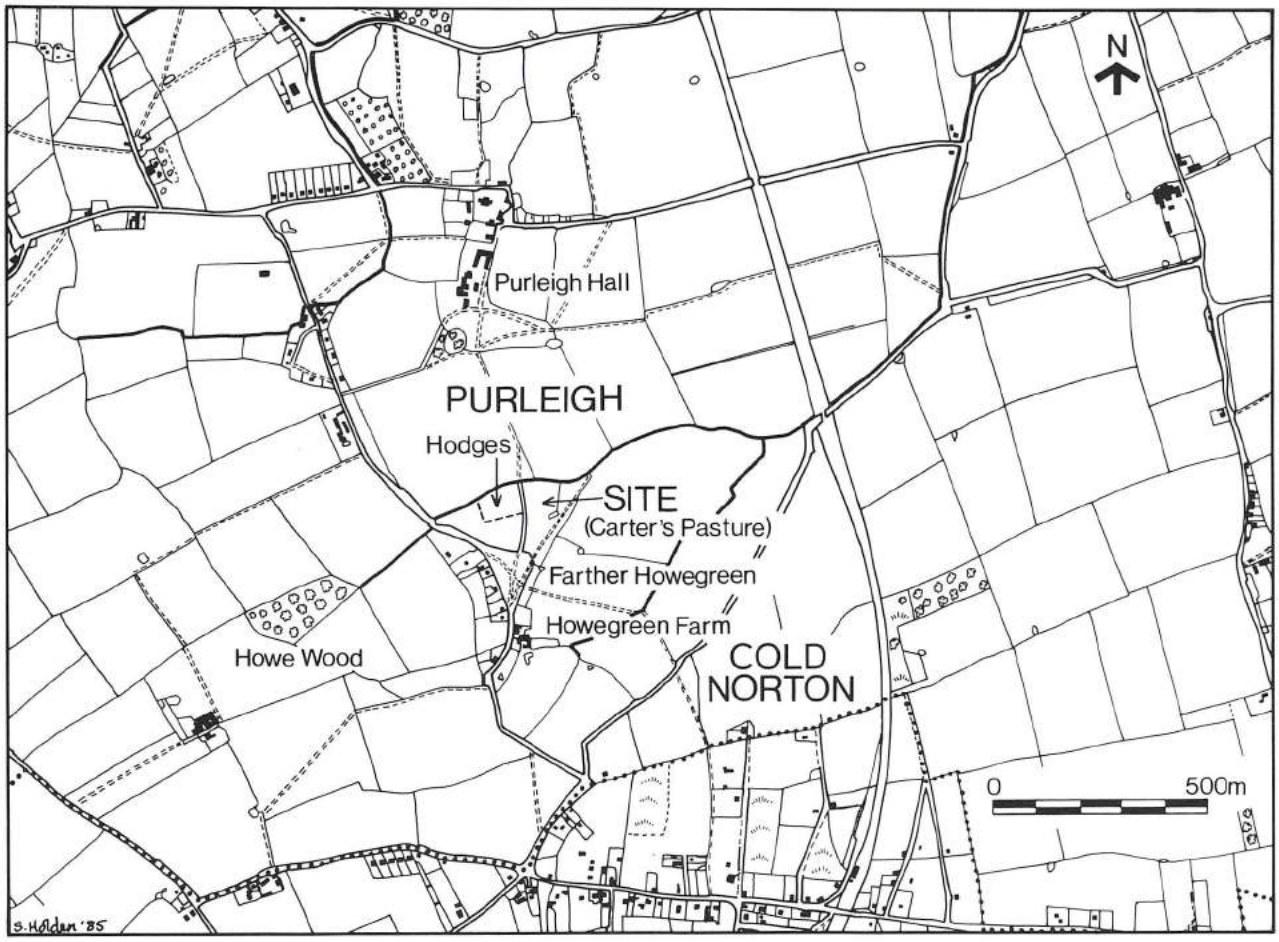

Fig. 1 Location map (from O.S. 6", 1922).

on one of four roughly circular mounds on the eastern side, where the ensuing field walking revealed a concentration of broken tile, brick, sherds and general debris. The suspicion that this mound might contain the remains of a dwelling was conveyed to Mr. Flemming, who immediately instructed the bulldozer driver to remove soil as and where directed, and to leave the levelling of this area for as long as possible, thus allowing as full an examination of the site as time would permit. As a result of this generosity and help, it was possible to spend the first three days of October 1984 excavating and recording the remains of the farmhouse which is the main subject of this report.

Howegreen Farm (TL842010) lies 1km south of Purleigh Church and is adjacent to Purleigh's only remaining piece of common land at Farther Howegreen (fig. 1). The soil type, like most of Purleigh (and much of the Dengie Hundred) is London Clay, and the topography slightly undulating, rising from 15m OD in the north to 35m in the south. Although part of the farm's southern boundary forms the parish boundary, the field in which the excavation took place (TL833010) is located in the north-west section of the farm.

Recently known only as 'The Four Acres', the tithe award shows that in 1846 this field was called Carters Pasture (fig. 6), a name revived for use in this report. It had been laid to grass at least until 1939. However it was shallow ploughed during the war and directly reseeded again, hence the marks of the stetches were still faintly visible running from north to south. The tithe maps of 1829 and 1846 both show it as a pasture field, and its very name, along with its close proximity to the homestead, suggests it has never supported any other type of crop. These same maps also reveal that its size then was 4 acres, 1 rood and 6 perches, and that a cottage and garden covering 24 perches existed in the south-west corner. This has long since been demolished and absorbed into the field.

The basically triangular shape of the field is shown in fig. 2. It is bordered to the north by a natural stream, beyond which lies Purleigh Hall, the manorial demesne farm; to the west by a lane; to the south partly by the common and partly by the remainder of the farmland, which also forms the remaining border to the east. A public footpath crosses Carters Pasture parallel with and almost adjacent to, the eastern side, and this, together with the shape of the north eastern corner, indicates that there was once a lane down this side of the field, although there is no documentary evidence for its existence.

The earthworks within Carters Pasture were surveyed before destruction and are shown in fig. 2. None were very pronounced (only the depression running north from the pond was deep enough to require caution on a tractor). They comprised several raised platforms and linear depressions. Two of the platforms (fig. 2, nos 1 & 2) proved to be house sites, and it is no. 2, to the east of the field, that forms

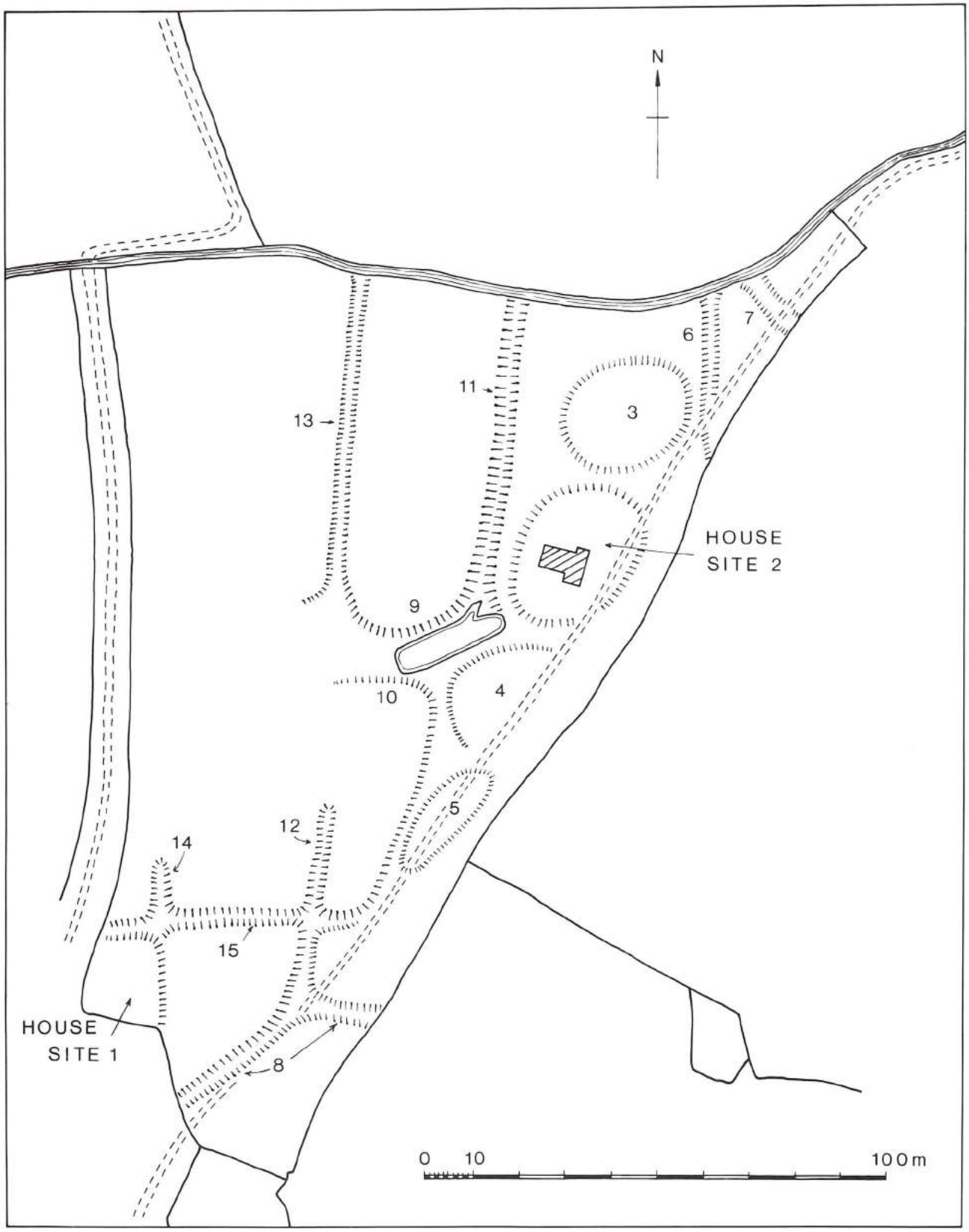

Fig. 2 Plan of deserted settlement represented by earthworks in Carters Pasture.

the subject of this article. Whether the other platforms (fig. 2, nos 3, 4, 5) represent house sites or sites of auxiliary farm buildings is uncertain; no obvious structural remains were recovered from them during the levelling of the field. The two short depressions (fig. 2, nos 6 & 7) in the north-east corner mark successive phases of the absorption of this end of the former lane into the field. The depression (fig. 2, no. 8) enclosing the south-east corner of the field is that of the earlier field boundary around what was previously the southern end of the lane. This area is shown on Chapman and Andre's map (1777), and also on a manorial map of 1815,[2] as a tongue of the common projecting into Carters pasture, i.e. the remaining section of this end of the lane. It was taken into the field in 1817 when 'about 10 rods' was granted from the common.[3] The banks numbered 9 and 10 on fig. 2 formed the sides of a pond which was filled in about 1980. The depression extending north from the pond to the stream (fig. 2, no. 11) regulated the pond's depth by acting as an overflow. From the southern edge of the field a depression extends northward, only to fade out after a short distance, but recommencing further on (fig. 2, nos 12 & 13). Presumably this sub-divided the field into smaller crofts, and it is noticeably parallel not only with the western field boundary, but also with depressions no. 11 & 6 to the east. The two final depressions originate from near the cottage site (no. 1) in the south-west corner. The shape of this corner of the field strongly suggests that the shorter depression (fig. 2, no. 14) represents the earlier field boundary, which has been subsequently 'pushed' slightly further to the west. Whether the same is true of the east-west depression no. 15, or whether this is merely a drainage channel for the disposal of surface water from the curtilage of the cottage is uncertain.

Excavation

Approximately 150mm of soil was stripped from house site 2 by bulldozer revealing the unmortared brick footings of what appeared to be a house of hall and crosswing plan, with a narrow outshot at the north side of the crosswing and the mortared foundations of a central brick chimney-stack (fig. 3). In general, the plinth seemed to have been one

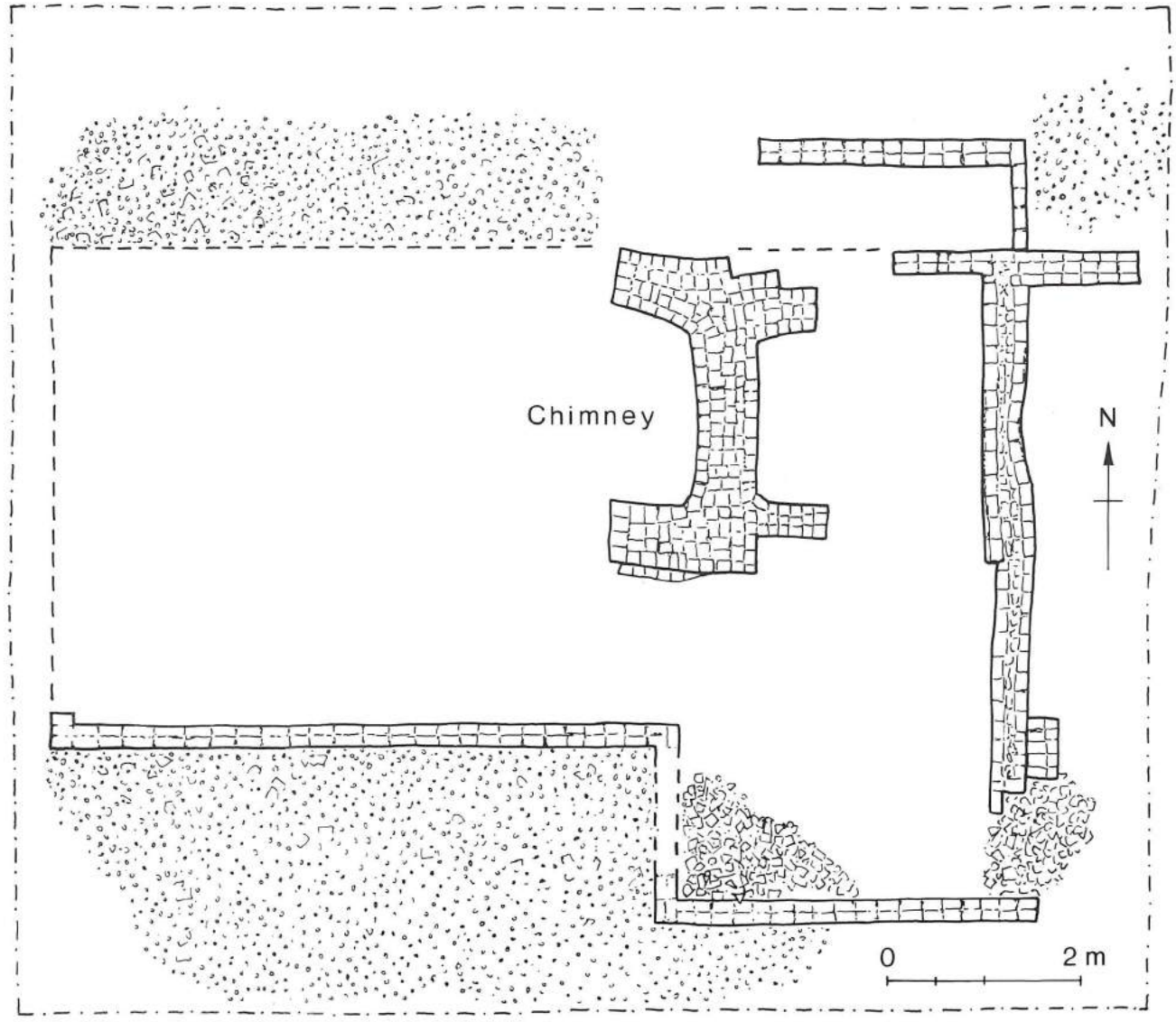

Fig. 3 Plan of house site 2.

course high and one brick length wide, made of stretchers set side by side. On the east side of the building, however, it was two courses high and wider, there being a gap between the stretchers about 120mm wide filled with broken pieces of brick. It appeared to have spread with the weight of the building. The rear wall of the outshot, in contrast, had been erected on a bed of roof tiles. The chimney base was built of half bats laid in lime mortar. It was two courses deep at the southern end and one course at the northern. A considerable quantity of mortar found on the base may have been stripped from bricks salvaged when the house was finally demolished. Adjoining the east side of the crosswing there were two buttresses or projections of uncertain function. The north one seemed bonded with the plinth but the south one made a straight joint with it.

The brickwork was flush with the surface of the fissured clay subsoil within the building. Traces of an earth floor were found only in the south-east corner of the crosswing. A stony layer, clearly the surface of a former yard, lay outside the building to north and south. A quantity of broken tile containing some potsherds was found lying on the yard surface to the south of the house. Spoil heaps prevented further investigation to the east and west of the site.

The brick plinth is interpreted as the underpinning of an earlier building, which at the same time had the chimney inserted and possibly an upper floor added to the hall (see below, p.117). It is easy to believe this was the case on the east side of the building, where the plinth is deeper, wider and may have spread under the load it was bearing. The two projections on this side might well have been added to help support a jettied storey if subsidence were taking place. However, it should be noted that where surviving elsewhere the plinth was much more regular and better made and not obviously an underpinning. It may have been associated with a major reconstruction.

The outshot and chimney present a number of problems. The outshot was built on a base of tiles and might therefore have been of a different date to the rest of the footings. The position of the chimney in the crosswing is unusual. In general, chimneys were built in a chimney bay in the late 16th and 17th centuries, or in the hall or cross passage if inserted into an earlier house. It is possible that this chimney was built into an earlier stairwell and the outshot was added to house a new stair. Alternatively, the outshot might be an earlier feature. The way in which the chimney projects into the line of the north wall raises the possibility that it was built into a former doorway associated with a stair in the outshot, which subsequently became redundant and was either demolished or adapted to a different use.

Where the stratigraphy had not been disturbed it was noted that the yard surface sealed medieval pottery, and that above it there were sherds of 17th century Metropolitan type ware, black glazed ware and Frechen stoneware, as well as red-bodied earthenware. Also present were a number of potsherds in Staffordshire type slipware, tin-glazed earthenware and Westwald stoneware, datable to the late 17th century and early 18th centuries. These may well be from vessels in use when the house was abandoned, and provide an approximate date for that event. Only a very few objects of later date were present amongst the finds, presumably as a result of field manuring.

The Finds

House Site 1

More than half the pottery found from field walking on House Site 1 can be attributed to the late 18th and 19th centuries. A third of it was brown-glazed red-bodied earthenware of a type made from the 16th to 19th centuries. Also present were a few sherds of Metropolitan type ware, black glazed ware, and southern white ware, all of 17th century date. A sherd from a Staffordshire combed slipware dish may be assigned to the end of the 17th or early 18th centuries. Six fragments of clay pipe stem (3mm bore) and one fragment of a bowl with an oval foot are of pre-1760 date. Two fragments of stem with a narrower bore (1.5mm) and a foot impressed J.D. for John Dunnett, a Maldon pipemaker active 1835-62, were also found.

A piece of 19th century brick was found after the area had been disced. However, further cultivation turned up a number of part bricks of late 16th/17th century date. They measured approximately 100mm wide and 50-60mm high. Most had pitted bases and traces of wood glaze. Six pieces of green window glass (1-1.5mm thick) were also recovered.

Documentary evidence indicates the house on House Site 1 was built in the late 18th century. The majority of pottery finds are compatible with this date. The handful of earlier potsherds may be from treasured heirlooms or from field manuring. The presence of late 16th/17th century brick, thin green window glass and lead cames may be explained by the practice of re-using building materials, especially in the case of small houses.

House Site 2

Of the 571 potsherds found, three, one each of the Early Iron Age, Late Iron Age and Roman period, are thought to be residual, as is possibly a single abraded rim attributed to the 12th century.

The majority of the pottery is of post-medieval date, but 13% of the assemblage is medieval sandy grey ware, Cunningham's fabric 20.[4] It includes one flat-topped rim with a neck attributed to the first half of the 13th century, and two neckless flat-topped rims of late 13th or 14th century date.[5] Also present are 29 sherds in sandy orange ware (fabric 21), five of which show traces of white slip-painted decoration. This fabric is considered transitional between medieval and post-medieval types, and is dated to the 15th and early 16th centuries. 75% of the pottery is red-bodied earthenware, much of it lead glazed, in fabric 40. Some of this may have been made in the vicinity for several potters appear in Purleigh records of the 17th century.[6] This fabric was made from the 16th to the 19th centuries, but most of the closely datable sherds can be assigned to the 17th and 18th centuries. A wide range of rim forms are present (fig. 4, nos 1-10), mostly from jars and bowls. Distinctive forms, recognizable from mainly very small fragments, comprise a candlestick, colander, a bung-hole from a cistern, more than one lid (*cf.* no. 11, fig. 4), a chafing dish, and the frilled base of a pedestal cup of a type which seems to have been current at the end of the 16th century.[7] 28 black-glazed sherds may be dated to the 17th century. A considerable proportion of this pottery has darker speckles in the glaze. Seven sherds, mainly rims from flatwares, have slip-trailed decoration characteristic of the so-called Metropolitan wares known to have been made at Harlow and Stock in the 17th and 18th centuries (*cf.* nos 12-13, fig. 4).[8]

Five sherds of Staffordshire type press-moulded dishes and two very small sherds from cups of this ware were found. This pottery is datable to the second half of the 17th and the 18th centuries. Of similar date are seven sherds of white tin-glazed earthenware, including the base of a small cup or bowl.

Stonewares constitute 5% of the assemblage. They include fragments of Frechen/Cologne vessels of the later 16th and 17th centuries, the almost complete lower half of an English stoneware mug, and seven sherds of Westerwald stoneware. Amongst the latter are the rim of a chamber pot, probably of the late 17th or 18th centuries, and sherds with incised lines as borders to coloured motifs. This form of decoration was common on straight-sided tankards which date from the early 18th century.[9] Later pottery types comprise four sherds of creamware, and two sherds datable to the 19th century. Finds of clay pipe include stems with bores measuring 1.5-3.0mm, three oval feet of pre-1760 date and a complete bowl datable *c.*1660-80.[10]

The bricks used for the house footings were 95-115mm (average

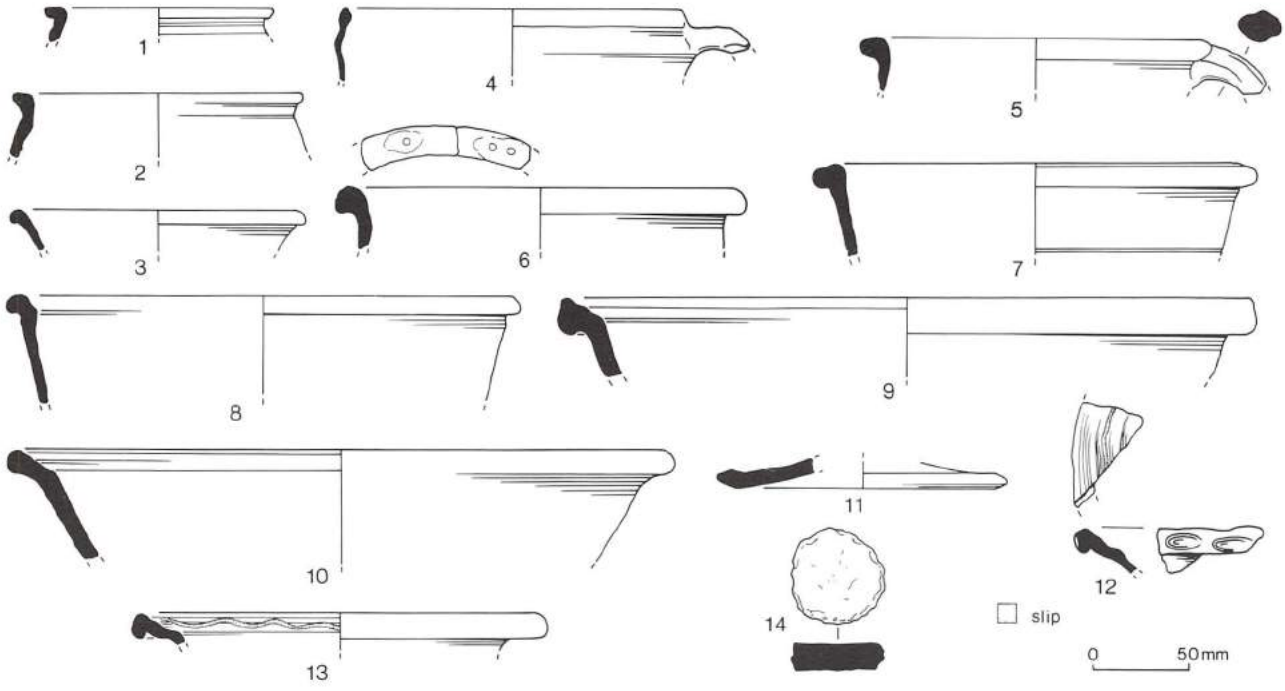

Fig. 4 Finds: nos 1-10, pottery in fabric 40; nos 11-12, Metropolitan Ware; no. 14, counter or tally made from a peg tile.

110mm) wide by 40-60mm (average 50-55mm) high. Most had pitted bases, sunken margins on the upper face, traces of wood glaze, and were very hard fired. The bricks of the chimney base were similar but with fewer glazed examples. A large quantity of broken peg tile was found to the south of the house. Two discs (45mm and 75mm in diameter) made from roof tiles were also found (no. 14, fig. 4). Similar finds from Chelmsford have been interpreted as counters or tallies.[11]

Documentary Evidence

Evolution and Early History of Howegreen Farm

Howegreen Farm lies in a part of Purleigh which reverted to woodland after the Roman withdrawal and mostly remained as such until well after the Norman conquest. Although some settlement had taken place by 1066, no detailed documentary evidence is available until the early 14th century, by which time numerous small farms, varying in size up to forty acres were in existence, although much woodland still remained.[12] When this settlement began in earnest is impossible to say, but a dispute of 1222 over common of pasture in Purleigh (i.e. woodland pasture) led to the plaintiff giving the deforciant 24 acres of land, 'which might be had at pasture or tillage, whichever the latter so wished'.[13] It would appear therefore that the enclosure of this woodland zone was well underway during the 13th century, an assumption supported by the 13th-14th century pottery found in Carters Pasture.

The topography of the area reveals something of the nature that this enclosure took. The present common is the survivor of a much larger predecessor, which originally included the house plots to the west, the 'pightle', Carters Pasture, the tenement to the west of the latter, named Hodges, and the land dividing them (fig. 5). Along the east edge of Carters Pasture a footpath shows the scars of an ancient lane, the final ten rods of which was absorbed into the field in *c.*1817.[14] The interlocking of these plots to form the outline of the earlier common, bordered on its eastern edge by a lane, suggests that Carters Pasture represents a fresh surge of woodland enclosure which post-dates that of the remainder of Howegreen Farm. Hodges, to the west (fig. 1), was originally two acres in size and is always described in the court rolls as being three quilletts of land (i.e. small plots),[15] thus indicating the piecemeal way that this ex-woodland holding evolved. It obviously post-dates Carters pasture since it forms a continuation into the unenclosed area, the two being separated only by a lane, formed at the origin of Hodges, to apparently prevent any restriction of access from Purleigh Hall to the remaining common. Although the earliest extant documentary evidence for both these properties is dated 1538,[16] the archaeological evidence indicates there was a habitation site in Carters Pasture in the 13th or 14th century. After their creation all further enclosure ceased, only to recommence in the 17th century.

Howegreen Farm falls within the manor of Purleigh Hall and according to the manorial map of 1815,[17] it was then approximately one hundred acres of copyhold land. However, when a change of ownership occurred in the 17th century, a large part of the farm was described as freehold, a fact which seems to have been conveniently forgotten by 1815.[18] The manorial court rolls are extant for the years 1410-1422 and 1554-1936, although various courts are missing within these time brackets, especially during the 16th century. It is evident from these rolls that Howegreen Farm was five small farms or holdings prior to the 18th century: Gales (eight acres), Hellmans (cottage and two acres), Whites (thirty acres), Toppis and Morris (seven acres) and

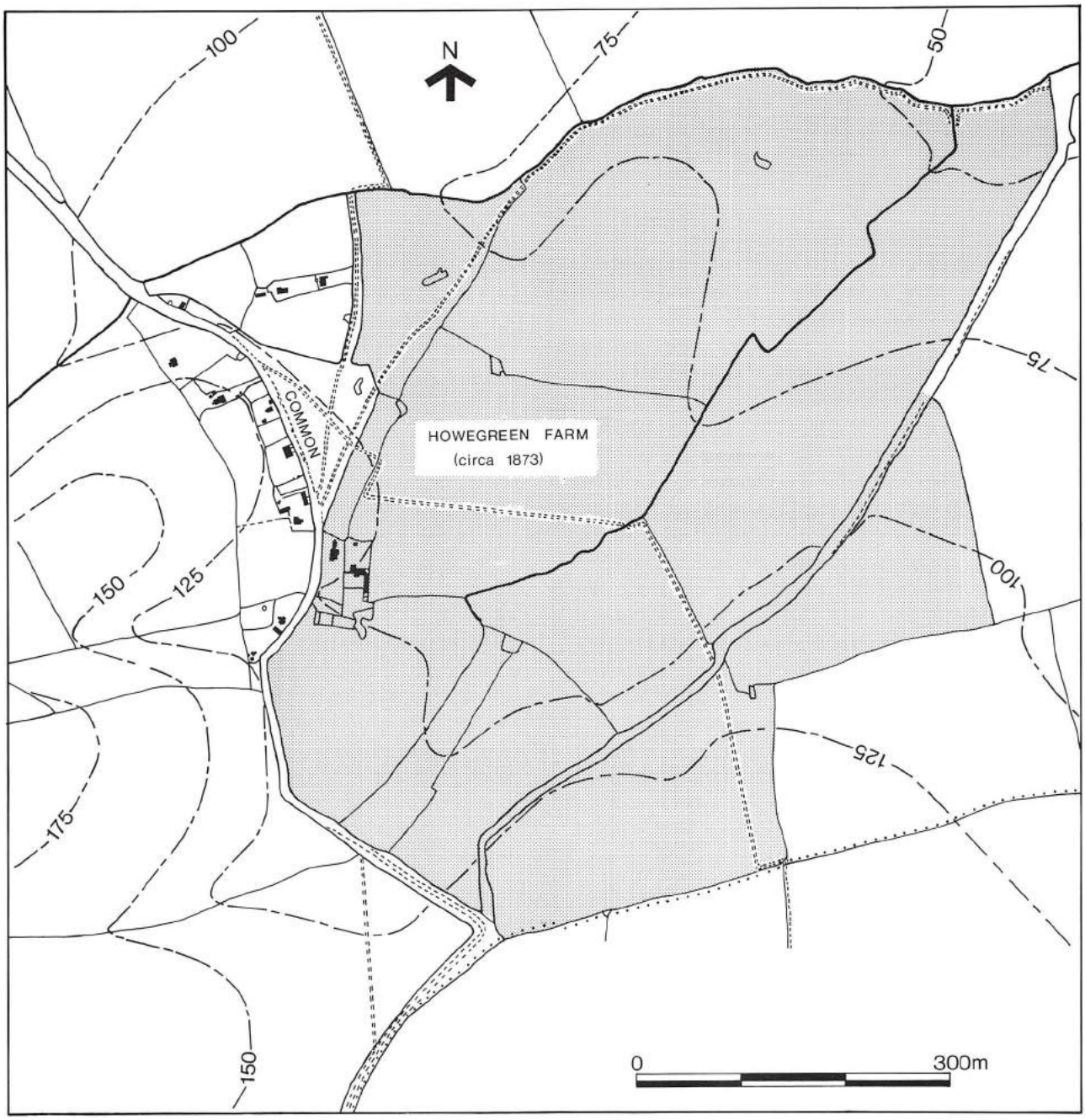

Fig. 5 Map of Farther Howegreen, showing the boundaries of Howegreen Farm (from O.S. 25" map, 1st ed., surveyed 1873).

Seagers, the freehold part mentioned above. The name Toppis and Morris is only used in the court rolls. The same property is always referred to as Seagers in wills, tax lists, rate assessments etc. It would thus appear that the two holdings were amalgamated before they can be positively identified in documents, that is, before the mid-16th century. Whilst the copyhold part, i.e. Toppis and Morris is mentioned in the court rolls, the parishioners recognised the entire farm as Seagers.

All these farm names are derived from local owners whose names turn up in documents relating to Purleigh during the Middle Ages: John le White, Joyce and Richard Sygor, John Moryce, John Gale and William Hellman all appear at various times, only a person named Toppis has remained elusive.[19] Of the farms themselves only Whites is mentioned in the earliest court rolls. In 1410 six perches of ditch were in need of scouring, the following year the tenement was presented as being ruinous, and in 1420 the legality of its ownership was the subject of dispute. The owners of Whites during this period, a family named Sankyn, are obviously also the occupiers, and their appearance in related documents such as *compoti* confirms their residence.[20] From the early 16th century when a continuous line of ownership of Whites can be followed, only one owner actually resided in the parish, although some can be traced to adjacent parishes or to the nearby town of Maldon. The Coker family, for example, owned and farmed Whites during the first half of the 16th century. Although they owned five other farms in Purleigh at this time, they mainly resided in Woodham Mortimer. John

Coker was Purleigh's highest contributor to the subsidy of 1524, paying a tax of fifty four shillings, when the average was only six shillings per taxpayer.[21] Documentary evidence for the actual farm of Whites is however, not forthcoming, and the only tenant who can be traced is William Wheeler in 1653,[22] about whom little else is known.

Of Seagers (cum Toppis and Morris) rather more information is available since its owners even when not actually occupying the property were resident within the parish. The earliest reference to Seagers is in the will of John Osborn of Purleigh, date 19 November 1511. He owned a considerable number of farms, not only in Purleigh and the surrounding parishes but also as far away as Hockley. Seagers is one of the properties bequeathed to Richard, the younger of his two sons, who still being an apprentice, was to have it farmed for him and the profit deposited in a chest in the church for his future use.[23] It seems likely therefore that the farm was tenanted after 1511, and was probably sold by Richard when he came into his inheritance, since it next appears in the will of Thomas Bowtell of 8 July 1547. Thomas not only owns Seagers at this date but is actually living in the farmhouse there. His will also refers to 'a house in Danbury called Bedulles with the ground called Mayrys', which would appear to mean that Mayrys is also in Danbury, but may possibly be referring to (Toppis and) Morris separately from Seagers.[24] At the manor court held on 25 May 1553 it was presented that Thomas Bowtell had died seized of Toppis and Morris (no mention of Seagers), and the following year his thirteen year old son Thomas was admitted.[25] Thomas senior's will gives a brief description of Seagers house — a table, trestles and form occupy the hall, while in the parlour is a great hutch (chest). The farming stock mentioned consists of a plough, cart, harrows, horseharness, wheat, oats, fruit and four 'kye' (cattle). Thomas junior, by his guardians, leased out the farm until he became of age, when he probably took possession himself.[26] During his lifetime he prospered sufficiently to become one of the major yeoman of the parish, and by the time of his death in September 1600 he owned not only Seagers but also the Hide land at Gibcracks (a detached part of Purleigh), and the lease of Flanders Wick, a large pastoral farm in the east of the parish, where he was living.[27] Seagers however seems to have been let out during the latter part of Thomas's life. In 1588 for example it was occupied by Thomas Ellis.[28] This Thomas Bowtell's will is an extremely lengthy one, mainly because he was childless, and goes into considerable detail which of his kinsmen should inherit his estate and in what order, being very concerned that it should descend to someone of his own name and blood. His executors, as directed, managed the estate until Thomas's debts had been paid, then, sometime before 1608 sold Seagers, (including Toppis and Morris) to Thomas Harwood, the first of a number of absentee landlords.[29]

Like Seagers, Gales was also owned and apparently occupied, by parishioners during the 16th century. The earliest owner on record is John Bonner. Four men with this name are listed in the 1524 subsidy assessment, suffixed as senior, middle, junior and labourer, and taxed on goods valued at £20, £8, £6.6s.8d., and wages of 20s. respectively. Which John occupied Gales is impossible to say, but probably one of the middle two.[30] The property descended from father John to son John, sometimes via a

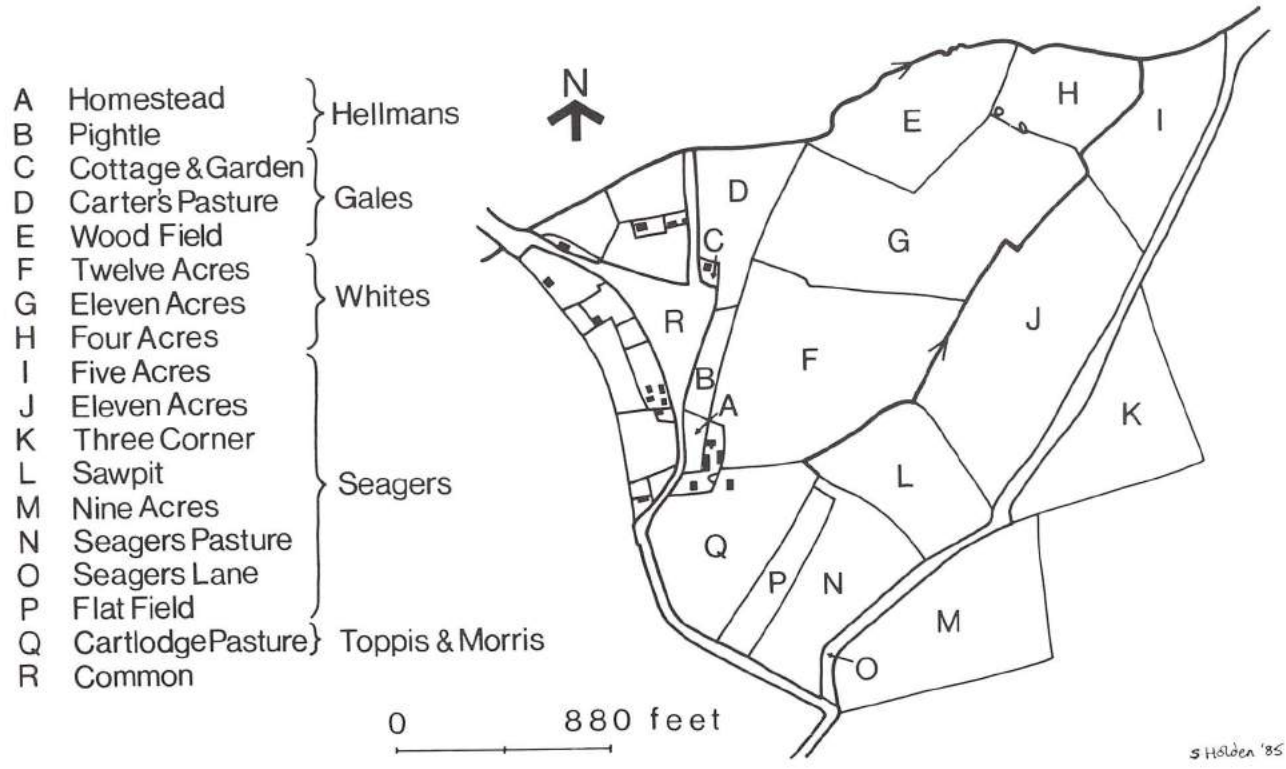

Fig. 6 Suggested reconstruction of the properties that comprise Howegreen Farm, based on the documentary evidence.

widow, for three or four generations, and was presented at the manorial court in 1575 because the kitchen of the dwelling had fallen into ruin for want of repair.[31] On the first of March 1592 Gales was purchased by James Brett, apparently in a dilapidated condition, since later that year the tenement was again subject to a court presentment, this time due to 'ruin' through neglect of tiling the roof and daubing.[32] James Brett first appears in Purleigh's records as the son-in-law of the leasee of Barons, a 112 acre freehold farm, the lease of which he inherited in 1571, (and which he retained until his death in 1612).[33] During the following decades he acquired more land, eventually becoming one of the major yeomen of the parish. Shortly after purchasing Gales, James Brett married his second wife, the recently widowed Margery Argent, an act which took him to the summit of parochial society. Margery had not only brought with her the lease of Purleigh Hall demesne (some 370 acres) but also a pastoral farm called Wysedomes in East Mersea, both fully stocked, and an annuity of £40.[34] With the social standing he had achieved (a chief pledge from 1573 and bailiff of the manor from 1592), it is certain that James did not live at Gales, but unclear whether the property was tenanted or farmed in hand, probably the latter. After his death in 1612 his estate was inherited by his son John, who mortgaged Gales for £100 in 1617 and then died a few weeks later. Gales thus became subject to foreclosure resulting in a string of absentee owners.[35]

With regard to Hellmans, little is known of either the property or the owners during the earlier years. Theoretically, a cottage with an acre or two of land is more likely to have been owner-occupied than a larger farm, but this doesn't seem to be the case here. Hellmans was owned by a succession of John Dobbyn's from before 1538 to 1626, but although this family regularly attended the manorial courts, and were even available to take surrenders out of court, they do not appear in the earliest parish burial register of 1593-1631, as at least two of them would have been if buried at Purleigh Church.[36] Neither is the name Dobbyn, in any context whatsoever, mentioned in any parishioner's will, nor in any Quarter Session documents relevant to Purleigh during this period, sources which between them capture the vast majority of the parish family names. This therefore leads to the assumption that they lived reasonably locally, but rented out Hellmans to a tenant. The last John Dobbyn had to forfeit Hellmans to his creditors in 1626, and again began a line of absentee owners.[37]

Amalgamation of the Farms

The amalgamation of these four farms was commenced during the mid-17th century by the Barnard family. Seagers had been acquired by Sir William Worthington, upon whose death the ownership was divided between his four daughters, one of whom left her share to her son William Barnard in 1628. The following year he purchased another quarter part from one of his aunts. This William appears to have been living within the parish, if not actually at Seagers, for he is named as bailiff of the manor in 1645, a position customarily held by the leasee of Purleigh Hall demesne. In 1647 William purchased Gales and Hellmans from William Young of West Hanningfield, in the name of his son Francis. In 1653 William and Francis acquired the final quarter of Seagers from an aunt, and were licensed by the manor court to let the property for up to 24 years; six years later the occupier is named as Goodman Carter.[38] By 1663 William and Francis were both dead and Francis's six sisters inherited joint ownership of Seagers, Gales and Hellmans. In 1666 Hellmans cottage caught fire and was totally destroyed. An order from the manor court for the dwelling to be rebuilt within a year was ignored, but in 1670 the sisters struck a deal with the lady of the manor. For a fee of £5 they were given permission to pull down and dispose of all the timber and materials of the dwelling house of Gales along with all the outbuildings except the barn (which was to be repaired and maintained). This was on condition that Hellmans was rebuilt by Michaelmas 1671, near the place on Hellmans ground where it formerly stood.[39] This agreement certainly seems to have been carried out so far as the rebuilding of Hellmans is concerned. The Hearth tax of 1671 names a Sara Barnard (probably the widow of William) occupying two dwellings (each with two hearths) one of which is specifically referred to as being newly erected. The clause in the agreement regarding the barn seems to have been ignored, since it was presented as being ruinous in 1690.

Five of Francis Barnard's six sisters relinquished their shares, either by death or sale, to the remaining sister, Ann, the wife of Samuel Clutterbuck, a London painter. By the time their son Thomas inherited in 1694 the ownership was again with one person. His son and heir, Thomas Clutterbuck of Fryerning purchased Whites in 1722, thus creating Howegreen Farm as it is shown on the tithe maps of 1829 and 1846.[40] This purchase of Whites was made from the heirs of John Godsave, whose father had acquired the property in 1675. At the court of 1719 John Godsave was given permission by the lord of the manor to take down the farmhouse of Whites, but to leave the barn and all other outhouses standing. This however appears not to have been done at this time, since similar permission was granted to Thomas Clutterbuck in 1722.[41] The fact that Whites was only fit for demolition at this time would indicate that the land was actually being farmed by someone living elsewhere, and this was most probably the tenant of Seagers, Gales and Hellmans. In 1698 these three properties were tenanted by John Glover and Richard Breach. The latter seems to have moved away after his wife's death in December 1700, as a rate assessment of 1704 shows Edward Theedame and John Glover jointly occupying Seagers and Gales (and presumably Hellmans, which is not mentioned).[42] Edward Theedame is also occupying a farm belonging to John Godsave, i.e. Whites. It was undoubtedly the fact that Seagers etc. and Whites had a common tenant which led to their amalgamation in 1722 (although Theedame had died some fifteen years previously). This tenant would have informed his landlord living in Fryerning (i.e. Clutterbuck) that his other landlord, who was probably living in Little Stambridge (i.e. John Godsave's widow), had died, and that Whites was on the market. The

tenant would have known if Clutterbuck was seeking further investment in land, and it would doubtless have been to his advantage to rent all his land from one owner rather than two; for Whites might have been purchased by someone wanting to take it in hand. From the evidence of the occupiers therefore, it would appear that Howegreen Farm was formed on a tenancy basis some years before it was formed as a unit of ownership.

Location of the Farms

Any attempt to try and locate the boundaries of these four farms within that of Howegreen Farm as it is shown on the earliest reliable map giving field boundaries, that of 1829, must remain somewhat speculative due to a lack of positive evidence.[43] Various documents give hints and suggestions, but the earliest map of the area (Chapman and André 1777) shows buildings only on the site of the present farmstead. However, enough evidence can be accumulated for a suggestion to be put forward as to which farm had its homestead in Carters Pasture. Before this can be done though, it is necessary to determine the actual size of each farm.

With one exception, the four farms are always referred to by a constant acreage in the court rolls. Whites is 30 acres, Gales 8 acres, Toppis and Morris 7 acres. The size of Seagers is never given. Hellmans during the 16th and early 17th centuries is described as a cottage and croft of one acre. When John Dobbyn mortgaged it in 1624 the description refers to an additional croft of half an acre, and by the time William Barnard acquired it in 1647 it had become two crofts of two acres. Even with Hellmans extra acre the total size from the court rolls, forty-seven acres, is less than half that of Howegreen Farm in the 19th century. The difference of some fifty-three acres is almost certainly accounted for by Seagers, which, being coupled with Toppis and Morris from an early date, seems to extend to some sixty acres.

The accuracy of these acreages can be checked against tax assessments, that of 1568 being the best for this purpose.[44] This names each property within the village along with the tax each paid. No property, however small, pays less than a penny, the average assessment being roughly a penny for every three to four acres. This gives comparative sizes for the farms as follows: Whites (taxed at 10d.) 30-40 acres; Gales (4d.) 12-16 acres; Seagers (14d.) 42-56 acres; Hellmans (1d.) 3 acres or less. Toppis and Morris is not mentioned since it is included with Seagers. The impression formed from these figures is that Whites and Hellmans are indeed the area given in the court rolls but Gales is somewhat larger than eight acres, and Seagers less than sixty. These figures are confirmed (to a less accurate extent) by a rate survey made in 1653,[45] when the rateable value varied from eight to fourteen shillings per acre. The acreages deduced from this are Whites 24-40 acres, Seagers 27-45 acres, Gales 15-25 acres. Hellmans is not mentioned but apparently included with Gales, which being rated on two houses and farmsteads instead of one has a disproportionately higher assessment per acre. Again therefore Gales seems larger than the eight acres of the court rolls, and Seagers less than sixty.

To find which of these four farms included Carters Pasture, we have to try and arrange the fields of Howegreen Farm, as shown in 1829, so as to comply with the approximate size of each constituent farm, and thus locate each within the overall boundary. To achieve this we are helped to some extent by the description given to two of the farms in the court rolls: Hellmans is described as lying near (or beside) Purleigh Green (i.e. the common), and Gales is also lying near the green on one side and Whites on the other side. These descriptions however are repeated *verbatim* and might not necessarily apply when later enclosures of the common were made. We learn from a court action of 1578 that Toppis and Morris also borders on the common. 'Thomas Bowtell, Richard Pellet and other tenants of land bordering the common' complained that tenants of the manor in other parts of Purleigh had 'poached upon the common grazing with their animals among the animals of tenants whose lands of the manor were bordering onto the common'.[46] The same court also reveals that Toppis and Morris actually consisted of two crofts. The general area of Seagers is indicated to be in the south and east of Howegreen Farm primarily by the 'field' names Seagers Pasture and Seagers Lane shown in the tithe award, while Seagers Hill is a name still in use for the road bordering Howegreen Farm to the south. This initial indication is substantially supported by numerous orders, from the manor court and from quarter sessions, for the occupiers of Seagers to scour ditches along the side of Seagers Lane and Seagers Hill. An order from the manor court in 1591 instructing Seager's occupier to remove branches of trees growing on the south side of Seagers Lane clearly shows that Seagers also includes the fields to the south of the lane as well as the north; evidence supported by early 18th century perambulation records.[47]

The final clue to the location of the farms from the documents comes from the manorial court rolls of 1555, when John Bonner was licensed to fell three elms in his croft called Woodcroft.[48] In 1538 John Bonner had owned not only Gales, but also the small tenement and two acres to the west called Hodges. It is unclear if he still owned both in 1555, or to which of these two the permission applied, but the occurrence of a 'Woodfield' on the north edge of Howegreen Farm strongly implies that this could well be the field referred to in 1555.

With all these hints and constraints in mind, it is possible to reconstruct the four farms within Howegreen Farm in the manner shown on fig. 6. Gales must lie adjacent to the common according to the court rolls, and also adjoin Whites. If John Bonner, the owner of Gales, owned Woodfield, then he must also have owned Carters Pasture, which is attached to Woodfield in one corner, and adjoins the common (before it was more fully enclosed) on its west side. Bonner also owned Hodges, and it would be logical for him to aquire another tenement adjacent to an existing holding should the opportunity arise, although the family apparently sold Hodges some years before they sold Gales. Woodfield and Carters Pasture together total just over ten acres, an adequate size to comply with that suggested by the tax

roll. If we thus locate Gales here, then Whites must consist of 'Four acres', 'Eleven acres', and 'Twelve acres', (which actually total almost thirty one acres). These would form a compact holding of the required size, butt onto Gales, and also respect the natural stream which runs north-east to south-west across the farm, a pronounced physical boundary so commonly used by medieval farms. Toppis and Morris (two crofts of seven acres), which also adjoins the common, can now be located as either Cartlodge Pasture and Flat Field (totalling eight and a half acres), or just Cartlodge Pasture (six and a half acres) which must have been bisected at some stage. The latter is most probable since the natural water-course lies to the east of Cartlodge Pasture, and the size is nearer the seven acres mentioned in the court rolls. Seagers therefore must be all the fields either side of the lane and probably Flat Field as well. Hellmans, a tenement and one acre which expanded to two acres in two half acre stages, all lying near or beside the green, must be the site of the present farmstead of Howegreen Farm. The pightle to the north of it is the result of the two additional half acres having been laid together. This pightle has obviously been created by enclosing the edge of the green, and the first edition 25" ordnance survey map shows a footpath bisecting it from east to west, probably delineating the division between the two stages of its enclosure (fig. 3).[49] We can, with certainty, dismiss the foundations in Carters Pasture as being Hellmans (and the cottage in the south-west corner being the result of the 1670 rebuild), since, quite apart from the fact that the field is much larger than two acres, there was no evidence from the excavation that the house on this site has ever been burnt to the ground. The house in the corner of Carters Pasture is not shown on Chapman and André's map (1777) but is first revealed on the Ordnance Survey surveyor's sheets of *c.*1800.

If the present farmstead is indeed Hellmans, then theoretically the house should show constructural features indicating it was built *c.*1670. However, the tithe map shows the present house site as the garden, the house of 1846 being further south. The exact outline of the present house (and site) is shown on the first edition 25" ordnance survey map (fig. 5). It must therefore have been constructed in the third quarter of the 19th century. With the kindness of Mr. Piper, the present owner, the farmhouse has been examined by the authors in great depth, and was found to be devoid of any features which could possibly make it earlier than the 19th century.

From this documentary evidence therefore we can surmise that by *c.*1670 Seagers, Gales and Hellmans were owned by the Barnard family, one of whom, Sarah, according to the Hearth tax of 1671, was occupying two dwellings.[50] Hellmans had been burnt down some years previously and Gales was in such a state of ruin that the Lord of the manor had no hesitation (for a fee of £5) in permitting its demolition. Prior to 1670 it is assumed that the family were living at Seagers, but as this was perhaps equally decayed the decision was made to build a new house on the site of Hellmans, this presumably being the most convenient of the four sites, with its central position and roadside accessibility. After Sarah Barnard had moved into new house, Seagers would have remained technically inhabitable for a while. This explains why she is apparently 'occupying' two dwellings in the Hearth tax of 1671, one of which (Hellmans) was noted as being newly erected, while the other (Seagers) had just been abandoned.

General Discussion

If it is acceptable that the house excavated in Carters pasture was that of Gales, what light can documentary evidence throw on the excavated remains and their historical context? The ground plan of the house, as revealed by the excavation, is that of the typical medieval hall-house with single crosswing, a design going out of fashion during the reign of Elizabeth. The bricks of the foundations are of late 16th to early 17th century date. This anomaly may be explained by information recorded in the court rolls. On the 14th June 1592 Gales was presented as being in 'ruin' through neglect of the tiling on the roof and the daubing. Earlier that same year James Brett had purchased the property from John Bonner, almost certainly in this 'ruined' condition. It was not uncommon for tenements to be presented at manorial courts for being in a ruined state because of damage to these two components. Frequently a third is also included, the groundcill, i.e. the lowest member of the timber framed walls which was either in direct contact with the ground or resting on a low plinth. If any subsidence or decay occurred to the groundcill of a timber framed house, the result would be a twisting or flexing of the house itself due to the mode of construction, a fault which would be quickly revealed by the failure of those inflexible constituents, the roof tiles and the daubing on the walls, both of which would fall. As the groundcill is not referred to in the presentment of 1592 we can perhaps assume that in this case the damage was caused by subsidence, and that the repair was affected by the jacking up of the sinking section of the house, which was then supported on the brick plinth discovered during excavation. This work was almost certainly carried out by James Brett soon after he purchased the property, since the tenement was not presented again at the next court, as would have been the case if the repairs had not been carried out. Since the bricks from the chimney base appear identical to those of the plinth, it seems probable that Brett took the opportunity of modernising the entire house at this time by carrying out the usual alterations of installing a chimney, inserting a floor into the open hall, and glazing the windows.

The repairs and modernisation of the 1590's were not enough to ensure the continued survival of the dwelling. The time came when the building was beyond repair, and the only course open was complete demolition. That it was destroyed for this reason, rather than because it was surplus to requirement is suggested by statistics compiled from the parish register, which demonstrate that Purleigh's population was reasonably static during the later 17th and early 18th centuries. It would seem therefore that it was not through lack of tenants and thus being surplus to requirements that Gales and Whites were demolished, but rather

because their condition dictated this action. The need for housing is evident from the presentments at the manor court in 1698-99, of four people (two of whom were occupiers of Howegreen Farm land) for enclosing parcels of Purleigh Green without the lord's consent. Five years later at least two, and possibly three, of these plots had had cottages built on them and were tenanted.[51] These house sites to the west of the present common are entirely unconnected in ownership with any of the farms forming the present Howegreen Farm, and hence do not originate as abandoned farmstead sites. At least two other farmsteads, Whites and Seagers, have yet to be located, and we believe these also lie buried beneath the fields. Future field walking is intended to confirm (or otherwise) this assumption.

Documents are not the only evidence to be considered, for when archaeological excavation has taken place there is also that of the finds. As will have been seen above, the majority of the pottery can be assigned to a date range from the end of the 16th to the early 18th century. Although pottery dating is rarely accurate to within more than a few decades, and although none of the pottery thought to be associated with the use of the building need necessarily be as late as the early 18th century, the finds do raise the possibility that the site was occupied after 1670. There is no proof that Gales was demolished when permission to do so was granted in 1670. Similar permission was given for Whites in 1719, but it was apparently still standing in 1722. It is interesting to note that when the barn at Gales was finally presented as being ruinous in 1757, the wording of the presentment actually refers to a 'house, building and barn on the land called Gales'. It is unlikely that the Gales house was still standing nearly ninety years after the original licence to demolish had been granted, and it is probable that this phase had become fossilized in the manorial records regardless of changing circumstances. Later that same year, the actual licence was enrolled which granted permission for Clara Ann Clutterbuck to demolish an old barn adjacent to the new barn and premises at Hellmans (apparently the present barn, which has the date 1757 inscribed on a doorpost), provided the barn at Gales, which had partly fallen down, was rebuilt.[52] No mention is made in this licence of a house or other buildings at Gales, and the requirement to rebuild the barn was apparently ignored, since it is not shown on Chapman and André's Map of 1777. Whenever the abandonment of Gales house occurred, the barn, and presumably the accompanying yard, seem to have survived in a dilapidated condition until the middle of the 18th century, and this could provide an explanation, if one is required, of the presence of pottery of this date. The small amount of later 18th and 19th century pottery that was found probably arrived on the site through manuring.

Acknowledgements

We wish to express our gratitude to Mr. R. Fleming for his permission to investigate the site in the first place and his ensuing assistance. We also wish to thank the Archaeology Section of the County Council Planning Department, and in particular, Deborah Priddy and David Andrews for their advice in preparing this report; the Essex Record Office; and Carol Cunningham who helped with the dating of the pottery finds. The field drawings were surveyed by Doug Renton and prepared for publication by Sue Holden, Steve Godbold and David Andrews. The finds drawings are by Ruth Parkin.

Notes and Reference

All reference numbers are those of the Essex Record Office unless otherwise stated. PRO — Public Record Office.

1. The fieldwork and writing of this article was a collective enterprise, but in general the excavation was directed by the late Douglas Renton, the excavation report was written by Patricia M. Ryan and the historical commentary compiled by Steven Potter, who has drawn extensively upon his researches on the history of Purleigh.
2. D/DHh P7 — Map of the manor of Purleigh Hall, 1815.
3. D/DHh M105 — Court Book of Purleigh Hall manor, court held 26th May 1817.
4. The broad classification of Essex pottery devised by Cunningham is followed here. See C.M. Cunningham and P.J. Drury, *Post-medieval sites and their pottery: Moulsham Street, Chelmsford*, London, 1985 (CBA Research Report 54), p.1.
5. *Cf.* P.J. Drury, Medieval potteries at Mile End and Great Horkesley, *Essex Archaeol. and Hist.* **7**, 1975, 57-58.
6. E.g. Q/SBa 2/1; Q/SR 191/41; D/DVo 4; D/DBr M35; D/ABW 60/9.
7. Cunningham *op. cit.* in note 4, form E3C, p.71.
8. *Ibid.*, p.64, 86.
9. *Cf.* S. Jennings, Eighteen centuries of pottery from Norwich, *E. Anglian Archaeol.* **13**, 1981, 123.
10. A. Oswald, *Clay pipes for the archaeologist*, Oxford, 1975 (Brit. Archaeol. Rep. 14).
11. Cunningham and Drury *op. cit.* in note 4, p.81.
12. John F. Nichols — 'The Extent of Lawling AD 1310' in *Trans. Essex Archaeol. Soc.* ns **XX** (1933) pp 173-198.
13. *Feet of Fines* 1 p.63 — Essex Archaeological Society.
14. D/DHh M105 — Court book of Purleigh Hall manor, court held 26th May 1817.
15. D/DHh M114 — Court book of Purleigh Hall manor, court held 12th August 1767 for example.
16. D/DVo 14 — Tax roll for Purleigh dated 1568, but compiled from an earlier one of 30 Henry VIII.
17. D/DHh P7.
18. D/DVo 4 fo.8d.
19. T/A 564 Lay Subsidy of 1319 (PRO E179/107/10-11); T/A 454 Lay Subsidy of 1327 (PRO E197/107/13); PRO E179/107/17 Lay Subsidy of 1332; D/DVo 1-2 Court rolls of Purleigh Hall manor 1410-1422.
20. D/DVo 1-2; D/DVo 13.
21. T/A 427/1/6.
22. D/P 197/28/9. Assessment of estates dated 27th December 1653.
23. PRO — PROB 11/17.
24. D/ABW 3/128.
25. D/DVo 3 fo.1r.
26. D/DVo 3 fo.2d.
27. D/AEW 12/11; D/DGe P1.
28. Q/SR 105/29 — Quarter Session presentments of the Dengie Hundred.
29. D/DVo 4 fo.8d.
30. D/DVo 14; T/A 427/1/6.
31. D/DVo 3 fo.7r.
32. D/DVo 3 fo.11r and fo.12r.
33. D/ABW 4/289; D/ABW 4/285. Wills of William and Rose Beadman.
34. D/AEW 14/97 — Will of James Brett 1610; D/DVo 3 fo.11r — Manor court held 14th June 1592; PRO — PROB 11/81 — Will of John Thirkill alias Agent 1592.

35. D/DVo 4 fo.10r.

36. D/P 197/1/1.

37. D/DVo 4 fo.17r.

38. D/DVo 4 fo.18d to end; Q/SR 379/31 Quarter session presentment of 1659. It is tempting to assume that this Goodman Carter is the person whose name is given to the field. However, the earliest reference to this field name is in the tithe award (1846), and the name Carter is not an uncommon one. Moreover, Carter is named as the tenant of Seagers, and no connection with any of the other farms can be inferred from this.

39. D/DVo 6 — court held in 1670.

40. D/DVo 8 — The court held in 1694 gives an abstract of descent; see also courts for 1696-98, 1700.

41. D/DVo 9 — Courts held 1719, 1722.

42. D/P 197/3/7.

43. D/DZI 3.

44. D/DVo 14.

45. D/P 197/28/9.

46. D/DVo 3 fo.19r.

47. D/DVo 3 fo.10d; Q/SR 336/20; D/P 197/28/10 — 1707; are examples.

48. D/DVo 3 fo.2d.

49. O.S. 25" first edition; sheet 62:1.

50. Q/RTh 5.

51. D/DVo 8; D/P 197/3/7.

52. D/DHh M110 Courts held in January and October 1757.

The Development of Settlement in North West Essex: the results of a recent field survey

by Tom Williamson

Summary

Field-walking of a selected area indicates that the pattern of settlement is of greater antiquity and density that has previously been believed.

Introduction

The county of Essex is characterised by a highly dispersed pattern of settlement, a feature which it shares with other parts of the south and east of England. A pattern of strongly nucleated villages never developed here, nor the regular open-field systems with which, in the Midland counties, this is usually associated.

Open field systems of an irregular kind did develop in a number of places within the county, but these normally underwent early piecemeal enclosure, except in the extreme north west (Hull 1950). The hedged closes which dominate, or at least until recently dominated, the landscape of Essex have varied origins, and do not for the most part originate from the enclosure of open-field arable. Most were formed by direct enclosure from the waste, but the idea that such enclosure was invariably the work of Saxon or medieval colonists has been decisively rejected by Paul Drury and Warwick Rodwell. Using techniques of landscape stratigraphy and topographic analysis, they have been able to demonstrate that the basic pattern of fields and routeways in many parts of the county '. . . was established in the later Iron Age and Roman periods, and has survived because of the subsequent continuous agricultural usage of the areas concerned' (Drury and Rodwell 1980).

The county's settlement pattern of dispersed hamlets and farmsteads has also traditionally been seen as a consequence of later Saxon and medieval assarting (Hoskins and Stamp 1963; Roden 1973). The results of a recent field-walking survey in north west Essex, however, strongly suggest that in some areas this pattern has, in large part, a very much earlier origin.

The area studied in this survey comprises a rectangular block of 144 square kilometres lying in the extreme north west of the county, and includes small portions of the neighbouring counties of Hertfordshire and Cambridgeshire (Figure 1). To the north, it is bounded by the low chalk scarp which trends south-east/north-west and forms the approximate boundary between Essex and Cambridgeshire. The study area includes the towns of Newport and Saffron Walden, but excludes the Roman town of Great Chesterford, which lies some 2 kilometres to the north.

Within this area, the heavy boulder clay plateau which covers most of north Essex is disected by the valley of the

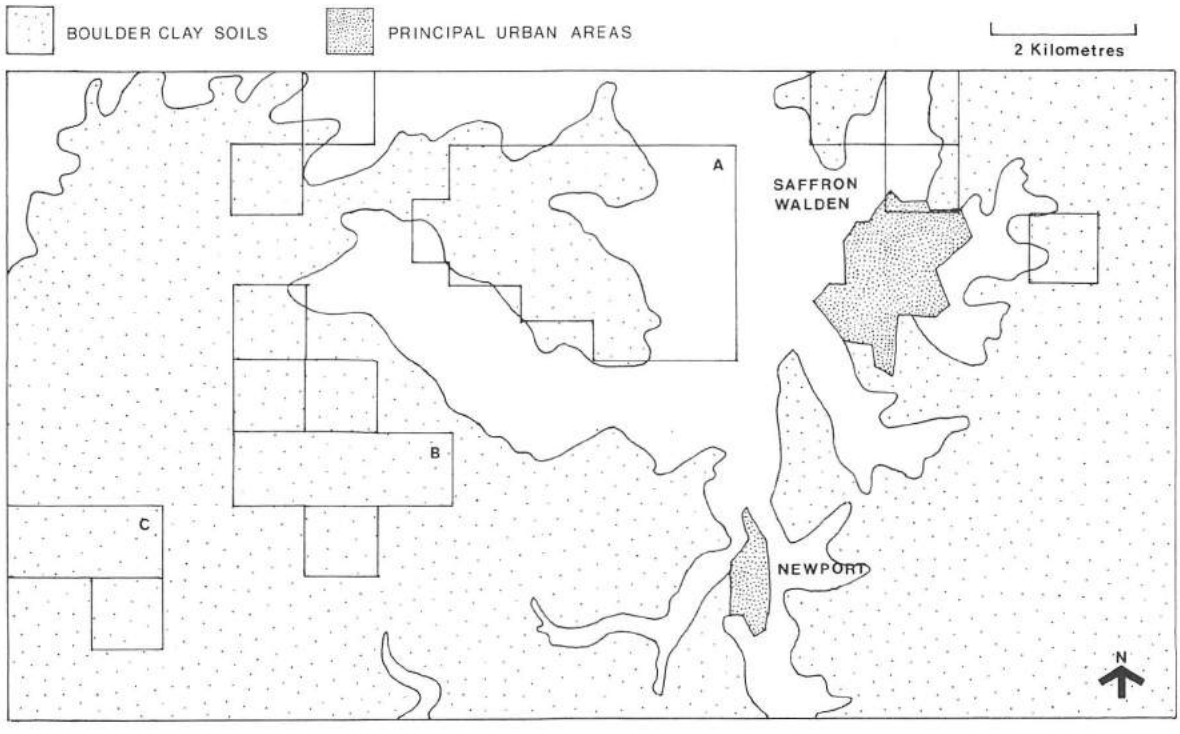

Fig. 1 The area investigated.

river Cam draining northwards into Cambridgeshire, and by the valleys of its tributaries. Where the valleys are deepest, the underlying chalk is exposed, giving rise to freely-draining soils. Even where the underlying chalk is not exposed, in the higher reaches of the tributary valleys, the clay soils of the valley sides are often relatively light and free-draining, owing to the gradient. Between the valleys, however, the boulder clays are more level and give rise to heavier, poorly-draining soils.

On the more extensive areas of the light valley-side soils, open-field systems of a multiple, irregular kind often survived until parliamentary enclosure in the 19th century. In the earlier post-medieval period, and in the middle ages, documentary evidence suggests that sub-divided fields were more widespread in the area, occurring higher up the tributary valleys and also sporadically on the heavier soils of the interfluves (Cromarty 1966; Williamson 1984a). In the latter areas, however, they seem only to have occurred within a complex matrix of enclosed fields and blocks of woodland. The distribution of subdivided fields known from the earliest maps thus represents a contraction of the area over which they formerly occurred, resulting from the progress of piecemeal enclosure.

The distribution of field systems seems to have been related to the local pattern of settlement. On the earliest available maps, as indeed today, farmsteads, hamlets and villages avoided the light soils of the valley sides where the more continuous and extensive areas of open-fields lay, although the larger nucleations of settlement — hamlets and the principal village foci — usually clustered at the margins of these. They were sited either on the floors of the major valleys (that is, in the lower reaches of the tributory valleys, or in the valley of the Cam itself) or on their upper margins, at the junction with the more level areas of plateau clays. This pattern is most plausibly interpreted as a response to the problem of water supply. While water was difficult to obtain on the valley sides, the more level areas of the interfluves carry a perched water table, while in the lower reaches of the valleys of the Cam's tributaries, as beside the Cam itself, reliable flows of water existed. In the medieval period, as was often still the case in the post-medieval, the farmsteads located beside the valleys had their holdings scattered in the open-fields near to them on the valley slopes; although quite widely scattered, that is, their lands were not evenly distributed throughout all the fields of the village in which they lay.[1] Such an arrangement was typical of the medieval field systems over a wider area of north and west Essex, north Hertfordshire, and the Chilterns (Roden 1973).

On the clay interfluves away from the major valleys, farmsteads and hamlets are more evenly dispersed. In the medieval period and after the holdings of these farms seem to have been rather more consolidated than was the case with those located beside the major valleys, lying in hedged closes and, to some extent, in small subdivided fields close to the farmsteads themselves.

Field survey strategy

The simple archaeological technique of fieldwalking — the careful examination of the ploughsoil for the concentrations of debris indicating the sites of early settlements — has over the last twenty years revolutionised our understanding of the development of settlement in England. In general terms, it has shown that during the later prehistoric and Roman periods settlement was dense and extensive even in areas of heavy and poorly-draining soils (Taylor 1984). In the Midland counties of England, moreover, it has demonstrated that the characteristic pattern of nucleated villages was not established by Saxon colonists in the 5th and 6th centuries, but was a later development from a more dispersed pattern inherited from the Romano-British past (Foard 1978; Hall 1980).

A sample of 28 square kilometres of the 144 square kilometre study area was fieldwalked by the writer between 1979 and 1982, in an attempt to elucidate the development of settlement in the area in the period up to, and including, the middle ages. The approach adopted was a rigorously systematic one. No attempt was made to look for sites in particular areas; instead, every field was examined with equal intensity, regardless of the expectation or otherwise that it would contain evidence of early settlement. In addition, attention was paid during the survey not merely to the larger and denser concentrations of debris indicating the location of settlement sites, but also to the distribution of the stray sherds which are ubiquitous in the ploughsoil of the local fields. As there is general agreement that this material enters the soil incorporated within manure brought out from farmyards and middens, careful examination of its distribution should enable areas of past arable landuse to be identified, at least for those periods in which pottery was locally abundant.

For this reason, and also in an attempt to ensure the discovery of settlement sites of the less archaeologically visible periods, 16 square kilometres of the 28 square kilometre sample were fieldwalked in some detail, utilising transects spaced at only 3 metre intervals. The areas so examined were located in three principal blocks, their outline determined by the framework of the National Grid (areas A, B, and C on Figure 1). These were chosen as representative of the principal local soils and environments. The remaining 12 square kilometres were walked less intensively, in transects spaced at intervals of 15 metres. These areas were in separate square kilometre blocks, again based on the framework of the national grid; some were chosen randomly, some to answer specific questions.

Prehistoric Settlement

Relatively few flint scatters were located by the survey, but this may not represent a reliable picture of early prehistoric activity in the region. Fieldwalking is a highly subjective exercise, and the writer finds it difficult to observe worked flints while looking for pottery sherds, especially in the kind of flint-strewn soils which form over both the chalk and the boulder clay in the area. Nevertheless, both concentrations of worked flints and flakes, and individual flakes and artefacts, were located in a number of places, including several on the plateau clays. These discoveries, such as they are, support the conclusions of a much earlier examination

of early prehistoric activity in the upper Cam valley; that flint flakes and implements 'are scattered more or less abundantly over the chalk outcrop of the valley slopes and the edge of the boulder clays . . . ' but that these 'are usually absent at any considerable distance from the chalk outcrop', although isolated examples and, more rarely, significant concentrations 'may occur in any part of the area' (Morris 1923). The chalk soils of the major valleys, and certainly the sides of the Cam valley, must have been extensively cleared during the Bronze Age, to judge from the location of ring ditches in 'false crest' positions — implying their visibility from the valley floors.

The results of this survey are more reliable as a guide to late prehistoric settlement in the area. A large number of concentrations of prehistoric pottery were discovered, few of which were directly associated with substantial concentrations of flints (Table 2). Individual sherds were, with few exceptions, badly abraded. All were in sand and, to a lesser extent, flint-tempered fabrics, the latter occasionally also incorporating some vegetable temper. Both the fabrics and — in a few cases — the form of individual sherds were comparable to material of middle or later Iron Age date from local excavated Iron Age sites at Barley, Herts. and Wendens Ambo, which lies within the study area (Hodder 1982; Cra'aster 1961). Most of these sherd concentrations therefore appear to represent settlements of middle or late Iron Age date.

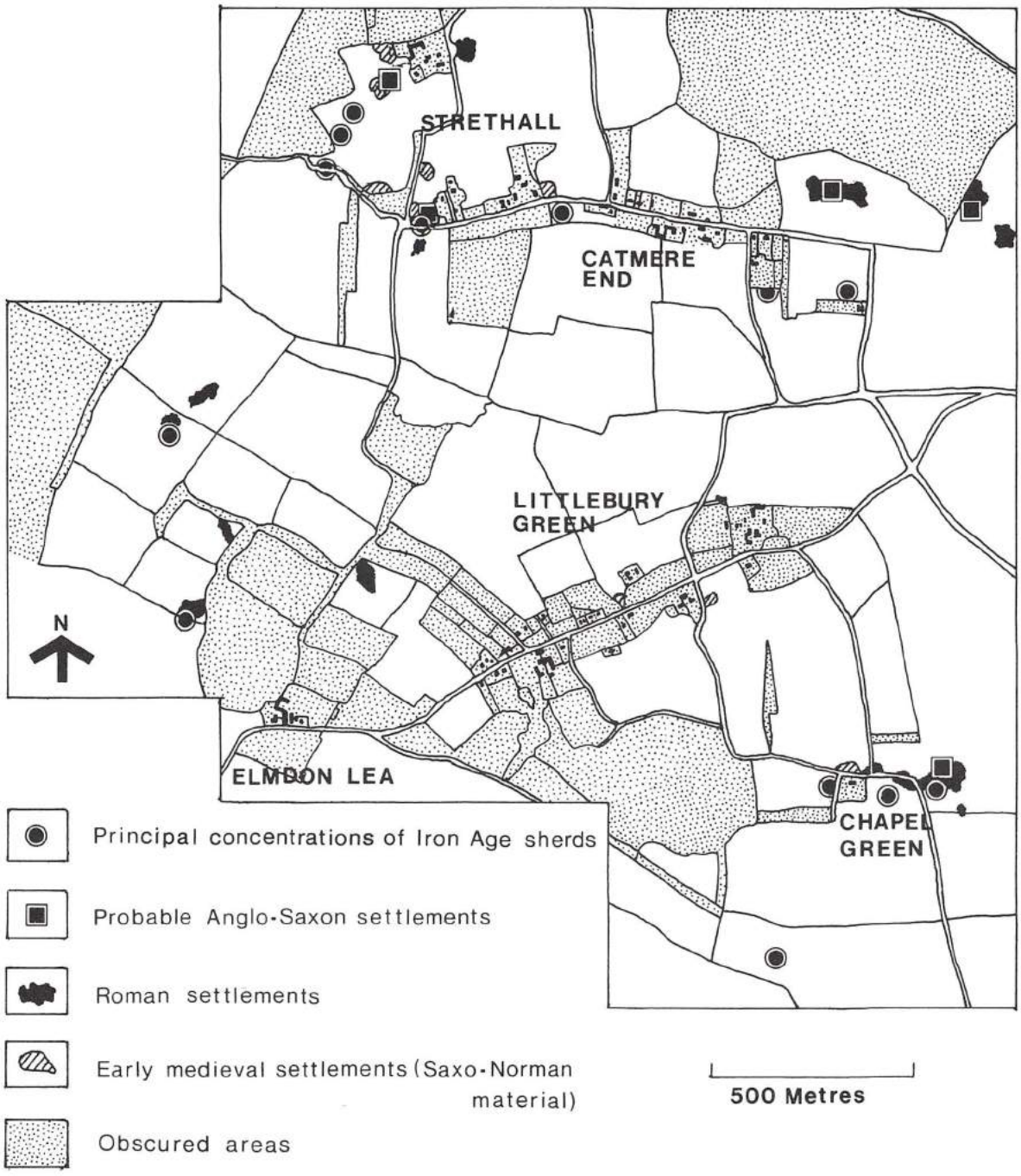

Fig. 2 Detail of Area A.

In total, 34 probable Iron Age settlement sites were discovered, giving an overall average site density (allowing for sites obscured beneath areas of non-arable land-use, and known from chance finds or excavations) of *c.*1.2 per square kilometre. This almost certainly represents an underestimate of the density of such sites in the areas examined. It excludes a further 23 small and diffuse concentrations of sherds (i.e., with less than 10 sherds within an area of 200 square metres), most of which perhaps represent dumps of rubbish or fortuitous agglomerations of sherds from manuring, but some of which may represent ploughed-out settlement sites (Table 3). It should also be noted that, given the poor visibility of this material in the ploughsoil, especially when badly abraded, it is quite possible that other sites within the areas examined remain undiscovered. On the other hand, it must also be stressed that even if these settlements were all permanently (rather than seasonally or sparodically) occupied, they need not all have been occupied at the same time.

Concentrations of Iron Age pottery are rare on the lighter soils of the valley sides, but occur on most parts of the interfluves, including some of the most level and poorly draining areas. There is, however, a clear tendency for sites to cluster near to the junction of the level plateau soils with the freely draining clay and chalk soils on the valley sides: of the 24 probable settlements discovered on the poorly-draining interfluve clays, 14 lay within 200 metres of their margins. The settlements in such locations, moreover, usually appear to have been larger than those situated further out onto the interfluves. They are normally represented by concentrations of debris covering around half a hectare, although in the case of the site at Strethall (48253950-48323975) debris occupies an area nearly four times this. Away from the margins of the lighter soils, the plateau sites appear to be both smaller (represented by sherds scattered over an area of only *c.*0.2-0.5 hectares), and fewer. Although in general these sites are fairly evenly dispersed, there are some apparent gaps in the distribution, as for example on the particularly heavy soils to the south west of Duddenhoe End, in the south of the parish of Elmdon (Figure 3).

Not all the sites discovered need represent permanently occupied settlements. Some of those on the heaviest clays may represent regular but intermittent use of woodland areas for the exploitation of wood and timber, or for pannage and grazing. Nevertheless, stray sherds of prehistoric pottery, presumably indicating at least sporadic arable land-use, were discovered even in areas of heaviest clay. The overall impression is that by the end of the Iron Age the area was already extensively deforested, even on the level areas of the interfluves.

The area studied includes within it the Iron Age hillfort of Ring Hill, situated above the river Cam to the south of Littlebury (515382). Paul Drury has suggested that early and middle Iron Age hillforts in Essex fulfilled a purely defensive function, unrelated to the hierarchy of settlement, and that many may not have been permanently occupied (Drury 1980). The relative paucity of stray sherds indicative of manuring in the fields surrounding the Ring Hill earthwork may provide some support for this hypothesis, although the thin nature of the soils here, and the steep gradient, make it possible that such evidence has been destroyed by ploughing; that is, that the sherds may now lie buried beneath soil in the floors of the surrounding valleys.

The distribution of stray sherds proves more helpful in elucidating the date and function of another earthwork in the area. Warwick Rodwell has suggested that the earthworks surrounding Grimsditch Wood (54754060) in the north of the parish of Saffron Walden may represent an *op-*

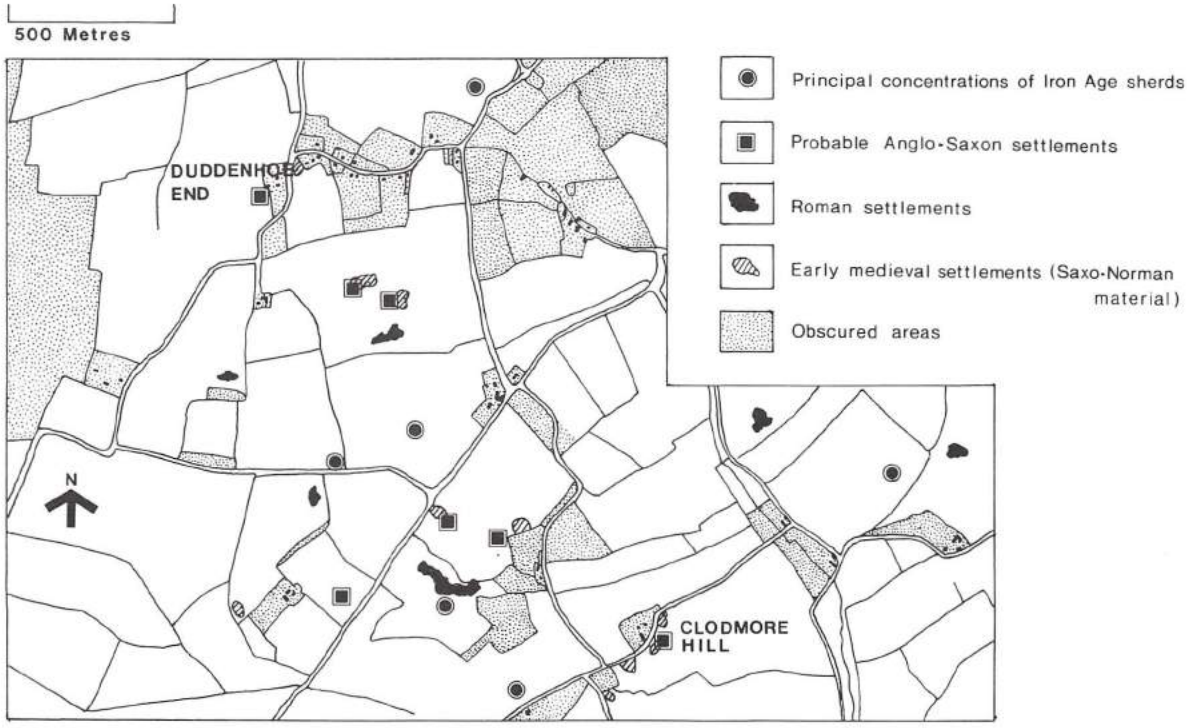

Fig. 3 Detail of Area B.

pidum of later Iron Age date (Rodwell 1976). This suggestion is to some extent supported by the large quantities of stray sherds recovered from the ploughed fields immediately to the west of the wood, strongly suggesting manuring out from a settlement obscured beneath the wood itself.

Romano-British Settlement

Evidence for settlement and landuse is much clearer for the Roman than for earlier periods, owing to the large quantities of pottery in use in the area at this time, and to the fact that many Romano-British settlements are marked in the field not merely by sherd scatters, but also by concentrations of rubble. Fieldwalking recovered 35 probable settlements of Roman date in the area surveyed (Table 4). Once again, this total excludes a number of minor concentrations, apparently too small or too diffuse to represent permanently occupied settlements, yet too dense to represent fortuitous agglomerations of manuring material (Table 5). Twelve such minor concentrations were recorded in the survey. Most probably represent dumps of hardcore or rubbish, some perhaps burials, although some — like the two on thin chalk soils above the Cam to the west of the village of Littlebury (51023915 and 51523930) — could conceivably represent the ploughed-out remains of settlements.

Allowing for other known sites, such as the villa at Wendens Ambo, this suggests a density of around 1.3 settlements per square kilometre within the area studied. Not all of these were occupied at the same time, however. Dating of many of these sites, especially those located in former areas of open-field arable, is difficult, owing to the abraded nature of much of the pottery. Nevertheless, it would appear — allowing in addition for sites undiscovered because they lie obscured beneath present areas of non-arable land use — that around 1.2 settlements per square kilometre were occupied in the mid-1st century, and perhaps slightly more — *c.*1.3 per square kilometre — at the end of the 4th (Williamson 1984b).

Once again, settlement sites are not distributed evenly across the area studied. As in the Iron Age, settlements were concentrated around the margins of the lighter clay and chalk soils of the valley sides, principally on the edge of the level plateau soils, although also to some extent beside the Cam, and on the floors of the lower reaches of the valleys of its tributaries. Some of the sites in the latter locations now lie buried beneath modern villages, as in the case of Littlebury[2]. Settlements were by this stage absent from the light soils of the valley sides away from the major watercourses or the junction with the level clays of the interfluves.

On the level interfluves themselves, away from the margins of the lighter soils, Romano-British settlements were fewer and scattered more evenly, with no obvious gaps in the observed distribution.

There are variations in the size of Romano-British settlements, and also possibly in the wealth of their inhabitants, which appear to be related to their location. Those situated on the plateau clays at some distance (more than 200 metres) from the margins of the lighter valley-side soils are represented by scatters of debris covering an area of half a hectare or less. The much more numerous sites situated at the margins of the lighter soils are usually larger, some covering as much as 1.5 hectares. Moreover, noticeable clusters of settlements occur beside the most extensive areas of well-drained soil, as for example in the area to the east of Catmere End in Littlebury, overlooking the wide valley of the Cam (Figure 2).

Settlements located beside the lighter soils also tend to produce fine pottery, especially Samian and colour-coated wares, in greater quantities than those further out onto the plateau clays. The former settlements often also produce small quantities of flint rubble — presumably from footings or cobbles — and in many cases fragments of roofing tile. Rubble and tile are absent from most of the interfluve sites. In part, however, these apparent variations in wealth and construction may be related to another important aspect of the local Romano-British settlement pattern. While the larger settlements situated beside the lighter soils were usually occupied throughout the Roman period, the smaller and rarer settlements surrounded by the heavier soils were often comparatively short-lived. In part, the absence of tile and finewares from these sites seems to be related to chronology, for at the excavated site of Wendens Ambo it was only during the later phases of occupation that significant quantities of luxury items reached the site (Hodder 1982). On the other hand, even those interfluve sites which were occupied in the later centuries of the Roman period give an impression of relative poverty.

It is clearly hazardous to make judgements about the size and, in particular, the status of settlements from the evidence of debris scatters on the surface of the ploughsoil; and it is often difficult to date settlements on the basis of poorly abraded pottery fragments. Nevertheless, in this part of north Essex a coherent picture of Romano-British settlement does seem to emerge. The majority of settlements clustered on the margins of the lighter valley soils, and these were larger, longer-lived and perhaps of higher status than those more evenly and sparsely scattered across the heavier clays of the interfluves. The valley sides were themselves devoid of settlements, except beside the major water courses. This pattern invites comparison with that of the medieval and modern periods. Not merely do we see the same avoidance of the lighter soils as sites for settlement and the consequent clustering of settlements at their margins. We also see a similar relationship between settlement size and location: for the larger nucleations of settlement are still associated with the more extensive exposures of the lighter soils, a location which is shared by most medieval parish churches in the area.

Yet this pattern does not, in the Roman period, seem to indicate that the more poorly draining areas of clay were occupied by extensive tracts of uncleared woodland. Substantial quantities of stray sherds occur throughout the area fieldwalked; indeed, *more* stray sherds were recovered from the heavier soils of the interfluves than from the lighter soils of the valley sides. It may be that the observed distribution reflects a real difference in Roman-British agricultural practices. The arable land situated on the lighter valley-side soils may have been dependent on folded sheep for the maintenance of its fertility, whereas that on the damper

clays — land less suitable for sheep — may have had its fertility maintained by the application of dung from cattle which were, at certain times, stalled within farmyards. It is also possible, however, that the observed difference results from post-depositionary factors. There may have been a degree of post-Roman soil movement on the valley sides, leading to the burial of quantities of stray sherds under thick deposits of ploughsoil in the valley floors.

On the plateau clays themselves, the stray sherds are not evenly scattered. The dense concentrations of debris marking the location of settlements are surrounded by a wider 'halo' of sherds, normally between 50 and 100 metres wide. Beyond this, the density of sherds falls away rapidly to a general 'background' level of *c.*0.8 sherds per hectare; it must be stressed, however, that this figure discounts sherds of possible Roman date which are too poorly abraded, and/or too similar in fabric to some of the local medieval material, to allow any confidence of identification.

This pattern — of dense concentration of sherds in the vicinity of the settlements, but a lesser density beyond — does not appear to result from the later spread of debris by ploughing, and it probably indicates intensive manuring of gardens or small 'infields' in the immediate vicinity of the farmsteads, with less intensive arable use — perhaps sporadically ploughed 'outfields' — on the land beyond. Such a pattern of land-use would fit in well with the relatively marginal nature of much of this poorly-draining clay plateau.

Within this wider area of less densely manured land on the plateau clays, there are one or two apparent gaps in the distribution of sherds, but for the most part the average 'background' density is maintained, even within fields which bear names (such as Stocking or Stubbing) of the kind usually considered indicative of Saxon or medieval woodland clearance. Such material also occurs within 5 areas where woods shown on 18th and 19th century maps have been grubbed out during the 20th century for the extension of arable farming. This is addition to the 10 sites of Iron Age or Romano-British date which appear to be partially obscured beneath areas of ancient woodland or have been exposed by its recent removal.[3] Taken together, this evidence strongly suggests that the Roman landscape of N.W. Essex was very extensively cleared. The area may have carried less woodland than in the 18th and 19th centuries, and even the heaviest clays were at least sporadically under arable cultivation. It was certainly not an area of under-utilised woodland grazing.

Settlement in the 11th Century

Taken at face value, the evidence recovered by fieldwalking would appear to suggest that around the time of Domesday the area studied was much less intensively settled than at the end of the Roman period (Table 7). Domesday itself records extensive tracts of woodland in the area, but to a large extent the number and distribution of settlements discovered by fieldwalking appears to be limited and biased by the fact that in many cases occupation has continued on the same sites up to the present day.

Settlements occupied in the area during the 11th century are represented by concentrations of sherds of shelly St. Neots and related wares which usually include apparent examples of 'early' forms, in particular small cooking-pots.[4] Sherds of Thetford-type wares only very rarely occur. Such sites are more common and more obvious out onto the clays of the interfluves than they are around the margins of the lighter valley soils. When they are found in the latter locations, they are frequently small in area because they protrude from the edge of modern settlements and their adjacent areas of gardens and grass. In addition, certain small settlements which can be identified with Domesday manors, such as Lea in Elmdon and Wigghepet (now Rockells Farm) in Arkesden, produced no archaeological evidence for occupation at this time, presumably because the entire area of 11th century settlement lies obscured beneath areas of non-arable landuse which now surround them. While such coincidence or near-coincidence of early medieval settlement-sites and modern farmsteads and hamlets also occurs on the poorly draining soils of the interfluves, rather more sites are completely exposed in these locations by subsequent settlement failure or shift. This is, in particular, a feature of the area of level clays between Clodmore Hill in Arkesden and Duddenhoe End in Elmdon. The early medieval settlement pattern thus appears to have been similar to that of the Roman period, with settlements on the plateau clays displaying a greater degree of mobility in areas away from the lighter valley soils than around their margins. As in the Roman period, distinct clusters of sites seem to occur around the margins of the lighter valley soils.

Nevertheless, the area does appear to have been rather less intensively farmed and settled, and certainly less extensively cleared, than it had been in the Roman period. Abundant reserves of woodland were recorded in the Domesday Survey — amounting in the case of Clavering, for example, to an area sufficient for 800 swine, representing perhaps 1000 acres or around a fifth of the total area of the vill (Rackham 1980, 119). Judging from the absence or near-absence of woodland from those manors whose territory lay principally on the lighter valley soils, it would appear that most of this Domesday woodland lay — as we might expect — on the level clays of the interfluves. Much of this, as we have seen, was growing up over abandoned Roman farmland and settlements. The interfluves were not, however, occupied by a continuous blanket of woodland. The results of the survey make it clear that hamlets and farmsteads were scattered across the clays between the major valleys. These settlements were not named in the Survey (although some still bear probable pre-Conquest names, such as Duddenhoe End in Elmdon (Reaney 1935), indicating that they were tenurially dependent on the named settlements which lie at the margins of the more extensive areas of light, valley-side soils. Because abraded sherds of St. Neots and related wares are difficult to distinguish from some of the later Romano-British material, it is impossible to ascertain archaeologically the extent of clearance on the interfluves at this time. The farmsteads and hamlets discovered by fieldwalking probably lay within areas of arable and pasture, separated by areas of coppiced woodland or more open wood-pasture.

The extent and the intensity of settlement in the area at this time may at first sight appear surprising. It should, however, be remembered that in spite of the extent of woodland recorded in Domesday, the area also had the highest recorded population density in the county and indeed one of the highest England (Darby 1957). The abundance of woodland did not mean the area was sparsely settled.

Settlement in the Anglo-Saxon period

The survey, in spite of its intensity, was not entirely successful in elucidating the development of settlement in the area in the immediate post-Roman centuries. The first two seasons of fieldwork recovered only two sherds of pottery which could, with confidence, be attributed to the Saxon period. Both were hand-made sherds densely tempered with grass and chaff, closely comparable to examples of pottery from the middle Saxon settlement at Wicken Bonhunt, located within the study area and excavated by Keith Wade between 1971 and 1973 (Wade 1980). The discovery of these sherds — one on a Romano-British site near Catmere End in the parish of Littlebury (49513952) at the margin of an extensive area of light chalk soils, the other unassociated with other material near Coshe Farm in Elmdon (46023543) on quite heavy soils some way out onto the interfluves — suggested the possibility that similar material occurred in small quantities elsewhere in the area but had remained unlocated by the survey.

There were several reasons why evidence of early and middle Saxon settlement might have been missed in the initial survey. At Wicken Bonhunt, the earliest phase of Saxon occupation was represented by hand-made sherds in a sand-tempered fabric. If such material existed in small quantities on the surface in the area surveyed, then there was some potential for confusion with Iron Age pottery, when in an abraded state. This problem which does not apply to the grass-tempered material, for which there are no close parallels in the assemblages recovered from the excavations at Wendens Ambo and Barley.

For the middle Saxon period, the situation is rather more complicated. Although the excavations at Wicken Bonhunt produced considerable quantities of pottery, including large amounts of Ipswich Ware, elsewhere in Essex there is evidence for 'an almost aceramic Saxon phase . . . between the demise of plain grass-tempered pottery (probably in the seventh and early eighth centuries) and the appearance of Saxo-Norman wares' (Drury and Rodwell 1978). Excavations by Warwick Rodwell at Hadstock, less than 5 kilometres outside the study area, produced evidence for stratified but aceramic phases of middle Saxon occupation (Drury and Rodwell 1978). This contrasts markedly with the results of the excavations at Wicken Bonhunt, which lies only 12 kilometres to the south west of the latter site. For here there was an abundance of pottery; Ipswich Ware was 'hardly an overlay of fineware as in percentage terms it forms 70% of the assemblage, with handmade wares forming 20%, and the imported continental wares filling the remaining 10%' (Wade 1980). This suggests a considerable degree of variation in the quantity of pottery in use at different kinds of settlement in the area during the Middle Saxon period, and also offers some support to Wade's suggestion that Bonhunt was a special, perhaps a royal, site (Wade 1980). If the majority of sites occupied in the area during the 8th and 9th centuries were like Hadstock, then middle Saxon settlements in the area might be represented by no more than limited quantities of grass-tempered sherds, especially as Saxon hand-made pottery, and grass-tempered material in particular, survives badly on the surface of the ploughsoil (Shennan 1981).

One reason for believing that the absence of early and middle Saxon settlement in the area was more apparent than real was the suggestive similarity between the Romano-British pattern of settlement and that of the early medieval period. Apart from the broad similarities of site distribution already noted, 35% of the settlements known to have been occupied at the end of the Roman period lie within 200 metres of settlements occupied at the time of Domesday. However, this percentage excludes a number of other Romano-British settlements which lie adjacent to farms or hamlets where evidence of earlier occupation is totally obscured by the present configuration of non-arable land-use. It also excludes a number of settlements occupied in the medieval period and still occupied today which appear, judging from patterns of manuring scatters and/or chance finds, to overlie Romano-British settlements. This kind of coincidence or near-coincidence of Romano-British and early medieval settlement location is most common in areas adjacent to the lighter valley soils, but also occurs to a more limited extent on the poorly-draining interfluves (Williamson 1984a).

For all these reasons, it seemed possible that evidence of early and middle Saxon occupation in the area might be revealed by a careful re-examination of selected areas. The areas chosen were principally those in which concentrations of Romano-British and Saxo-Norman pottery occurred in proximity, but in addition the areas around a number of single-period Romano-British or 11th century settlements were also examined. Two strategies were adopted. *Strategy one* involved a simple and rather unstructured, but nevertheless careful and lengthy, collection of material visible on the surface of the ploughsoil. Areas so examined were walked in 2 metre transects on two different occasions, in different soil but in ideal (i.e., overcast) weather conditions. *Strategy two* was more rigorous and time-consuming. It involved the gridding of the selected areas in 25 x 25 metre squares, and detailed examination of the ploughsoil with eye level maintained at between 0.5 and 1 metre above the ground. Total collection of all material present on the surface of the ploughsoil was attempted, and while this will not have been achieved the majority of sherds present at the time should have been recovered.

As Table 6 demonstrates, small quantities of grass-tempered pottery, together with some possible sherds of early Saxon sand-tempered material and Ipswich Ware, were recovered from a number of the areas re-examined. Those sites which produced the largest quantities of the most convincing material were mainly located beside the areas of lighter valley-side soils; 9 of the 16 areas re-examined in such locations produced reasonable evidence of

Saxon occupation; a further 3, rather more ambiguous evidence. While 8 of the 12 areas which were examined on the interfluves lying at more than 200 metres from the margins of the lighter soils also produced small quantities of possible Saxon pottery, in only 4 of these cases were the quantities recovered, and/or the state of preservation of the individual sherds, sufficiently unambiguous to be accepted as evidence of occupation during this period. These 4 sites, however, while not on the very heaviest soils which the area has to offer, were nevertheless located at some distance from the major valleys (at 45763658; 46293630; 46413541; and 46433541). Also among the areas re-examined on the interfluves was that in which, during the initial survey, a single sherd of grass-tempered material had been recovered near Coshe Farm in the south of Elmdon: this site produced a further 3 sherds of grass-tempered pottery.

The results of this selective re-examination are, therefore, to a certain extent ambiguous. The evidence appears to indicate continuity of occupation within what had long been the most favoured areas for settlement, on the margins of the lighter clay and chalk soils of the valleys. Here, it seems, settlement foci moved only short distances in the five centuries following the end of the Roman period: the medieval pattern of settlement evolved directly from the Romano-British. On the more poorly-draining interfluves between the valleys, however, the situation is less clear. Some settlements appear to have continued, but many did not. This apparent difference between the two zones may partly, however, be a consequence of the survey strategy adopted, combined with the nature of post-Roman settlement on the interfluves. It is possible that the pattern of settlement in the Saxon period continued to exhibit the tendencies which had characterised it during the Roman period; that is, poverty and considerable mobility. The more equivocal evidence for occupation recovered from certain of the areas re-examined on the interfluves could conceivably reflect the former feature; the absence of such material from others may be a function of the latter. For while the initial field-walking survey was rigorously systematic, the subsequent and more detailed re-examination was essentially selective, being restricted to areas in which there was evidence of late Roman and/or early medieval occupation. The small, unassociated scatter of grass-tempered material recovered near Coshe Farm in the south of the parish of Elmdon may be one of several existing in isolation from Romano-British and early medieval sites. These may not have been discovered in the initial survey because of their low visibility, yet may have been missed in the subsequent re-examination because of the selective nature of the strategy adopted.

Some other, less conventional archaeological evidence suggests that, whatever the fate of settlements themselves in the post-Roman period on the interfluves, these areas did not entirely revert to woodland. In a number of places on the heavier soils there are traces of small-scale rectilinear patterns of land division which may represent fragments of Romano-British field systems. Such layouts were, before 20th century field amalgamation, clearest in the area between Pond Street and White Friars Farm in Elmdon, and on the level clay plateau to the west of Littlebury Green. Such arrangements are stratigraphically earlier than medieval lanes, and are obscured and disrupted by the expansion of medieval settlements. That in the west of Littlebury, for example — which is laid out parallel to the Braughing/Great Chesterford Roman road — is clearly cut by a number of lanes and former lanes, including that which runs from Elmdon Lea to Littlebury Green, suggesting that its layout preceded the growth of the latter settlement. This particular stratigraphic relationship still survives, in part, on the ground (Figure 2). It is possible that such systems are early medieval in date, but they have a discontinuous appearance which suggests that they were laid out at a time when more land was under cultivation than was subsequently to be the case. Such a pattern can perhaps best be explained in terms of a Roman origin for the boundaries in question.

Nevertheless, there was clearly a considerable contraction of land under cultivation in the post-Roman period, with woodland growing up over abandoned farmland on the interfluve soils. There are signs that some land also went out of cultivation even on the lighter soils. Thus one of the open fields of Chrishall, on the chalk scarp, was called Moor Field (O.E.*mor*, 'barren and uncultivated land'); in Saffron Walden Hathfeld (O.E. *Hath*, 'uncultivated and unproductive land') appears in the 1400 Walden Survey as the name of an open field on chalk soils in the Cam valley (Cromarty 1966; Field 1972). Nevertheless, although there was a considerable thinning of settlement, especially on the level interfluves, even here there is some evidence of Saxon occupation, although whether such settlements were involved in the arable exploitation of these difficult soils is perhaps more doubtful.

Medieval Developments

The development of medieval settlement in the period after Domesday is characterised more by the expansion of existing foci than by the establishment of new ones. Sometimes this led to the growth of sprawling hamlets; several of the existing hamlets in the area, such as Duddenhoe End in Elmdon or Clodmore in Arkesden, were once rather larger than they are today. Sometimes it appears that two or more separate but neighbouring 11th century foci expanded and eventually fused, creating the loose, 'polyfocal' plan which characterises the larger settlement nucleations — large hamlets and villages — in the area. This development can most clearly be seen in the case of the village of Strethall, because of its subsequent contraction later in the medieval period.

Today the village consists of two discrete clusters of houses near the junction of the plateau clays with the chalk scarp lying to the north: a northern group, adjacent to the Saxon church; and a southern, partly fronting on a lane which forms the southern boundary of the parish, partly along a track which leads from this northwards to the church. The two clusters are separated by some 300 metres. Romano-British settlements existed near both the southern and the northern foci. The northern site, which lies to the east of the church and apparently extends beneath it, was

certainly occupied into the late 4th century.

Small quantities of grass-tempered pottery and a sherd of probable Ipswich Ware were recovered from the ploughed areas some 150m to the west of the church. Grass-tempered sherds were also found immediately to the west of the southern focus of settlement, adjacent to the east-west lane which forms the parish boundary. A single sherd was also recovered from the area immediately to the east of the present line of houses, again adjacent to the east-west lane.

All these sherds were associated with concentrations of Saxo-Norman material, which also occurs in two other locations near the present southern focus of settlement. One lies further west along the east-west lane, and is largely obscured by a small area of woodland called Round Grove; the other to the north of the present settlement, apparently associated with the lane leading north to the church. Thus at the time of Domesday, the settlement consisted of a loose cluster of separate farmsteads.

In the 12th and 13th centuries, these early foci expanded, largely along connecting lanes and tracks which still exist, until they formed what was virtually a single, sprawling, nucleation. Subsequently the village contracted, to produce its present, more scattered form. At its most expanded, however, Strethall must have displayed a morphology comparable to that now exhibited by more successful hamlets and villages at the margins of the interfluve clays, such as Elmdon or Chrishall. These usually have a number of distinct yet connected nodes, consisting of small greens and road junctions, some of which are individually named. The similarity suggests that they, like Strethall, developed from the fusion of a number of distinct nucleii rather than from the expansion of a single focus.

As well as the expansion of existing sites, however, the centuries after the Conquest saw the establishment of a number of new settlements in the landscape. Some appear to be assarts in areas of woodland, like that represented by a scatter of 12th and 13th century pottery adjacent to High Wood in Elmdon (45103689). Others appear to be strung around greens or commons, like the loose agglomeration a few hundred metres to the north of the latter site, between Duddenhoe End and Chiswick Hall (45233720). Yet others appear to be the result of the movement of settlement within areas already cleared and divided into fields, such as the small abandoned farmstead site located within a small croft called 'Lawkins' near Coshe Farm on the 1826 Enclosure Map for Elmdon (46013576).[5]

Thus by the 14th century the landscape of the area studied was characterised by a dense settlement pattern of complex and varied origins. Single farmsteads, hamlets of many forms, and loosely nucleated villages all existed in profusion. The contrast is marked, not only with the more sparse settlement pattern of the late 11th century, but also with that of the Roman period. To judge from the number of debris scatters, and also from their extent, it is very difficult to accept (for this area at least) estimates of Romano-British population levels which equate them with those of the late 13th century.

As settlement grew, cultivation re-expanded at the expense of woodland and waste. Irregular open fields developed in the vicinity of the larger nucleations, partly perhaps as a result of the division of assarted land which had formerly been shared as grazing between neighbouring farms, and partly, perhaps, through the division of holdings by partible inheritance (although this inheritance custom is not recorded in the earliest available manorial documents from the area (Roden 1973 and 1967).

The enclosed fields which are depicted on the earliest maps of the area also had varied origins. Some may represent surviving elements of Romano-British systems of land-division; some, to judge from their shape or name, represent assarts of Saxon or medieval date; while others were formed by the piecemeal enclosure of small common-fields or other kinds of subdivided arable.

Conclusion

It is unclear how representative of other areas of north Essex such a settlement history might be. Two features may have combined to make the area somewhat atypical. Firstly, it lies in the immediate vicinity of the Roman town of Great Chesterford, and is crossed by the Roman road leading from there to Braughing in Hertfordshire. This location may have influenced the intensity of settlement, and the extent of clearance and arable landuse, not only in the Roman period, but also, perhaps, in the post-Roman. For there are indications that Great Chesterford retained some importance throughout the Anglo-Saxon period. It was walled in the 4th century, and has a cemetery which began in the 5th. In 1066 it was not only itself a royal manor but was part of a much larger block of estates which were either still in the hands of the Crown, or which were recent alienations (like Littlebury and Strethall, granted to the Priory of Ely in 1005) (Blake 1962). A number of parish boundaries in south Cambridgeshire and north Essex — including the southern boundary of Littlebury — form an intermittent arc around the town at a distance of between 6 and 10 kilometres. This feature is particularly clear and continuous in the part of Cambridgeshire immediately to the north east of the area studied. Such a pattern may hint at some continuity of territorial organisation associated with the town itself.

Secondly, the nature of the local topography is not entirely typical of the boulder clay areas of north Essex, for the clay plateau is extensively dissected here by deep valleys. This has not only led to the exposure of wide areas of the underlying chalk, but has also ensured that there are numerous areas of well-drained clay, and that continuous areas of the more level and poorly-draining soils are limited in their extent.

For both these reasons, the degree of settlement continuity suggested here may be considerably greater than in many other parts of the county. Nevertheless, the essential features of the development of local settlement — most notably extensive clearance in the Roman period, the subsequent contraction of agricultural landuse, post-Roman continuity of settlement beside the lighter soils but a greater degree of discontinuity and mobility on the heavier clays — may well have a wider relevance.

If they have, then it is possible that other areas of the county, and other areas of southern and eastern England,

possess a dispersed settlement pattern in part because they failed to fully experience the twin processes of settlement nucleation and open field formation during the middle and later Saxon periods. Unlike the champion areas of the Midlands, that is, they maintained the essentially dispersed settlement pattern characteristic of earlier millennia.

As population expanded in the early middle ages, the more irregular and individualistic pattern of landholding which survived in such areas allowed a greater mobility of settlement than was possible in Midland areas, where holdings were more widely dispersed in small strips across the entire territory of each vill. In the latter areas villages could only grow, locked within their expanding subdivided fields; but in the former areas new farmsteads could always be constructed in long-enclosed fields, on assarts from the waste, or in piecemeal enclosures from the small and irregular open-fields.

At the same time, the apparent density of settlement during the later Saxon period in the area studied suggests that the failure of some areas to experience settlement nucleation and the development of regular open-field systems need not always have been a consequence of their low population densities.

Table 1
Principal Concentrations of Flint Flakes and Artefacts

Grid Reference	Parish	Soils
48023914	Littlebury	Heavy clay
49303925	Littlebury	Heavy clay
49503868	Littlebury	Medium/heavy clay
51213785	Littlebury	Chalk
51303780	Littlebury	Chalk/light clay
51543755	Littlebury	Chalk
51763931	Littlebury	Chalk/Gravel
51893925	Littlebury	Chalk
54154080	Walden	Gravel

Table 2
Probable Iron Age Settlement Sites

Grid Reference	Parish	Soils
46323537	Arkesden	Heavy clay
46503505	Arkesden	Medium/heavy clay
47703577	Arkesden	Medium/heavy clay
45153940	Chrishall	Heavy clay
46103468	Clavering	Moderate clay
45553965	Elmdon	Heavy clay (Largely obscured)
45753785	Elmdon	Chalk/gravel
45793738	Elmdon	Heavy clay
46453690	Elmdon	Light clay (Poor condition: possibly not a settlement)
46003575	Elmdon	Heavy clay
46303590	Elmdon	Heavy clay
46304085	Elmdon	Chalk
42803490	Langley	Heavy clay
47893895	Littlebury	Heavy clay
48833945	Littlebury	Heavy clay
49353928	Littlebury	Light clay
49483755	Littlebury	Moderate clay
49593925	Littlebury	Light clay/chalk
49603810-49903805	Littlebury	Medium/heavy clay
50243958	Littlebury	Heavy clay*
50253835	Littlebury	Light clay/chalk
51653905	Littlebury	Chalk
43453308	Meesdun	Heavy clay
42303403	Nuthampstead (Herts.)	Heavy clay
48253950-48323975	Strethall	Heavy clay
48503945	Strethall/Littlebury	Heavy clay
53814035	Walden	Light clay
548406	Walden	Heavy clay (Grimsditch Wood: obscured site)
	Wendens Ambo	Chalk (Cropmark site)

*This represents the edge of a site destroyed by the construction of the M11 but excavated by Tony Collins in 1977 (Collins 1978).

(The following Roman sites produced quantities of material in Iron Age fabrics, but which may be of early Roman date.

47953845	Littlebury
50903760	Littlebury
48403855	Littlebury
53284080	Walden
50023685	Wendens Ambo).

Table 3
Minor Concentrations of Prehistoric Pottery

Grid Reference	No. of Sherds	Parish	Soils
45253515	5	Elmdon	Medium clay
45303525	6	Elmdon	Medium/heavy
45503535	4	Elmdon	Medium clay
49123970	5	Littlebury	Heavy clay
49153962	6	Littlebury	Heavy clay
49243855	8	Littlebury	Medium clay
49353865	4	Littlebury	Heavy clay
49353899	5	Littlebury	Medium clay
49503759	4	Littlebury	Medium clay
49513855	6	Littlebury	Heavy clay
49653762	7	Littlebury	Medium clay
49713768	8	Littlebury	Medium clay
50093785	4	Littlebury	Medium/heavy clay
50613935	6	Littlebury	Light clay/chalk
51423915	8	Littlebury	Chalk
51603892	6	Littlebury	Chalk
43253310	8*	Meesdun	Medium clay
48683968	4	Strethall	Light clay
48803969	7	Strethall	Light clay
53824040	8	Walden	Light clay
53864032	7	Walden	Light clay
54494041	10	Walden	Medium clay
54723925	4*	Walden	Medium clay

*Roman sherds also present in small quantities.

Table 4
Roman Settlements

Grid Reference	Parish	Soils
46703460	Arkesden	Heavy/medium clay
47303590	Arkesden	Light clay
47903579	Arkesden	Medium clay
45303770	Chrishall	Medium/light clay
46103470	Clavering	Heavy clay
45553975	Elmdon	Heavy clay
45653602	Elmdon	Heavy clay
45803730	Elmdon	Heavy clay
45953565	Elmdon	Heavy clay
46203615	Elmdon	Medium/heavy clay
46303541	Elmdon	Heavy clay
42853490	Langley	Heavy clay
43103415	Langley	Heavy clay
43503435	Langley	Light clay
47893895	Littlebury	Heavy clay
47953845	Littlebury	Heavy/light clay
48083865	Littlebury	Heavy clay
48403855	Littlebury	Heavy clay
48503940	Littlebury	Heavy clay
49503950	Littlebury	Heavy/light clay
49803820	Littlebury	Heavy/moderate clay
49853945	Littlebury	Heavy/light clay
49903940	Littlebury	Heavy clay
50903760	Littlebury	Medium/light clay
51503890	Littlebury	Chalk
51603870	Littlebury	Chalk
42303403	Nuthampstead (Herts.)	Heavy clay
43503310	Meesdun (Herts.)	Heavy clay
48603980	Strethall	Light clay/chalk
53284080	Walden	Heavy clay
53804055	Walden	Medium clay
54904040	Walden	Heavy clay
56053884	Walden	Heavy/medium clay
56103850	Walden	Heavy/medium clay
50023685	Wendens Ambo	Light clay

Table 5
Minor Scatters of Roman Pottery

Grid Reference	No. of Sherds	Parish	Soils
46143564	16	Elmdon	Heavy clay
43853390	40	Langley	Light chalk
47983881	28	Littlebury	Heavy clay
49313758	20	Littlebury	Light clay
49613758	12	Littlebury	Light clay
49853831	38	Littlebury	Light chal/chalk
49913962	21	Littlebury	Heavy clay
51023915	45	Littlebury	Chalk
51523930	45	Littlebury	Chalk
51783886	40	Littlebury	Chalk
43223309	42	Meesdun (Herts)	Light clay
54703935	35	Walden	Chalk

Table 6
Sites Examined for Evidence of Saxon Occupation

1. On or adjacent to concentrations of Saxo-Norman material.

G.R.	Parish	Survey Strategy	No. grass-tempered sherds	Other material
46433541	Arkesden	2	4	1 sherd Ipswich ware
46963526	Arkesden	2	3	Sherds of possible sand-tempered
45763658	Elmdon	2	3	
45983542	Elmdon	2	Nil	
46293630	Elmdon	2	5	2 sherds Ipswich ware: sherds of possible sand-tempered
46413541	Elmdon	2	2+2?	
49703806	Littlebury	2	3?	
48393978	Strethall	2	5	1 sherd Ipswich ware
48403979	Strethall	2	3	
48503945	Strethall	2	3	
48853949	Strethall	2	1	
53184029	Walden	2	Nil	

2. On or adjacent to concentrations of Romano-British material

47263589	Arkesden	2	1?	
47903579	Arkesden	1	Nil	
45263772	Chrishall	1	1?	
45013666	Elmdon	1	1?	
45553975	Elmdon	1	2?	
46303544	Elmdon	1	3?	
42833495	Langley	2	4, +2?	
43103415	Langley	2	Nil	
47903845	Littlebury	2	3	
47893904	Littlebury	2	2?	
48353858	Littlebury	1	2?	
49513952	Littlebury	2	7	1 sherd Ipswich ware; 4 sand-tempered
49883940	Littlebury	1	2	Sherds of possible sand-tempered
49893806	Littlebury	2	4	
51603870	Littlebury	1	Nil	
50903760	Littlebury	1	Nil	
48633978	Strethall	2	Nil	
53854062	Walden	2	3	

3. Single-period, unassociated sites

46023543	Elmdon	2	4	

?= Possible or doubtful abraded sherds

Table 7
Concentrations of Saxo-Norman Sherds

Grid Reference	Parish	Comments
46323570	Arkesden	Post-medieval desertion
46503560	Arkesden	Medieval desertion
46653485	Arkesden	Post-medieval desertion
46853520	Arkesden	Post-medieval shrinkage
46853508	Arkesden	Medieval desertion
45653535	Elmdon	Shift or desertion
45903670	Elmdon	Debris protruding from present settlement area
46233640	Elmdon	Medieval desertion
46253630	Elmdon	Medieval desertion
42703435	Langley	Post-medieval desertion
42903400	Langley	Medieval shrinkage
43603425	Langley	Post-medieval shrinkage
49003850	Littlebury	Debris protruding from present settlement
49223851	Littlebury	Debris protruding from present settlement (may be post-Conquest only)
49603809	Littlebury	Debris protruding from present settlement
48403975	Strethall	Medieval desertion
48413986	Strethall	Medieval desertion
48503950	Strethall	Medieval desertion
48853950	Strethall	Medieval desertion
53204025	Walden	Medieval desertion or shift

Table 8
Medieval Settlements

Medieval settlement debris, usually only of the 12th and 13th centuries but sometimes including late and post-medieval material, occurs on and adjacent to all the above sites; in addition, the following settlements appear to have been occupied after St. Neots Ware ceased to be used in the area.

Grid	Parish	Comments
53094039	Walden	Abandoned in the 14th or 15th centuries
49353930-49363924	Littlebury*	Abandoned in the early post-medieval period
48593829	Littlebury*	Abandoned in the 14th or 15th centuries
45853675	Elmdon*	Abandoned in the 14th century
46813489	Arkesden	Occupied from 15th to 19th centuries
47503549	Arkesden*	Material mainly 13th and 14th century
45233730-45303685	Elmdon/ Wenden Lofts	Extensive area of medieval and post-medieval desertion, not fully surveyed. Associated with field called 'Potton Green Mead'. Outlying but perhaps associated areas of desertion at 45753701 and 45403685
45103689	Elmdon/ Wenden Lofts	Small scatter of 12th and 13th century pottery
49493900	Littlebury	Small concentration of late medieval and post-medieval pottery

*Adjacent to, and probable former extension of, existing settlement.

Footnotes

1. (Cromarty 1966). This arrangement of holdings survived especially well in Arkesden; see draft enclosure map, E.R.O. D/Day 01.
2. Essex County Council S.M.R., Chelmsford.
3. Using the term ancient woodland in Oliver Rackham's sense (Rackham 1976 and 1980). For further discussion of Romano-British manuring patterns, see Williamson (1984b).
4. (Cunningham 1982, 81-3; Hurst 1956, 52-5). Not all sites produced early forms, but those which did are, significantly, unobscured and well-preserved sites on the level clays of the interfluves.
5. E.R.O. Q/RDc 26.

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Colchester Courts and Court Records, 1310-1525

by R.H. Britnell

I

By virtue of concessions granted to the burgesses of Colchester by Richard I and his successors, jurisdiction over the ancient Hundred of Colchester during the later Middle Ages was exercised by the elected bailiffs of the borough.[1] Courts were held in the moothall, where the town hall now stands, and the business of each session was recorded by the town clerk. This jurisdiction, like that of rural hundreds, embraced both the execution of justice on behalf of private litigants and the administration of day-to-day police work. But the courts of Colchester Hundred had some exceptional features by 1310/1, the date of the earliest surviving court roll.[2] There was more than one court for private litigation; the work of the hundred court was supplemented by that of a 'court of pleas'. The two courts shared the same court room, but they employed different procedures in bringing defendants to answer charges against them. Meanwhile the special sessions of the hundred court called lawhundreds, which handled most of the police work of the borough, were held three times a year, rather than only twice as in rural hundreds.[3] Even so small a town as Colchester was sufficiently urban to have moulded its jurisdiction away from the rural pattern.

All through the fourteenth and fifteenth centuries the record of all Colchester's courts continued to be kept on a single roll. There is here ample documentation of the way in which procedures for both private litigation and for police work became adapted to the burgesses' changing requirements. The development of litigation was a very different matter, however, from that of police work, and the two things cannot conveniently be discussed in tandem. The present study concerns only the handling of private disputes in the hundred court and the court of pleas, a topic which presents enough complications of its own.

Private litigation in the borough included cases of violence and theft which fell short of felony but for which a plea of trespass might bring some redress to the victim. Other pleas concerned debts, detention of chattels and breaches of contract. The authority of Colchester's courts extended beyond the normal competence of an English hundred. A defendant was not usually obliged to answer in hundred courts for debts over £2,[4] but the Colchester courts did not recognise any such restriction. When a merchant attempted to stay proceedings against himself on these grounds in 1311 the court judged that it had frequently heard pleas of debt of over £2, and even some amounting to £10 or more.[5] In practice the courts assumed the competence to determine any plea concerning debt arising within the liberty — that is, any debt which was repayable there. Again, normally a freeholder was not obliged to answer for his freehold unless his opponent secured a writ directed to the sheriff, which meant that it was unusual for pleas concerning title to freeholds to appear before hundred courts. But since 1252 writs concerning disputes within the liberty of Colchester were directed to the bailiffs of the borough rather than to the sheriff of Essex.[6] This meant that the courts were from time to time instructed to determine the justice of rival claims to landed property. In reality, it must be admitted, only a tiny proportion of the business of the courts was initiated by royal writ, and litigation concerning title to freeholds occupied little of the bailiffs' time.[7] This must be because burgesses preferred to defend their freeholds in the king's courts rather than in those of the borough.

The hundred court was the older of the two civil courts in Colchester at the opening of the fourteenth century, and its sessions were more predictable than those of the court of pleas. Even in rural areas increasing private litigation between the tenth and the thirteenth centuries had caused an increase in the number of times hundred courts met. In 1234 the king's council had decreed that these courts should be held no more frequently than once every three weeks, so that they commonly met only 17 times a year.[8] In Colchester, by contrast, the hundred court usually met fortnightly on Mondays. In 1311/2 there were recesses at Christmas time, when no hundred court sat between 13 December and 17 January, and again during August and September, but on the other hand sessions were held weekly during the spring between 27 March and 1 May, so that all told there were 23 meetings during the year. In 1336/7 there were no recesses, and the court met regularly on alternate Mondays, the only irregularity being that one sitting in May was brought forward a week. There were accordingly 27 sessions of the court during this year.[9]

But not even frequent sessions of the hundred court could cope with all the requirements of the burgesses, since procedure was too slow for some purposes. When a plea was first registered with the town clerk the defendant was summoned for the next session, and only if he failed to appear then did the court order his goods to be distrained. Moreover, defendants were entitled to three essoins (i.e. excuses for absence) at fortnightly intervals before having to answer the charge against them. This meant that a plaintiff would have to wait from eight to ten weeks before he could expect the procedures of the hundred court to bring a reluctant defendant to account.[10] This was not good enough for pleas against outsiders who might be in town one day and gone the next. The officers of the court had no authority to arrest defendants once they had passed beyond the bounds of the old Colchester Hundred, now known as the liberty of Colchester, nor could they distrain goods except within those bounds. It was for this reason that the burgesses had developed the court of pleas as a second avenue for litigation.

One advantage of the court of pleas was that when a plea was registered the defendant was distrained to appear

at the very next session. Moreover, sessions of the court of pleas might be held any day of the week and at short notice. An allowance of three essoins to the defendant was customary, as in the hundred court, but there was no set period between sessions. When Hugh Fareman was sued on 21 June 1311, for assaulting Ralph Smith with a stick at the Sowenwode within the liberty of Colchester, his three essoins gave him only a day's respite; the bailiffs were willing to hold three sessions of the court of pleas on that day, to exhaust Fareman's capacity to delay justice, and then to hold another session on the following day at which he was compelled to answer.[11] Because of its *ad hoc* character the court of pleas sat at irregular intervals. There were 36 sessions between Michaelmas 1311 and 20 August 1312 but in 1336/7 there were only eight.[12]

The system of legal recording practised in Colchester in the earliest court rolls was one which was to last, with few alterations, for the rest of the fourteenth century. Sessions of court were entered in chronological sequence, each with its own heading stating the type of court (hundred court or court of pleas) together with the day on which it was held. The record of court business at each session contained several distinct elements, which may be classified as follows. (a) There was a list of new pleas, usually entered above the heading of the first session to take cognisance of them. (b) A list of essoins at each session was entered immediately below the heading. Following the list of essoins came the details of business handled by the court. These notes concerned (c) the appointment of attorneys by one or other of the parties to litigation, (d) pleadings heard in court with the court's decision how to proceed, (e) verdicts by inquest juries, (f) defendants who had successfully wagered their law or failed to do so, (g) pleas which had terminated through the default of one of the parties or by agreement, (h) acknowledgements of debt by prosecuted debtors, (i) the instructions to be given to officers of the court to arrest or distrain. These various details were recorded in the court roll by the town clerk in court as they arose, which meant that there was no orderly classification of different types of entry. It was a laborious matter checking back on the course of a plea, since each separate stage — essoins, distraints, pleadings, mode of trial and outcome — was recorded as it happened. The record of a protracted lawsuit might be scattered through several membranes of a roll, and often had to be carried forward from one year's record to the next.

II

The main features of development in Colchester courts during the later fourteenth century are to be explained by the great growth in the business of the courts which accompanied Colchester's economic development as a clothmaking town.[13] Table 1 shows the increase in the number of pleas brought to the Colchester courts during the course of the fourteenth century, chiefly as a result of an increasing amount of commercial litigation of various kinds.[14]

Table 1: Pleas brought to Colchester borough courts, 1311/2-1399/1400

Year	no.	Year	no.
1311/2	102	1378/9	532
1336/7	53	1381/2	654
1351/2	62	1382/3	537
1353/4	127	1384/5	643
1356/7	129	1387/8	878
1359/60	286	1398/9	668
1366/7	387	1399/1400	555
1372/3	322		

Source: CR 2, 5, 9, 10, 11, 12, 15, 16, 19, 21, 22, 24, 26, 30, 31.

Table 2: Sessions of the hundred court and of the court of pleas in Colchester each documented year, 1311/2-1399/1400

	hundred court	court of pleas
1311/2	23	36
1336/7	27	7
1351/2	26	8
1353/4	26	28
1356/7	26	62
1359/60	26	65
1366/7	27	73
1372/3	27	67
1378/9	26	31
1381/2	27	62
1382/3	25	45
1384/5	24	58
1387/8	26	48
1398/9	26	38
1399/1400	23	38

Note: Until 1382 it was not unusual for one of the above courts sessions to be held on a lawhundred day. After 1382 this was avoided.

Source: CR 2, 5, 9, 10, 11, 12, 15, 16, 19, 21, 22, 24, 26, 30, 31.

The approximately tenfold increase in business could not be handled without some administrative changes. Table 2 shows how often both courts sat during the later fourteenth century. The hundred court held steadily to its traditional practice, sitting approximately every fortnight and so holding about 26 sessions each year. The court of pleas first accommodated the increase in its business by sitting more and more frequently, but lost much of its older flexibility in the process. This is illustrated in Table 3, which shows how the court of pleas increasingly sat on a Thursday or Friday, becoming more like the hundred court in the weekly routine of its operations.

Table 3: Days on which the court of pleas sat, 1311/2-1399/1400

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
1311/2	11	6	5	5	3	5	1
1336/7	2	0	1	2	1	1	0
1351/2	3	0	3	0	0	2	0
1353/4	6	3	10	2	4	3	0
1356/7	11	0	22	4	18	7	0
1359/60	16	0	24	2	18	5	0
1366/7	21	1	22	0	26	3	0
1372/3	23	2	9	0	32	1	0
1378/9	18	1	5	1	6	0	0
1381/2	2	3	8	0	43	4	2
1382/3	1	0	1	13	29	1	0
1384/5	3	4	6	1	41	0	3
1387/8	0	1	10	7	29	1	0
1398/9	0	0	0	23	15	0	0
1399/1400	2	1	0	23	10	2	0

Source: CR 2, 5, 9, 10, 11, 12, 15, 16, 19, 21, 22, 24, 26, 30, 31.

The increase in the volume of business also explains some changes in procedure introduced in 1388, which were designed to speed up business and to reduce the burden upon officers of the court. In that year the borough council approved the curbing of burgesses' traditional freedom to delay justice. In future a defendant would be allowed to excuse himself for not appearing at the first session at which a plea against him was declared, and after that he would be allowed only one more essoin before the court would start distraining his goods to compel him to answer the charge against him. This gave the courts power to coerce defendants to appear well within one month of a plea having been registered.[15] The reform had a further stage, for an insertion into the text in Michael Aunger's hand — implying that it was made by 1398[16] — states that the second of these essoins was later disallowed. In effect this means that the system of essoining which had operated before 1388 was abolished. This reform had an immediate effect in reducing the clerical work required to keep track of pleas in progress. After 1388 the borough court rolls were never again as bulky and complex as they had been during the mid 1380s. The largest surviving roll is that of 1387/8, which has 71 membranes, but the largest from the 1390s, that for 1391/2, had only 45 and the largest fifteenth-century roll, that for 1437/8, had 50.[17]

Other developments of the late fourteenth century show the way in which the increase in business had encouraged changes in clerical routine and a development of professionalism in the courts.

During the years when business was increasing more rapidly, clerks became used to leaving the courtroom at the end of each session with the record of pleadings still incomplete. During the 1360s and 1370s Michael Aunger's predecessor commonly broke off his record of a plea to finish it later. Usually the record was in fact eventually completed, the resumption of clerical labour being apparent from a change of pen or ink.[18] Some pleadings were completed in a different hand,[19] and a few were never finished.[20] In time this practice became a matter of routine. By the late 1370s the same clerk would systematically leave entries incomplete when he was busy, writing for example 'Richard Crosby was attached to answer Robert Saundone in a plea that he should pay him 3s. 0d. which he owes him etc. because he says that . . .', and then leaving a gap of about an inch for the completion of the entry.[21] Michael Aunger continued this practice, which is best illustrated in the court roll for 1398/9 when he had more assistance than usual. At a court of pleas on 4 December 1398 Aunger himself wrote out the list of essoins, the precepts to the sergeants, notes of inquests deferred to later courts and the incipits of each plea heard before the court. Details of six out of the seven pleas attended to that day were later filled in by Aunger's assistant, but the seventh was left imcompletely recorded,[22] perhaps because it terminated rapidly. Against an uncompleted plea from later in the same roll, in the space where normally the plaintiff's case would have been recorded, it is noted that the defendant had afterwards applied for licence to settle with his accuser.[23]

Three conclusions may be drawn from this evidence. The first is that the main skeleton of the court record, including the incipits of each plea heard by the court, were written while the court was still in session, usually by the town clerk himself; Aunger was recording the incipits of pleas in amongst matters which could not have been noted before the court sat. The second is that the completion of proceedings, so far from being a matter calling for the clerk's special knowledge of the law, was treated as hack work to be finished off by his assistant. This implies that the completion of court roll entries involved no more than copying from a written statement of the plaintiff's case. The third is that, though town clerks kept the court rolls mostly in their own hand they had assistants about them. This is probably because they combined their public duties with commercial legal business for which they employed clerks of their own.

The borough courts were sharing in a development common to the judicial system as a whole in the later Middle Ages[24] — the development of procedure by bill of complaint. This required the services of professional clerks to prepare bills for each plaintiff before he went to court. The existence of such bills in the clerk's keeping helps to account for the ease with which they were able to cultivate more leisurely habits. If any query arose concerning the exact form of a plea they could refer to the plaintiff's bill, which was more authoritative than any court roll copy or abstract. Increasingly the most important part of any court record was not a statement of the plaintiff's case but the defendant's answer to it and the court's decision concerning the future course of the plea.

Throughout the later fourteenth century, however, the court roll remained the clerk's working record of what went on. The rolls do not have the characteristics of a fair copy; records of pleas were annotated in the course of their process through the courts to help the clerk follow their pro-

gress. Plaintiffs lodged their pleas at the town clerk's office, and the clerk issued instructions for defendants to be summoned, distrained or arrested. For each court session there was, it may be supposed, a closing date after which new business would not be accepted. When this date was passed,[25] the clerk compiled a list of the new pleas in the court roll, writing it, as in the earliest rolls, above the heading of the session at which they were to be declared. The list of new pleas usually had a marginal heading of 'Monday Pleas' or 'Tuesday Pleas' in the case of the hundred court and 'Thursday Pleas' or 'Friday Pleas' in that of the court of pleas. The lists were later annotated to indicate what happened in court. If a defendant came to court or opted to essoin himself the clerk would write *ca., for captus*. If he did not come some note about the next step was likely to be noted on the list; *dis*, for *distringatur*, would imply that the plaintiff would be distrained, *pr e c*, for *preceptum est capere*, would mean that he should be arrested. Other marginal notes related what had happened in court. If the defendant had come, heard the charge against him and made his defence, the clerk would write *placit* beside the plea, as well as recording the details of his case in the records of the court's business. If the plea resulted in an immediate settlement out of court, as it commonly did, or if the plaintiff failed to appear to put his case, then this was recorded in the court business and the letter *t*, for *terminatur* was put beside the plea in the list of new pleas. These conventions were not pursued with perfect rigour, but they were useful enough to be employed by successive clerks with minor variations.[26]

III

In contrast to the great increase of court business in the third quarter of the fourteenth century, the late fourteenth and the fifteenth century saw first a levelling off of activity and then a decline. The dating of this decline is difficult, but the number of pleas of debt was already in the late 1390s lower than it had been during the 1380s. It may be that the reforms of 1388 and subsequently, by removing the defendants right to essoins, had encouraged debtors to settle more readily out of court before any legal action was brought against them. That was not the end of the matter, however. By the second quarter of the fifteenth century the number of pleas was already normally lower than at the end of the fourteenth century, and it continued to decline slowly through the latter half of the century. By the 1490s the courts were handling no more pleas than they had done in the 1360s and 1370s (Table 4). Changes in the courts and in legal recording were nevertheless numerous, and in many respects follow in the same direction as those pioneered during the later fourteenth century.

Table 4: Number of pleas brought to Colchester courts (select years)

1434/5	347
1435/6	496
1437/8	628
1490/1	366
1493/4	389
1510/1	322

Source: CR 52, 53, 55, 83, 84; Monday Courts VI-XVII Henry VII, fos. 1r-60d; Thursday Courts VI-XVI Henry VII, fos. 1r-76v.

Developments in the organisation of the Colchester courts during the fifteenth century have a certain contradictory look about them. On the one hand the old court of pleas became more routine its operations than it had been before; on the other hand a new court was introduced to supply the flexibility which the old court of pleas had lost. Each of these developments will be examined in turn.

In the last years of the fourteenth century sessions of the court of pleas had numbered about half as many again as those of the hundred court; after the first decade of the fifteenth century this difference disappeared. The court of pleas sat 27.3 times a year on average between 1411/2 and the end of the century, and the hundred court sat 27.5 times a year (Table 5). This change of practice must have been deliberate. The court's title was changed shortly afterwards. In the roll of 1409/10 and thereafter the court of pleas was officially called the foreign court (*curia forinseca*),[27] a reference to the fact that it was the aptest court in which to prosecute non-burgesses. From now on it was very unusual for the court to sit on any day other than Thursday or Friday. The number of sessions showed no further alteration during the fifteenth century, though it rose again slightly in the early sixteenth. It was felt to be anomalous, perhaps, that the bailiffs had come to be holding more sessions of the court of pleas than of the hundred court when, in effect, it was operating on similar principles.

Some of the advantages of the old court of pleas were recovered from 1448[28] by holding a court of piepowder. This innovation may have been prompted by a clause in the burgesses' new charter of 1447,[29] but the burgesses did not suppose that their right to hold the court depended upon this charter. A heading in the court roll of 1458 speaks of a court of piepowder held in the moothall before the bailiffs 'in accordance with the custom of the town enjoyed from time immemorial by virtue of the market held anywhere in the town on any day'.[30] In Edward IV's charter of 1462 the bailiffs were explicitly authorised to hold courts of piepowder as well as courts meeting regularly on Mondays and Thursdays — a formal legitimation of current practice.

Table 5: Sessions of the hundred court, the court of pleas and the court of piepowder, 1400/1-1524/5

	hundred court	court of pleas	court of piepowder
1400/1	26	38	0
1405/6	30	33	0
1406/7	33	33	0
1411/2	24	31	0
1419/20	28	25	0
1422/3	29	28	0
1423/4	29	29	0
1424/5	26	25	0
1425/6	27	24	0
1427/8	26	27	0
1429/30	26	23	0
1432/3	29	29	0
1434/5	28	27	0
1435/6	27	27	0
1437/8	28	26	0
1438/9	27	27	0
1442/3	30	28	0
1443/4	29	31	0
1447/8	27	25	2
1448/9	29	29	1
1451/2	28	27	1
1455/6	27	27	4
1456/7	24	21	3
1457/8	29	29	5
1458/9	28	26	1
1459/60	28	27	9
1460/1	28	27	5
1463/4	29	24	10
1466/7	26	29	5
1476/7	26	29	4
1477/8	27	29	5
1481/2	28	30	2
1490/1	24	25	?
1493/4	31	29	?
1510/1	30	29	0
1512/3	25	23	0
1514/5	32	29	0
1517/8	33	27	0
1524/5	33	33	0

Source: CR 29-95; Monday Courts VI-XVII Henry VII; Thursday Courts VI-XVI Henry VII.

There were, however, no more than ten sessions of the court of piepowder in any recorded year.

In the daily work of the court the growth of legal professionalism affected in particular those pleas which were contested in court. Burgesses became less likely to speak for themselves. This development is probably related indirectly to the increased use of written pleas, since the same professional clerks both prepared written plaints for litigants and represented them before the bailiffs. There were usually two such men operating regularly in the borough, and they frequently found themselves on opposite sides of a case.[31] The qualifications for this work were close to those required for the office of town clerk. One of the attorneys in regular employment in the 1450s was John Horndon, a former town clerk,[32] and in 1455/6 Roger Purtepet acted as an attorney on several occasions even though he was himself town clerk at the time.[33] Evidence that professional representation became very common — probably most contested pleas being expounded in court by attorneys — comes from the 1450s. In the court roll of 1455/6,[34] Roger Purtepet was more concerned than in earlier years to say whether litigants appeared by attorney or not, and his record shows that in very few cases where the details of pleading are known did a plaintiff state his own case. Defendants were more likely to appear in person both then and in the earlier sixteenth century, since their task was often a relatively simple matter of recognising liability or denying it. Even defendants employed attorneys, however, where anything difficult or technical was in question. The activity of the courts was more conspicuously creating a living for professional men in the mid fifteenth century than at any earlier time.

Meanwhile town clerks made further progress in reducing the size of the court rolls, to the point that by the 1440s a year's records occupied only 25 membranes.[35] These reforms were of a clerical rather than a procedural nature and did not affect the speed with which the courts were able to transact their business.

The biggest single saving was achieved by omitting from the rolls the lengthy running instructions to the officers of the courts which frequently wound up the record of court sessions in the opening years of the century. After Michaelmas 1404 orders to arrest or distrain, after the first in any particular case, were no longer recorded here.[36] Between Michaelmas 1407 and Michaelmas 1409 further clerical labour was saved by the decision to omit any separate record of essoins put in on the first day of a new plea. The relevant procedural detail could be noted beside the record of the new plea, and it was unnecessary to have the same matter duplicated in the business of the court.[37] Thereafter the only essoins to be recorded separately were those allowed after a defendant had defended himself and was preparing for his case to come to trial.

Another development of the fifteenth century which reduced the amount of clerical work, though it did nothing to reduce the size of the rolls, was that clerks became accustomed to leave the record of pleadings in court permanently incomplete. A new format, absent from the roll for 1433/4, appears in the next surviving roll, that for 1435/6, having been adopted at Michaelmas 1434, Michaelmas 1435 or at some point between those dates.[38] In the meantime John Heyward had been replaced as town clerk by John Olyver,[39] so the new style may be credited to the latter. Under this system the defendant's answer to a plea and procedural details relating to it all went into a broad left-

hand margin, leaving only the incipit of the plea, with occasionally some details filled in, in the main court record. Since the marginal details usually took several lines, while the incipit of a plea took only one or two, the system was conspicuously wasteful of parchment, but it was nevertheless retained as standard form for at least 50 years. This is by far the most unfortunate of the various changes in practice which have been noted here, since it impoverishes the value of the court rolls as a source of information about urban economy and society.

Shortly after the introduction of this new style of legal recording, John Horndon introduced another labour-saving reform. In 1438/9 no lists of new pleas were transferred to the court roll;[40] they were evidently being kept separately. In 1439/40 the lists were restored to the court roll, presumably because their omission had caused some inconvenience.[41] But shortly after this — by 1442/3, the year of the next surviving roll[42] — a compromise had been devised and the system had been simplified. In cases where a plea terminated at the first session to which it was brought, either because the defendant sought to settle out of court or because the plaintiff failed to prosecute, the plea was omitted from the initial listing. These omitted pleas are equivalent to the ones beside which clerks would earlier have placed the mark *t.* From this time onwards the only record of such pleas in the court rolls was a note of their termination, included as a matter of course in the recording of court business. This reform, which reduced the labours of the town clerk, increases those of the historian, since it complicates the task of assessing changes in the volume of business the courts handled. A simple comparison of listed new pleas in the rolls for the years 1439/40 and 1442/3 shows a large drop in their number, but this is of no real significance since it was caused solely by the change in clerical practice which has been described.[43]

As a result of these various changes the court rolls of the mid fifteenth century are a less complete record than those of the late fourteenth century. Much of the procedural information required by the courts was kept elsewhere, the clerks having reduced their work by excluding such material from the rolls. As this happened the rolls lost their workaday character and assumed the function of a formal record, until in the sixteenth century much of their content was superfluous. To chart this process is difficult for want of the more informal records compiled during the daily course of legal administration. The revised method of recording pleas from about 1440 implies that town clerks at that date were copying up the court roll after each session rather than during it, since otherwise nothing but inconvenience could have accompanied the omission of some sorts of plea from the lists. This suggests the existence of a record such as the later court books in which procedural details were noted while courts were sitting. Such notes, together with the plaintiffs' bills of complaint, were all that were really necessary for the administration of justice, but they were not considered of sufficient status to be preserved indefinitely. This is readily understandable if the court books contained no formal enrolments of title deeds, indentures or recognisances, which continued to be recorded on the court roll.

Some court books made of paper, and evidently informal in their standards of neatness and legibility, survive from the 1490s.[44] By this time they must surely have been the main record from which clerks worked. Unlike the court rolls, where hundred courts and courts of pleas continued to be interspersed in chronological sequence, court books were kept separately for the two sorts of courts. The court books were compiled not before each session, as a listing of new pleas would have been, but while the courts were actually sitting. A practice already pioneered in the plea lists of the old court rolls was here carried to its logical conclusion; all the business relating to any given plea was recorded in one place, beside the first entry of the plea. Pleas are recorded in one of two forms, the commonest being 'A complains against B in a plea of trespass, the pledges to prosecute being C and D'. The subsequent history of this case would be recorded beside the original entry, so that if after a while the plea was settled out of court the clerk simply added *pro li con,* for *pro licencia concordandi* (i.e. 'for licence to agree') in the margin. But another form of words was adopted if a plea had already been settled before being considered by the court. In these circumstances the clerk wrote 'A complains against B in a plea of trespass for licence to agree, the pledges being C and D'. Pleas entered in this form correspond to those which were now (since *c.*1440) omitted from the court roll listings. The total number of pleas registered in a year by the town clerk is the sum of the pleas recorded in both these forms. So even though the court books contain no lists of new pleas comparable to those in the court rolls, it is easy to use them to gain accurate information about the volume of business handled by the courts. The count of pleas for 1490/1 and 1493/4 shown in Table 4 is from the court books of those years.

The number of court books surviving from 1490/1 onwards shows that by this time their status was sufficiently high to warrant their being stored. One indication of the triumph of the court books as an official record is that their style of presentation was transferred to the court rolls in 1516/7. The procedure, then over 200 years old, whereby new pleas were listed separately above the heading of the session at which they were first declared was abandoned. New pleas were now recorded amidst other court business, interspersed with notes in a different form concerning pleas which had terminated at their first session.[45]

By this time the court rolls had lost all independence as a record of court business. Comparison between the roll for 1524/5 and the surviving Thursday court book for part of that year shows that the former is little more than an edited version of the events, compiled some time after the date of the business it records. For example the court book records a plea of deception brought to court by John Vend against Edmund Chaundeler on Thursday, 13 October 1524. Chaundeler then denied the deception and undertook to wager his law. Marginal notes show that the court proceeded to summon six compurgators, but a subsequent addition shows that Vend failed to prosecute his suit and was penalised by an amercement of 6d. The court roll simply records in the business of 13 October that Vend was amerced for failing to prosecute Chaundeler, and there is no note

that the latter denied the charge or that he offered to wager his law. There is in the court roll, however, a note of Vend's pledges to prosecute which is absent from the court book, and this information must have come either from a written bill submitted by Vend at the time when he first brought the plea to court, or, less probably, from a register of new pleas kept separate from the court book.[46] The dependence of the court roll on the court book record can be illustrated further from the records of 1529/30, a year whose court roll and Thursday court book are both available. Again the roll supplied an edited version of the book, court by court; on one occasion the copyist overlooked a scrawled heading in the court book and so amalgamated the business of two sessions.[47] It is noteworthy that this court book contains recognizances which are copied up in the court roll[48] as well as one which is not.[49] In the rolls for the years after 1516 most pleas are recorded by a simple note of the manner in which they terminated and of any sum of money due to the court in consequence.

What were the main considerations behind these changes in office procedure? The fact that so many changes in the court rolls were designed to save clerical labour looks less significant when the growth of other forms of record keeping is taken into account, but it remains the case that clerks became increasingly unconcerned with formal neatness or completeness in the records they kept. Administrative considerations triumphed decisively over any concern to preserve a coherent legal record. The desirability of reform from the clerk's point of view was prompted by the repetitious and time-consuming nature of the clerical routines maintained until the early fifteenth century, and this alone must have created a disposition to cut corners wherever the efficiency of the courts would be unimpaired. But the pattern of reform was affected in detail by changes in the costs of office materials. In particular the greater availability and cheapness of paper[50] made it easier for clerks to slip into more ephemeral and informal styles of recording, a development which was at the heart of most of these changes in practice.

One other development affecting the appearance of the court rolls may conveniently be discussed here since it relates to the role of town clerks in their compilation. Under the early Tudors there was a reorganisation of clerical work in the borough. Roger Purtepet in the third quarter of the fifteenth century had been a clerk of the same stamp as his predecessors. He was himself responsible for much of the grind of maintaining the court rolls, though he was able to count on more assistance than his predecessors had been able to do, to judge from the number of different hands at work in the rolls during his years of office. John Hervy, who succeeded Purtepet in 1481, was also personally involved in clerical routine, and his hand dominates the rolls for 1481/2 and 1484/5.[51] Between his day and the early years of Henry VIII, a period from which no court rolls survive, the post of town clerk became sufficiently aloof from drudgery to be offered to the gentry. William Teye, gentleman, was clerk in 1510/1 and 1512/3.[52] He was succeeded by Thomas Audley, gentleman, first in tandem with John Barnabe in 1514/5[53] and then in his own[54] until Michaelmas 1532, when he was succeeded by Richard Duke, gentleman.[55]

Audley's talents took him into the service of Princess Mary, Cardinal Wolsey and, ultimately, to high office in the state. In 1532 he was appointed Lord Chancellor of England.[56] The clerkship of Colchester was only a first, local step in an ambitious career. Had all else failed perhaps Audley would have settled as an attorney in the Colchester courts. As things worked out, though, he was not often to be found at work in Colchester, and indeed it was not necessary that he should be. Even before his appointment the court rolls suggest that routine clerical work in the borough could be accomplished without the town clerk's personal involvement. The court roll for 1512/3, for example, contains contributions from at least four different hands,[57] and a number of hands were similarly at work when Audley was clerk. There was some continuity from year to year,[58] but new hands come and go, so that palaeographical analysis of the rolls of these years would be an elaborate undertaking. The rolls were evidently the product of a town clerk's office. Since there was no provision for such an office in the borough constitution, it must have been the town clerk's personal concern. Though probably every town clerk operated a private clerical practice, it was only in the early sixteenth century that the private practice ran the public office. The change in the make up of the court rolls introduced in 1516 dates from Audley's period in office, but it was not designed to save his own labour. His duties were partly — one supposes increasingly — honorific, partly those of a useful ambassador in high places, but also partly advisory. The court books of 1524/5 and 1529/30 both contain marginal notes to the effect that particular pleas were adjourned until his coming.[59] Audley was in effect the external legal adviser to the courts. The borough recorder, elected annually from Michaelmas 1463 onwards,[60] does not figure in this capacity; his concern was restricted to the police work of the Commission of the Peace.

In retrospect, then, it can be seen that the office work associated with the Colchester courts had been transformed between 1300 and 1525. The ancient obligation of the town clerk to sit in court and write the court rolls had vanished. Now some employee of the town clerk sat in court with a court book and other papers. The town clerk himself was in court only on special occasions, and when he came he was feted as the most learned and distinguished of men.

Notes

1. *Calendar of Charter Rolls*, i, 411; Tait, 1936, 48, 188.
2. Colchester Borough Records, CR 1. This reference and others like it state the number given to the relevant court roll in the Record Office. This numbering goes back to 1865, when the rolls were arranged and indexed by Henry Harrod, but Harrod's roll 51 was a stray membrane from CR 37 and has recently been restored to its proper place. The rolls have been renumbered to take account of this, so that Harrod's roll 52 is now CR 51, etc. More specific references to Colchester court rolls in this paper are given in the form CR 1/2, signifying the second membrane (using the medieval numeration of the membranes) of the first court roll.

   Years specified in the form 1310/1 signify the 12 months from one Michaelmas lawhundred to the next, in this case from the Monday after Michaelmas 1310 to the Monday after Michaelmas 1311.
3. Cam, 1930, 176.
4. Cam, 1930, 181-3.

5. CR 1/9d.
6. Ballard and Tait, 1923, lxi, 171.
7. For examples of procedure by writ in such cases, see CR 1/7r (attached writ), 8d; CR 2/5d, 8r; CR 3/2d.
8. Cam, 1930, 168-9.
9. CR 2; CR 5.
10. Peter le Wylde, distrained to answer a plea of broken contract, essoined himself on 17 April, 1 May and 15 May, 1312. An intervening session of the hundred court on 24 April did nothing to speed up the hearing of the case against him: CR2/8d-12r.
11. CR 1/12d.
12. CR 2; CR 5.
13. Britnell, 1986, ch. 4, 5.
14. *Ibid.*, ch. 7.
15. Colchester Borough Muniments, Red Paper Book, fo. 12v.
16. Britnell, 1982, 96, 99-100.
17. CR 26; CR 27; CR 55.
18. E.g. CR 14/3r, 5d, 6r, 7r.
19. E.g. CR 16/5r.
20. E.g. CR 15/3r, 7d; CR 16/1r, 4r.
21. CR 19/9r: *cf.* CR 19/6d, 8r, 13r, 18r, etc.
22. CR 30/7r.
23. CR 30/24r.
24. Harding, 1973, 109.
25. This is indicated by the neatness of the lists, the absence of frequent changes of pen or ink and by the absence of last-minute additions.
26. These abbreviations were neither new nor peculiar to Colchester. For similar conventions in a published sources, see Hopkins, ed., 1950.
27. CR 37 onwards.
28. CR 62/16d, 25d. Benham mistakenly refers to a piepowder court in 1443: Benham, 1937, 205. The court he discusses was in fact held on 5 May, 1458. The details are printed in Gross and Hall, eds., 1908-32, i, 122-5.
29. *Calendar of Charter Rolls*, vi, 84.
30. CR 68/21d.
31. E.g. John Horndon and John Page in 1456: CR 67/4r *bis*, 6d, 8r *ter*, etc.
32. See note above. Horndon was town clerk from Michaelmas 1439 until at least Michaelmas 1449. His hand is that of CR 57-63 and he is identified by name on the first membrane of CR 57-59, 62, 63.
33. CR 66/5d, 7r *bis*, etc. Purtepet succeeded Horndon by Michaelmas 1451 and remained town clerk until Michaelmas 1481. His hand prevails in CR 64-78 and he is identified by name on the first membrane of CR 64-7, 69-78.
34. CR 66.
35. CR 58-63.
36. During the year 1403/4 orders to distrain for the hundred courts were listed once a month except during the summer, i.e. following courts on 22 October, 19 November, 3 December, 7 January, 4 February, 10 March, 7 April, 28 April, 9 June, 1 September: CR 33/5v, 8v, 10r, 12r, 15r,d, 18r,d, 19d, 22r, 24d, 25r, 30r. This practice is abandoned in CR 34.
37. This appears from a comparison between CR 36 and CR 37.
38. This appears from a comparison between CR 52 and CR 53.
39. John Olyver was town clerk between Michaelmas 1423 and Michaelmas 1428 and again from Michaelmas 1434 or 1435 until Michaelmas 1439. His hand is that of CR 44-8, 53-6, and he is identified by name on the first membranes of CR 46 and 53-6. Between these two periods the clerk was John Heyward, whose hand is that of CR 49-52 and who is identified by name on the first membrane of each of these rolls.
40. CR 56.
41. CR 57.
42. CR 58.
43. Vigilance is required to identify variations in clerical practice, particularly in the early sixteenth century. The court roll for 1510/1 (CR 83) uses the conventions practised before *c.* 1440; all new pleas are listed even where they terminated before taking up any court time. The conventions were changed again at Martinmas 1512 when a practice was adopted analogous to that of the years after *c.* 1440; pleas requiring no handling by the court were not systematically listed. Unlike the earlier conventions, however, the termination of a plea after some delay by failure to prosecute or licence to agree was not recorded by a new entry in the rolls: compare the practice in CR 85/2r,d and 3r with that later in the roll. This illustrates the status of the court books as the true current record of litigation. There are no lists of new pleas in the roll for 1516/7 (CR 88) and afterwards.
44. The earliest surviving court books have been rebound in two volumes titled (i) Monday Courts VI-XVII Henry VII, (ii) Thursday Courts VI-XVI Henry VII.
45. CR 88.
46. CR 95/4r; Part of Thursday Court Book 16 Henry VIII, fo. 3v.
47. CR 99/16r; Thursday Courts 21 Henry VIII, fo. 18r.
48. CR 99/16d; Thursday Courts 21 Henry VIII, fos. 19r, 20r.
49. Thursday Courts 21 Henry VIII, fo. 9v.
50. Febvre and Martin, 1958, 29-30.
51. CR 79/1r; CR 81/1r.
52. CR 83/1r; CR 85/1r.
53. CR 86/1r.
54. CR 87/1r.
55. CR 102/1r.
56. Bindoff, 1982, i, 350-3.
57. CR 85.
58. E.g. the hand in CR 85/15r and CR 86/22r, 23d.
59. Part of Thursday Book 16 Henry VIII, fo. 1v; Part of Monday Book 21 Henry VIII, fos. 2r, 12v; Thursday Courts 21 Henry VIII, fo. 1r.
60. A recorder was elected every year from Michaelmas 1463: CR 72/1r.

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Work of the Essex County Council Archaeology Section 1985

Edited by Deborah Priddy

This is the ninth annual report describing the work undertaken by the Archaeology Section. Major excavations are summarised elsewhere in the volume (156-165).

Items are arranged chronologically or, in the case of multi-period sites, under the principal period represented.

The Section is grateful to all who undertook work on its behalf and to specialist contributors. Illustrations are by Sue Holden (Figs 7, 8, 11); Hazel Martingell (Fig. 4) and Ruth Parkin (Figs 1-3, 6-7, 10). Others are by respective authors.

Full accounts of the sites can be found on the County Sites and Monuments Record.

Bocking, TL 764254 (TL 72-130),
H. Martingell and C.P. Clarke

Early Mesolithic blade core kindly loaned for study; found in 1980 *c.*300m ENE of Dorewards Hall (Fig. 1.1); *c.*110mm long; single platform with blade removals all round. Slightly rolled with deep, glossy patina; slight peaty-brown staining.
Finds: Private possession.

Ardleigh, TM 064272 (TM 02-62),
H. Martingell

Mesolithic tranchet axe/adze: black flint, stained ocherous brown; fresh condition (Fig. 1.2). Triangular cross-section; length 153mm.

Tranchet axe/adzes are diagnostic tools for the Early Mesolithic. Other examples of Mesolithic worked flint in the vicinity include: flints and an axe from Little Bromley; a tranchet axe from Badley Hall, Great Bromley; and tranchet axes to the west of Great Bromley. This density of material indicates Early Mesolithic habitation in the area, and it is possible that an undisturbed working floor may still exist somewhere in the vicinity.
Finds: Private possession.

Basildon, Great Wasketts, *c.*TQ 719912 (TQ 79-115),
N. Brown

Two socketed axes were submitted to the section for recording and conversation (Fig. 2). They had been housed in the Cater Museum and were found during land drainage operations in 1910.

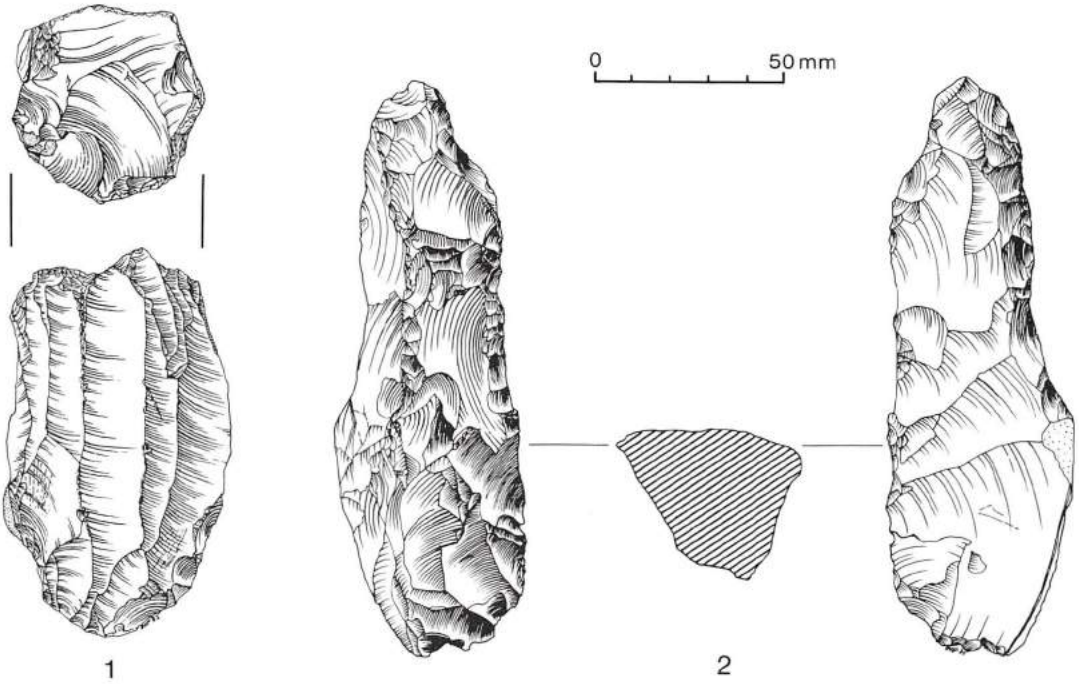


Fig. 1

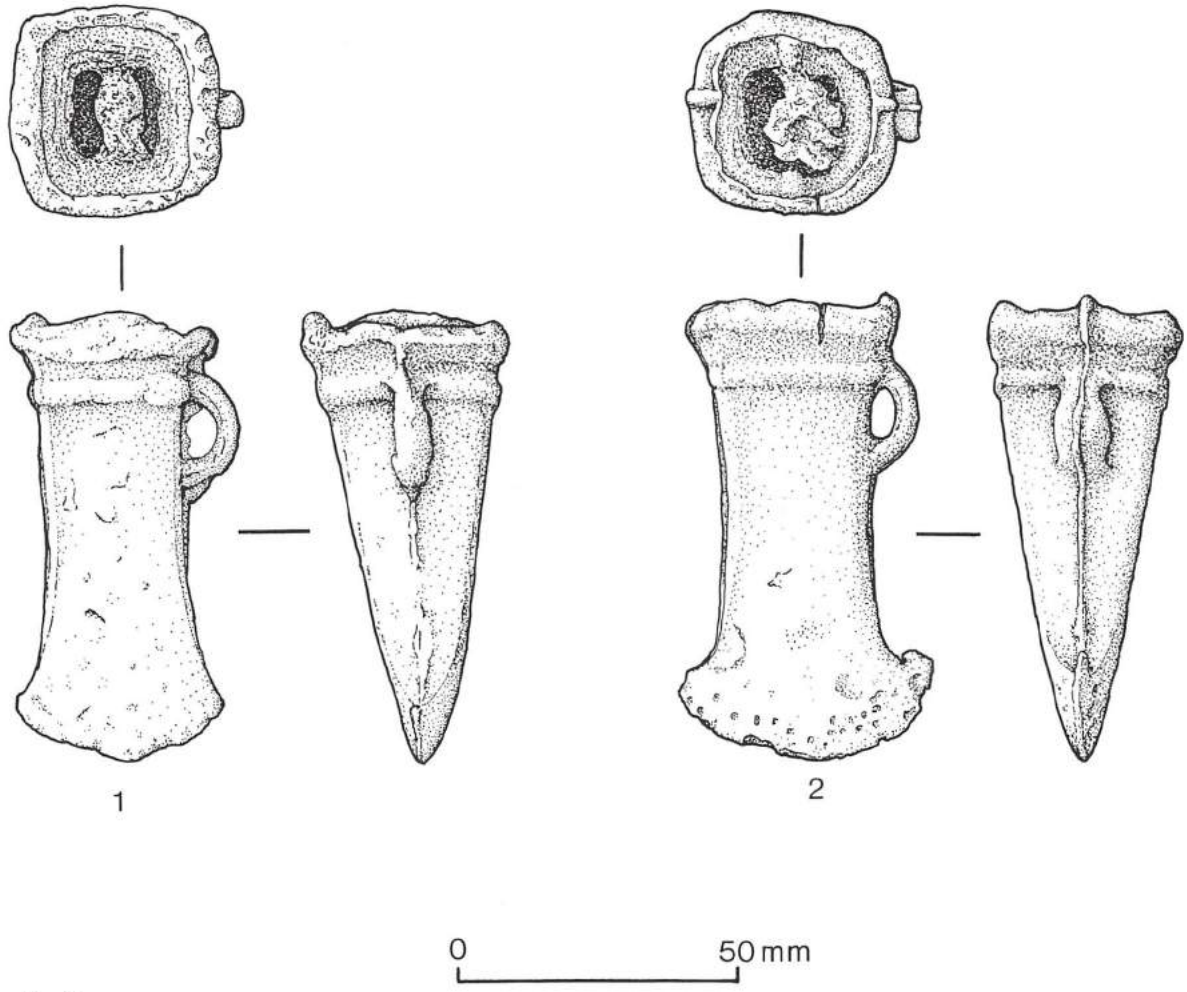


Fig. 2

Fig. 2.1 Socketed axe with pronounced collar and single moulding below. Side loop begins level with the top of the moulding and is partly untrimmed. There are prominent casting seams. The sides curve evenly to the cutting edge which is heavily damaged. No internal ribs. Considerable corrosion damage.

Fig. 2.2 Socketed axe with collar and single moulding below. Side loop begins level with top of moulding. Widely curved, heavily damaged cutting edge. There is a crack in the collar, and considerable corrosion damage. Slight internal ribs, Ehrenberg (1981) type 4.

Both axes have an irregular lump of metal inside the socket apparently fused to the axe presumably the result of a casting flaw.

The recording of this find adds to the concentration of Late Bronze Age metalwork in the Wickford area (Couchman, 1980, 45).

Finds: Private possession.

Rayleigh, Holly Cottage, TQ 81259162 (TQ 89-108)

O. Bedwin

A small trench (5 m x 1 m) was excavated next to the site of Holly Cottage, a small timber-framed, mid-18th century building. The aim of the excavation was to examine the possibility that a previous dwelling existed on the site. The pottery found can be classified as follows:

1) Early Iron Age (7th-4th centuries BC), indicating a hitherto unknown settlement.
2) Medieval (13th-15th centuries).
3) Modern (18th-20th centuries), corresponding to the occupation of Holly Cottage itself.

The absence of pottery dating to the 16th and 17th centuries suggests that there was no immediate predecessor to Holly Cottage on the site.

Finds: S.M.

Lexden, Oaks Drive, TL 98612513 (TL 92-15)

C. Turner

A complete Roman grey ware flask (Fig. 3) was recovered from Council allotments by Mr. B. Mills of Braintree.

The fabric is smooth and micaceous, with common, fine-coarse, ill-sorted, rounded red-brown inclusions (?ore particles). The abraded surfaces are brown, but darker in patches where the original burnished surface survives. The burnishing extended overall originally, including the lower base and internal rim surface (down to the level of the broken line on the illustration) and decoration is restricted

to a single incised line on the shoulder. The vessel weighs 362g and has a fluid capacity of 1050ml up to the level of the narrowest point of the neck.

This is an isolated find and no details are known of its context. It is possible that it is from an early Roman burial since its findspot is in the vicinity of the Roman West Cemetery (Hull 1958, 253-5). Similar flasks occur in early grave groups forming part of the Joslin Collection (in Colchester and Essex Museum) which may also have been recovered from this area.

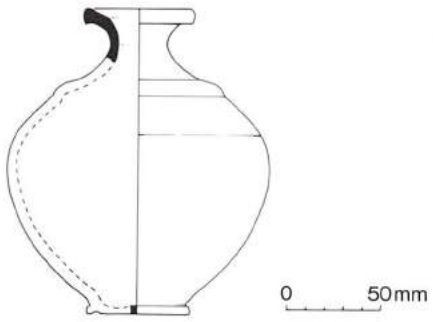


Fig. 3

Joslin's grave group 8/68, dated AD 40-70, included two flasks (May 1930, 254-5, pl. 76.8), one of which is described as being a 'Belgic grey' ware. Two further flasks are included as part of Joslin's group 82/20 (May 1930, 276, pl. 85.82), dated AD 117-138. They are described as being of 'reddish clay with buff slip' and of a type surviving to about the end of the 1st century. However, it should be borne in mind that flasks of this type were in use throughout the Roman period in Essex and the difficulties of dating them more closely has been noted already (Jones and Rodwell 1973, 31).

Finds: Private possession.

Woodham Walter, Warren Golf Course,

TL 799065 (TL 70-183) C. Turner

The discovery of a near complete jar (Fig. 4.1) and sherds from other coarse ware vessels in the west face of a sand quarry may be evidence for a Roman cemetery site. The pottery was brought to the attention of the Archaeology Section by the owner of the Golf Club, Mr. J. Durham and at his invitation a further exploration of the site was carried out. During trial excavations more pottery was recovered; apparently from the fills of a number of small pits, though these were not clearly defined since the fills were almost indistinguishable from the natural sand into which they were cut. Mechanical disturbance at a later date revealed more pottery in the quarry face and a further small group was collected by Mr. Durham with the help of Pat Ryan.

The upper levels of the pits were obscured by a dark humic level with root disturbance (5-30cm deep) immediately overlying the natural sand. The deepest of the pits was 1m below the sand/humic level interface, with others *c.*60-70cm deep. Previous ploughing on the site, perhaps in antiquity, is indicated since mainly bases and lower parts of vessels were recovered: in addition to the jar noted above only four rim sherds were found. Furthermore, the base parts were found tilted rather than lying horizontally and the fractured edges of all sherds show abrasion.

A single small, unstratified, prehistoric sherd was recovered but other than this all of the pottery is Roman in date. The soil content from the bases of six vessels was sieved but no trace of bone, cremated or otherwise, was found. If any bone had been present originally it may since have been lost through acid soil conditions. No other artefacts were recorded.

The Pottery

The pottery consists of 68 sherds (4.5kg) and represents a minimum of 22 vessels, probably all jars. With the exception of the near complete jar the sherds vary in size from

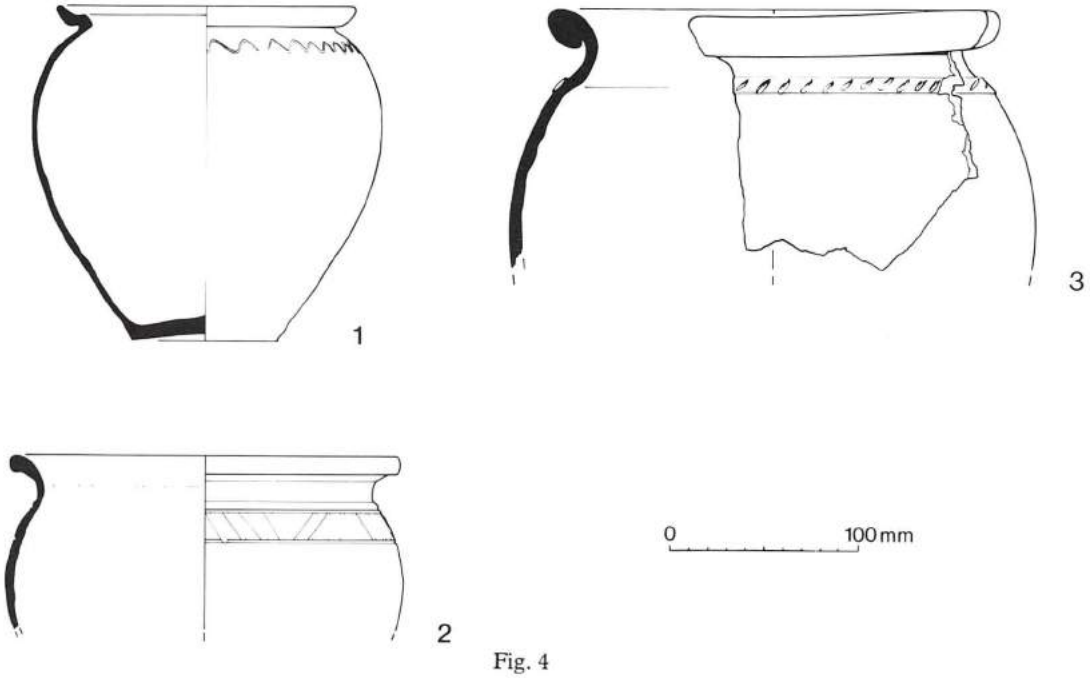


Fig. 4

fragmentary pieces to some comparatively large surviving parts (up to 24cm across). All of the sherds are in sand-tempered fabrics which are very similar in appearance but which, on microscopic examination, can be sub-divided into seven variants on the basis of additional inclusions of red (?ore) particles, mica, charcoal and grog or 'grog'-type particles.

Three of the jars (Fig. 4) provide some indication of date for the site:

Fig. 4.1 Ledge-rimmed jar (75% complete): dark grey fabric (nearest Munsell 7.5YR Ne/); tempered with abundant, medium-coarse sand; smoothed external surface, decorated with an incised wavy line.

A common 2nd to early/mid-3rd century jar form in Essex, although decorated examples such as this one are unusual. The form corresponds with those included as Mucking Type F (Jones and Rodwell 1973, 22-24) of which a sandy variant (with additional sparse shell inclusions) was produced in Kiln VI dated Hadrianic-Antonine (Swan 1984, microfiche p.300). The latest dating for this form occurs at Chelmsford where type G5 jars include forms dated not later than early/mid-3rd century (Going, in prep.).

Fig. 4.2 Cordoned jar/bowl: fabric similar to Fig. 4.1 above, with additional red (?ore) inclusions; burnished on the internal rim surface, in bands on the neck, on the body below the shoulder cordon and with burnished opposed sets of diagonal lines on the cordon itself.

Cordoned jars of this type had early origins and numerous examples have been found at Nazeingbury (Huggins 1978, figs 14-16, 19) where occupation lasted to *c.*AD 160. The Woodham Walter vessel has closer parallels in the more open bowl form such as Palmer's School Type 3 bowls which were produced in a late 2nd-century kiln at Grays, Thurrock (Rodwell 1983, 8-10).

Fig. 4.3 Large bead-rimmed jar with stab-decorated shoulder; fabric similar to Fig. 4.1 above, with a grey core and surfaces and red margins; burnished on the upper rim, extending just over the internal surface and on the neck in a band accessible below the level of the rim beading.

The form is not particularly well-dated in Essex. At Chelmsford it is tentatively put within a date range of ?late 1st-early 3rd century (Going, pers. comm.) but similar jars from the Mithraeum deposit at Colchester (Hull 1958, fig. 69.121-122) may be later.

Finds: Private possession.

Chelmsford, Hall Street, TL 70970633 (TL 70-1)
D. Andrews and M. Gee

The demolition of outbuildings and construction of a new computer building provided an opportunity to investigate this area for remains of the Roman town, and especially of a Roman road aligned east-west, which by extrapolation from previous excavations ought to have run through it. Excavation was confined to the foundation trenches of the new building. The southern edge of the road was located, together with its flanking ditch. The lower fill of this contained pottery datable to the 2nd century AD. Its upper fill, a dark loam, contained pottery of the later 4th century, and was sealed by a thin pebbly horizon which, in a matrix of similar material, also extended across the road. This loam was very little distinguishable from the overburden of cultivated soil on the site, and in general these layers resembled the dark earth typical of the late Roman and early Middle Ages in many towns. No evidence of buildings was found, but this could be because it had been removed by agriculture and cultivation.

Finds: Ch. E.M.

St. Osyth, Welwick Farm, TM 121168 (TM 11-64)
D. Priddy

Following further stripping of topsoil in the western part of the quarry, fieldwalking revealed a concentration of Roman building materials and pottery at *c.*TM 12201670. Eight sherds of Roman sandy grey ware were recovered, including one rim from a bead rimmed dish of early 2nd-to mid-3rd century date. Also recovered was one very abraded fragment of buff ware, possibly from a 1st to 2nd-century flagon. The building materials consisted mostly of roof tile and several patches of burnt material were noted. From elsewhere on the site a single truncated flint flake with horizontal straight re-touch across the distal end was found. This is probably an early Neolithic piece.

Finds: C.E.M.

Broomfield Borrow Pit, TL 714095 (TL 70-3)
M. Gee

Introduction

In the late 19th century a rich 7th-century Saxon burial was discovered off the Broomfield Road near to the present Saxon Way (Fig. 5). Such burials are extremely rare and little investigation has been undertaken into their surroundings and the landscape into which they are placed. For this reason, the area around this burial was of great archaeological interest.

Accordingly, in July 1985 when gravel extraction began, to provide material for the Chelmer Valley (South) road, a watching brief was undertaken. It was hoped that evidence would emerge to place the seemingly isolated burial 'in context', either in the form of other burials or, perhaps, an adjacent settlement.

The Watching Brief

Topsoil was removed by box-scraper. Monitoring of this process produced *c.*170 pieces of mostly poor quality flintwork. The only diagnostic pieces were a blade, two scrapers and an arrowhead all of which fit well into a late Neolithic/Early Bronze Age category (Fig. 6). The remaining unretouched material may date from all periods from the Mesolithic onwards. Surface pottery was minimal with most of the scattered sherds being modern. However, a

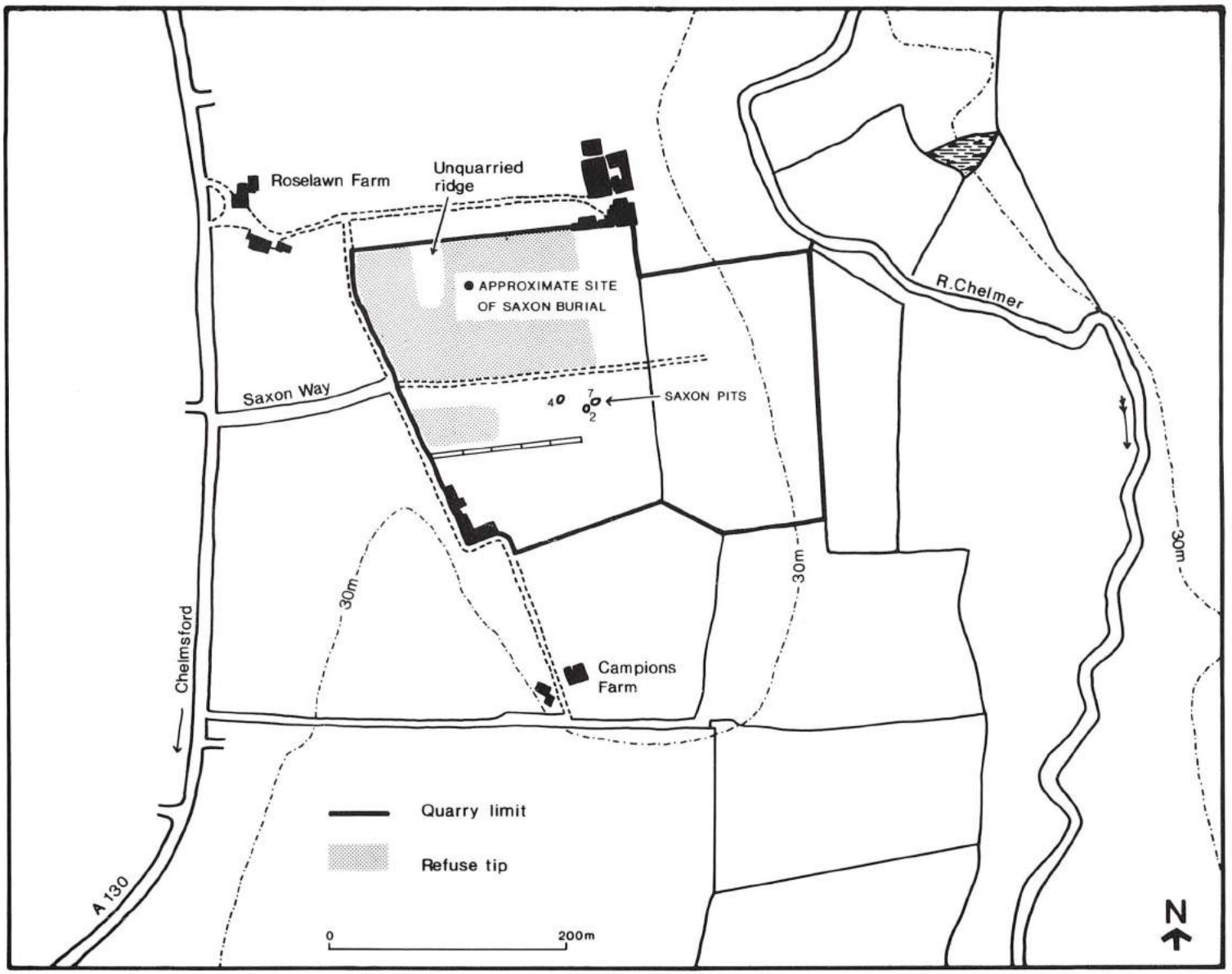

Roselawn Farm
Unquarried ridge
APPROXIMATE SITE OF SAXON BURIAL
R.Chelmer
Saxon Way
SAXON PITS
30m
30m
30m
Chelmsford
A130
Campions Farm
Quarry limit
Refuse tip
0
200m
N

Fig. 5

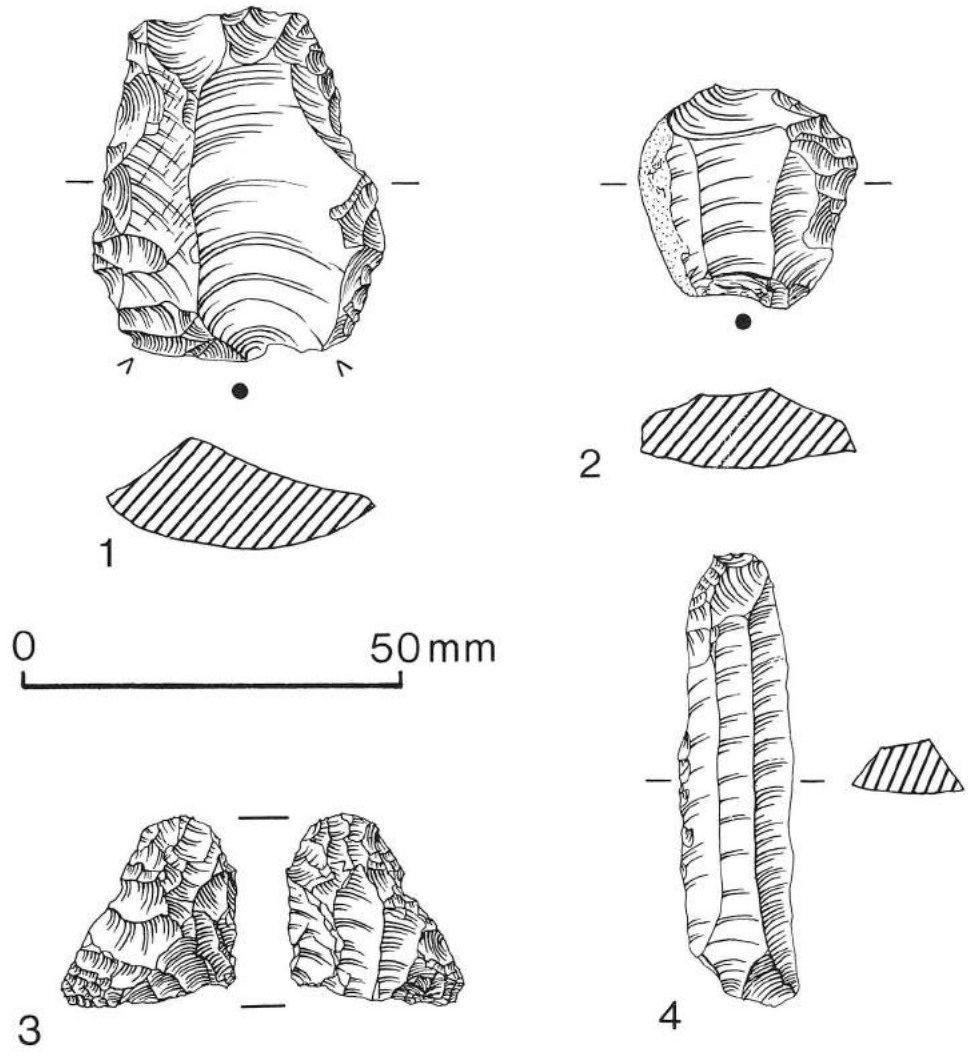


Fig. 6

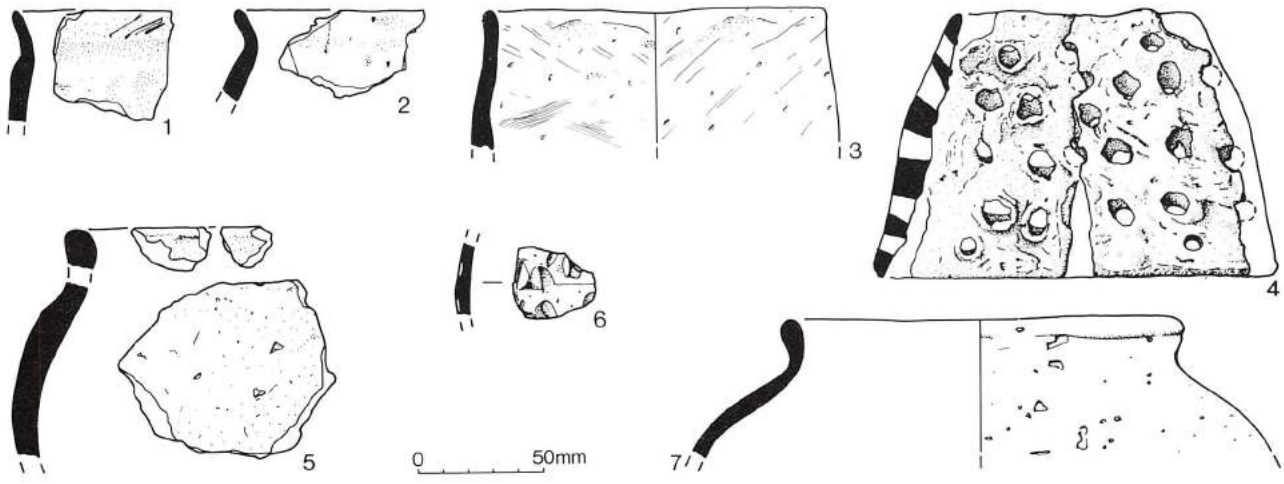


Fig. 7

small concentration of Early Saxon pottery appeared but this showed no associations with any archaeological feature(s).

The only features identified were three oval pits (Fig. 5). Pit 2 measured 1.60m by 1.30m by 0.45m in depth. Although fairly shallow, the pit sides were steep, being almost vertical in places. Pit 4 measured 3.60m by 2.00m by *c.*0.50m in depth but, unlike pit 2, the sides sloped gently, maximum depth being reached only in a small central area. Pit 7 was similar in size and shape to 2, measuring 2.00m by 1.20m, but only 0.10m in depth. The pit sides were near vertical.

The fills within the three pits were broadly similar, all relatively stone-free silty loams ranging from dark grey-brown to orange-buff in colour. Pit 4 was an exception to this; the lowest fill contained many large flint nodules.

Material from the pits

All three pits contained similar archaeological material including charcoal, daub, badly decayed animal bone and Early Saxon pottery in varying quantities. Of the animal bone, only five fragments were identifiable and all were cattle. The pottery assemblage numbered 60 sherds in total and contained several large unabraded sherds. The pottery was almost exclusively grass-tempered although several sherds showed quartz-sand tempering. Globular and sub-globular jars dominate although a perforated sherd was identified which has been tentatively interpreted as a brazier on the basis of similar material from other sites including Mucking and Sutton Courtenay (Fig. 7).

The presence of the pits and the domestic refuse within them points to the existence of a Saxon settlement but its position remains undetected. It may lie on the ridge overlooking the River Chelmer along the line of the Broomfield Road with the pits lying beyond its eastern margin. The 'settlement' would appear to be broadly contemporary with the Saxon burial but the wide date range provided by the pottery makes it difficult to show any close association. Indeed, it is possible that the settlement went out of use before the burial was dug.

Acknowledgements

The Archaeology Section are grateful to Mid Essex Gravel Limited and Cementation Construction Limited for their generous financial support.

Finds: Ch. E.M.

Goldhanger, note on loomweights from site 1 Chigborough Farm, TL 880083 (TL 80-44)

S. Tyler

A total of eight loomweights were recovered from a pit, feature F33, during excavation by Pat Adkins in 1981-82. As the pit was in line with a row of postholes (P. Adkins, pers. comm.), this raises the possibility that the 'pit' was in fact a posthole and that the loomweights were used as packing around the post. The row of postholes is interpreted as representing one side of a building of middle Anglo-Saxon date.

Loomweights can be divided into three types: (i) annular; (ii) bun-shaped or disc-lenticular, and (iii) intermediate between (i) and (ii). It has been argued (Dunning *et al.* 1959, 23-25) that 'annular' loomweights belong to the early Saxon period, 'intermediate' loomweights to the middle Saxon period and 'bun-shaped' to the later Saxon period. Annular is defined as having a central hole as wide or wider than the ring of clay around it, whilst loomweights with smaller central holes are either intermediate or bun-shaped. The early Saxon annular loomweights were made as rings or had their centres pushed out with the fingers to form a hole, whereas the later loomweights are discs which have been pierced with holes of varying sizes (Dunning *et al.* 1959, 23-24).

Of the eight loomweights submitted to the Archaeology Section, it has only been possible to draw and describe four,

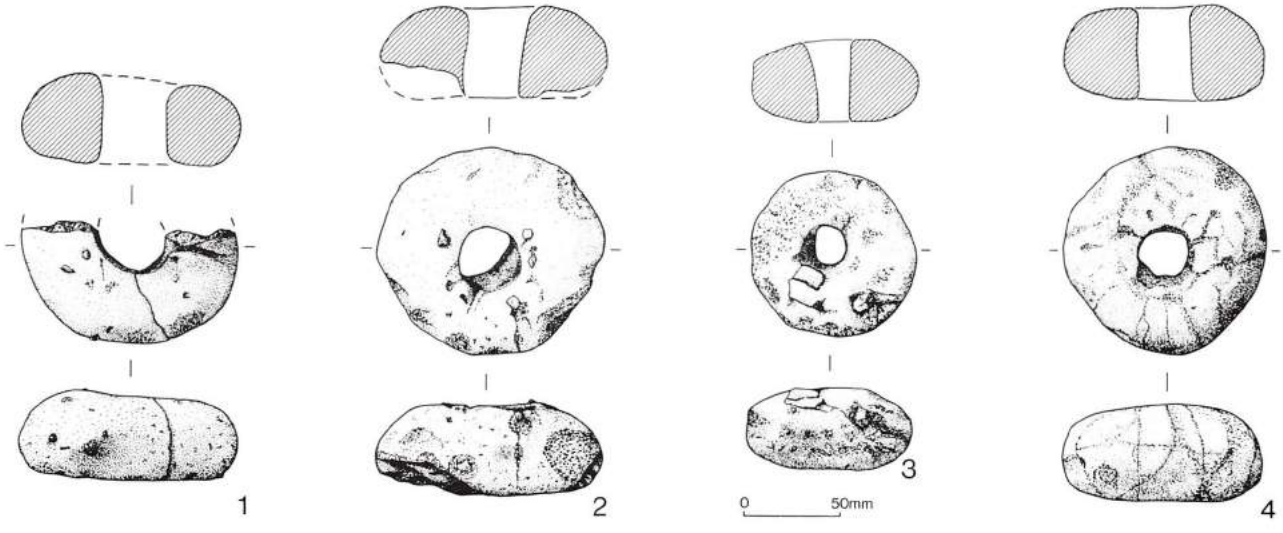


Fig. 8

(Fig. 8); the others had not been cleaned as the excavator wishes to submit these for environmental analysis.

Fig. 8.1 Intermediate; *c.*50% of the loomweight survives; fired clay with occasional large quartzite inclusions (some greater than 10mm in diameter); a suspension groove is visible on both sides; max. diameter: 115mm; max. height: 46mm; weight: 329g.

Fig. 8.2 Intermediate; *c.*75% of the loomweight survives, fired clay with quartz and quartzite inclusions (some greater than 10mm in diameter); max. diameter: 118mm; max. height: 48mm; weight: 555g.

Fig. 8.3 Bun-shaped or disc-lenticular; almost complete, slight damage to one surface; fired clay with quartz and quartzite inclusions, size varying from less than 1mm to very large pebbles with diameters greater than 15mm; very slight indication of a worn suspension groove; max. diameter: 86mm; height: 42mm; weight: 320g.

Fig. 8.4 Intermediate; fired clay with quartz and quartzite inclusions (some with a diameter greater than 5mm); worn suspension groove; max. diameter: 106mm; max. height: 50mm; weight: 504g.

The other four loomweights which were not examined in detail appear to be of intermediate or bun-shaped form, with sizes ranging from *c.*85mm to 130mm.

Discussion

The Chigborough Farm loomweights belong to the intermediate and bun-shaped categories which suggest a middle Saxon date. The central holes in the Chigborough loomweights could well have been made with a wooden stick, as they appear too regular to have been made with a finger. The intermediate type is found in 7th and 8th-century contexts throughout the country, including Caister-by-Norwich, Norfolk; Whitby, Yorkshire; and Yeavering, Northumberland (Dunning *et al.* 1959, 25). A 7th to 9th-century date range is therefore postulated.

Finds: Private possession.

West Hanningfield, 'Galleyview', TL 711010 (TL 70-186) H. Walker

A quantity (3.8kg) of medieval pottery, mainly of 13th to 14th-century date was recovered during gardening. Examples of Mill Green fine ware, Mill Green coarse ware, Hedingham ware, Colchester ware and London ware were present together with a few post-medieval sherds.

Finds: Private possession.

Pleshey, Woolmers Mead, TL 665145 (TL 61-12) C.P. Clarke

Recording of foundation trenches for a garage revealed a wide, shallow ditch of flat 'V'-shaped profile, and an estimated width of *c.*4m running east-west, apparently parallel to Back Lane. The sterile boulder clay silts within are presumed to represent deposited bank material. A sherd of 13th-century pottery was recovered from a context which sealed the ditch fills. The small size of the ditch makes it unlikely that it represents the ditch of the northern earlier castle bailey although its line should, by all accounts, go through Woolmers Mead. It is therefore possible that the bailey ditch may not have been completed or that it follows the south rather than north side of the Back Lane.

Finds: Private possession.

Bardfield Saling, Church of St. Peter and St. Paul, TL 68602645 (TL 62-18) D. Andrews

In 1984-85, the round tower was stripped of its render and repointed, and parts of the suspended timber flooring in the nave were renewed. The tower is built mainly of flint with occasional use of other types of stone. Apart from later repairs it seems to be of one build, with rows of regularly spaced putlog holes occurring for its full height. The nave seems to butt up against the tower, but whether this is significantly earlier than the rest of the fabric of the church (which is dated to the early 14th century) is uncertain (Rodwell 1977, 117).

At the west end of the nave, suspended floors were replaced on the north and south sides of the aisle. In both areas, earlier flooring in a mixture of brick (probably 16th-18th centuries) and re-used medieval floor tiles were discovered (Drury 1976, 275). Also found on the south side were some stones, with mouldings which suggest they may belong to the medieval chancel (rebuilt in the 18th century); and, on the north side, a grave slab with an indent (now raised and re-set), and a badly rotted bench end, apparently with a plain poppy head.

Coggeshall, Queen Street, TL 85142277 (TL 82-63) C.P. Clarke

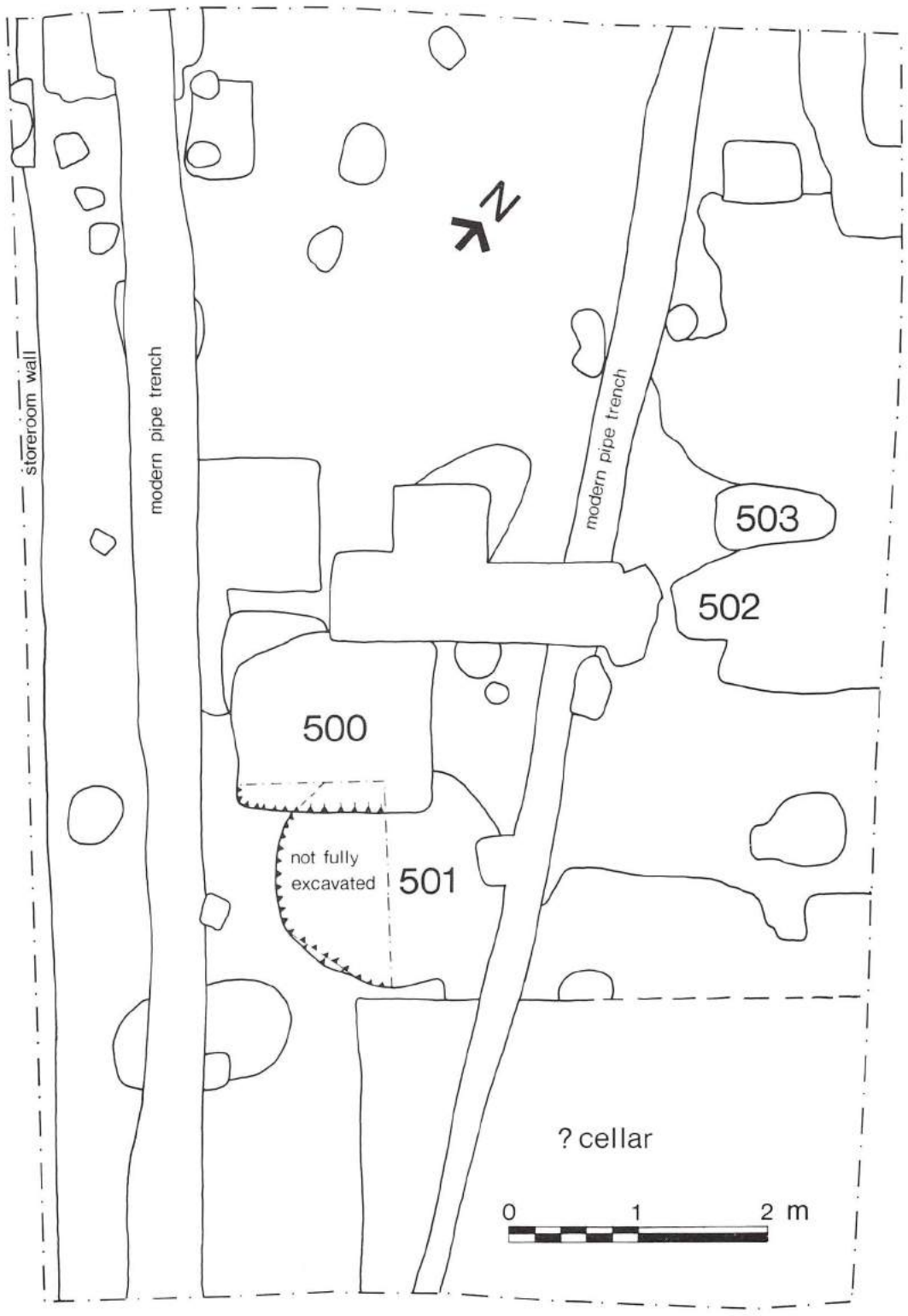
Redevelopment provided the opportunity for a small area excavation to test (a) whether the Roman settlement extended as far west as this, and (b) whether medieval settlement was indicated at this point.

A rectangular trench 10 x 7m was machined down to a depth of 0.4-0.5m. Topsoil and modern surface rubbish deposits were present to a thickness of 0.3-0.35m. Natural boulder clay subsoil was visible in parts of the northern and eastern trench sections to a maximum thickness of 0.20m, and remained undisturbed over some 50% of the machined surface of the trench.

Most of the features visible were obviously modern, therefore it was decided to limit excavation to one feature (501) which was stratigraphically early in the sequence (Fig. 9).

Feature 501 was a well whose top fill contained pottery of late 16th to early 17th-century date. Pits 502 and 503 produced surface finds of pottery of probably 17th-century date but were not excavated. Pit 500, cutting the fill of well 501, contained 19th-century building debris.

The presence of occasional pieces of struck flint indicate activity in the area at least from the early Neolithic period. However the absence of features or other finds of pre-16th century date indicates fairly conclusively that the excavated trench is outside the areas of LBA/EIA, Roman and Medieval settlement.



QUEEN STREET, COGGESHALL

Fig. 9

The well (501) and post-medieval features probably belong to the late 15th or 16th-century structure to the south, 41 Church Street. The well contained a considerable amount of building debris in its top fill (101), and its infilling probably coincides with structural alterations or repair to the property. The shallow depth of topsoil and build-up suggests minimal activity in the area of the site prior to the 19th century.

It appears that the western boundary of the Roman settlement lies to the east of the site, possibly on a line north of the point where the modern road curves slightly northwards between 47-59, East Street.

Full finds reports are included in the site archive.

Pottery by H. Walker

0.7kg of post-medieval pottery was recovered from three contexts; it consisted mainly of late 16th to 17th-century coarse wares. As the material is poorly stratified and there is very little of it, this report only identifies the diagnostic sherds, most of which are illustrated in Fig. 10. For fabric classification see Cunningham and Drury (1985, 1-2).

Context 101 (top fill of well 501)

Most of the pottery comes from this context. Fabrics 21 and 40 are present in roughly equal amounts.

Fig. 10.1 Rim with bead below neck, all over internal glaze with external splashes; glaze green with clear patches. Fabric 21. Possibly part of a strap handled jar; jars with similar rims are dated to the 16th century at Fulmodeston, Norfolk (Wade-Martins, 1983, fig. 22), and the bead forms a common decorative element on jar and jug rims from the late 16th-century contexts in Chelmsford (Cunningham, 1985).

Fig. 10.2 Hollowed everted rim, unglazed. Fabric 40. This sherd may be part of a large neckless jar. Similar forms are found at Fulmodeston (Wade-Martins 1983, No. 173 in Group 2, fig. 23), thought to be 16th-century. A comparable rim from a late 16th to early 17th-century context in Waltham Abbey was identified as part of a large pipkin (Huggins, 1982, fig. 24, no. 143).

Fig. 10.3 Base of slipware vessel, with a narrow line of white slip under a clear all over glaze. Fabric 40. Usually thought to be to 17th-century, but at Moulsham Street, Chelmsford, it is represented in contexts datable to the late 16th-century.

Fig. 10.4 Pad base of ?jug in a pinky orange version of Fabric 40. External green glaze with splashes of glaze inside the base, 16th-century or later.

Fig. 10.5 Base of pancheon; green internal glaze with large splashes of glaze externally and below the base. Fabric 40. At Chelmsford these vessels first appear *c.*1560-90, and are current in the 17th century.

Context 103 (top fill of pit 503);

Fig. 10.6 Single sherd, part of a jar with a beaded rim. Fabric 40, brick red in colour with a darker 'skin'. Patches of clear glaze internally. It is likely to be 17th-century in date, when beaded rims replaced the hollow rims of the 16th century.

Worked stone by H. Martingell

Five unstratified pieces of flint were recovered: a two platform core, trimming flake, primary flake and two blades. The core and trimming flake are probably early Neolithic; the rest later prehistoric.

Acknowledgements

Permission to excavate was willingly given by the developer, Mr. C. Neale. Mr. J. Bakewell and Mr. D. Taylor of the Manpower Services Commission are thanked for the temporary transfer of the following staff to Coggeshall from the Braintree excavation MSC scheme: J. Anderson, I. Birch, Clare Capon, P. Chapman, Louise Cowlin, M. Drackford, A. Marshall and M. Wiffen. These are thanked for their work on site.

Finds: C.E.M., Acc. No. 114.1985.

Stebbing, Church of St. Mary the Virgin,

TL 664240 (TL 62-113) D. Andrews and D. Priddy

Improvements to the central heating system revealed several features against the internal face of the south wall of the chancel. Two phases of foundation for the chancel arch were visible. The original chancel arch was constructed on a flint rubble foundation. This was extended when the chancel arch was rebuilt in the 19th century.

Butting up against the foundation for the chancel arch was a small patch of flint rubble in a matrix of rammed clay and brown silt-clay. This was thought to be a fragment of an earlier foundation, but closer inspection suggested it represents levelling up at the west end of the chancel, prior

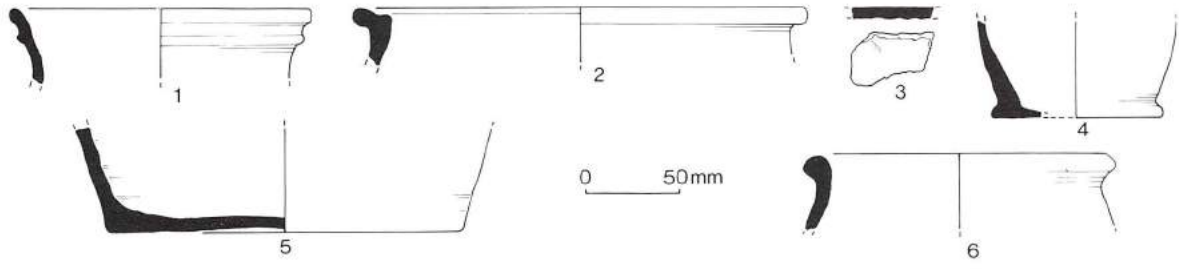


Fig. 10

to the laying of a compacted brown silt-clay floor.

Three small post-holes cut into this floor may be related to the construction of the chancel.

In the northern half of the area deposits had been destroyed by post-medieval vaults.

Rayne, The Cauldron Restaurant, TL 72832265 (TL 72-131) C.P. Clarke and H. Walker

A costrel (Fig. 11) was found in 1980 during the digging of a foundation trench for an extension to the immediate rear of the Cauldron Restaurant, lying upside down at a depth of *c.*1m. No features or other artefacts were recorded. The finder, Mr. S. Young lent it for study in 1984.

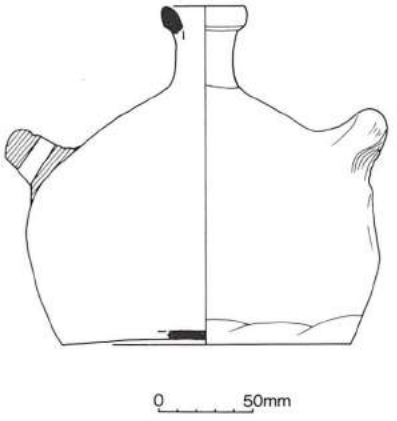


Fig. 11

A standing costrel of post-Medieval red earthenware, Fabric 40 (Cunningham and Drury 1985, 2-3). It has pierced lugs (for suspension) set transversely across the shoulders and is unglazed except for occasional splashes of clear lead glaze. A costrel is a drinking vessel, used especially in country areas (Price, 1978, 50); this one has a capacity of just under four pints.

A similar costrel was found at Moulsham Street, Chelmsford (Cunningham and Drury, 1985, 13, fig. 10.67), although the Moulsham Street example has slightly flattened faces while this one is completely rounded. The transverse lugs are quite a distinctive form and are characteristic of 17th-century central Essex (Cunningham and Drury 1985, 71).

Finds: Ch.E.M. Acc. No. 1986:12.

Castle Hedingham, Pottery Lane, TL 78803550 (TL 73-1) D. Andrews

A small site was investigated prior to development. The only archaeological remains recorded were a possible boundary ditch, containing two sherds of medieval pottery and two post-medieval features.

Pitsea, St Michael's Church, TQ 739878 (TQ 78-100) D. Andrews

Trial excavations following redundancy and prior to conversion works were carried out for Basildon District Council. The results were largely negative apart from the discovery of a single sherd of ?Roman pottery. The church is situated on a prominent hilltop, which would have been an obvious choice for early settlement. Since no traces were found of an earlier structure or even of debris associated with it, it is thought that the floor level was probably lowered at the time of the 1871 rebuild and all archaeology removed.

Witham, 102-118 Newland Street, TL 819143 (TL 81-33) D. Andrews

Investigation prior to development revealed no obvious traces of medieval or earlier occupation apart from remains of the last buildings to stand on the site. These appeared in their ultimate form to be 18th or 19th-century. The ground level had been reduced across the site and the natural gravel was in places only inches below the existing ground surface. That the level of Newland Street is about one metre below that of the development site and of the floors of other houses in this part of the street, is presumably to be explained by it being a hollow way.

Aerial Photography, S. Tyler

Aerial photographic survey of the county was undertaken during the summer of 1985. Funds for the project were provided by Essex County Council and HBMC. The survey programme had two general objectives:

1) To survey the Chelmer-Blackwater Valley. This is a contained geographical region rich in sand and gravel sub-soils, extensively settled since the early prehistoric period, considered to have high potential for the location of new cropmark sites. Areas likely to be affected by sand and gravel quarrying; industrial and housing developments and new road schemes were intensively surveyed.
2) To survey and photograph specific archaeological monuments and to obtain high quality aerial photographs, to be used for tourist promotion, archaeological publication and enhancement of the Sites and Monuments Record.

A total of eight flights were undertaken and both objectives were successfully achieved despite an exceptionally poor summer. The unproductive weather was a particular hindrance to the implementation of the Chelmer Valley cropmark survey. It had been intended to carry out ten flights, each of one hour's duration, however by the end of June only two of these had been undertaken. A two week dry spell at the end of July afforded the only further occasion to photograph the fleeting appearance of archaeological cropmarks and the opportunity was used to the full with four two-hour flights undertaken during this two-week period. Two of the most interesting cropmark sites photographed are discussed below.

Langford, TL 84250955 (TL 80-46)

Cropmarks to the south of an agricultural reservoir close to Langford Hall comprise a series of ring-ditches, trackways, enclosures and other linear features. A watching brief during the construction of an agricultural reservoir to the south of this complex in 1984 recorded several pits, one of which produced pottery probably belonging to the Middle Bronze Age (Priddy (ed.) 1985, 100). The site has previously been photographed by the NMR, Cambridge University and Mrs. Ida McMaster.

NMR TL 8409/5/199 (1973), TL 8409/13/427 (1975); TL 8309/1/300 (1979)
CUC CGE 30-3 (1978); BXR 47, BZS 24, CKW 12-13 (1979)
McMaster 55 (1980)
ECC 4.5-13 (1985)

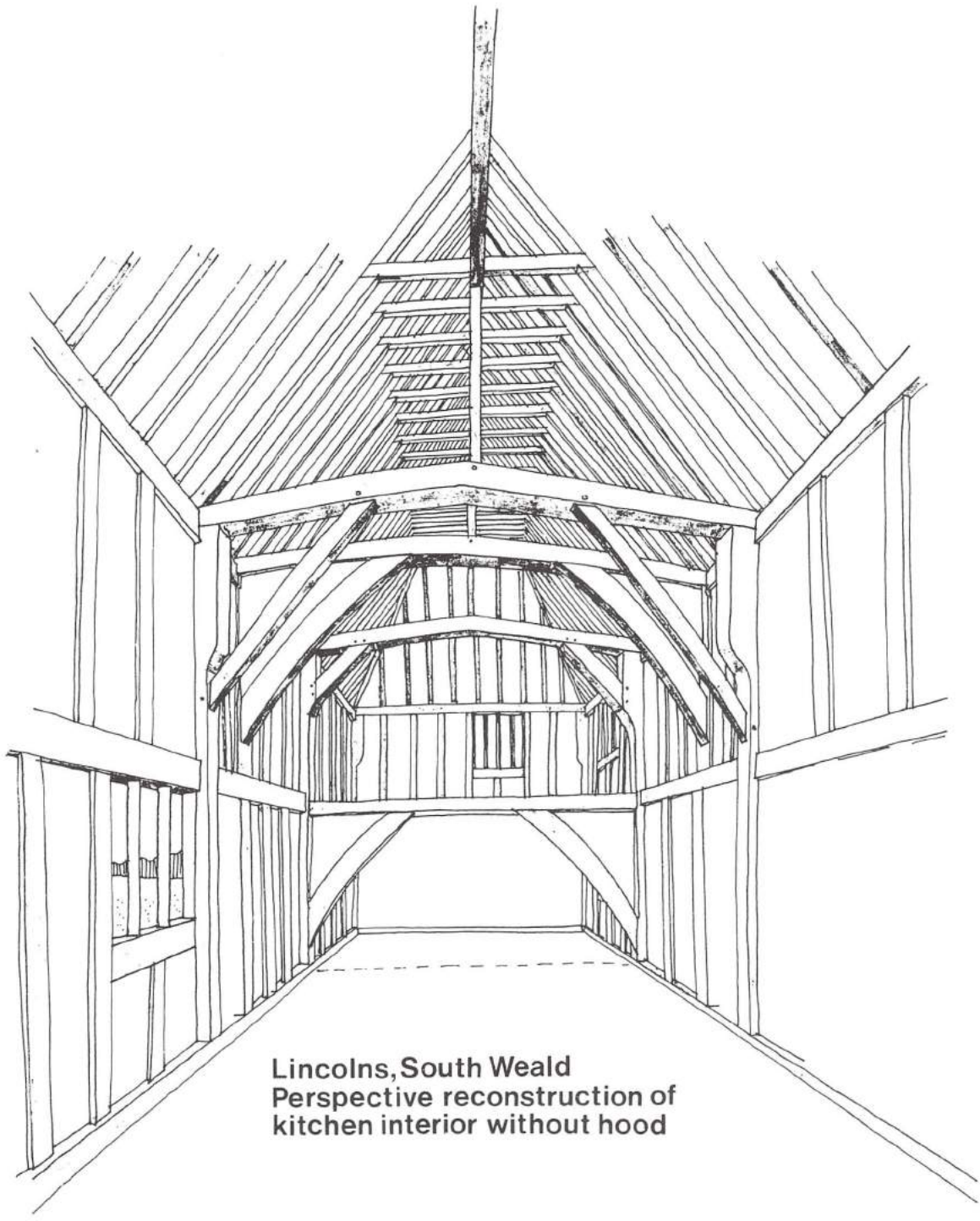


Fig. 12

Boreham, TL 73450957 (TL 70-147)
Large penannular enclosure (*c.*35m external diameter) with four internal "block" marks. Three "block" marks are large (one is cirucular, the other two rectangular) and one is small and rectangular. The site may represent a ploughed-out barrow perhaps contemporary with the Late Bronze Age enclosed settlement currently under excavation at nearby Springfield. The Boreham enclosure has previously been photographed by the NMR during the dry summer of 1976.

NMR TL 7309/3/50 (1976)
ECC 1.5-8 (1985)

The bulk of the photographs are currently being studied and accessioned into the SMR. It is hoped to undertake further aerial surveys, some related to specific sites under threat (such as those in the Stansted area), in future years.

Historic Buildings Surveys D. Stenning

South Weald, 'Lincolns', possible Detached Kitchen
Lincolns is a medium sized timber framed house with 16th-century crosswings and suggestions of an earlier, possibly aisled, open hall. Immediately to the south east of the front elevation is the small black weatherboarded barn-like structure (Fig. 12).

This is a three bay timber framed building with wide stud spacing, curved external wall bracing and substantial jowled posts. Although reconstructed, the roof contains some original soot blackened rafters for a simple crown post roof which was eventually hipped at both ends. There are remains of five diamond mullioned windows one more or less complete, three of which are mounted high in the walls. A narrow span bay at the south end has three of these windows and could conceivably have been floored. Top plate, half dovetail, mortices and arch brace sockets reveal the former presence of an additional tie beam, off-centre in the central bay. Small horizontal mortices and further arch brace slots suggest the existence of 'single storey' height partition or screen between the southernmost two bays. It is suggested that these two beams were provided to support some form of timber chimney hood over part of the central bay and the off-setting of the end wall windows would suggest the eastern half. A limited amount of localised soot blackening on the underside of the structural members would support this theory. No evidence for a door position could be ascertained although a cross passage adjoining the hearth could be a possibility. The general character of the carpentry and the use of very short halved and bridled scarf joints in the top plates, suggest a date in the early 15th century. The particular siting seems impractical for a kitchen and this small building could possibly have been moved, at some time, from a more plausible position to the rear of Lincolns. An inserted and well constructed floor in the northern bay, of *c.*1600 could post date this move.

Chignal St James, Chopyns Barn, former 'Wealden House'
Chopyns is a small timber framed building, recently cottages, containing a substantial timber framed chimney hood. With reference to 'Lincolns' above it is possible that this structure could again be a former medieval kitchen. To the rear of this building is a black weatherboarded barn of medieval framing now being converted to a house. Close examination of the framing revealed a reasonably complete 'Wealden' house of the early part of the 15th century (Fig. 13). The original conversion to a barn (17th-century?) involved the reconstruction of the roof and the lopping off of the jettied fronts of the two crosswings. Curiously in its original form the house faced away from the present highway. The sequence of house converted to barn and then back to house must be slightly unusual!

Coggeshall, Paycockes House, West Street
Recent re-examination of this well known and magnificent early 16th-century merchants house has revealed a number of new points of interest. The carriageway bay, at the east end of the building seems likely to be a slightly later extension having a narrower stud spacing, a vertical break in the structure at the juncture and evidence for a door being cut through to the upper chamber. Inspection of the first floor rooms shows clear evidence of the former existence of a third floor over the entire building, presumably removed after damage. In the westernmost internal partition on ground and first floor are the seatings for curious timber mantel beams which obviously pre-date the existing brick stacks. Having fireplaces in this strange but convenient position could mark remains of an interesting and unresolved problem.

Chigwell Row, The Post Office (former), 115 Lambourne Road
The Old Post Office is an interesting three bay 'in-line' house recently carefully restored. It consists of a central open hall of a single bay with floored bays at each end. Intruded into the service end bay is a cross-passage with a spered opening to the hall of conventional form. At the 'high' end is a similar intrusion of shallower depth intended as a 'high end recess' for the original owners bench. Such high end recesses are relatively uncommon and the author knows of only four other unambiguous examples in Essex ('Savages' Lower Street, Stansted; Crossed Keys Public House, Saffron Walden; derelict crosswing North Street, Dunmow; July Farmhouse, Great Chesterford). The mouldings of the post, and bressumer and the clasped side purlin roof suggest a date not earlier than *c.*1550.

Abbreviations
See Priddy (ed.) this volume, 165.

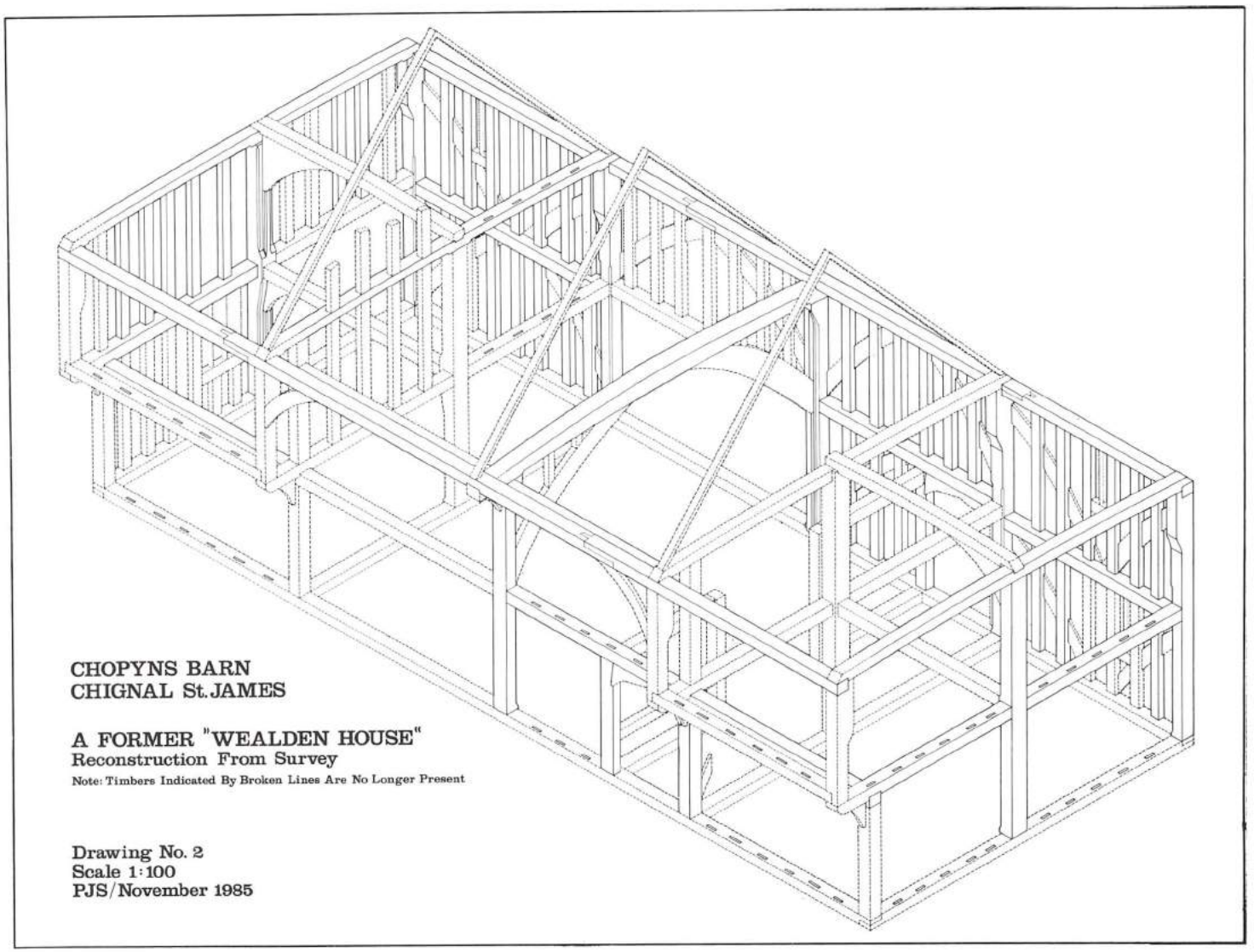

CHOPYNS BARN
CHIGNAL St.JAMES
A FORMER "WEALDEN HOUSE"
Reconstruction From Survey
Note: Timbers Indicated By Broken Lines Are No Longer Present
Drawing No. 2
Scale 1:100
PJS/November 1985

Fig. 13

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Excavations in Essex 1985

Edited by Deborah Priddy

This report is the ninth annual round-up of excavations and fieldwork in the County compiled by Essex County Council Archaeology Section for the Advisory Committee for Archaeological Excavation in Essex. Forty-nine excavations were reported to the Section during the year (Fig. 1).

Sites are listed alphabetically by parish; the directors of excavations and organisations involved, the present or intended location of the finds and place of final report, where known, are listed. Excavations continuing from previous years are indicated by reference to previous summaries in the relevant 'Excavations in Essex 19--'.

Contributors are thanked for supplying information. The original reports have been added to the County Sites and Monuments Record in the Planning Department, Globe House, New Street, Chelmsford. Details of sites in Greater London are contained in the Greater London Sites and Monument Record.

1 **Asheldham**, Asheldham Camp (TL 972012)
O. Bedwin, E.C.C.

Trial excavation established that Asheldham Camp was constructed during the early Iron Age. The Camp ditch was 3.6m deep and 3.5m wide at the bottom. The bank was revetted with wooden posts, and sealed a well-preserved old land surface which was sampled for pollen and soil analysis. There was a major recut in the ditch in the late Saxon/early medieval period, making it shallower, but wider, to a width of 11.0m across at the top. Middle Saxon pottery (7th-9th centuries) was also recovered from the ditch.

Much of the interior of the Camp was shown to have been destroyed by 19th and early 20th-century gravel quarrying. Some archaeological features had survived however, and indicated both early and middle Iron Age occupation. One middle Iron Age pit within the Camp contained large amounts of carbonised grain. Surprisingly, in view of the casual finds made at the Camp over the years, there was little sign of late Iron Age or Roman material.

Finds: E.C.C.; go to C.E.M.
Final Report: *Essex Archaeol. Hist.*

2 **Barking**, Abbey Road, G.L.C. (TQ 438840)
M.J. Stone, P.E.M.

Excavations on the site of the old Match factory, opposite the west end of the Abbey Church, revealed Mesolithic and Neolithic flint blades and cores from the gravel terraces, together with indications of old stream courses feeding into the River Roding. Part of a crouched burial, in a 'bowl'-like feature, probably of Bronze Age date, was cut by pits and post-holes containing Late Bronze Age and Early Iron Age pottery. To the south further pits and post-holes extended from the gravel into the silts and sands of the River Roding, containing Late Iron Age pottery, briquetage and large amounts of Roman tile.

Two Roman tile stamps, one of which possibly reads PR[LON], and part of an inscribed tombstone were recovered from Saxon and medieval horizons.

Preliminary examination of the pottery suggests Saxon occupation commenced in the 7th century (Abbey founded AD 666), with the erection of two timber buildings. Building (1), 9 x 5m, was built of timber, using some vertical planks with wattle and daub infilling and evidence of a fine plaster finish, possibly painted white. One internal partition divided the building in two; the timber beam was levelled up with Roman tile and sand. The floors of brickearth were relaid on at least five occasions, the last floor had large areas of collapsed and burnt daub with mid to late Saxon pottery and glass. Building (2), which has only been partially excavated, is 6.5m long with some evidence of division, constructed of timber posts set into irregular spaced slots. Running east-west from building 2 a gravel path and evidence of two further buildings are currently under excavation.

In the late Saxon/medieval period the area was laid out along the line of the gravel terrace with gravel paths and a dry stone walled building 9 x 6m. There is some evidence of internal timber roof supports and the smelting of iron. To the east rectangular pits, 1 x 1.5m and one 1.5 x 1.0m, lined with clay, were fed by a plank-lined gully from a stream. In the pits and in the surrounding horizons were deposits of probable fullers' earth. Further support for a fullery or washing area is given by a lost document of 1462/63 which records this area as the 'wash house yard'.

By the 13th century the fullery had been filled in. To the west a flint and ragstone wall, aligned north-west, was constructed and probably represents the western precinct wall. No medieval layers survive in this part of the site, owing to levelling during construction of the factory in 1910, except the line of the great drain or culvert, partially excavated by Clapham (1913). The drains of 13th to 14th-century date are 2m wide x 2m deep, built within an existing water course, using chalk, flint and Kentish rag. There was extensive evidence of rebuilding and repairs. Two garderobes and the remains of a brick vault and wall probably indicate the site of the Guest House or Patron House recorded by Clapham.

The drain was rebuilt in brick in the 15th or 16th century, running from the house (for 37m) to the town quay area. A branch drain ran from the main drain to a garderobe 4 x 4 x 3m deep. Fills of the branch drain produced a large sealed deposit of 14th to 16th-century pottery containing Italian, Spanish and other European wares along with Essex and London wares.

Finds: P.E.M.
Final Report: P.E.M. Monograph

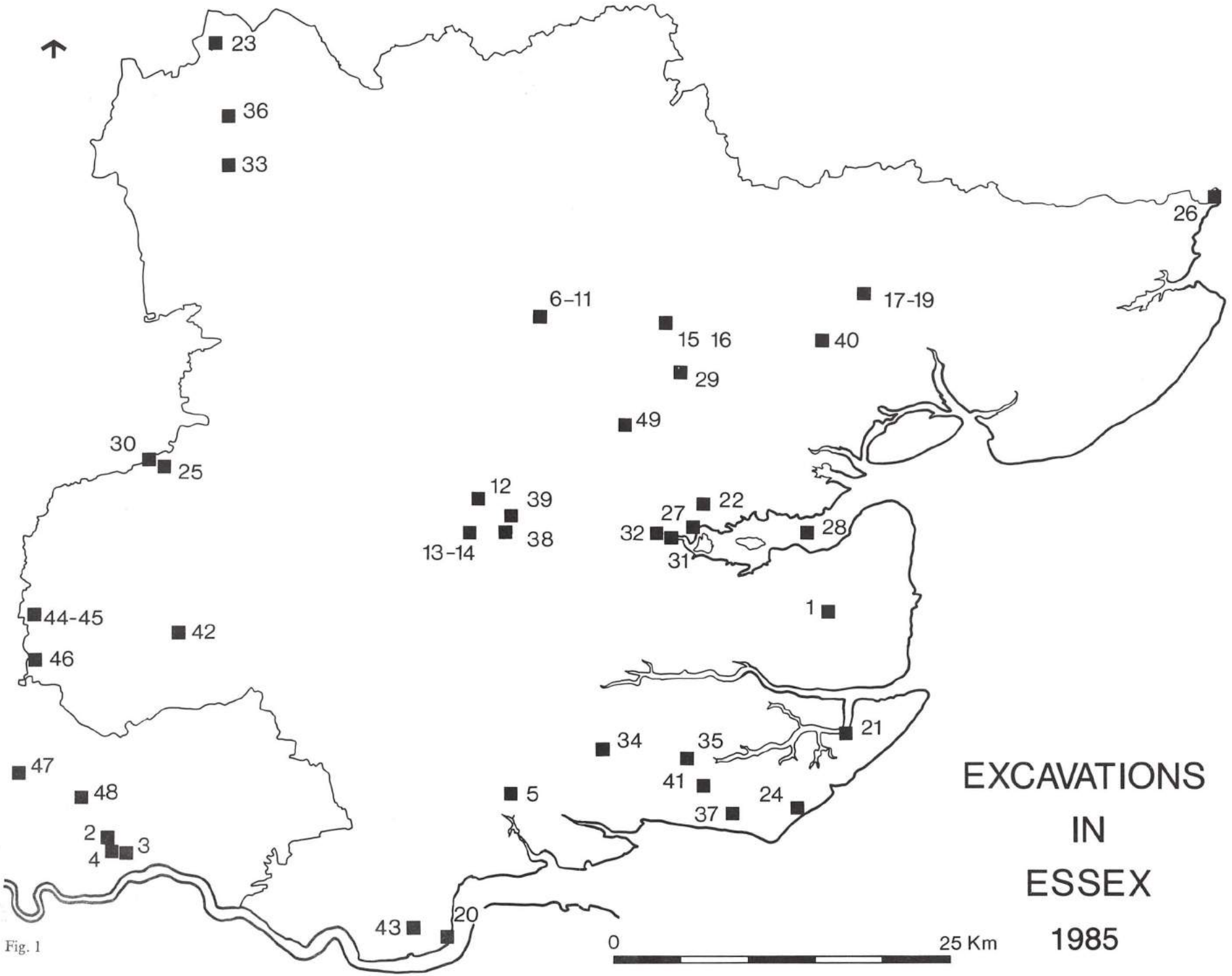
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Fig. 1

3 **Barking**, Alfred's Way, G.L.C. (TQ 45128323)
M. Redknap, P.E.M.

Preparations for fish ponds, involving the excavation of two 2.5m deep trenches exposed a peat horizon 20-30cm thick containing a large amount of timber, and some bone (immature *Bos*). The peat deposit lay *c.*0.5m below O.D., above, and below estuarine clay. Two areas were examined following reports of a log boat.

Two tree trunks were recorded, one lying perpendicular to the other. Both were worked, and together with other worked wood (including a stake point) suggest an early artificial consolidation of the marshy lowlands at this site. No pot sherds or flints were found.

Finds: P.E.M.
Final Report: P.E.M. Monograph

4 **Barking**, St. Margaret's Church, G.L.C. (TQ 441838)
A. Thompson, Forest Projects Ltd/M.S.C.

Excavation outside the east end revealed a brick-built tomb, constructed directly on natural sand and gravel, with two vents at ground level and a low domed roof. Pottery from the limited excavation, immediately around the tomb, was of mid-17th century date. Within the tomb was a west door which led directly into the church. On the south side were 4 burial niches (two above two). Centrally placed in the two upper burial niches was an inscribed stone of Tho. Cambell, who had had the tomb constructed in 1645 for himself and his wife Hester. Eight original occupants of the tomb were examined and removed, plus a quantity of dumped and unrelated human skeletal material.

Finds: P.E.M.

5 **Pitsea**, St. Michael's Church (TQ 739878)
D. Andrews, E.C.C.

See Andrews, this volume 151.

6 **Braintree**, 4 London Road (TL 75442285)
J.H. Hope and R. Bale, B.V.A.S.

A trial excavation revealed over 3m of archaeological deposits, the earliest feature being a 1st-century AD ditch. This was sealed by a series of clay floors, one of which had an oven set into it, belonging to a building with stone footings. Traces of later timber buildings were noted.

Previous summaries: Priddy (ed.) 1984, 125.
Finds: B.T.H.C.
Final Report: *Essex Archaeol. Hist.*

7 **Braintree**, College House (TL 75472291)
J.C. Bakewell, B.D.C./M.S.C.

Further evidence for both domestic and industrial occupation in the Roman period has been recorded. Traces of at least one timber-framed building were associated with a probable ironworking site. Two wells, one timber-lined, have also been recorded. These features are sealed by a cobbled surface. An area examined on London Road/High Street revealed a considerable depth of 18th and 19th-century features preventing exposure of Roman levels.

Previous summaries: Priddy (ed.) 1984, 125.
Finds: B.D.C.
Final Report: *Essex Archaeol. Hist.*

8 **Braintree**, Letch's Yard (TL 755229)
J.H. Hope, B.V.A.S.

Excavations were concluded during the year demonstrating occupation from the 1st century AD. A clay-lined pond was dug through the 1st-century deposits. A 2nd-century AD date can probably be assigned to the iron bloomery discovered in 1984 and traces of a ?second were noted. At the southern edge of the site traces of masonry and timber buildings were recorded.

Previous summaries: Priddy (ed.) 1982, 133; 1983, 163; 1984, 125.
Finds: B.T.H.C.
Final Report: *Essex Archaeol. Hist.*

9 **Braintree**, Boar's Head (TL 755230)
J.H. Hope, B.V.A.S.

Examination of the upper levels show at least two phases of timber buildings and possible roadways within the Roman town for which a late 2nd-century AD date is provisionally assigned. Later occupation in the area is represented by a number of pits. On the western edge of the site a ditch, re-cut in the 12th-century was sectioned.

Finds: B.T.H.C.
Final Report: *Essex Archaeol. Hist.*

10 **Braintree**, Rayne Road (TL 75552314)
J.C. Bakewell, B.D.C./M.S.C.

A small area, in close vicinity to the Roman road, produced traces of a cobbled surface cut by the foundations of a 19th-century brick building. No Roman features were recorded, despite 19th-century finds of pottery and coins; nor was a pond attested by documentary sources located.

Previous summaries: Priddy (ed.) 1984, 125.
Finds: B.D.C.
Final Report: *Essex Archaeol. Hist.*

11 **Braintree**, George Yard (TL 756232)
J.C. Bakewell, B.D.C./M.S.C.

Four distinct phases of activity were identified within the late-3rd to early/mid-4th century AD. Traces of post-built structures, and one with cill beams, were accompanied by cobbled floors and rubbish pits. The buildings are of simple construction and of rectilinear form, although due to the limited area of excavation no complete ground plans were recovered. They probably represent domestic occupation.

Roman levels were heavily disturbed by cess-pits, one probably late-medieval and a second dating to the 18th-century. Other post-medieval features included a large structure of unknown nature, apparently removed during

the 19th century when the area became a garden.

Previous summaries: Priddy (ed.) 1984, 125.
Finds: B.D.C.
Final Report: *Essex Archaeol. Hist.*

12 **Broomfield**, land to rear of Saxon Way (TL 714095)
M. Gee, E.C.C.

See Gee, this volume 144-147.

13 **Chelmsford**, 23 Grove Road (TL 70900617)
B. Milton, E.C.C.

Excavations located the south-east wing of the *mansio*, including the position and alignment of a number of internal walls. Part of an internal cobbled floor surface was recovered and external features included drains and post-holes, the latter possibly related to external repairs. Buttresses were a late addition to the east wall.

A buried soil, revealed in the sides of the *mansio* foundation trenches, produced worked flints, prehistoric and early Roman pottery.

Finds: E.C.C.; to go to C.E.M.
Final Report: Ch.A.T. Monograph

14 **Chelmsford**, Hall Street (TL 70970633)
D. Andrews and M. Gee, E.C.C.

See Andrews and Gee, this volume, 144.

15 **Coggeshall**, East Street (TL 85442264)
C.P. Clarke, E.C.C.

Work continued on the eastern side of the Roman settlement. Principal features in its south-eastern corner were two Roman ditches parallel to and just to the north of the Roman road (Stane Street). The smaller, *c.*1.5m wide and *c.*1m deep had silted-up by the early 2nd century AD. The larger, 2.5m wide and 1.8m deep, was backfilled in the late 4th century and included quantities of building debris in its fill. The latter is provisionally interpreted as the southern edge of the settlement. The area was disturbed by numerous medieval pits and post-holes.

Previous Summaries: Priddy (ed.) 1984, 126.
Finds: E.C.C.; to go to C.E.M. Acc. No. 113. 1985.
Final Report: *Essex Archaeol. Hist.*

16 **Coggeshall**, Queen Street (TL 85142277)
P. Clarke, E.C.C.

See Clarke, this volume, 148-150.

17 **Colchester**, Crouched Friars (TL 99002501)
F.D. Lockwood and D.P. Tripp, C.A.G.

The precise line of the 1st-century AD road linking the Balkerne Gate with the main east-west road to London was established. Post-medieval disturbance hampered an assessment of roadside occupation, but some features dating to the 1st and 3rd-centuries were recorded.

Finds: C.E.M.
Final Report: *Colchester Archaeol. Group. Annu. Bulletin* **28** (1985) 27-40.

18 **Colchester**, Culver Street (TL 99502510)
P. Crummy, C.A.T.

Parts of about twenty Roman buildings, Roman streets, the town wall and rampart, and large areas of Roman cultivated soil were examined. The earliest buildings belonged to the legionary fortress and consisted of six barracks (of the First Cohort) and two ?tribunes' houses. The two groups of buildings were separated by the main north-south street of the fortress (*via principalis*). All the barracks were reused as Roman houses and consequently were destroyed in the Boudican fire of AD 60/1. The ?tribunes' houses were not retained in the new town but were demolished and, on the site of the northern one, an east-west street was constructed fronted on both sides by small houses later burnt in AD 60/1.

The techniques of civilian house building followed the pattern already noted from earlier excavations in the town, timber-framed buildings in the 1st century developing into more robust structures in the 2nd century with rubble or mortared foundations and tessellated or mosaic pavements.

The south-west corner of the ?church found in 1982 was located about 18m west of the western frontage of *Insula* 35.

Large parts of the southern half of the site had been covered in the later Roman period by cultivated soil indicating the presence of gardens or allotments. In one of these areas was a possible stone granary of *c.*2nd-century date. A corn-drying oven was built on the site of the west end of the ?granary in the late Roman period.

The section dug through the rampart and underlying layers behind the Roman town wall confirmed that the wall had been free-standing before the rampart was built. The south face and much of the core of the wall had been robbed in post-Roman times leaving a stump less than 1m wide. However the north face proved to be intact and well preserved. The stump of the wall had moved about 0.6m southwards and tipped over from the vertical by about ten degrees.

Previous summaries: Priddy (ed.) 1982, 136-7; 1983, 165-6.
Finds: C.A.T.
Final Report: C.A.T. Monograph.

19 **Colchester**, Gilberd School (TL 993253)
D. Shimmin, C.A.T.

Excavation continued to reveal the remains of a Roman barrack block, which lay towards the rear of the legionary fortress, established shortly after the conquest in AD 43. For the first time in Colchester it proved possible to examine the men's quarters (*contubernia*) in some detail. The *contubernia*, probably 14 in all, each measuring *c.*7m x 3.6m, were clearly delineated by regularly spaced slots, originally housing timber-framed partitions; they had been refloored at least once and often housed small hearths. The centurion's quarters to the west had been destroyed when

an air-raid shelter was built. The barrack block, with a covered verandah, faced southwards across an ungravelled alleyway 10.5m wide, bounded by drains, to a further barrack block, the north wall of which was located. Small ovens and rubbish pits, some containing items of military equipment, were excavated in this area.

In the early colonial period (AD 49-60/1), there was some evidence for the reuse of the barrack block, although the eastern part was soon demolished and built over. Structural remains included a substantial timber-framed building burnt in AD 60/1, with scorched floors and occasional stumps of daub walls surviving *in situ*. A well-preserved, D-shaped grid-iron was recovered from the floor.

Post-Boudican remains were surprisingly sparse, although parts of several small structures of 2nd to 3rd-century date were recovered. Trenching located Roman streets along the northern and eastern margins of the site, forming the corner of *Insula* 17a.

The site was unoccupied in the medieval and post-medieval periods, when it was used primarily for cultivation, although in the south-west corner there were two medieval industrial features, a lime kiln and an oven/furnace.

Previous Summaries: Priddy (ed.) 1984, 127.
Finds: C.A.T.
Final Report: C.A.T. Monograph.

20 **East Tilbury**, Coalhouse Fort (TQ 691768)
J. Catton, M.S.C.

Restoration of the Victorian and later phases of the fortifications continue, focusing on building restoration including stone, concrete, carpentry and metalwork. Restoration of the curtain wall dry-ditch defence of 1874, which was infilled early this century, is about to begin. Restoration and display of artillery and re-enactments of military procedures provide an opportunity to display the history of the fortifications from Henry VIII's time to the second World War.

21 **Foulness** (TQ 985923)
R.W. Crump A.W.R.E. (Foulness) Archaeological Society

Two sea gutters, forming part of the drainage system of Foulness were located on the south bank of the River Roach and rows of stakes associated with the sea wall surveyed. The gutters were constructed of elm, scarfed together using wooden dowels. Encroachment by the sea had damaged the seaward ends. Three phases of seawall may also have been eroded away. In an attempt to relate the gutters to one particular phase of sea-wall construction, radiocarbon dates are being sought.

Finds: A.W.R.E. (Foulness)
Final Report: *Essex Archaeol. Hist.*

22 **Goldhanger**, Rook Hall (TL 877094)
P. Adkins

Salvage excavation continues to reveal features from the late Bronze Age onwards. Of particular note was a cremation group of five vessels. Evidence for Iron Age and Roman activity on this part of the site is limited to scatters of flint-gritted pottery, 4th-century storage jar sherds from the ditched trackway and possible metalworking sites. However, Saxon occupation, both domestic and industrial, is attested by two sunken-featured buildings, post-built structures, hearths and extensive evidence for metalworking in the form of slag, furnace debris and tuyère (bellows) fragments.

Previous Summaries: Priddy (ed.), 1983, 167; 1984, 131.
Finds: With excavator.

23 **Great Chesterford**, Temple Precinct (TL 515436)
T.E. Miller, Great Chesterford Archaeological Society

The lines of the south and west walls of the temple precinct were confirmed and evidence for an earlier palisade recorded. The outer ditch (indicated by cropmarks) was also located on the south and west sides.

The area immediately inside the south-west corner of the precinct contained a number of pits, some recut. Fills varied from sterile chalk to almost pure loam including varying quantities of animal bone, sometimes in vast amounts. Most appear to date from the late-1st or 2nd centuries AD.

An area examined in 1978 was extended to reveal that the temple faced the ancilliary building excavated in 1983-4 rather than the gateway which is slightly to the north.

A trial trench across the eastern precinct wall, just south of the ancillary building, revealed foundations similar to that of the gateway but without buttresses. This may indicate that the precinct had twin entrances with paths on either side of the ancillary building.

Previous summaries: Priddy (ed.), 1984, 127-8.
Finds: S.W.M.

24 **Great Wakering**, Crouchman's Farm (TQ 945874)
K.L. Crowe, S.M./S.E.E.A.S.

An area adjacent to the 1984 excavations revealed at least three phases of rectilinear field sytems. The few finds recorded suggest a later prehistoric date. A fine barbed and tanged arrowhead was recovered from the surface of one of the ditches.

Previous summaries: Priddy (ed.), 1984, 129.
Finds: S.M.
Final Report: *Essex Archaeol. Hist.*

25 **Harlow**, Harlowbury Chapel (TL 477121)
R. Bartlett, H.M.

Excavations in advance of restoration work were undertaken adjacent to the north and east walls of the Chapel. No further traces of the 8th-century timber structure revealed in 1984 were uncovered. The area had been extensively disturbed during the 19th-century restoration and only post-medieval features were recorded.

Previous summaries: Priddy (ed.), 1984, 129.
Finds: H.M.
Final Report: *Essex Archaeol. Hist.*

26 **Harwich**, 10-12 George Street (TM 26003254)
B. Milton, E.C.C.

Excavations were undertaken to establish the origins and extent of medieval and later occupation. The earliest features consisted of a fence or wall line and a number of small pits and post-holes, sealed by a layer of brown loam containing 13th to 14th-century pottery. This was followed by the deposition of a garden soil prior to and during the earliest phases of post-medieval occupation in the late 17th and early 18th centuries. A number of features, rubbish pits and post-holes probably date to this period. Other features, including a grave, are probably contemporary with the post-medieval Chapel.

Finds: C.E.M.
Final Report: *Essex Archaeol. Hist.*

27 **Heybridge**, Heybridge Marina (TL 872076)
P. Adkins

Salvage recording over an area of *c.*4.3ha, prior to the excavation of a training lake for the Blackwater Sailing Club, produced a number of features. A wide, probably natural channel crossed the site. A scatter of Neolithic flints was present on the site and shallow scoop-shaped features, characteristic of prehistoric sites on the north side of the Blackwater, contained worked flint. At least three triangular structures were recorded on a gravel peninsula. Late Bronze Age/Early Iron Age pottery came from many of the 27 wells/deep pits. A linear ditch also produced Bronze Age pottery. Other finds from the site include perforated clay slabs, bell and triangular-shaped ?loomweights (unpierced) and a large quantity of animal bones. A hearth-like feature produced two possible Roman sherds.

Finds: E.C.C., to go to C.E.M.
Final report: *Essex Archaeol. Hist.*

28 **Hullbridge Coastal Project**
T. Wilkinson and P. Murphy, E.C.C./University of East Anglia

A total of twenty-three sites were surveyed during the year, including several red hills known from the Sites and Monuments Record. Survey concentrated on the north shore of the Blackwater estuary and included Northey, Osea and Mersea Islands. Monitoring of previously discovered sites continued along the south shore of the Blackwater and in the Crouch estuary.

The earliest sites (two) consisted of flint artefacts only and are thought to be of early Holocene date; seven sites comprised scatters of flint artefacts and flint-gritted pottery, of these a major Neolithic occupation site near Tollesbury will be excavated in 1986. Three salt-working sites of Late Iron Age/Romano-British date were identified; a possible Roman habitation site was recorded between two salt-working sites, whilst one red-hill showed traces of medieval occupation. One site on East Mersea consisted of miscellaneous wooden structures and flint tools of unknown date.

Three of the sites included significant wooden structures; fences, trackways/platforms, and radiocarbon dates are awaited.

Analysis of macrobotanical remains within the 'River Peat' of the Blackwater estuary showed that the peats accumulated in estuarine/marine conditions. Unlike the Crouch estuary there was no sign of the development of a freshwater peat during the early stages of the transgression.

Previous summaries: Priddy (ed.), 1983, 167; 1984, 129-130.
Finds: E.C.C.
Final Report: *E. Anglian Archaeol.*

29 **Kelvedon**, Doucecroft (TL 865190)
P. Clarke, E.C.C.

Excavation revealed four phases of Middle to Late Iron Age occupation consisting of a domestic enclosure surrounding two circular houses and a second possibly an agricultural enclosure, associated with the settlement. No Roman features were located, although future work in this area should locate the north-eastern defence of the Roman small town.

Finds: E.C.C.; to go to C.E.M., Acc. No. 60. 1985
Final Report: *Essex Archaeol. Hist.*

30 **Latton**, Harlow Temple (TL 468123)
R. Bartlett, H.M.

Two sites were investigated on the temple mound:

Site A: Despite promising resistivity survey results, an area *c.*30m south-east of the temple revealed few archaeological features.

Site B: Work in an area on the western side of the temple courtyard concentrated on the 4th-century AD destruction levels, revealing large quantities of burnt building materials and dressed stone. Associated with these levels was a life-size limestone head of Minerva, which had been defaced, and which may have been the cult statue of the temple. In addition, mid to late 4th-century pottery and sixty-two Belgic coins were also recovered from these levels.

Further excavations are planned to elucidate the pre-Roman occupation of the site.

Finds: H.M.

31 **Maldon**, Survey of ecclesiastical monuments
S.P. Nunn, M.A.G.

Research and survey work continued on the Carmelite friary and Beeleigh Abbey. Eight reports have now been completed. A watching brief was kept during the lifting of a Victorian tiled floor at St. Mary's Church and restoration works at St. Mary's Mundon. A detailed plan of the walled garden area of the friary was made. A metal detector survey of the chancel floor in All Saints suggests the survival of several monumental brasses, buried *c.*1870.

32 **Maldon**, Spital Road (TL 84680690)
P.N. Brown, M.A.G.

Excavations prior to landscaping leave no doubt that the remains of a rampart and large associated ditch is that described by Salmon (1740, 419) and Strutt (1775) in the 18th century. Despite the apparent lack of late Saxon pottery from the fills (late Bronze Age/Early Iron Age, Roman and early Saxon material is present) it is probable that the main ditch is that of the 10th-century burh. Prehistoric activity is represented by one post-hole and residual pottery. A thick post-medieval build-up layer is present over the site.

Finds: M.A.G.

33 **Newport**, Carnation Nurseries (TL 529349)
D. Andrews, B. Nurse and D. Priddy, E.C.C.

Trial excavations prior to house-building and an archaeological watching brief during contractors' groundworks suggest the northern part of the site formed part of the hospital cemetery since a number of burials were cut by contractors' trenches. No medieval structural remains could be identified; a concentration of building debris to the south of the site is consistent with the site of Hospital Farm demolished in 1907. The wall forming the northern limit of the site contained much reused worked and moulded stone and may be associated with the precinct boundary.

Finds: S.W.M.
Final Report: *Essex Archaeol. Hist.*

34 **Rayleigh**, Bellingham Lane (TQ 80659082)
B.H. Milton, E.C.C.

Following the location of a large ditch orientated south-west/north-east, a 2m wide trench was excavated to record its profile and date. Although its size (*c.*13m wide, 5m deep) and its position in regard to the castle suggested a town defence or outer bailey, very little early medieval pottery was found whilst large quantities of 15th or 16th-century pottery were present in its fill.

Previous summaries: Priddy (ed.), 1984, 132.
Finds: S.M.
Final Report: *Essex Archaeol. Hist.*

35 **Rochford**, Rochford Hall (TQ 870903)
D. Andrews, E.C.C.

Observation of foundation trenches and a series of small scale excavations have revealed that the 16th-century Hall is on the site of an earlier manorial centre and extends over the rectilinear moat which enclosed that centre in its later phases. The Hall has been shown to be rectangular, probably with four courtyards and octagonal turrets at all, except perhaps the south-east, corners. It was surrounded by a moat.

Finds: E.C.C.
Final Report: *Essex Archaeol. Hist.*

36 **Saffron Walden**, Audley End (TL 524382)
C.M. Cunningham, Ch.A.T.

Excavations in advance of service trenches, and as part of a reappraisal of the grounds by the H.B.M.C., examined deposits underlying the extensive 19th-century paths in The Mount Garden.

Investigation of the parterre revealed the formal garden designed by William Gilpin in 1832, demonstrating that it is archaeologically possible to identify flowerbeds, and the extent to which they shifted with use.

The rubble foundation of a serpentine path was located in several areas bordering the Mount Garden, part of the landscape design for Audley End originally conceived by Lancelot Brown in the 1760's. Flanking flowerbeds to the west, an ephemeral kidney-shaped bed to the east, and the possible foundation for the Adam urn can be associated with this garden. Successive flowerbeds show that it was remodelled between 1782 and 1788.

Extensive remains of the earlier 18th-century 'wilderness' gardens (post-dating *c.*1725 when the chapel and council chamber were demolished) were recovered. A complex path foundation of clay and hoggin, over 3m wide and flanked by buried dry brick drains, ran east-west in front of the south range, whilst a semi-circular path of contrasting chalk enclosed the central portion of the Mount Garden. Sections of intersecting paths to the east and west, shown on a contemporary survey (Drury and Gow 1984, 58) were located in excavation and their layout confirmed by a resistivity survey. Other features, paths and drains in the same area, relate to earlier gardens of the 17th century.

Excavation of a disused fire hydrant to take a new gas main to the east of the house, together with excavation of some of the 19th-century parterre flowerbeds exposed walls of the east range of the house (constructed *c.*1605-16, demolished *c.*1753). This included the south-west corner of the range, parts of its west wall and two internal divisions.

The east claustral range of the medieval abbey of Walden lay on the same alignment. Substantial flint and mortar foundations of the south, west, and internal walls were uncovered, together with floor levels including part of a decorated tile floor *in situ*.

Extensive quantities of decorated stonework (mostly clunch) derived from demolition of the abbey and of the Jacobean house were found to have been used as foundation material for the 19th-century paths.

Previous summaries: Priddy (ed.) 1983, 168; 1984, 133.
Finds: DOE store, Audley End.

37 **Southchurch**, Southchurch Hall (TQ 894855)
J.R. Jackson, Southend Historical Society

Excavations were concluded in 1985 and landscaping of the moat has continued. During landscaping and removal of banks in the moat part of a timber sole plate was located and a number of features recorded, including a square, brick-built well at the foot of the north-east bank. A stone agricultural roller was found within the well.

Previous summaries: Couchman (ed.), 1977, 104; Eddy

(ed.), 1979, 108; 1980, 47; 1981, 54; Priddy (ed.) 1982, 142; 1983, 168; 1984, 133.
Finds: Southchurch Hall
Final Report: Report to be deposited in S.M.

38 **Springfield**, Springfield Cursus (TL 729068)
B. Milton and D.G. Buckley, E.C.C.

Further areas within the eastern half of the enclosure confirmed the position of the north and south ditches. A modern feature was found to be responsible for a 'gap' in the southern ditch, whilst an apparent discontinuity in the northern ditch was confined to the cropmark. The evidence suggests the cursus ditches were more or less continuous. No internal features were revealed but surface scatters of flint and pottery were recorded.

Previous summaries: Eddy (ed.), 1980, 47; 1981, 54; Priddy (ed.), 1984, 134.
Finds: E.C.C.; to go to the B.M.
Final Report: *Proc. Prehist. Soc.*

39 **Springfield**, Springfield Lyons (TL 736082)
D.G. Buckley, E.C.C.

An area to the south, west and east of the existing excavations was examined in an attempt to delimit the early Saxon cemetery and the later settlement. Further burials bring the present total to at least 113 inhumations, including two ring-ditch burials and 100 cremations. Additional timber buildings and a number of large rectangular pits were also found. Excavation in anticipation of contemporary features on the approach to the main entrance of the late Bronze Age enclosure produced features containing Neolithic plain bowls and unabraded Beaker pottery.

Work is now in progress to excavate totally the late Bronze Age enclosure ditch prior to landscaping and reconstruction of the earthwork enclosure within a new technology park.

Previous summaries: Priddy (ed.), 1982, 142; 1983, 168; 1984, 134.
Finds: E.C.C.; to go to B.M.
Final Report: *E. Anglian Archaeol.*

40 **Stanway**, Olivers (TL 965212)
A.J. Fawn, C.A.G.

Continued excavation of a brick kiln revealed three phases of activity beginning with a possible clamp kiln over which a conventional brick, two-tunnel updraught kiln was built. The firing chamber and one tunnel of the latter was adapted for use during a third phase. Finds included a wide range of bricks, clay pipes, horseshoes and a single sherd of pottery dating from the 17th-18th centuries.

Previous summaries: Priddy (ed.), 1984, 134.
Finds: C.A.G.
Final Report: *Colchester Archaeol. Group Annu. Bull.* **28** (1985) 7-20.

41 **Sutton**, Temple Farm (TQ 88008830)
N. Brown and R. Arscott, E.C.C./S.E.E.A.S.

Late Iron Age and Roman occupation was revealed by S.E.E.A.S. during building works. Finds included pottery, metalwork, bone objects and a number of coins. A hoard of 33 Late Iron Age gold staters was recovered by a metal detector user. Anglo-Saxon occupation was attested by at least one sunken-featured building.

Further excavations by E.C.C. to the west showed the above occupation did not extend down the slope to the Prittle Brook. A number of modern disturbances, shallow undated features, a scatter of features containing small sherds of flint-gritted pottery and a small pit containing much flint-working debris were revealed.

Previous summaries: Priddy (ed.), 1984, 133-4.
Finds: S.M.
Final Report: *Essex Archaeol. Hist.*

42 **Theydon Mount**, Hill Hall (TQ 488995)
D. Gadd, Ch.A.T.

Following an extensive programme of structural and archaeological investigation (Drury 1983), a final, minor season of excavation was conducted to resolve some remaining questions.

Excavation of a further area of the West Terrace showed that the clay floors and beam slots of the 15th-century sub-manor (Period 1: pre-dating Sir Thomas Smith's work of 1557-81) did not extend beyond the extant West Range. The external gravel associated with this building was cut by an isolated group of eight substantial post-pits without associated floors or linking walls. This 'structure' was sealed by the external metalling of the Period 2 Smith house, as was a massive drainage culvert presumably serving the 1570's South Range cellar and/or its 1550's predecessor.

Excavation on the South Terrace produced a more extensive sequence. A pre-Smith wall foundation is probably associated with the Period 1 garden. The South Front wall was reconstructed in 1574-5, and at some later period the raised South Terrace was laid against it. The central bay above terrace level differs significantly from the 1570's bay however, which is now shown to have been *c.*2m wider with a square, rather than the extant splayed, return. It is therefore evident that the South Front façade has been reorganised, possibly during the first half of the 17th century.

A further quantity of tin-glazed architectural terra cotta was recovered, including a fine tile with an embossed patera or Tudor Rose.

Previous summaries: Priddy (ed.), 1983, 169; 1984, 134-5.
Finds: DOE Store, Hill Hall.

43 **Thurrock**, Candovers, West Tilbury (TQ 66547769)
R. Bingley, Thurrock Museum

Salvage recording of an Romano-British updraught pottery kiln was undertaken.

Finds: Thurrock Museum.

44 **Waltham Holy Cross**, Abbey Church (TL 38110065) P.J. Huggins, W.A.H.S.

A selective assessment of the Church foundations has so far revealed a burial pre-dating the Collegiate Church, and associated with middle Saxon pottery. There may be evidence of an earlier stone church.

Previous summaries: Priddy (ed.), 1984, 136.
Finds: E.F.D.M.

45 **Waltham Holy Cross**, Abbey Farmhouse (TL 38150081) P.J. Huggins, W.A.H.S.

A stratigraphic assessment of the remains of a timber-framed building was initiated, prior to the construction of an information centre on the site. It dates from the period 1250-1350 and was destroyed between 1450-1530, probably as a result of flooding.

Finds: E.F.D.M.

46 **Waltham Holy Cross**, Northfield Nursery, Sewardstone (TQ 379976) P.J. Huggins, W.A.H.S.

A pond, to the west of the area excavated in 1975 (Huggins 1978) was sectioned and much pottery dating from *c.*AD 360 onwards was recovered.

Finds: E.F.D.M.

47 **Walthamstow**, Walthamstow Central, G.L.C. (TQ 371890) A. Thompson, Forest Projects Ltd./M.S.C.

Large area excavation revealed that the rear of modern terraced buildings and their associated gardens directly overlay natural clay and gravel. Several sherds of abraded 14th/15th century pottery (?London Type wares) were recovered but these were probably brought to the site with garden topsoil. Three further areas around the main excavation, failed to reveal archaeological deposits. The recorded evidence suggests that the area was still forested up to the 17th-18th century when the area was cleared for a farm to the east of the main excavation.

Finds: P.E.M.

48 **Wanstead**, Wanstead Park, G.L.C. (TQ 416873) F. Clark, West Essex Archaeological Group

Fieldwork has continued in an attempt to locate a Roman villa first recorded in 1715. Lack of locational information and extensive 19th-century landscaping have hampered its rediscovery to date.

Previous summaries: Priddy (ed.), 1984, 132.
Finds: P.E.M.

49 **Witham**, 102-118 Newland Street (TL 819143) D. Andrews, E.C.C.

See Andrews, this volume, 151.

Progress in Essex Archaeology 1985

Excavations in 1985 have continued to advance period studies both by the discovery and examination of new sites and in the consolidation and extension of our understanding of some of the longer term projects.

Two sites recorded in the Hullbridge Survey (28) produced Mesolithic flints, whilst a scatter of Mesolithic blades and cores were recovered from Barking (2). Although reports of a log-boat from Barking (3) proved to be worked wood of indeterminate date and function, it may well indicate nearby settlement of an early prehistoric date.

For the Neolithic, a further season's work on the Springfield Cursus (38) clarified its structure suggesting a more or less continuous ditch, whilst at nearby Springfield Lyons (39) features containing Neolithic and Beaker pottery have been excavated. Scatters of flintwork were recovered during salvage work at Heybridge Basin (27). A major settlement site of the period at Tollesbury (28) is to be excavated in 1986.

The proposed reconstruction of the Bronze Age enclosure earthwork at Springfield Lyons (38) has provided an opportunity to excavate the remaining ditch segments. Settlement and cemetery evidence continues to be revealed on the north bank or the River Blackwater at Goldhanger (22) and Heybridge (27).

Iron Age communities also favoured the Blackwater estuary sites (22, 27). Excavations to assess the state of preservation of Asheldham hillfort (1) confirmed an early Iron Age date for its construction and revealed that the interior has suffered severe modern disturbances. Later Iron Age activity was recorded at Sutton (41) where traces of occupation were excavated and a coin hoard was dug-up. Elements of a rectilinear field system were recorded at Great Wakering (24) and enclosed settlement recorded at Kelvedon (29). The Hullbridge Survey (28) produced three further Late Iron Age/Roman salt-working sites.

Much effort has been directed towards urban sites for the Roman period with six sites in Braintree (6-11), whilst finds in Coggeshall (15-16) suggest a nucleated settlement of some note. The quality and significance of the Culver Street (18) and Gilberd School (19) sites has been remarkable and the lack of resources to satisfactorily conclude the former is of great concern. The positions of urban road lines were confirmed in Colchester (17) and Chelmsford (14), whilst further elucidation of the *mansio* in Chelmsford (13) aids our understanding of the town's public buildings. Work has continued within the temple precinct at Great Chesterford (23) and likewise an examination of the destruction levels at Harlow temple (30) is underway. Work at Sutton (41) and Waltham Holy Cross (46) adds to the rural settlement pattern, whilst the exact whereabouts of the Wanstead villa (48) still remains a mystery. Salvage recording of a pottery kiln at Thurrock (43), salt-working sites on the Hullbridge Survey (28) and metalworking in Braintree (7-8) contribute to our knowledge of the industrial processes.

A number of important Saxon sites have been investigated during the year. The boundaries of the settlement and cemetery at Springfield Lyons (39) are yet to be defined

with further burials and timber buildings being revealed, whilst a single sunken featured building at Sutton (41) suggests settlement in the vicinity. Proposals to extract gravel from an area adjacent to the site of the Broomfield burial (12) promoted a detailed watching brief after topsoil removal, revealing some Saxon finds but little to locate settlement or a cemetery. An important technological discovery at Goldhanger (22) was the recovery of a range of debris, artefacts and features related to metalworking. The pre-conquest origins of religious houses are not well known in the south-east hence the discovery of timber buildings at the double house at Barking (2) is of considerable interest. Continued work at Harlowbury chapel (25) however, found no further remains of its timber predecessor. The Saxon defences at Maldon have almost certainly been identified and sectioned at Spital Road (32).

Work in medieval towns has been on a small scale with minor projects at Harwich (26), Rayleigh (34) and Witham (49). Religious houses have received some attention at Newport (33), Saffron Walden (36) and Waltham Abbey (44-5). Maldon Archaeological Group have continued their comprehensive survey of the town's ecclesiastical sites and monuments (31). Limited church excavations have carried out at Pitsea (5) and Barking (4). This year saw the conclusion of lengthy excavations at Southchurch Hall (37) with a forthcoming emphasis on the restoration and production of an excavation report. Work on Rochford Hall (34) revealed that the earlier manorial centre and the 16th-century mansion were moated.

Country house studies constitute a major element in the county's post-medieval projects with work continuing at Audley End (36) on the archaeology of the garden and at Hill Hall (42). The excavation of a tile kiln at Stanway (40) was concluded. The restoration of Coalhouse Fort (20) will provide a much needed interpretation centre for the archaeology and history of the coastal defences which have played such a major part in national and regional defence.

Abbreviations

B.D.C.	Braintree District Council
B.T.H.C.	Braintree Town Hall Centre
B.V.A.S.	Brain Valley Archaeological Society
B.M.	British Museum
C.A.G.	Colchester Archaeological Group
C.A.T.	Colchester Archaeological Trust
C.E.M.	Colchester and Essex Museum
Ch.A.T.	Chelmsford Archaeological Trust
Ch.E.M.	Chelmsford and Essex Museum
E.C.C.	Essex County Council
E.F.D.M.	Epping Forest District Museum
H.M.	Harlow Museum
M.A.G.	Maldon Archaeological Group
M.S.C.	Manpower Services Commission
P.E.M.	Passmore Edwards Museum
S.E.E.A.S.	South-East Essex Archaeological Society
S.M.	Southend Museum
S.W.M.	Saffron Walden Museum
W.A.H.S.	Waltham Abbey Historical Society

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Archaeological Notes

Late Iron Age pottery and briquetage from Elm Park House, Ardleigh, 1981 by Isobel Thompson and P.M. Barford.

A small but interesting assemblage of Late Iron Age pottery and briquetage was unearthed by workmen excavating a lift shaft at Elm Park House, Ardleigh, in December 1981. Messrs. G.M.R. Davies and P.R. Sealey, from the Colchester and Essex Museum, visited the site (TM 055 287) and took charge of the finds, which apparently came from a shallow gully.[1]

1. The pottery. Between 50 and 60 vessels in all are represented, by sherds that are noticeably unworn. 21 vessels have been drawn for publication, nearly all substantial pieces. The remaining undrawn sherds reveal several unmatched clean breaks, with considerable parts evidently missing. This may be because only part of the feature was excavated.

Fig. 1:

1. Form A5, trumpet pedestal base (see Thompson 1982 for all forms). Good brown fabric with much reddish and black grog, dark grey surfaces, well burnished outside. The standard Essex pedestal urn form of the 1st century AD, also made after the conquest in Roman fabrics.
2. Heavy jar, several substantial pieces. Grey-brown fabric, much dark grey and red grog; roughly hand-smoothed inside, dark grey and red-brown; dark grey smooth outside, burnished on neck and rim; perhaps partly hand made but some turning lines. The form is B1-2, tall jar with offset neck and everted rim; this one thick and heavy with no cordon. B1-2 can be any date from the late 1st century BC until after the Roman conquest, but the fabric very quickly becomes romanised at Sheepen, at least.
3. B1-2 jar; compare nos 2 and 4. This one is plain and without the cordon, but small and highly burnished. Brown-grey fabric, medium-sized black and red grog, red-brown below grey-brown surfaces, burnished all over outside, rather patchy colouring, brown and grey, with burnish in faint 'feather' strokes on offset.
4. B1-2: compare nos 2 and 3. Hard and brittle metallic grey fabric with small and large irregular pieces of black grog; darker grey below red inside and brown-grey outside, no burnish and fairly rough to touch.
5. B3-1, one of the most common of jar rim forms, which covers nearly the entire 1st century AD in increasingly Roman fabrics; this one is in a good native fabric. Grey, many black grog inclusions of small-medium size and varied shapes. Red-brown below worn patchy brown inside and dark grey outside much worn to the red-brown below. Neatly shaped.
6. B3-1: compare no. 5. This one is typologically debased, as the cordons have become mere grooves; but like all these pots is neatly made. One sherd, grey with much black grog, reddish inside, grey-brown outside, fairly smooth but not burnished. One cordon, two clear grooves and one faint groove.
7. B3-1: compare nos 5 and 6. A small version. Dark grey with much black grog, dark grey smooth inside worn to red-brown, very patchy buff-dark grey outside, once burnished.
8. B3-8 jar, tall with narrow rim and cordoned shoulder. Reconstructed on paper from many pieces: red-brown fabric, harder at rim than foot; black and red grog, medium grains, dark grey surfaces, smoothed but not now much burnished; one side of body and rim pale patchy buff-grey, thick at girth. Very shallow cordons; neatly made. The form is hardly found in Essex except in Colchester, in native or Roman fabrics, and often in post-conquest contexts there and elsewhere. This example is very plain.
9. C1-2, coarse bead-rim jar; with faintly defined bead rim and internal thickening. A very common form that covers the whole 1st century AD. Thick dense brown fabric with black and red grog; red below patchy dark grey-brown surfaces, nearly all worn to red on outside. Possible flat base sherds present; red inside.
10. C2-2: small coarse everted-rim jar, without genuine offset or cordon. Grey fabric with much coarse black and pale red grog, large pieces; brown below surfaces, dark grey inside roughly smoothed; smoothed dark grey neck and rim, rather browner below, reddish-brown firing patch; roughened surface. The form is common at Sheepen but rare elsewhere; there usually in a romanised fabric.
11. C3, plain coarse jar with no external rim: this one very small, but the rim has a good parallel in Cam. 255A: pre- and post-conquest. One sherd, grey with many black, red, and buff grog grains, not coarse; grey surfaces, darker outside.
12. C6-1 storage jar rim, two joining pieces. Dense coarse grey grog-tempered, inside grey-brown with bright orange/black firing patch, outside orange-grey. Neat but very plain. A form and fabric to be found on all settlement sites in the south-east from the late 1st century BC to the end of the 1st century AD.

Fig. 2:

13. C7-1, rilled jar. Brown fabric, fine black and red-buff grog, some larger grains, one or two larger quartz lumps; red below smooth grey-brown inside, dark grey outside; fine horizontal rilling below black burnish on neck and over rim. Rilled jars at Sheepen were nearly all in Roman fabrics; it is an unusual form in Essex, and where datable it usually occurs with Roman pottery (in north Essex at least).
14. D2-2, very large cordoned bowl. Thick brown fabric with large black and buff grog grains, red below dark

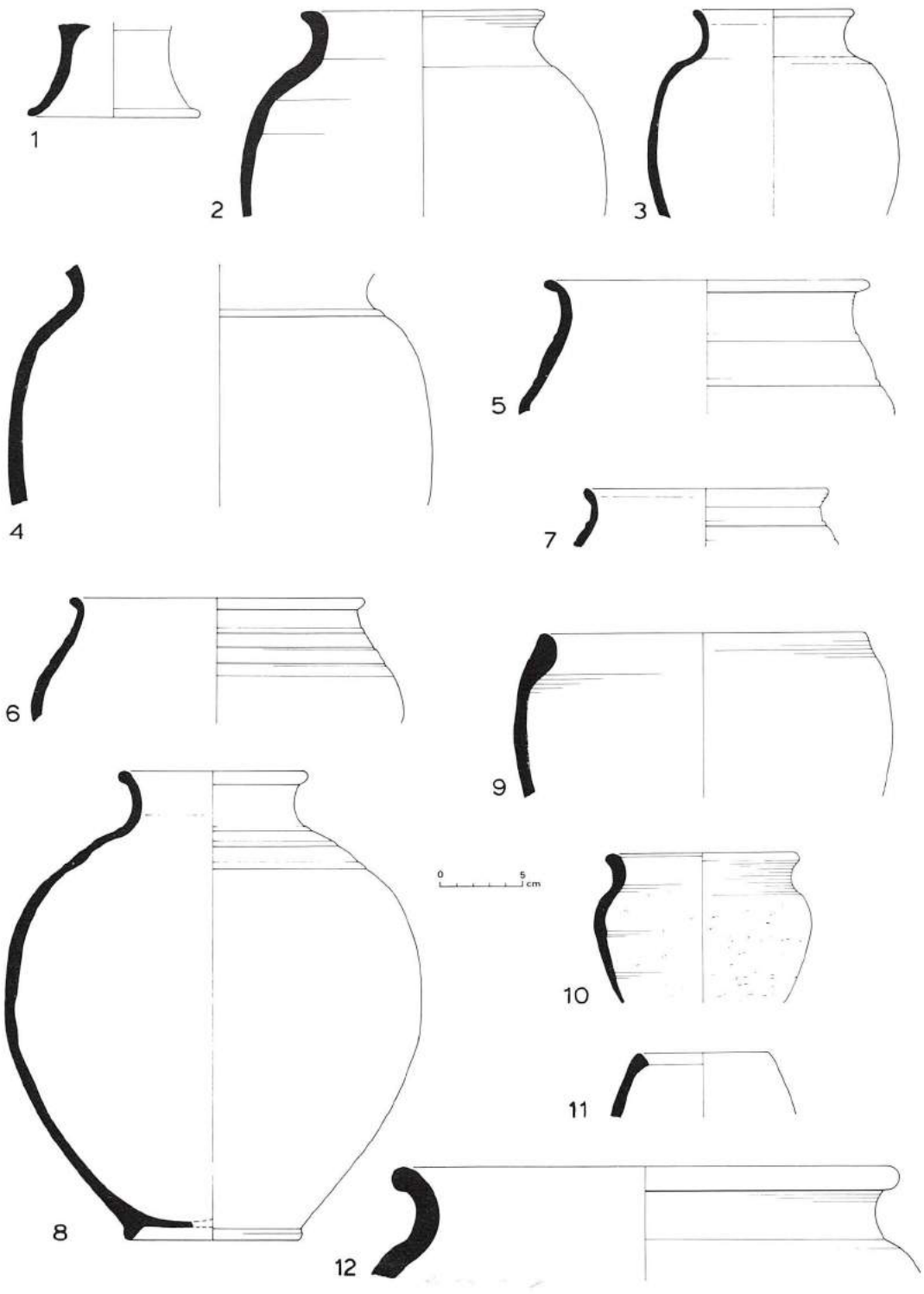

Fig. 1 Pottery from Elm Park House, Ardleigh. 1:4.

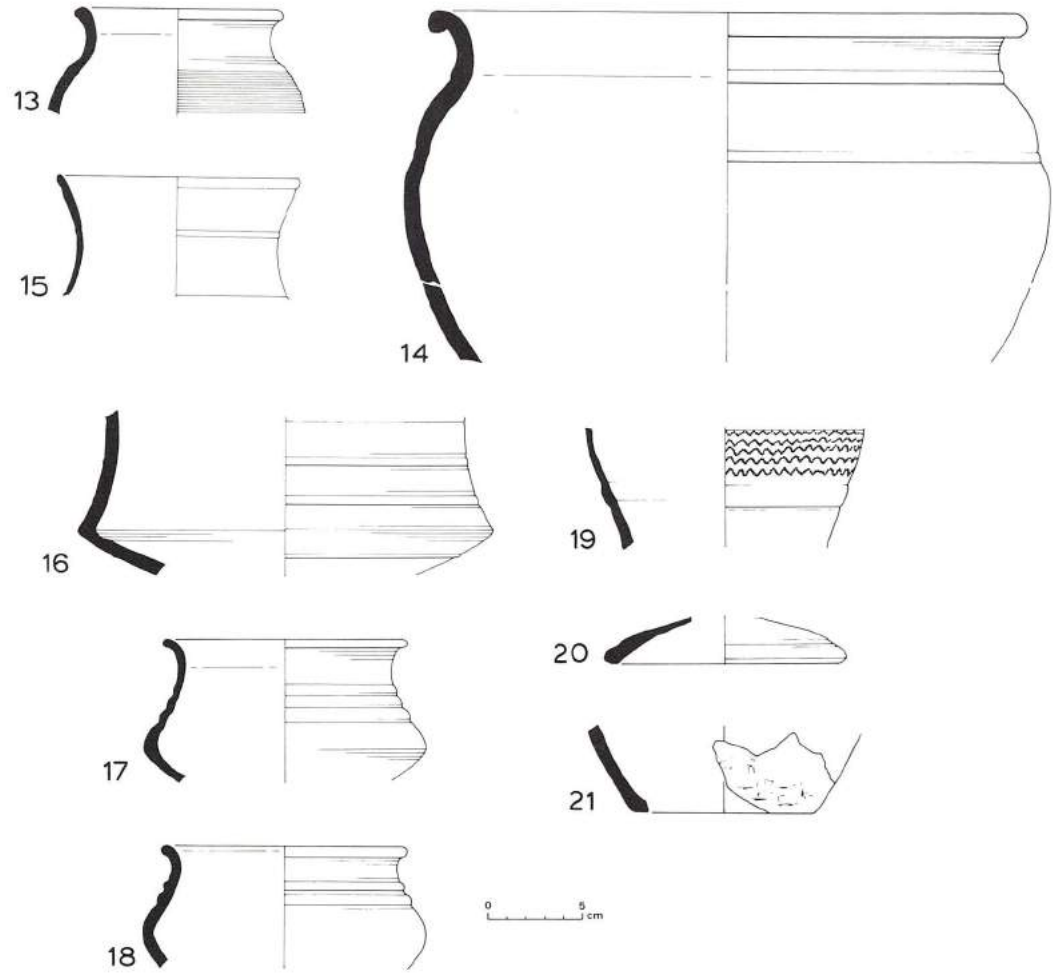

Fig. 2 Pottery from Elm Park House, Ardleigh. 1:4.

grey surfaces, spalled on lower inside; heavily burnished outside and well over rim, almost black. Not a common form; only one other in Essex, from Colchester Cemetery.

15. E1-1, small carinated cup with waist constriction. Fine grey-brown fabric, very small dark grey grog grains; reddish below darker brown-grey surfaces, burnished outside; shallow features. A common form, usually 1st century AD and overlapping the conquest. The cordon and rim-bead are not usually so shallow.
16. E1-2, carinated bowl with multiple cordons. Dark grey, with plenty of medium-sized black and red-buff grog grains; some brown below brown-grey smooth inside and dark grey burnished outside. Well made but not much remains. One of the most common of the carinated forms. This one has the gentle curve of the Essex examples. The date is from the end of the 1st century BC to the conquest.
17. E2-1, squat wide-mouthed cup with rippled shoulder and carination. Brown fabric, fine dark grey and buff grog, grey surfaces, burnished to dark grey outside with a red firing patch. Neatly made. A fairly common form but varies in detail; can be found in post-43 contexts.
18. E2-3. This cup does not have the relationship with carinated cups that no. 17 has, and is rounded with rippled shoulder. Brown with fine grog, paler brown below grey-brown inside, rather worn, and heavily black burnished outside. The form is often hand made and this is neater than most; its date range is late 1st century BC to the conquest.
19. G5-6 butt beaker sherd. Fine brown grog-tempered fabric, reddish surfaces to imitate TR, black firing patch outside; highly burnished and decorated with a small square-headed tool. The original type is Rigby's type 39, or Cam. 112A, usually made in TR3. This copy has the highly burnished surface and the 'notched scroll' decoration that is one of the recognised styles for the original beakers (Rigby in Partridge 1981, 172).
20. L6, lid, in one piece only; a standard pre- and post-conquest form. Grey, large and small dark grey grog, quite hard; red below darker grey surfaces; smoothed rim with turning lines.
21. Base sherd, 'low density vegetable tempering, Little Waltham fabric G: identified by PJD [P.J. Drury] 22.11.1982'. Black, hand made, red-brown inside, black sooty outside with small browner patch. Fabric G at Little Waltham was most common in Period II, 3rd

century BC; it was still present but less frequent in Periods III & IV, and in Period IV was alongside one of the earliest appearances of grog-tempered vessels (Drury 1978, 58).

None of the grog-tempered forms is notably rare; they are all recognisable settlement forms of the first half of the first century AD, and in good native fabrics; some of the forms can be post-conquest, but the group as a whole is emphatically native. A distinctive local trait may be seen in a tendency to plainness, with shallow or non-existent cordons. Most belgic settlement pottery seems to have been made very locally, as such distinguishing characteristics and quirks are common. Some at least of the Ardleigh pottery, however, presumably came from Colchester; in particular the butt beaker sherd, no. 19, and the other undrawn sherds noted below that copy imports.

The sherds of earlier and later periods, no. 20, middle Iron Age (residual here) and the Roman grey ware pieces noted below, are all fragmentary, in contrast to the substantial nature of most of the late Iron Age pottery.

The *undrawn pottery* includes ten everted rim scraps from jars of various B1 and B3 forms; a dozen shoulders from similar jars; four flat jar bases, one of which may belong to vessel no. 9, and another of which has two post-firing holes drilled through it; a storage-jar base, and body sherds from another storage jar (C6-1); three small thin butt beaker sherds and a base, all from different vessels and attempting to imitate Gallo-Belgic fabrics (two rouletted). All of these are grog-tempered. Also present, and apparently intrusive, are four everted rim scraps and five small body sherds of hard Roman grey ware.

As noted above, this is not a collection of worn scraps that had been lying around for some time before final deposition, so presumably the source of this domestic rubbish must be close by. The map of the multi-period cropmark complex of Ardleigh in Couchman and Savory 1983 (fig. 2) shows Elm Park House in the centre of the complex (*ibid.* for details and references). Publication of finds has been piecemeal and scanty; the present note should provide a useful group of Late Iron Age settlement wares.

2. The briquetage, by P.M. Barford

Nine sherds of briquetage (ceramic equipment believed to be associated with salt production) were found associated with the pottery described above. These came from at least four vessels, probably large thick-walled troughs (e.g. de Brisay 1978, fig. 12). All but one sherd were small, some abraded. They were all medium to hard fired, oxidised (pink/orange) with copious vegetable temper (grass or cereal leaf fragments and seed heads). The fabric was typical of Essex Red Hill briquetage, but the sherds varied in petrology with variable mica and ironstone content. Two rim sherds (Fig. 3.1 & 2) are of similar fabric, one flat topped with shallow 'cabling'; the other has a knife-trimmed edge to which a coil of clay forming a 'cabled' rim had been luted. This has since been broken off. The largest body sherd (Fig. 3.3) has (vertical?) shallow finger wiping.

Several inland sites in Essex, Kent and Hertfordshire have produced sherds of briquetage vessels. These finds have been discussed by Rodwell (1976, 298-301 and fig. 42; 1979, 160) but in a recent discussion of similar material

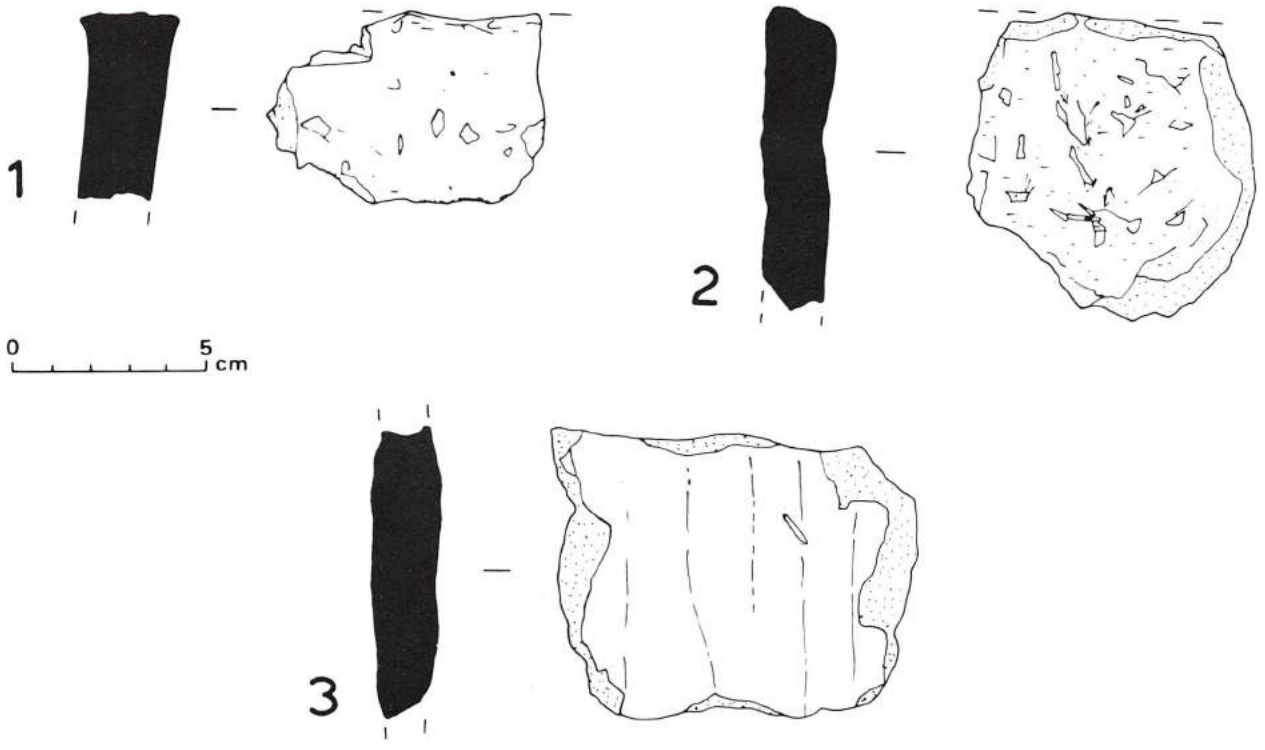

Fig. 3 Briquetage from Elm Park House, Ardleigh. 1:2.

from Mucking (Barford forthcoming) the writer considers that two other mechanisms may have been responsible for the transport of this material instead of those proposed by Rodwell.

It is suggested that either sherds of these vessels were accidentally included in salt packed for transport in another container, or that these porous sherds were traded for their salt content. It is possible that this was not for human but animal consumption (as salt licks for live-stock grazing poor pasture). The limited data at present at our disposal tend to support this latter idea; relatively little briquetage (compared to pottery sherds) comes from towns, but the material often occurs as small abraded (weathered?) sherds in the fills of field ditches.[2] This suggestion can only be tested when a more reliable body of data is available; there is still much to learn from the briquetage of Essex once the problems of recognition have been resolved.

Notes

1. We are grateful to Dr P.R. Sealey, of the Colchester & Essex Museum, for drawing our attention to the group and providing the opportunity to study it. The material is now deposited in the Museum.
2. Since the above was written Kirsty Rodwell (1983, 34) has recently suggested a similar explanation of the presence of briquetage vessel sherds in a Roman ditch at Palmer's School, Grays.

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Three Anglo-Saxon Bone Combs from Great Wakering by Susan Tyler

The following is a description and discussion of three previously unpublished Anglo-Saxon bone combs found during extensive brickearth extraction in the 'Brick Fields' of Great Wakering during the nineteenth century.[1] The extraction revealed and destroyed (without systematic recording) settlement features belonging to the Bronze Age, Iron Age, Roman and Saxon period;[2] the precise contexts of the combs are, thus, unknown. The National Grid Reference for the 'Brick Fields' is TQ 944881, Essex County Sites and Monuments Record number: TQ 98-038. The combs are in the possession of the British Museum.[3]

1. Bone comb (incomplete). British Museum Acc. No. 92, 11-4, 43. Double-sided composite comb. 75% surviving. Convex end with 'double S' shaped profile; coarse teeth (averaging 6 per cm), graduated in length towards the end; one connecting plate (convex with slight central groove in profile) held in position by a single disc-headed iron rivet (other connecting plate missing), second rivet-hole visible at broken end of connecting plate. In good condition, surfaces very smooth. Undecorated. Maximum width; 35.5mm; length (incomplete): 52mm.
2. Bone comb (incomplete). British Museum Acc. No. 92, 11-4, 44. Double-sided composite comb. Ends and most of tooth segments missing; connecting plates fragmentary. Tapering coarse teeth (averaging 5 per cm), ungraduated but slightly uneven; connecting plates (semi-circular slightly flattened convex in profile) held in position by two disc-headed iron rivets, two further rivet-holes visible at either end of one of the connecting plates. Decorative notching along the edges of the connecting plates is very haphazard and discontinuous along one edge. Maximum width: 35mm; length (incomplete): 79mm.
3. Bone comb (incomplete). British Museum Acc. No. 92, 11-4, 42. Handled single-sided composite comb. Approximately 50% surviving, both ends of handle damaged (butt end chipped, prongs of split end broken off), nearly all tooth segments missing. Bone handle (circular in cross-section) has one split end and the other vertical in profile. A tooth segment is secured into the split by a single disc-headed iron rivet; the back of the tooth segment is flush with the handle. The beginnings of the teeth (broken off) are visible, but most of the extant tooth segment is uncut; teeth are coarse (*c.*5 per cm). Butt end of handle decorated with a series of 9 incised circumscribing lines; two further groups of 9 and 10 incised lines and the beginnings of a third group are visible on one of the two prongs at the split end. Maximum diameter of handle: 26mm tapering to 18mm; length (incomplete): 108mm; length of tooth segment projecting beneath handle: 21mm.

Anglo-Saxon bone combs are relatively rare finds in south Essex (partly, no doubt, because of the acidic soil conditions encountered on several settlement and cemetery

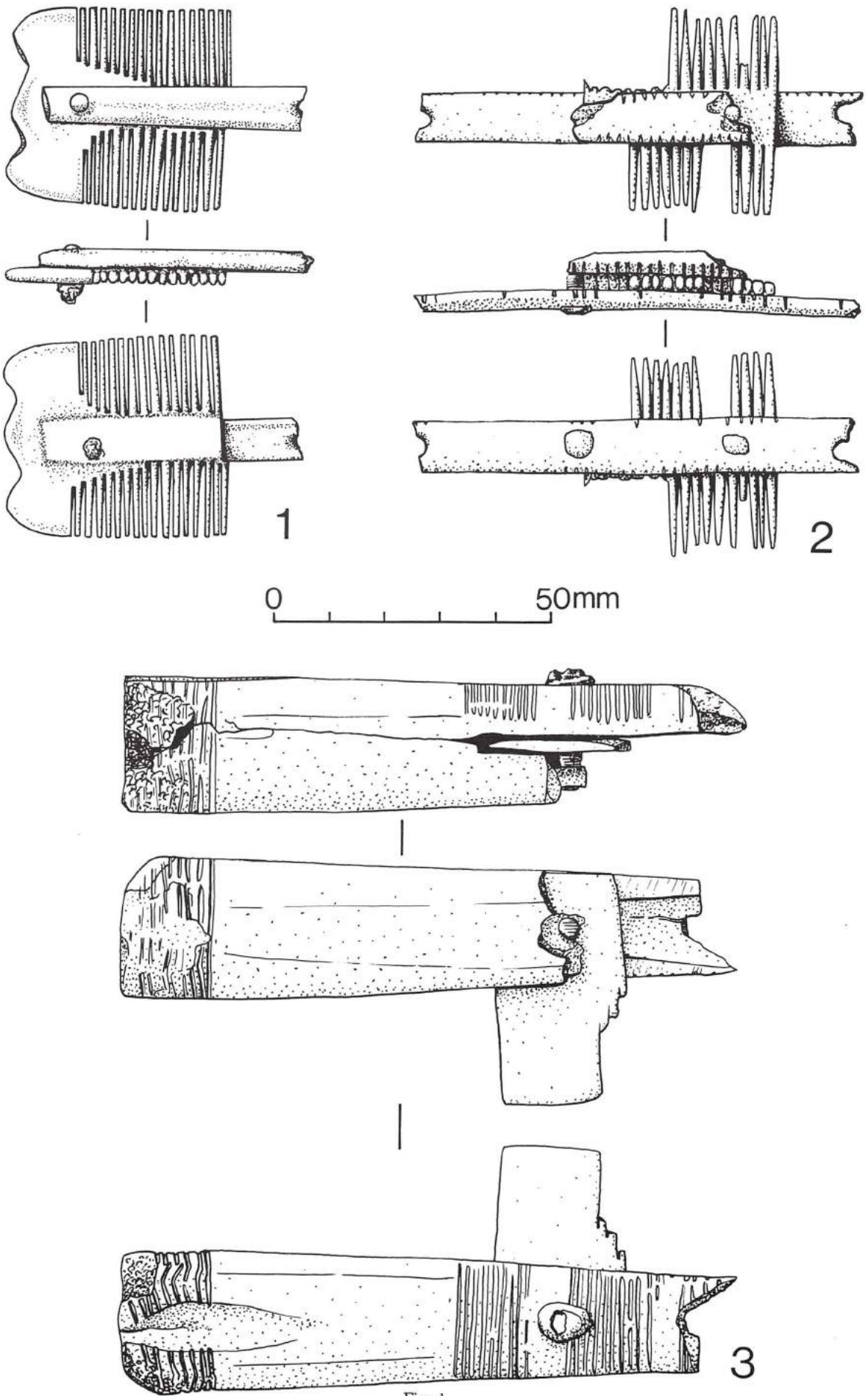

Fig. 1

sites); examples have occurred in fifth to seventh century contexts at nearby Prittlewell[4] and at Mucking.[5]

The Great Wakering combs are of two different forms numbers 1 and 2 are double-sided composites (a fairly common type), whilst number 3 is a handled single-sided comb — a rare find in this country. A bone comb handle with incised decoration found during excavations in the late-seventh to early-tenth century town of Hamwih (Southampton)[6] is very similar to Great Wakering number 3. Holdsworth notes that handled combs are most commonly found in Frisia, an area with which Hamwih had significant trading contacts in the 8th and 9th centuries.[7] The Great Wakering example, therefore, probably dates to the period AD 700-1000 and is, perhaps, of continental manufacture. The other two Great Wakering combs (nos 1 and 2) are not closely dateable; plain double-sided composites have occurred in Anglo-Saxon settlement and cemetery contexts dating from the early-fifth century through to the eleventh century. A tentative date can be suggested for comb number 2; the notched edges of the connecting plates and the coarseness of the teeth are characteristics seen on early Saxon combs found during the excavation of the settlement at West Stow, Suffolk, which was first occupied in the early-fifth century and abandoned in the mid-seventh century.[8] The three combs, therefore, belong to the period AD 500-1000; their recovery (along with Anglo-Saxon metalwork not discussed here[9]) from the 'Brick Fields' of Great Wakering indicates that this was an area of Anglo-Saxon habitation and, or, burial.

Notes:

1. *Trans Essex Archaeol. Soc.* **X**, (1905). p.252.
2. Victoria History of the County of Essex, **III**, (1963). pp194-195.
3. The author thanks the British Museum for permission to study the finds.
4. Bone comb from grave 14, found with iron casket fittings in Pollitt, W., 'The Roman and Saxon Settlements, Southend-on-Sea (Excavated, 1923)', *Southend-on-Sea Antiquarian and Historical Society Transactions*, Vol. **1**, Part II, (1923), p.119.
5. Bone comb from a cremation urn mentioned in Jones, M.U. and W.T., 'The Mucking Excavation: 1972, *Panorama*, **16**, (Winter 1972-3), p.38.
6. Holdsworth, P. 'Saxon Southampton', *Medieval Archaeol.* **XX**, (1976), pp45-47, fig. 21. no. 4.
7. *Ibid.* p.47.
8. West, SE, 'The Anglo-Saxon Village of West Show', *Medieval Archaeol.*, **XIII**, (1969), pp13-15, fig. 10, no. 6.
9. *Op. cit.* in note 1, p.252.

Acknowledgements
Fig. 1. nos 2 and 3 were drawn by Sue Holden of the County Archaeological Section, fig. 1. no. 1 was drawn by the author.

Plaster or Stone? Some observations on Layer Marney Church and Tower

by D. Andrews, O. Bedwin and R. Hall

Recent repointing of the tower of Layer Marney church has led to fresh discoveries about its fabric which have implications for the decorative scheme used in the better known Tower. The church of St. Mary is situated about 200 yards west of the Tower, which is in truth a huge gatehouse tower and adjoining wing of a mansion that was never built (Plate I). The buildings are approximately contemporary, but the exact date of their construction is not known. It is thought that they were begun in the early years of the 16th century, and work must have stopped in about 1525 when the second and last Lord Marney died. The most notable feature of the Tower, the renaissance terracotta mullions of the windows and decorative finials of the parapets, are generally dated *c.*1520.[1]

It needs only a cursory examination of the church to realise that its brickwork was entirely plastered. Scrappy remains of plaster are to be found hanging cobweb-like on most parts of its structure. What is not so evident is that originally plaster was used solely in imitation of ashlar masonry. Around the windows there are raised areas of plaster intended to represent stone jambs. The plaster also covered the window mouldings and mullions. In addition, the plaster on the hood moulds was pink, made with red aggregate, probably crushed brick, and there are traces of similar colouring on the moulded plinth below the windows. These features are especially well preserved in the area of a window on the south wide of the church, where they have been protected from the weather by the porch (fig. 1).

As far as it is possible to tell, this plasterwork is of two main phases. Originally, the body of the church would have appeared as a brick building with stone dressings, and pale red or pink hood moulds and dadoes, these being intended to look like sectional terracotta mouldings rather than simply made of individual rubbed or moulded bricks. (All the bricks used in the church seem to be rubbed, apart from the rounded ones of the hood moulds and plinths). Nowhere does the pink plaster have traces of plaster above or below it, and it therefore seems a primary feature. That on the hood mould finishes in a neat edge where it butted the white plaster of the window surround. That of the dado cannot be related directly to the sequence in the window area, but there is no reason to doubt that it is original. Limewash on the upper west window of the tower raises the possibility that the imitation stonework was picked out in this way.

To a later phase belongs the envelope of coarse, greyer plaster, which forms a second skin, covering the jambs and making them less prominent in relief, but not the pink plaster (though there is evidence to show that this was eventually concealed by coats of limewash that were applied to the plaster). Reconstructions of these two phases are shown for the area of the window by the south porch in fig. 2.

The case of the church tower is a little different. Here too the windows had imitation stone surrounds, and plinths, dadoes and cornices were plastered over, as was possibly the entire crenellated parapet. But unlike the rest of the church,

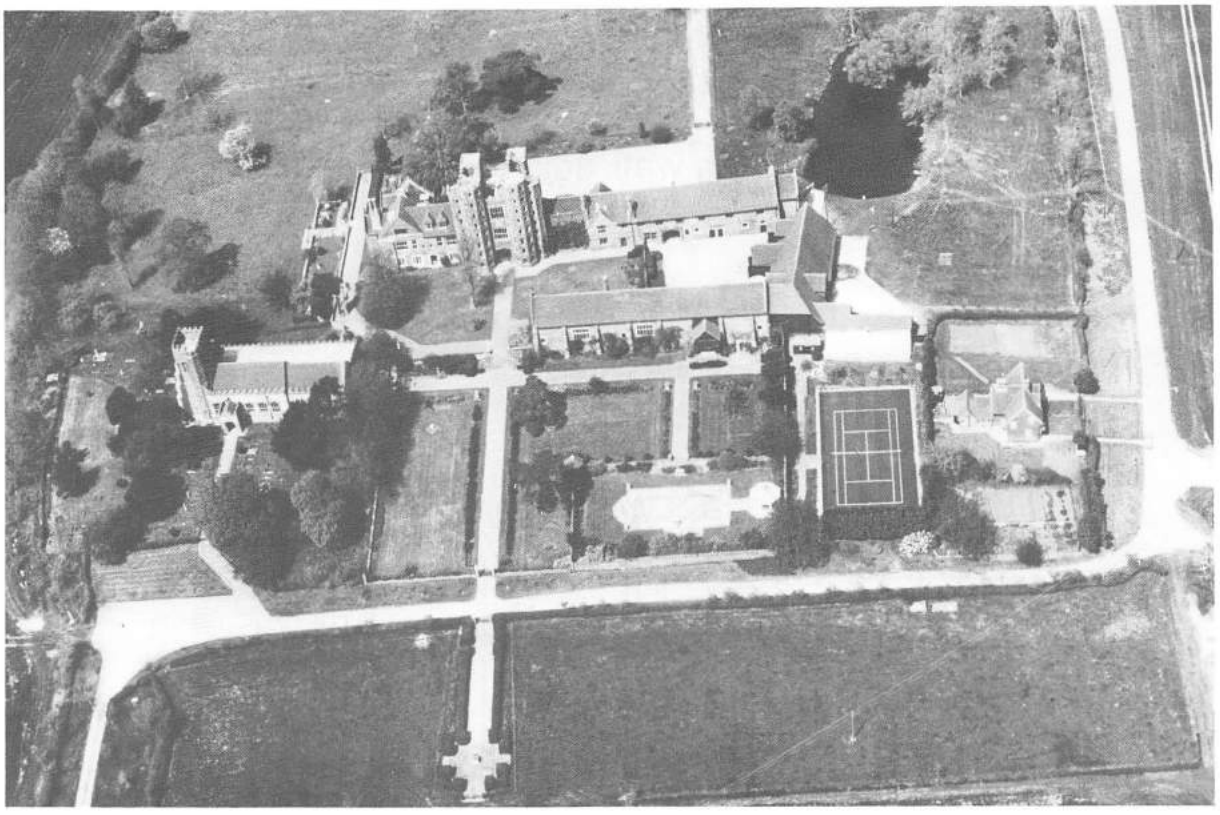

Plate I Layer Marney Church and Tower from the south. (Photo by Pat Adkins).

the brickwork of the tower has consistent diaper-patterning which was never concealed by plaster, and its diagonal buttresses have limestone quoins and copings for their full height.

When the stonework of the tower buttresses was renewed, it was at first thought to be a later feature. However, it was noted that in some cases half bricks were set with their intact faces flanking the ashlars, and it therefore seems to be original. The stones had been re-used, and five pieces are illustrated here (fig. 3).[2] Although they bear traces of secondary working, they are generally in good condition despite in some cases having been set in the buttresses with their carved surfaces visible. Nos 1 and 2 are chamfered mullions from the same or very similar windows. No. 1 is from the top or bottom of a surround, whilst no. 2 is probably a jamb. No. 3 is probably a label from a window arch. It has a radius of about 1.5m and is unweathered, the hollow chamfer bearing fine impressions left by a toothed chisel or similar tool. The top of the moulding has been removed. Possibly there was a chamfered weathering. No. 4 is the base of a reveal, probably from an arch or door. Although intact for its full length, no. 5 is rather badly damaged. It may also be from a reveal, or else possibly a cornice. A stone fragment with romanesque decoration kept inside the church indicates that it had a Norman predecessor. In contrast, these mouldings are in a style that seems to be much the same date as the existing church, and it is only possible to speculate as to their origin.

The discovery of these features prompted a comparison with the Tower. Here there is ample evidence that the windows were surrounded by plaster in imitation of ashlar jambs. This explains an unusual feature of the large windows of the central part of the gate tower, that is the use of off-white terracotta for the decorated mullions instead of the more usual red. This was clearly chosen because the windows were intended to look as though they were made of stone, and the mullions would thus have blended with the counterfeit ashlar of the window surrounds. The quoins, cornices and plinths of the gate tower were also plastered. The effect would have been striking, especially on the south side where the polygonal faces of the turrets would have been broken down into panels of diaper-patterned brickwork enclosed by plastered window surrounds and quoining.

Plasterwork in imitation of masonry, and gaudy colouring, were, it seems, typical features of Tudor mansions. At Rochford Hall, the brick and rubble masonry was covered by plaster with slightly raised and scratched ashlaring at the window surrounds. Plastered reveals and quoins over brickwork is to be found at Giffords Hall (Stoke-by-Nayland, Suffolk). Long Melford Hall (Suffolk) has stone dressings, but there is evidence that the brickwork was covered with a red limewash on to which was painted brick joints and diaper patterning.[3] The sombre appearance presented by so much Tudor architecture today is clearly misleading.

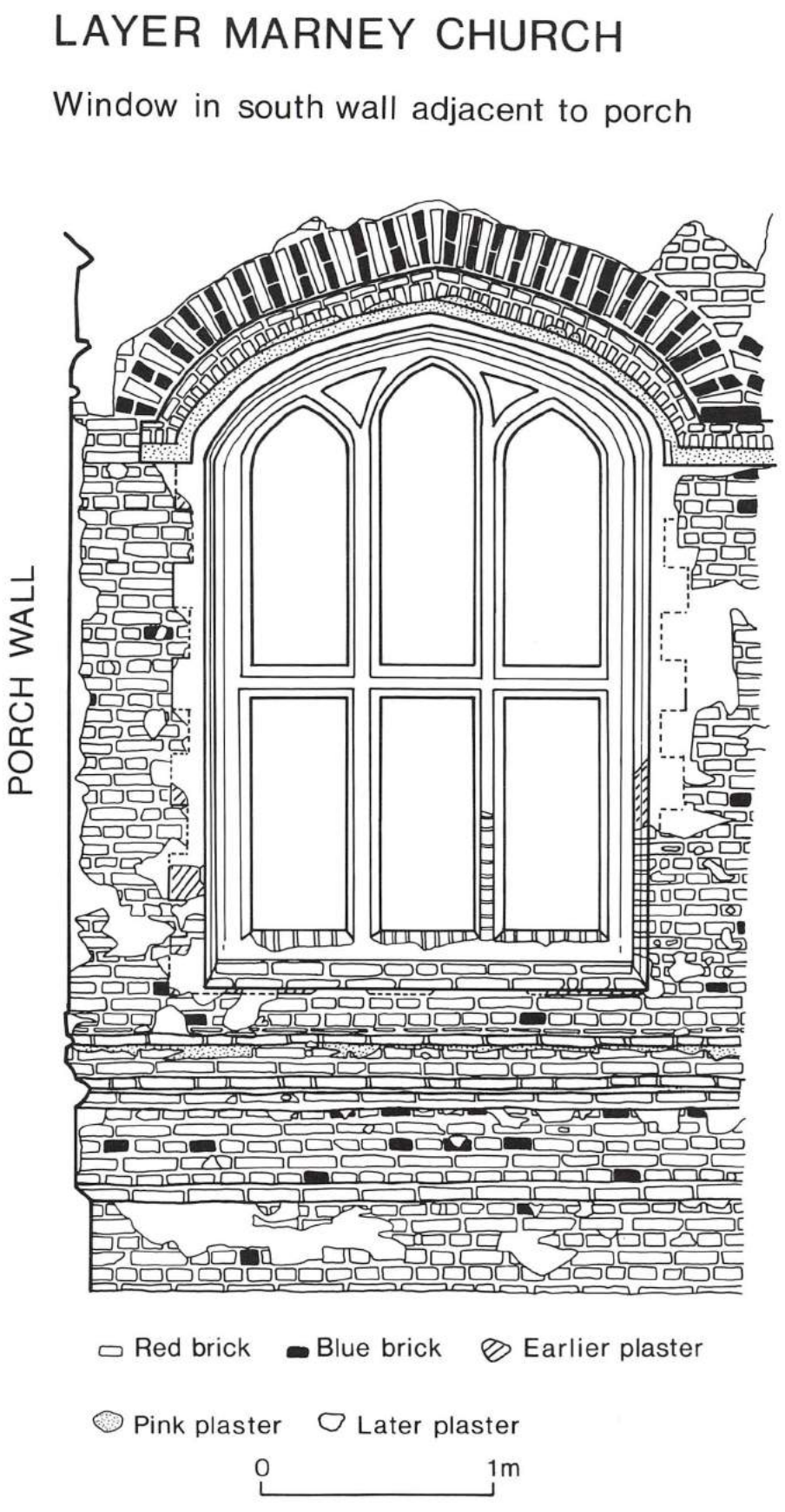

Fig. 1 Layer Marney Church. Elevation of window on south side of nave, immediately east of the porch. The single tile course, just below the window, is seen only on the south side of the nave.

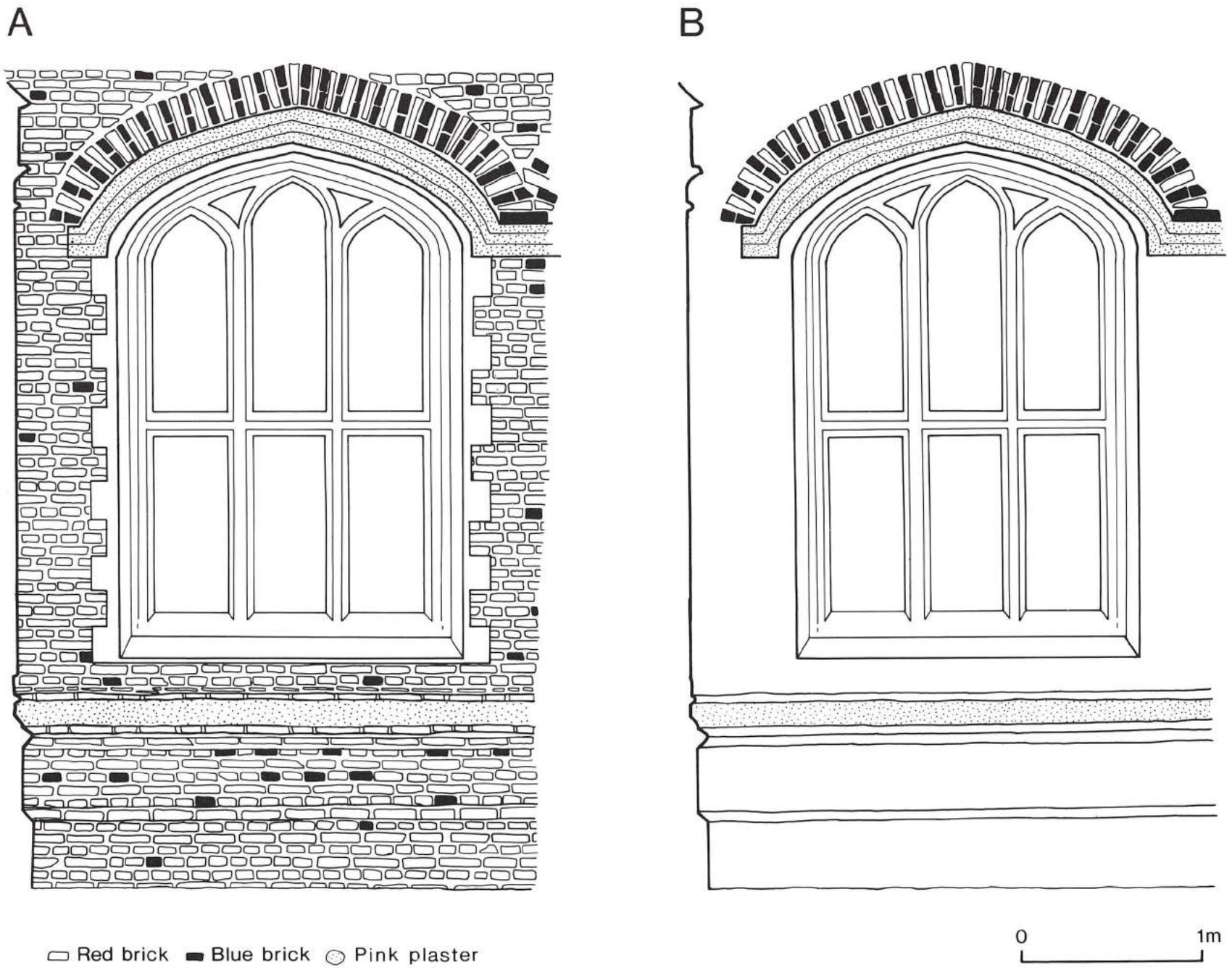

Fig. 2 Layer Marney Church. (A) Reconstruction of the window elevation with imitation stone jambs. (B) Reconstruction of the window elevation in pink and white plaster.

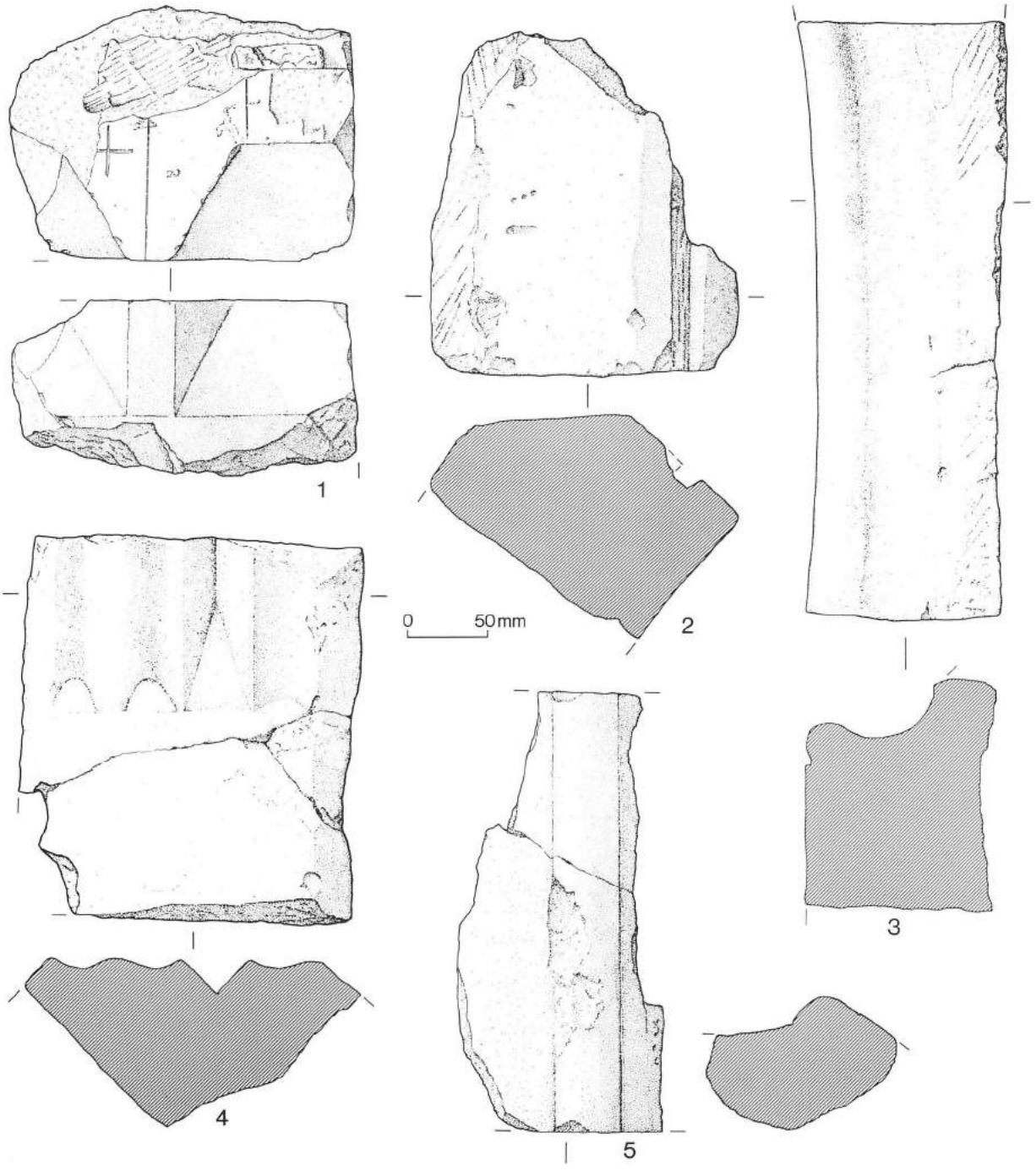

Fig. 3 Layer Marney Church. Examples of carved stone re-used as quoins on the Tudor church tower.

Acknowledgements
We should like to thank Bakers of Danbury, John Burton, and Major G. Charrington for their co-operation, help and advice. The drawings of the church are by Miranda Gee, and of the stones by Ruth Parkin.

Notes

1. This decoration is probably best illustrated in J.A. Gotch, *Early Renaissance architecture in England*, London, 1901, fig. 41 and plate XIII.
2. We are indebted to Richard Lea (Museum of London) and James Thorne (HBMC) for their comments and advice on the re-used stones.
3. Information on Giffords Hall and Long Melford Hall from J. Burton and M.C. Wadhams.

Apothecaries' and Barber-Surgeons' Tokens of Essex and their Issuers by T.D. Whittet

Tradesmen's tokens formed an illegal money of necessity issued between 1648 and 1679 when small change was scarce. The issuers were clearly persons of some affluence, but information about them is often limited. This note lists additional details recorded by the author.

References are to the standard work properly known as Williamson (W).[1] The Judsons[2] relisted the Essex section, with additions and included that of an apothecary William Rowe under Newport Pond but have realised this was an error (personal communication, October 1974).

Apothecaries Tokens

1. Harwich, Thomas Bradshaw W196

The issuer was listed as a county freeholder in 1696.[3]

2. Colchester, Isaac Colman W107

I have been unable to find anything about the issuer who was presumably a member of a gild of grocers and apothecaries or a grocer-apothecary.

Additional Apothecaries' Tokens

The following tokens were definitely issued by apothecaries:

3. Felsted, Henry Bigg W176

The will of Henry Bigg, apothecary of Felsted, was made on June 17 1684[4] when he was 'in health of body and of sound and disposing memory and understanding yet considering the frailty of my life and the uncertainty of the time of my death . . .' He left to his wife Elizabeth 'a messuage and tenement or farmele called Browne's farme Toppsfield, Essex with houses, edifices, buildings, barns, stable, outhouse, yards, orchards, gardens, land, meadows and pastures, woods and woodgrounds, thereunto belonging.'

If he died without heirs he left to his brother Fernegan and then to his nephew of the same name the 'messuage wherein I now dwell in the town street of Felsted.' He made numerous monetary bequests.

Elizabeth was the sole executrix and she proved the will on June 18 1714. In the 17th century it was unusual for a will to be made so many years before the testator's death. They were usually made when he was ill or dying.

4. Colchester, Henry Lambe W123

Williamson wrote that another token is dated 1663 and that the issuer was Mayor in 1669, but was unaware that he was an apothecary.

Mason[5] wrote of the issuer 'Henry Lambe contributed £200 to the fine (of £12,000) imposed by Lord Fairfax at the surrender of Colchester during the 1648 (Civil War) siege. He was an apothecary living in St. Runwald's parish, Colchester, and issued tokens dated 1655 and 1663. Alderman and Mayor 1662, 1669 and 1674. He held the office of Mayor from July to October in 1662. As Alderman, he gave useful assistance during the plague of Colchester (which raged from 1665 to December 1666). He had at least three sons, Basil, Arthur and James, all educated at Colchester Royal Grammar School. The master records of Basil in the school register 'He does not bear himself always as a lamb, but sometimes as a pugnacious little lion.' During his Mayoralty in 1670, Henry Lambe signed a warrant to break up a meeting of the Society of Friends (still flourishing in Colchester) at Colchester; but they resisted until 1671 (the next mayor's office).

Henry had another son as, in the apprenticeship records of the London Grocers' Company,[6] (which are in Latin), Henry Lambe, son of Henry of Colchester, pharmacopole (apothecary), was bound to John Cressener for seven years from November 10 1671. The latter was the son of Edward of Earls Cone (sic), Essex, and was probably a druggist. He may have been related to Marie Cressener of Bury St. Edmunds, who issued a token bearing the device of a mortar and pestle.[7] She was the widow of Thomas, apothecary.

On October 21 1661 Henry Lambe, apothecary, consented to the marriage of his daughter Elizabeth to Andrew Formantel of Trinity parish Colchester.[8] The latter was a baymaker who also issued a token.

A Probable Apothecary's or Barber-Surgeon's Token

Harwich, John Atkinson W195

Williamson[9] gave no information about the issuer of this token which depicts an hour-glass surmounted by a skull. Gilbert[3] wrote 'This is an unusual device. Mr. Golding suggests the token was issued by an undertaker. In the register of Woodbridge School we find in 1684 'Samuel Atkinson de Harwich in Co. Essexiae'. Commenting on a token bearing the device of three human skulls Williamson[9] wrote 'This is probably an apothecary's token.' The device of a skull was, indeed, often used by apothecaries and barber-surgeons and John Atkinson may well have been of one of these occupations or both.

Tokens bearing devices often used by Apothecaries

Bunch of Flowers or pot of Lilies

Williamson[1] described the devices on two Essex tokens, those of John Noon of Great Bardfield (W 4) and Richard Bush of Colchester (W 99), as 'a bunch of flowers.' They are, however, indistinguishable from other devices which he called 'a pot of lilies', a device very frequently used on apothecaries' tokens. John Noon was an innkeeper. I have been unable to find the occupation of Richard Bush who may have been an apothecary.

Unicorn

Tokens bearing this device were issued by William Aldred of Colchester, weaver, William Ang(i)er of Much Clafton,

innkeeper, and Thomas Copley of West Ham, innholder.

Cock

Richard Cocke of Colchester issued a token with this device which may have been a pun on his name. There were, however, numerous apothecaries and physicians called Cock in the city.

Other possible Apothecary Token Issuers

Thomas Firmin of Hedingham Castle, who issued an undated token bearing the device of a castle, was probably an apothecary and the father of Nathaniel Firmin of that town who was granted on August 11 1704 an episcopal licence to practise medicine and surgery.[10] He may have been the Thomas Firmin who was an appraiser of the inventory of the apothecary William Fothergill of Sudbury in 1713.[11]

Another Thomas Firmin, son of Mark Firmin of Sudbury, was apprenticed to a surgeon in 1742 and had apprentices bound to him between 1754 and 1770.[10] He may have been the person of that name who entered the University of Leyden as a medical student in 1738 at the age of 24.[12]

John Firmin of Colchester was granted on November 15 1676 an episcopal licence to practise medicine and surgery.[10]

The token issuer was probably related to Giles Firmin of Sudbury, who was described by Kremers and Urdang[13] as the first apothecary who entered New England. He arrived in Boston in 1632 and died there in 1634. His son Giles Jr. (1614/15-1697) became an apothecary and physician. Later he returned to England and became a clergyman.

The family was undoubtedly an apothecarial and medical one.

Richard Graygoose of Epping issued an undated token bearing the device of a man making candles on which he was called a chandler. In an advertisement for Bromfield's Pills dated 1684 he was described as a grocer. He may have been a grocer-apothecary or a general dealer who sold apothecaries' wares.[14]

James Robient of Maldon, who issued an undated token bearing the Grocers' arms, was the father of John Robjert (Robient) of All Saints, Malden, co. Essex, chirurgeon, who on July 26 1706 was granted a licence to practise surgery.[15] James' will was proved in 1688.[16]

Barber-Surgeons' Tokens

1. Manewden, Thomas Bull W233

Williamson gave no information about the issuer. There are several references to 'Thomas Bull of Manuden' in the Quarter Session Rolls:[17]

1617 He was described as a tailor, who before and since July 1, had kept a common alehouse there without licence.

1630 He was presented 'for suffering disorders in his alehouse.'

1670 A return of the Constables stated 'Thomas Bull alehouse keepers licences keep good orders'.

As there were 53 years between the first and last entry it seems likely that there were two persons of the name, probably father and son. Thomas Sr. may have left the alehouse to his son who appears to have continued to run it as well as being a barber-surgeon.

The will of 'Thomas Bull of Mallewdine in the County of Essex Barber Chirurgeon' was made on July 20 1672[18] when he was 'of sound and perfect memory'. He left to his son William 'the messuage and tenement which I now live in' but his wife was to have it for her life. William had to pay the following sums to his sisters: Frances £20, Jone Champnis £1, Alice £10, Mary £15, the last two at the age of 21. He also mentioned daughters Elizabeth and Martha as beneficiaries but did not state the amounts they were to receive. Presumably Jone had received her portion as a dowry.

Thomas's wife who was not named was to be the sole executrix of the will and was left 'all and singular my goods and chattels and pewter Brasse Linnen household stuffe'. The will was proved on January 28 1672/3.

2. Manningtree, Henry Carter W234

Williamson[3] gave no information about the issuer of this token. I have been unable to find anything about him.

Acknowledgements

Much of the research in this paper was carried out with the aid of a grant from the Wellcome Trust and I express my gratitude to the Trustees. I wish to thank Mr. Victor Gray, Essex County and Honorary Diocesan Archivist for information about Thomas Bull and Dr. J.H. Appleby and Mr. W.H.A.C. White, F.P.S., for information about Henry Lambe.

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Current Research on Essex History and Historical Geography, 1985-6

by Nancy Briggs

This list is based partly on *Historical Research for University Degrees in the United Kingdom List No. 46* Part I, *Theses completed 1984* and *List No. 47* Part I *Theses completed 1985* and Part II *Theses in Progress 1986* (University of London Institute of Historical Research, May 1985, May 1986). Other information has been taken from research cards filed and theses deposited at the Essex Record Office.

Medieval

Early Saxon Essex
S.A. Tyler (London M.Phil.)

Popular revolts in England, 1449-50
Isobel M.W. Harvey (Wales Ph.D.)

The Bohun family in the 14th century
Mrs. Winifred A. Kind (Keele M.A.)

Early Modern

Mental illness in Tudor England
Cynthia Chermely (Cincinnati Ph.D.)

The Papillon family in the later 17th century and early 18th century
Mrs. Anne V. Moy (London M.Phil.)

Modern

The middling sort in 18th century Essex and Suffolk
Shani D'Cruze (Essex Ph.D.)

The Association Movement in the Home Counties, 1779-85
P.T. Smetham (Oxford M.Litt.)

The Petre estates in Lancashire, 1780-1860, including relationship with the Essex estates
L.A. Hardy (Lancaster M.A.)

Resistance to the New Poor Law
C.L. Locke (London M.A.)

Farmworker unionism in N.W. Essex, 1870-1920
M.A. Woodgate (Essex M.Phil.)

Motor car registration and industry in Edwardian Essex
T. Maloney (London M.Sc. Econ. Hist.)

The Jewish Community at Upton Park since 1905
C. Wiseman (London M.Phil.)

History of county planning in Essex, 1930-74
N.R. Toodgood (London M.Phil.)

Bibliography of the London Borough of Havering
Julie A. Johns (F.L.A.)

Completed Research

Office-holding in East Anglian boroughs, 1272-1460
S. Alsford (Leicester M.Phil. 1982)

Economic and social aspects of provincial towns: a comparative study of Cambridge, Colchester and Reading, *c.*1500-1700
N.R. Goose (Cambridge Ph.D. 1984)

London over the border: a study of West Ham, 1840-1910
J.W. Marriott (Cambridge Ph.D. 1984)

Women in the family economy in Halstead, 1840-1880
Judy Lown (Essex Ph.D. 1984)

Roman and medieval settlement in N.W. Essex
T.M. Williamson (Cambridge Ph.D. 1985)

The Bohun earls of Hereford and Essex, *c.*1270-1322
Gwenllian Jones (Oxford M.Litt. 1985)

Violence, crime and public disorder in East Anglia, 1422-42
Philippa C. Maddern (Oxford D.Phil. 1985)

Women workers in the tailoring industry: 19th and 20th century Essex
Belinda Westover (Essex Ph.D. 1985)

*Witchcraft Prosecutions in England: the Home Counties, 1563-1625
W.J. Coll (Calgary M.A. 1985)

*Copy in E.R.O. Library

Book Reviews

Rivenhall: investigations of a villa, church and village 1950-1977. W.J. and K.A. Rodwell. CBA Research Report 55, Chelmsford Archaeological Trust Report 42, £22.50

This is a volume of initiatives, inspiration, ideas and surprises; some are excellent, some raise queries, and some raise doubts. The first surprise, when I bought the volume entitled just Rivenhall, was to find that it was only half the intended publication; it would have been helpful if the title had been advertised as Rivenhall I just to warn investors that there was more to come. In general this volume gives details of the excavations, the structures and the ideas; volume II will give the material. A typescript for the second volume is said to be already in existence and it has been suggested that it may appear in 1989 or 1990. Readers are therefore in the difficult position of judging only one half of the finished work without the finds which must eventually flesh out the structural skeleton.

In this volume we have the background and setting (pp.1-11), the Roman villa complex (12-65), the Rivenhall area in the Roman period (65-8), the site in the Saxon period (68-77), the cemeteries and churches (78-107), the churchyard and secular buildings (108-27), the fabric and furnishings of the church (128-69), Rivenhall village and parish (171-86), sections, notes and plates. Thus in 198 pages of print and 35 pages of plates we have a sequence of information spreading chronologically from the middle of prehistory to 1976, and geographically over an area of about 50 square miles. The information, like the investigation, grows outwards from the excavations of the site of the villa and church, brought into order and interpreted, and extends to place-names, hedges, and field survey.

The coverage of different topics obviously varies both in depth and in certainty. 53 pages on the villa complex ensure more detailed coverage than 15 pages on the parish; but because the church is a standing building with datable architectural details in situ 70 pages on the church give much greater certainty than the 53 pages on the villa. The church is largely a matter of record, the villa is mainly interpretation. In the absence of finds I cannot raise great enthusiasm for the secular buildings in the graveyard. They are an excellent matter of record but the point at which I would get interested in this almost modern period is the link or confusion between the documents and the material — but that has to wait.

The interpretation of the villa buildings is a major feature and the authors are firm in their policy of projecting major buildings from basic foundations. This section is heavily influenced by the reconstruction of the villa at Nennig and needs detailed discussion. In general I applaud the determination to make the most of what was found, but I regret the symmetrical extrapolation from limited evidence and especially the arrival of a second storey with no architectural material, or social reasoning to back it up. In brief it was well worth doing, but I don't believe it. So far as I can see the authors have always been honest in showing the limits of their evidence, so, for instance, the tenuous nature of the great barn can readily be appreciated (p. 58). The placing of this building — if it is Roman — plays havoc with the 'classical' layout and the implications of such changes need more discussion. As a general point, I did have some difficulty in locating myself on different plans with different orientations and finding my way spatially from phase to phase.

The authors deal very fairly with the evidence which takes us from the late Roman period to the first church (?AD 350-? 850) making clear that a continuous, dated, physical sequence cannot be demonstrated, while plumping heavily — as they are fully entitled to do — for some form of continuity of use. Their view is obviously the best informed but it could not convince a firm sceptic because of the inevitable gap between the fragmentary material and its interpretation.

Warwick Rodwell and Kirsty Rodwell deserve high praise for doing the work, having new ideas, and refusing to be constricted within the limits of a standard rescue excavation, or hidebound by a typical excavation report. I do not know any of the murky story of the barriers to publication which held up the report for six years, and I may even be talking of close friends, but these people cannot be sufficiently castigated. If an excavator writes a complete report then, given some reason for the space available, the excavator is the only judge of what to print, and it must be printed. Editors, advisors, readers, policy makers should be kept in their subservient role as technicians whose job is to get the excavator's word into print. At present they have got above themselves and are holding up the great backlog.

Richard Reece

John Wymer: The Palaeolithic Sites of East Anglia. Geo Books, Norwich, 1985, £29.50 (hardback) also paperback edition.

Anyone with an interest in the Palaeolithic, the Old Stone Age, of East Anglia has, up to now, had to spend much time and effort looking through a variety of books and journals to find the archaeological reports about this period.

John Wymer has gathered together this record and we now have a reliable gazetteer of Palaeolithic sites with associated finds for Norfolk, Suffolk and Essex.

The format is one of maps (34) to locate the sites or find-spots and a text that gives a description of each site or find under its own individual heading (local or specific names are used where known followed by a six figure grid reference). There are 84 line illustrations, mostly by the author, they are of the lithic assemblages, a major feature in the recognition of Palaeolithic sites, and also of plans and sections especially redrawn to convey the maximum information.

A useful short section with a description of palaeolithic artifacts in general is also included, plus a classification of hand-axes and the necessary attributes for particular

palaeolithic stone industries. A further chapter covers the evolution of the region during a period of major climatic change and the relevance this has to human occupation. Finally there is a section on the lithic technology of the time, with descriptions of the stone tools known to have been part of palaeolithic man's tool-kit and how it is now possible to recognise patterns of slow development that occured during this long time span.

The clarity of the writing of John Wymer as usual reveals his remarkable knowledge, in particular about the palaeolithic, at the same time it enables the reader to extract a variety of information in the most straightforward manner. For both the professional and amateur archaeologist this is the most useful book about the Palaeolithic of East Anglia.

Hazel Martingell

R.H. Britnell, **Growth and decline in Colchester, 1300-1525**, Cambridge University Press, 1986, xvi + 304 pp., bibl.

Dr Britnell's book examines the economic history of Colchester in the fourteenth and fifteenth centuries. It is an important contribution to the historiography of the town, but it is shaped chiefly as a contribution to a debate that has exercised economic historians for more than thirty years. The controversy concerns the economic and social effects of the bubonic and pneumonic plagues, the Black Death, which became endemic in Western Europe in the fourteenth century, and which were a major cause of mortality in England until the seventeenth century. The population undoubtedly suffered great damage from plague, which was a fearsome addition to the normal hazards of life, but the wider effects of the mortality on society, and especially on the economy, are difficult to establish. Historians argue about whether and to what extent economic activity diminished, and whether or not wealth diminished with it. Were the fewer people left alive more impoverished or more affluent than those who went before them? We know from our own experience that a growing population can be a stimulus and or a burden to the economy that feeds it, and despite the imperfections of medieval evidence we have projected a variety of theories on to what we have discovered about the Middle Ages. The effect of economic contraction on the towns is a matter particularly in dispute, and *Growth and decline in Colchester* is the latest and a notably close-argued addition to the debate.

The starting point of the study is the end of the thirteenth century, at the close of a long period of economic development in Western Europe. At that time Colchester was relatively small, with a population probably between 3,000 and 4,000, and despite its marks of antiquity its standing was, as Dr Britnell says, humble. It had been a place of some consequence in Norman times, but seems to have developed little since then. It housed a cloth industry of no particular distinction, though the fact that we can discern it is a distinction of a kind, and in its population and resources it ranked thirtieth or lower amongst English towns. Two centuries later, in 1524, it ranked twelfth in the kingdom in terms of its inhabitants' taxable wealth. The intervening time had been a disturbed one in which Colchester had certainly not enjoyed an even run of success, but its industry had grown strongly, and its population appears to have doubled. It is also interesting that the town adjusted its civic style to its new status.

Dr Britnell begins with a brief sketch of Colchester in 1300, and then discusses its economy, municipal powers, and food supplies. He then demonstrates a period of growth in the second half of the fourteenth century, and a period of relative decline in the fifteenth. His discussion is an accomplishment in itself, as the sources upon which it draws were almost entirely framed for other purposes. As Dr Britnell says, although Colchester is a well-documented town, 'the economic evidence is of a low quality'. The Middle Ages were unaware of economics as an end in itself, and they documented matters that in the twentieth century seem central to human existence in an accidental and sparse way. What is well-documented in Colchester is the borough's court, a judicial assembly with administrative functions. The earliest surviving court roll dates from 1310, and the sequence is reasonably continuous after the 1330s. The borough's Oath Book and Red Paper Book, begun around 1380, contain memoranda and other material, including entries from court rolls which have since been lost. What Dr Britnell has done is to ransack the records for any information that can be used, together with manorial and other records from the surrounding area, to reconstruct the economy of the town. His work displays much learning and ingenuity, and he has used it also to prepare a schedule of the court rolls, and a paper on the courts and their records which is being published separately.

With the aid of his findings, set in the context of the national economy and international trade, Dr Britnell traces the development of a successful specialised textile industry in Colchester in the second half of the fourteenth century, advanced by mechanised fulling, and able to penetrate Baltic and eastern European markets as well as to sell in south-western France, where the wine-growing region was open to industrial products. In the course of the fifteenth century the markets abroad weakened, but Colchester cloth-makers, then a smaller group with a more tightly-organised business, stayed prosperous enough to maintain, with some other of their fellow townsmen, a higher standard of living and a comfortable level of personal wealth.

Its wider reputation aside, the town's fortunes had relatively little effect on the surrounding countryside, though there were other successful cloth-making towns in the neighbourhood, of which Levenham was the most striking. Colchester's own organisation was transformed, however, with a burst of explicit civic pride in the late fourteenth century — which could be related to other manifestations of pageantry in that period — and a self-conscious revision of its forms of government. Some pragmatic regulation of trade and industry followed in the fifteenth century. The picture that Dr Britnell paints is a convincing one, and it has implications both for national and local history. Those directly interested in the history of Colchester will find it no less interesting than those who are concerned with its wider arguments.

G.H. Martin

Our Contributors

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OWEN BEDWIN, B.A., Ph.D., F.S.A., worked for 10 years as a rescue archaeologist in the Sussex Archaeological Field Unit before joining Essex County Council's archaeology section in 1984. While in Sussex, he was actively involved in the County Society, and edited 5 volumes of its annual journal, *Sussex Archaeological Collections*. His main interest is in the prehistoric period.

R. H. BRITNELL, M.A., Ph.D., is a senior lecturer in History in the University of Durham. He is the author of *Growth and Decline in Colchester, 1300-1525*, 1986, and has written a number of articles concerned with agriculture and trade in medieval Essex.

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