

The upgrading of the A120 between Stansted Airport and Braintree allowed the unique opportunity to examine a slice of landscape crossing the clay plateau of Essex; a geology which has received little attention in the past. A diverse pattern of human history was revealed including earlier prehistoric flint knapping, later prehistoric ritual activity, a Roman farmstead with accompanying cemetery, a middle Saxon hall, medieval settlement, pottery production and a windmill.

This report is the product of a joint venture between Oxford Archaeology and Wessex Archaeology and has been designed to provide the reader with an accessible interpretation of the findings with supporting factual data.

A Slice of Rural Essex

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Archaeological discoveries from the A120 between Stansted Airport and Braintree

by J Timby, R Brown, E Biddulph, A Hardy and A Powell

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Recent archaeological discoveries from the A120 between Stansted Airport and Braintree

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Abbreviations

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CBM	ceramic building material
CP	ceramic phase
EBA	Early Bronze Age
ECC	Essex County Council
EIA	Early Iron Age
ERO	Early Roman
FLB	Forward Logistics Base
ha	hectares
LBA	Late Bronze Age
LIA	Late Iron Age
LTCP	Long Term Car Park
MBA	Middle Bronze Age
MIA	Middle Iron Age
MTCP	Mid Term Car Park
NGR	National grid reference
OA	Oxford Archaeology
OWA	Oxford-Wessex Archaeology
RB	Romano-British

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Summary

The following report presents the results of the archaeological fieldwork carried out between 2000 and 2003 along the A120 between Stansted Airport and Braintree in north-west Essex. Essex County Council undertook the preliminary stages of work in 1990 with a comprehensive fieldwalking programme to identify sites of potential interest accompanied by documentary searches and other related works. In 1993 Essex County Council also undertook a large scale rescue excavation at Stebbingford Farm, Felsted, subsequently published (Medlycott 1996). In 2000 Oxford Archaeology undertook the initial field evaluations on 19 targeted sites and subsequently, between 2001–2003, Oxford-Wessex Archaeology completed the evaluation programme with follow-up excavations where deemed necessary and finally undertook a watching brief. The 2001–2003 seasons were undertaken concurrently with the construction of the road. The work was funded by the Highways Agency and at the completion of fieldwork some 47 ‘sites’ had been investigated.

Evidence for the presence of human activity was documented from the Mesolithic through to modern times with clear evidence of settlement and manipulation of the landscape from middle Bronze Age times.

The earliest evidence for activity came from finds of distinctive flintwork and nearly every site yielded at least one piece of struck flint. Two isolated Mesolithic tools were identified, one from Clobbs Wood/Grange Farm and one from West of Ongar Road. Assemblages of reasonable size were recovered from Strood Hall, West of Ongar Road and West of Stone Hall. These can be dated to the early Neolithic, mid/late Neolithic and late Bronze Age respectively, thus providing a valuable chronological sequence of technological development. At Strood Hall the flintwork was accompanied by sherds of early Neolithic pottery.

During the middle Bronze Age we get the first significant appearance of prehistoric farming communities establishing a pattern of settlement that developed across the landscape throughout the Iron Age. The number of sites within each chronological period suggests a peak of activity in the late Bronze Age/early Iron Age, falling sharply to the late Iron Age. However, when the duration of each period is considered there is a relatively consistent density of settlement within the landscape from the middle Bronze Age through to the Roman period.

One noticeable focus of activity was the combined watersheds of the River Roding and its tributary to the east, with middle Bronze Age features being recorded at three sites, North of Frogs Hall Stables, Stone Hall and Strood Hall and residual middle Bronze Age pottery being found at another four (Warish Hall; Frogs Hall East; Highwood Farm and South of Great Dunmow). The area to the east of the River Chelmer displayed evidence for far less extensive middle Bronze Age activity.

Late Bronze Age/early Iron Age activity represents a continuation of the developments witnessed during the middle Bronze Age. The range of features is similar, comprising again mainly pits and ditches. However, some of the ditches, particularly at Stone Hall, can be seen to form a more recognisable layout of fields and droveways. In addition, there is for the first time an identifiable structure in the form of a four-post structure at Stone Hall, and there is quite widespread evidence of burial practices.

The increase in the number of locations containing late Bronze Age/early Iron Age features, from six (in the middle Bronze Age) to thirteen, points clearly to both the intensification of settlement in areas of the clay plateau landscape that were already occupied, and the expansion of settlement into previously unoccupied areas. With the exception of South of Great Dunmow and Clobbs Wood all the sites producing evidence of middle Bronze Age activity witnessed continued activity in the late Bronze Age/early Iron Age.

The middle and late Iron Age saw a reduction in the number of sites encountered which seems to reflect a change in the pattern and distribution of settlement, with a greater emphasis on the nucleation and in some cases the enclosure of settlement. These are processes well illustrated by three sites: Highwood Farm, Grange Lane and East of Little Dunmow Road.

Seven sites yielded *in situ* evidence for late Iron Age and Roman-period activity. Strood Hall was the largest. Excavation revealed the nearly complete plan of a mid 1st to mid 4th-century farmstead, complete with round-houses, at least one rectangular building, and a cemetery. Investigation at Rayne Roundabout provided evidence of field systems and enclosures. Another field system was encountered at Parsonage Lane, this time confined to the late 1st to early 2nd century AD, although some resumption of activity is evident from the later 3rd century. Ephemeral traces of Roman-period activity were recorded at Valentine Cottage and Frogs Hall East, both early Roman, and West of Panners Roundabout, which dated to the late Roman period. Ditches dating to the late Iron Age/early Roman period were recorded at Warish Hall. Artefactual scatters incorporating late Iron Age or Roman pottery were collected at Greenfields, Blatches and Clobbs Cottage/Grange Farm.

Evidence for Saxon activity remained elusive with one notable exception, a single timber building dating to the beginning of the 8th century at Takeley. If the generally accepted understanding of the Saxon period in north-west Essex is one of the slow expansion and coalescence of initially sparse and dispersed settlement, then the period from the 11th to the 14th century is one of development on an increasingly rapid scale, followed by a relatively abrupt collapse. The archaeology uncovered appears to reflect this, with a single short-lived

farmstead at Blatches and two other small examples of sites reflecting an equally transient industrial focus: a pottery production site to the West of River Roding and a windmill at Clobbs Wood.

Overall the excavations yielded a very modest artefactual assemblage within which pottery was the most prolific find, providing a good sequence from the middle Bronze Age through to the later Roman period. Several of the Roman burials from the cemetery at Strood Hall produced grave goods. No artefactual material was recovered dating to the Anglo-Saxon period. Small assemblages, again mainly ceramic, represent the medieval period from settlement sites at Blatches, Stebbingford Farm and the kilns west of the River Roding.

Cremated human bone was recovered from eight sites with examples dating to the late Bronze Age, late Iron Age, Romano-British and non-specific prehistoric. The majority derived from the late Iron Age/early Romano-British or early Romano-British period from the cemetery at Strood Hall. Deposit types include the remains of urned and unurned burials, most of the latter including deposits of pyre debris recovered as one with the remains of the burial. Other contexts represent the remains of discrete deposits of pyre debris within grave fills, fragments of bone apparently incidentally included in the fill of vessels forming grave goods or within the general grave fill, and one possible memorial/cenotaph deposit. The remains of a single inhumation burial were recovered from Strood Hall, situated within the confines of the cremation cemetery.

The quality of the environmental remains was variable with some sites producing very well-preserved

samples of charred plant remains and charcoals and others poorly preserved material. The collective animal bone assemblage was generally poor with poor preservation and a high fragmentation rate.

The evidence from the A120 sites supports the suggestion that animal husbandry was more important than arable cultivation up until the late Iron Age. Charred plant remains were recovered in low concentrations from Stone Hall, West of Ongar and Greenfields. All three sites produced emmer/spelt wheat grains and chaff, hulled barley and a few hazelnut shell fragments.

Charcoal analysis of samples from domestic contexts and cremation burials from Greenfields, Stone Hall and Grange Lane indicated that mixed oak/ash deciduous woodland was available as a resource throughout the late Bronze Age and Romano-British periods.

The molluscs indicate that the area around the Iron Age farmstead at Highwood Farm had been cleared for some time. The assemblages from all the A120 sites examined indicate an Iron Age and Romano-British lowland pasture, with little intensive use of the local landscapes. The early Roman evidence primarily from Strood Hall and Rayne Roundabout shows an expansion of production from increases in the quantities of bone and charred cereal remains. The first evidence for large scale spelt processing was recovered from both sites, with several deposits of concentrated spelt processing waste being recorded.

Blatches was the only medieval site to produce useful quantities of environmental evidence. This produced a typical medieval assemblage of mixed cereals, legumes (horse bean, pea and possibly cultivated vetch) and all the main species of domesticated animals.

Introduction to the CD-Rom

This volume is accompanied by a CD-Rom containing the second volume of the project which contains the detailed stratigraphic narratives and specialist reports. A digital copy of Volume 1 is also provided.

The data on the CD can be divided into two separate areas. The first is the text which is available as a PDF and also in open office format – the open source office suite available freely to download from the internet (openoffice.org). The second set of data on the cd contains the spatial data, this has produced for Map Explorer 2.0, which is available to install from the CD-Rom.

The CD has been provided to allow the publication of a greater range of accessible data and the text, in PDF and .odt format to enable easily searchable access to the data. This approach for research data allows another dimension to usual flat data. It is hoped that providing the spatial data will allow for a fuller exploration of the data set collected during the project.

Technical Details

To use the CD-Rom insert it into your CD drive, if auto play is enabled the A120 installer will start, otherwise browse to your CD-Rom drive letter in *my computer* and double click on install.exe to launch the programme. The programme installs to C:\A120.

‘A larger Slice of Rural Essex’ was written in Open Office; styles were applied to the main text, links have been inserted cross-referencing tables and external links to pdf versions of the figures used in the main publication.

The spatial data has been provided as projects in Map Explorer 2.0, which can be accessed either through an Html page or directly by browsing C:\A120\projects. Data has also been as shapes, which allow the data to be imported into other GIS packages.

Chapter 1

Introduction

by Jane Timby

The following report presents the results of the fieldwork carried out along the A120 between Stansted Airport and Braintree in north-west Essex, initially by Oxford Archaeology (OA) and subsequently by Oxford-Wessex Archaeology (OWA) between 2000 and 2003. The 19 km road corridor crossing the boulder clay plateau cut through a range of sites dating from the early Neolithic through to post-medieval times. The sites, whilst not exceptionally prolific in cultural material, present a diversity of types including settlement, industrial, cemetery and sacred. This volume is the first of a new series of OWA reports for joint enterprises.

Background

Discussions about the development of Stansted airfield into an international airport for London date back to 1949 (see Havis and Brooks 2004, 1 for detailed planning background). Over three decades later, in 1985, the decision to expand Stansted Airport into the third London airport was announced. The archaeological response from Essex County Council (ECC) was immediate and the Stansted Project was established primarily to undertake a series of archaeological investigations in the areas designated for the new developments. Fieldwork began immediately in November 1985 on a medieval moated site at Colchester Hall. Between 1985 and 1991 the project evolved from a site-specific exercise to a major landscape study with an extensive fieldwalking programme combined with large-scale excavations and watching briefs. Archaeological activity spanning the early prehistoric periods through to modern times was documented and a number of upstanding post-medieval buildings recorded. The results of this phase of work have recently been published (Havis and Brooks 2004).

Linked with the expansion of the airport itself was the announcement made by the Department of Transport to upgrade the existing A120 trunk road between Stansted Airport and Braintree, Essex. This was to also set in motion an extended programme of archaeological work along the new proposed route. Between 1990 and 2003 four main phases of archaeological investigation were undertaken: fieldwalking, evaluation, excavation and watching brief. The road corridor runs for 19 km between Junction 8 of the M11 at Stansted Airport (NGR: TL 5346 2200) and

Panners Roundabout on the south-west edge of Braintree (NGR: TL 7460 2215) (Fig. 1.1). The designated area of works was between 40–65 m wide and covered a total area of approximately 115 ha. The work thus allowed a detailed study of an east-west transect across the boulder clay landscape of north-west Essex complementing that focussed around Stansted Airport itself, and allowing an opportunity to examine an area that has received relatively little detailed archaeological study in the past. The work revealed the presence of humans dating back to the earlier prehistoric period and a history of activity and use of the landscape dating back until at least the middle Bronze Age. Until relatively recently it had been assumed that the heavily clay soils of the area had not been intensively used until the medieval period. However, the results emerging from work at Stansted suggested that this was not the case and indeed the work along the A120 provided further proof of prehistoric and later exploitation.

At the completion of the fieldwork some 54 sites had been designated of which 47 were investigated archaeologically, although not all of these yielded archaeology (Table 1.1). Most of the sites were fairly uncomplicated and typical of rural locations where there has been a long regime of agricultural use. As a consequence ploughing appears to have destroyed much of the upper levels, truncating many features and undoubtedly totally removing some of the more ephemeral traces. Overall four sites yielded evidence of an earlier prehistoric presence from flint artefacts, 28 sites produced evidence for later prehistoric activity, 17 produced Roman archaeology, including one major site comprising a farmstead and associated cemetery at Strood Hall, one site produced a Saxon building and 11 provided evidence of medieval activity. In some cases the indication of activity was limited to occasional finds of a specific date rather than tangible archaeology. Initially it was thought that there were no traces of any Saxon activity but this was subsequently modified during post-excavation work in the light of radio-carbon dating.

Format of the report

As a consequence of the piecemeal nature of the archaeology along the A120, this report is presented as a

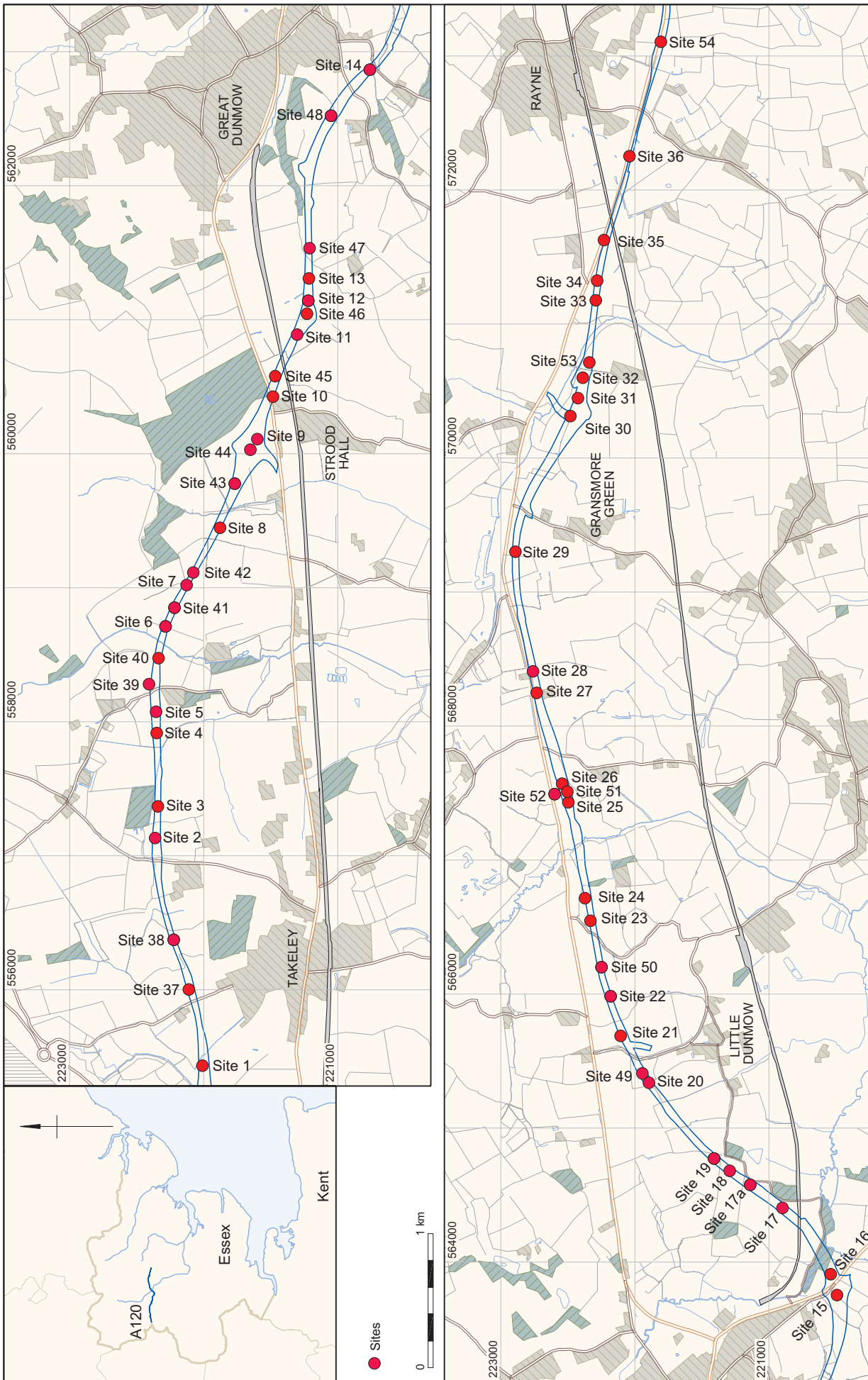


Fig. 1.1 Location of investigated sites along the A120

synthetic text accompanied by a CD-Rom. Archaeological publication is currently going through a transition phase. An increased sophistication in analytical techniques enhanced by computer technology has seen a growth in the amount of specialist data generated from just a single site. In a linear scheme such as this with a number of sites the problem is exacerbated. This increased specialism has made the conventional monograph reports not only weightier and by association more expensive, it is also making them more exclusive to the archaeological community. The reports are becoming inaccessible to the public who have seen the archaeology take place on their doorsteps. This report attempts to redress this imbalance by making accessible a general overview of the work which can be read as a stand-alone publication whilst still presenting the detailed contextual and specialist reports which form the backbone of subsequent interpretation.

The book itself comprises the synthetic text with four chapters arranged chronologically. Following the introductory section there is thus a chapter drawing together the prehistoric evidence (Chapter 2), one focussing on the Roman presence (Chapter 3), one for the Saxons (Chapter 4) and one for the medieval remains (Chapter 5). Each chapter presents a summary of the stratigraphic, artefactual, ecofactual and

environmental evidence recovered. Selected plans, tables and illustrations support the texts. Brief summaries of other finds, artefactual, ecofactual and human, are given for which more detailed analyses and catalogues can be located in the CD-Rom. Chapter 6 provides a summary overview through time with an environmental overview.

The CD-Rom is arranged as a series of chapters. Following an introduction, Chapter 2 by Maria Medlycott (Essex County Council) discusses the fieldwalking and other studies carried out prior to archaeological intervention. This work identified potential sites and established the site numbering sequence from Site 1 (Takeley) up to Site 36 (Fentons Farm). Chapter 3 presents the detailed stratigraphic descriptions forming the basis of the synthetic discussions. These are arranged by site progressing from Site 1 in the west through to Site 54 in the east. Site numbers 37–54 were allocated during the watching brief and fall in between the previously designated site numbers. Some of these are essentially extensions of previously investigated sites. For each site the evidence is described chronologically. Interactive plans exist for each site showing geographic position and the location of all evaluation and excavation trenches. Further detailed plans show all excavated features and, where relevant, sections relating to these. CD-Rom Chapter 4 presents the artefactual reports from all the sites arranged by artefact type in the conventional manner. This includes reports on the flint (K. Cramp), pottery (prehistoric (R. Every), Roman (E. Biddulph, G. Jones and D. Stansbie) and medieval (L. Mepham)), ceramic building material (R. Seager-Smith), fired clay (L. Mepham), coins (N. Wells), metalwork (P. Walton and I. Scott), metalworking debris (L. Mepham), worked stone (R. Shaffrey), worked bone and antler (L. Mepham) and glass (L. Mepham). Chapter 5 by J. McKinley describes and analyses the human bone, whilst Chapter 6 by E-J. Evans presents and discusses the animal bone. The environmental evidence can be found in Chapter 7, including charred plant (W. Carruthers), pollen (D. Druce), charcoal (D. Challinor), insect remains (M. Robinson), molluscs (M. Allen) and auger survey (M. Bates). Chapter 8 reviews the fieldwork methodology comparing the results of the fieldwalking with the below ground archaeology to determine how useful a predictive tool this was for this particular geology and topography. This also includes a comment on a pilot study of phosphate analysis undertaken at East of Dunmow Road. A digital copy of the book can also be found on the CD-Rom.

The complete site archive including artefacts will be deposited at Saffron Walden Museum. Printed copies of the CD-Rom will be available at Essex County Council with copies deposited with the site and finds archives at Saffron Walden Museum. The site archive has also been fished/microfilmed with a copy deposited at the National Monuments Record Centre, Swindon.

Key to conventions	
	Trench edge
	Sondage/edge of excavation
	Section line
	Section levelled
	Feature not excavated (detail plans only)

Key to phasing	
	Neolithic (3)
	Middle Bronze Age (5)
	Middle-late Bronze Age (5-6)
	Late Bronze Age/early Iron Age (6-7)
	Middle Iron Age (8)
	Late Iron Age (9)
	Early Roman (AD1-70) (11.1)
	Early Roman (AD 43-120/5) (11)
	Mid Roman (AD 120/5-260/70) (12)
	Late Roman (AD 260-360) (13)
	Late Roman (AD 360/410) (13)
	Saxon (5th-10th century) (14)
	Early Medieval (11th-12th century) (15)
	Early Medieval (early 13th century) (15.2)
	Early Medieval (mid 13th century) (15.3)
	Early Medieval (late 13th century) (15.4)
	Late Medieval (14th-16th century) (16)
	Post-medieval (mid 16th-18th century) (17)
	Modern (19th-21st century) (18)
	Undated

Table 1.1 Sites investigated along the road corridor

Site No.	Site Name	Site Code	Eval 2000	Eval 2001	Excavation 2001	Archaeology
<i>Targeted sites</i>						
1	Takeley Church	TATC 01	Yes	-	Yes	Yes
2	Warish Hall	TAWH 01	No	Yes	Yes	Yes
3	Fanns Wood	TAFW 01	No	Yes	No	No
4	Frogs Hall West	TAFHW 01	No	Yes	No	No
5	Frogs Hall East	TAFHE 01	No	Yes	Yes	Yes
6	Little Canfield Hall	LCLCH 01	Yes	-	Yes	Yes
7	Stone Hall	LCSHW 01	Yes	-	Yes	Yes
8	Stone Hall	LCSHE 01	Yes	No	No	Slight
9	Strood Hall	LCSTH 01	Yes	-	Yes	Yes
10	A120 Stane Street	-	No	No	No	Not investigated
11	Highwood Farm	GDHF 01	No	Yes	Yes	Yes
12	Dunmow Roundhouse	GDR 01	No	Yes	No	Slight
13	Minchins	GDM 01	No	No	No	Not investigated
14	Hoblong's Brook	GDHB 01	No	Yes	No	No
15	A130	GDCDR 01	No	No	No	Not investigated
16	Chelmer River	GDCDR 01	Yes	-	Yes	No
17	Clobbs Wood	LDCW 01	No	Yes	Yes	Yes
17a	N of Clobbs Wood	LDNC 01	No	Yes	No	Slight
18/19	Clobbs Cottage/Grange Farm	LDGF 01	No	Yes	No	Slight
20	Grange Lane	LDGL 01	Yes	-	Yes	Yes
21	Clay Lane	LDCL 01	Yes	-	No	No
22	Throes Farm	LDTF 01	Yes	-	Yes	Yes
23	Bramble Lane	LDBL 01	Yes	-	No	No
24	Blatches	LDB 01	Yes	-	Yes	Yes
25/26	Stebbingford	-	No	No	No	Yes
27/28	Greenfields	FLGF 01	Yes	-	Yes	Yes
29	Straits Farm	FLSF 01	Yes	No	No	No
30-2	Graunts Court	FLGC 01	Yes	No	No	No
33/34	Rayne Roundabout	RARR 01	Yes	-	Yes	Yes
35	Rayne (Essex AFU Fieldwalking)	-	Not investigated	-	-	Slight
36	Fenton's Farm (Essex AFU Fieldwalking)	-	Not investigated	-	-	Slight
<i>Watching brief sites</i>						
37	Parsonage Lane	TAPR 02	-	-	-	Yes
38	East of Parsonage Lane	TAPE 02	-	-	-	Yes
39	North of Frogs Hall stables	A120/7075	-	-	-	Slight
40	West of River Roding	TARR 02	-	-	-	Yes
41	West of Stone Hall	A120/7580	-	-	-	Slight
42*	Stone Hall	LCSH 02	Yes	-	Yes	Yes
43	West of Strood Hall	A120/8590	-	-	-	Slight
44*	Strood Hall	A120/9095	Yes	-	Yes	Yes
45	Stane Street South	A120/9510	-	-	-	Slight
46*	Highwood Farm	A120/1010	-	Yes	Yes	Slight
47	South of Great Dunmow	A120/1011	-	-	-	Slight
48	West of Ongar Road	ONGA 02	-	-	-	Slight
49*	Grange Lane	A120/1515	Yes	-	Yes	Yes
50	East of Little Dunmow Road	DUNE 02	-	-	-	Yes
51*	Stebbingford Farm	A120/1718	-	-	-	Slight
52*	Stebbingford Farm Borrow Pit	STBP 02	-	-	-	Yes
53	Valentine Cottage	A120/2121	-	-	-	Yes
54	West of Panners Roundabout	A120/2323	-	-	-	Yes

Period

Neo, RB, Saxon
 LBA, LIA/RB
 RB? finds
 -
 Late preh/RB, Med also MBA, LBA finds
 E-MIA
 LBA-EIA
 Preh
 LIA/ERO, RB also Neo & LBA,
 -
 MIA, LIA
 LBA/EIA, Med
 -
 RB finds
 -
 Undated crem, Med finds
 Med, also preh & RB finds
 M/LBA, LIA/RB & Med finds
 M-LBA, IA?
 MBA, LBA, E-MIA
 -
 E-MIA?, Med also LBA, E-MIA & LIA-ERO finds
 -
 LIA/ERO, Med
 Med
 MBA, LBA also LBA, MIA & RB finds,
 -
 -
 E-LRO
 Preh finds

 Preh finds

RB
 MIA, RB
 LBA
 Med
 LBA
 LBA, EIA
 LBA
 RB
 Undated
 Med
 LBA?
 Meso/Neo, LBA
 LBA, LIA
 MIA, LIA/ER
 Med
 LBA – ERO, Med
 Preh, ERO also Meso, Neo finds
 LRO

Sequence of work

Essex County Council carried out the first response to the proposed roadworks along the A120 in 1990. This consisted of a fieldwalking survey and trial-pit survey (see *Medlycott CD/Chapter 2*). Monitoring of contractors trial pits was also carried out in this year (Medlycott 1990; Murphy 1990a).

Over the spring and autumn of 1990, 85% of the route was field-walked in 20 m transects. The remaining 15% was unwalkable, being under permanent pasture, woodland, the present road-system, or in the case of the land within the boundaries of Stansted Airport under re-deposited topsoil. Thirty-six areas of potential archaeological interest were identified by the survey, either from the field-walking, aerial photographic or metal-detecting evidence (see Table 1.1). Four areas of palaeo-environmental interest were also highlighted. In addition Essex County Council carried out a programme of documentary research in 1991 (Medlycott 1992). The identified sites of archaeological interest were numbered in sequence 1–36 inclusive, progressing along the route from Stansted in the east to Panners Roundabout in the west. The new A120 route links into the Braintree by-pass, which has been widened as far as Panner's Roundabout, to accommodate the increased traffic. The line of the Braintree by-pass was also field-walked between 1984 and 1986 and one site at Rayne Roundabout excavated, prior to its original construction in 1987. This revealed traces of a small Roman settlement, a farmstead or small villa occupied from the late 1st to early 4th centuries AD (Smoothy 1989).

As a consequence of the fieldwork one site, a medieval farmstead at Stebbingford (Site 25/26) was initially evaluated and then excavated by Essex County Council in 1993. An area of approximately one hectare was investigated revealing a mid 12th to mid 14th-century farmstead comprising four buildings, a yard, field-system and horticultural area (Medlycott 1996).

There then followed a short hiatus when the road scheme was temporarily shelved and no further archaeological work was undertaken. Plans became active again and between May and November 2000 Oxford Archaeology (OA) was commissioned to undertake a field evaluation of 19 sites along the A120 route. Of the 36 sites originally identified by Essex County Council as having potential for the survival of below ground archaeological remains, 30 were specified within the brief produced by Essex County Council (ECC 2000) as requiring investigation by trial excavation. During 2000 access was initially gained for 19 of these sites and the work accordingly carried out (OAU 2001). In summary, of the 19 sites investigated, 15 produced archaeological remains, and 4 produced no archaeology (see Table 1.1).

Once confirmation was received from the Highways Agency that work on the new trunk road was to proceed

Essex County Council prepared a second archaeological brief for further evaluation and excavation on identified areas of archaeological importance (ECC 2001). A further stage of work was undertaken between March and November 2001 by Oxford-Wessex Archaeology (OWA) to complete the evaluation work on the 11 sites not previously investigated and to undertake excavation on 15 sites. Seven of the sites from this phase of work produced no archaeology or archaeology of such poor quality that no further work was required.

During the summer of 2002 a watching brief was carried out during the construction works and as a consequence a further 17 sites were recorded. In addition an evaluation was carried out at Stebbingford Quarry where a borrow pit was to be located. Six of the 17 new sites coincided with sites previously investigated (see Fig.1.1 and Table 1.1). The site numbering system introduced by Essex County Council was extended, each new investigation being given a new site number resulting in a total of 54 sites. As the watching brief took place along the entire stretch of road the numbers from 37–54 are interspersed amongst the original 36 sites. Where the watching brief sites appear to be extensions of existing sites the site numbers are generally linked for the purposes of discussion.

A single chronological scheme has been applied to all the sites excavated along the entire length of the road (see Table 1.2). Within this sub-phases have been developed, particularly for the Roman and Medieval periods based on chronological refinement through the use of pottery or stratigraphy.

Table 1.2 Periods and phases used in the report

<i>Period</i>	<i>Phase</i>	<i>Date</i>
1		Palaeolithic
2		Mesolithic
3		Neolithic
4		Early Bronze Age
5		Middle Bronze Age
6		Late Bronze Age
7		Early Iron Age
8		Middle Iron Age
9		Late Iron Age
10		Late pre-Roman Iron Age–early Roman
11		Early Roman (AD 43–120/5)
12		Mid Roman (AD 120/5–260/70)
13		Late Roman (AD 260/70–400)
14		Saxon (5th–10th)
15		Early medieval (11th–13th)
	15.1	12th–13th century
	15.2	13th century
	15.3	13th century
	15.4	13th century
16		Late medieval (14th–mid 16th)
16.1		14th century
17		Post-medieval (mid 16th–18th)
18		Modern (19th–21st)

Aims of the project

The aims of the fieldwork were detailed in the archaeological brief (ECC 2000) and comprised the following:

- to establish the presence/absence of archaeological remains within the proposal area
- to determine the extent, condition, nature, character, quality, date and depth of any archaeological remains present
- to establish the ecofactual and environmental potential of any archaeological deposits and features
- to make an assessment of the need for further archaeological evaluation or mitigation before or during the construction of the proposed scheme
- to test the results of the previous investigations
- to make available the results of the investigation

The original research aims outlined in the ECC brief prior to the commencement of fieldwork (ECC 2000) were as follows:

- add to the landscape studies already undertaken on the boulder clay plateau
- compare with previous and current work at Stansted
- examine processes of change in economic strategy, settlement patterns and social structures within a diachronic framework
- medieval sites – contribution to understanding settlement patterns of boulder clay not only of NW Essex but of a large area of East Anglia

In recent years Essex has benefitted from a number of useful syntheses arising from various conferences designed to address, both at county and regional level, various research issues and priorities and to set the archaeology of the area against national academic frameworks (Buckley 1980; Bedwin 1996; Glazebrook 1997; Brown and Glazebrook 2000). The establishment of such a detailed research framework provides a firm foundation within which to consider new evidence some of which will hopefully contribute to the wider picture, whilst others will provide additional factual information.

Excavation methodology

In 2000 on each of the 19 sites approximately 5% of the area was sampled by trial trenching utilising machine dug linear trenches 30 m by 1.65 m. A total of 134 trenches were excavated along the 19 km length. The areas between the sites, areas where no significant concentration of artefacts had been noted, were not investigated at this stage. Two auger transects comprising six boreholes were drilled across the Pincey

Brook and River Roding floodplains as part of this study to define the sediment sequence and detect any palaeochannels present. In 2001 for each of the 11 sites not previously investigated the same methodology of a 5% sample of the site area was evaluated by trial trenching using machine dug trenches.

The trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature and to retrieve finds and environmental samples. All features were surveyed and mapped with an electronic total station and AutoCAD software and where excavated their sections drawn at scales of 1:20. Features were photographed using colour slide and monochrome print film.

For the sites identified for further work a larger area was stripped. The topsoil and ploughsoil were removed with a 360° mechanical excavator fitted with a toothless bucket, under the direct supervision of an archaeologist. The spoil was taken from the excavated area and stored in a designated soil dump. All features/deposits that were revealed were cleaned and recorded by hand in accordance with OWA procedures.

During the watching brief the same methodology was employed if an area was considered to potentially contain 'significant archaeology'. Richard Havis (ECC) and Steve Haynes (Ove Arup consultant archaeologist) assessed the decision of the 'significance' of the archaeology of a particular location after the OWA fieldwork manager had put an application forward. If a site was deemed 'significant' then a controlled machine strip of the area was undertaken under continual archaeological supervision. If the site was deemed 'non-significant' controlled machining was not undertaken and the features were excavated and recorded as left after the contractor had removed topsoil and subsoil deposits with bulldozers and/or 360° mechanical excavators fitted with forked buckets.

All artefacts were retained unless they were of recent origin. In the latter case sufficient of the material was retained to validate the date and establish the function of the feature.

Recovery was normally by hand, except where bulk soil samples were taken for other purposes or for special recovery of small items. All finds and samples were treated to standards agreed in advance with the approved recipient museums. They were exposed, lifted, cleaned, stabilised, marked, bagged and boxed in accordance with the guidelines set out in Walker (1990).

Where moderate to abundant archaeological deposits and features were revealed, bulk sampling was undertaken for the potential study of plant, fish, invertebrate and animal remains. Bulk samples of a minimum of 40 litres were taken (or 100% of the deposit, if less than that capacity). Bulk samples were floated, with the flot collected in a 250 micron mesh. The residue was sorted for artefacts and bone to 4 mm and the finer fraction (to 500 microns) was scanned to assess potential.

A series of controlled samples were taken at East of Dunmow Road (Site 50) for phosphate analysis with a view to establishing the potential of soils analysis to provide additional insight into the nature and patterns of human activity at the site (*see CD/Chapter 8 for phosphate assessment*).

Location, geology and topography

The north-west of Essex forms the highest part of the county, being 50–120 m above sea level. To the north the chalk escarpment of the Chilterns terminates near the Cambridgeshire border. A boulder-clay plateau and the valleys of the rivers that rise in it (Allen and Sturdy 1980, 1–7) dominate the landscape transected by the A120 route (Fig. 1.2). The route cuts across the valleys of the Pincey Brook, River Roding, Hoblongs Brook, River Chelmer, Stebbing Brook and River Ter. Essex is part of the trough-shaped London Basin. The Tertiary deposits that overlie the bedrock of chalk comprise the Lower London Tertiaries, that is the Thanet sands, Woolwich and Reading Beds and the Blackheath Beds, also London Clay, Claygate Beds and Bagshot Beds. London Clay is the thickest deposit present.

The drift geology varies along the route from boulder clay to glacial sands and gravels, alluvial deposits, sandy clays and silty clay (Geological Survey sheets 222 and 223). Soils developed on the boulder-clay can be sub-divided into wet clayey soils from which the chalk had been partially leached so that they are naturally acid, and dry clayey soils containing higher quantities of chalk, which are neutral or alkaline. The drier soils tend to occur on slopes at the plateau's edge, where there is a greater degree of natural run-off. Both types of soil require under-drainage for profitable modern arable farming, while it is thought that the use of ridge-and-furrow was an aid to drainage in the past. Parts of the plateau have stony loamy soils in drift, incorporating a good deal of silty material in the upper 0.6 m. This overlies the leached chalky boulder-clay.

The valleys of the rivers Stort, Roding, Chelmer, Ter and Brain cutting through the boulder-clay plateau contain a variety of deposits of glacial origin. Most are glacial sands and gravels, brickearth (loess), head-solifluction deposits and alluvial deposits. Local deposits of tufa and peat are also found

Devensian periglacial features occur across the area and one such feature, a probable pingo, was located at Greenfields. Pingos tend to be isolated mounds resulting from frost action. Their formation results from local peculiarities of drainage and sediment. Once the frost mound has decayed, slumping and solifluction may result in a pond forming in the centre (West 1974). Some of the non-archaeological features and soil marks encountered on many sites may well be other periglacial features such as ice-wedges, stripes or polygons.

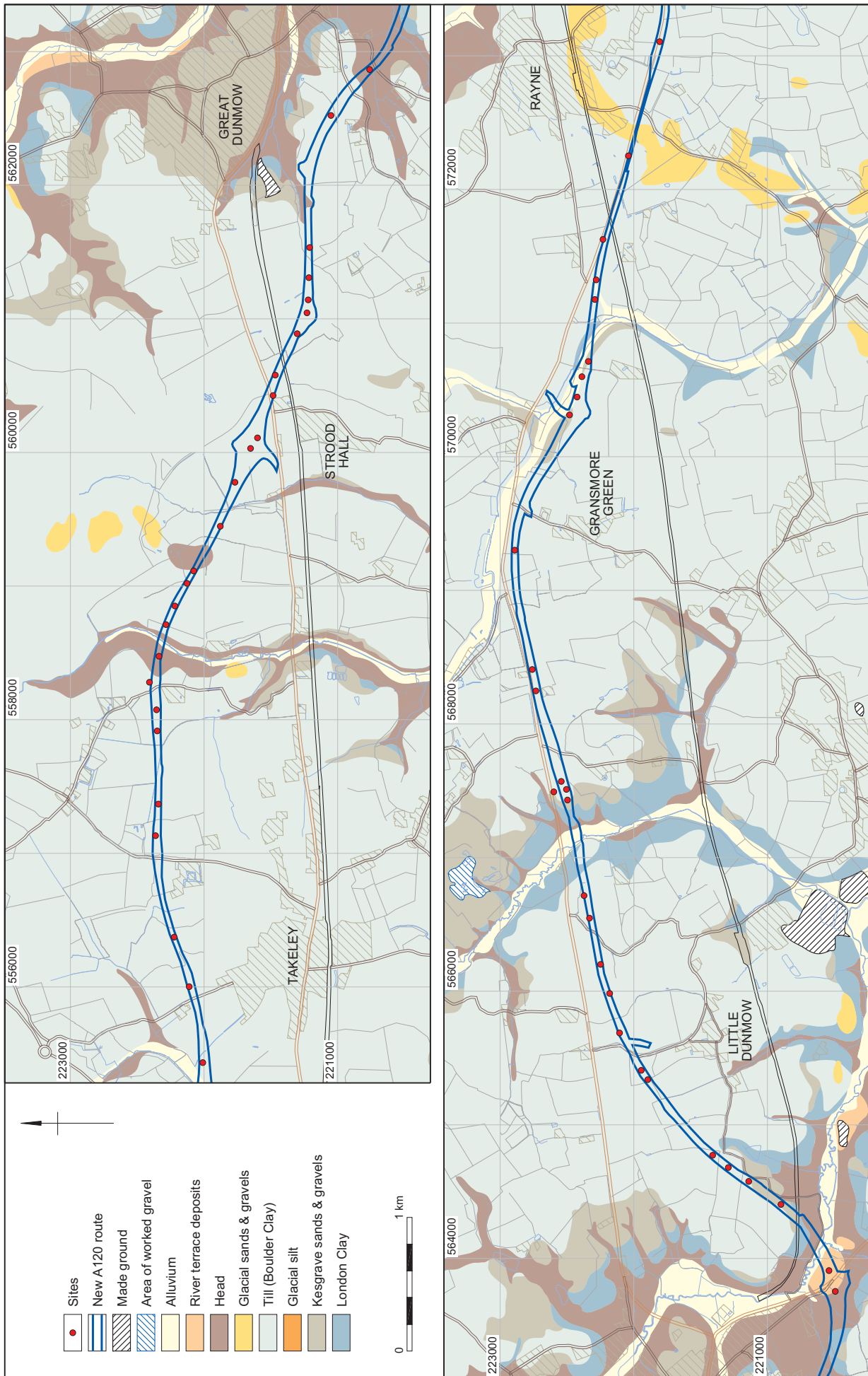


Fig. 1.2 Geology of area



Fig. 1.3 Map showing location of place names mentioned in text

Archaeological and historical background

by Edward Biddulph

The investigations along the A120 augment knowledge of an archaeologically diverse region (Fig. 1.3). The heavy boulder clays were thought to be a barrier to settlement in mid and north-west Essex until the Bronze Age, and generally pre-Bronze Age sites have been located in the brickearths and gravels of the Chelmer, Blackwater and Stour valleys. However, the picture has altered with extensive field surveys and excavations at Stansted. A hand-axe found at the Mid-term Car Park site revealed Palaeolithic activity in the area (Framework Archaeology 2004). Evidence for Mesolithic occupation has been recovered from sites near Great Dunmow and in the Stort and Lea valleys; at Stansted, Mesolithic flint scatters have been recovered at Duckend Farm and the Car Park 1 site (Havis and Brooks 2004, 13). Neolithic pits and flints were revealed at the Long- and Mid-term Car Park sites, while pits found on the M11 link road may have contained structured deposits (Framework Archaeology 2004). With chance finds being recorded elsewhere, for example a flint axe or adze at Cressing, near Braintree (Biddulph 2001), these discoveries indicate exploitation of the region during the earlier Prehistoric period and hint at ritual aspects to land-use.

Early and middle Bronze Age evidence appears to be sparsely distributed across the region; findspots and sites have tended to be restricted to the sands and gravels of east Hertfordshire (Havis and Brooks 2004, fig. 338), although this impression too is changing with the discovery of a middle Bronze Age settlement at the Mid-term Car Park site, Stansted (Framework Archaeology 2004). Excavations revealed roundhouses and pits enclosed by a boundary ditch; an elaborate, centrally-located, structure may have provided a focus for the settlement's inhabitants. An early Bronze Age Beaker from Stebbing (Kemble 2001, 191) is another sign that the landscape along the A120 route was not totally devoid of occupation during this time. The late Bronze Age/early Iron Age witnessed an increase in the level of occupation of the heavy boulder clays, although settlement still favoured the lighter soils and river valleys; southern Essex and east Hertfordshire again provide much of the evidence for this period. The large enclosure at Springfield Lyons, Chelmsford is well-known (Buckley and Hedges 1987b). Another circular enclosure (rectilinear enclosures are uncommon in the region (Brown 1996, 30)) was situated on the opposite side of the Chelmer valley at Great Baddow (Brown and Lavender 1991). However, the extensive excavations at Stansted have to an extent filled the gap in north-west Essex. Perhaps the most significant site was found at the Social Club; features included pits and two post-built structures (Havis and Brooks 2004, 23–4). The Bury Lodge site and the Car Park 1 site contained further evidence of settle-

ment, the latter site including a pit yielding worked antler, bird bones and a large quantity of pottery (Havis and Brooks 2004, 13). A burnt mound and post-built structures were uncovered at the Long-term Car Park site (Framework Archaeology 2004). Bronze Age finds beyond Stansted are known; at Great Dunmow, for example, a copper alloy spearhead and flint-tempered pottery have been found (Wickenden 1988, 89).

Subsequent higher rainfall and accelerated woodland clearance opened up previously unprofitable land to pasture and cultivation, particularly on the boulder clay plateau. Middle Iron Age settlement evidence from Stansted's Car Park 1 site (Havis and Brooks 2004, 24–9) and Social Club site (*ibid.*, 30–3), among others, attest to the presence of farming communities in the region, although environmental data suggest that the arable economy in this region was less important than livestock, with expansion of the cereal growth only taking place from the late Iron Age (Murphy 1996, 175). A more complex picture was revealed at Wendens Ambo, some 15 km north of Stansted. The middle Iron Age settlement overlay a range of subsoils, which determined the location of settlement activities; woodland overlying boulder clay provided valuable resources, while alluvial soils adjacent to the settlement were cultivated (Sealey 1996, 51; Halstead 1982, 61–2). In addition to occupation at Stansted, middle Iron Age settlements are known at Bishop's Stortford on the west end of the A120 (Havis and Brooks 2004, 525) and Buildings Farm, Great Dunmow (Lavender 1997) towards the east, while Iron Age burials at Churchend, 1 km north of Dunmow, are suspected (Going 1988b, 86). Despite this apparent population growth, few early-middle Iron Age settlements are known along the route of the A120. This is unlikely to reflect a genuine absence. Fieldwalking tends not to produce substantial surface collections of Iron Age pottery (Going 1988a, 86), and gaps in the distribution of cropmark sites (eg Priddy and Buckley 1987, fig. 31) typically coincide with areas of clay soils. There is little to compete in terms of size, for instance, with the middle Iron Age settlement at Little Waltham, some 10 km south of Great Dunmow (Drury 1978).

Settlements belonging exclusively to the late Iron Age are difficult to identify; ceramic assemblages characteristic of the late Iron Age but lacking Gallo-Belgic imports can date decades after the Roman conquest. With this in mind, Stansted's Airport Catering Site provided exceptional evidence for late Iron Age occupation. The enclosed settlement, dating from 75 to 25 BC, contained a series of roundhouses; an annexe was located to the south (Havis and Brooks 2004, 79–114). Occupation resumed after AD 40, continuing to *c* AD 75. Excavations at Puckeridge, Hertfordshire have also proved fruitful, yielding extensive late Iron Age settlement evidence (Partridge 1981). Moving east, no direct late Iron Age antecedent to Great Dunmow is known, though the late Iron Age/early Romano-British transi-

tion is represented at the Buildings Farm site (Lavender 2000). Braintree, in contrast, does offer settlement continuity. The late Iron Age settlement was focused at the junction of Grenville Road, Pierrefitte Way and London Road, with occupation continuing here into the Roman period, perhaps as far as the early 2nd century AD (Havis 1993; Garwood and Lavender 2000; Pearson 2002; Hickling 2002). Another settlement—a farmstead occupied in the first half of the 1st century AD—was situated on Marlborough Road some 1.3 km east of the modern town centre (Medleycott 2002). How these settlements related to the putative *oppidum*, evidenced by earthworks on Coggeshall Road, is uncertain, but it is clear that Braintree was the centre of significant late Iron Age activity. *Camulodunum* was pre-eminent in the region; its substantial earthworks were constructed at the end of the 1st century BC.

The line of Roman Stane Street transects a dense and varied Roman landscape. Most classes of settlement type are represented along Stane Street. Colchester, at the road's eastern extent, represents a major town. Small towns and nucleated settlements are more numerous, and strung out along the road at approximately one every 12 km. Most of these, like Braintree and Braughing, were located at principal road junctions, and must have been valuable as places of rest, trade and communication. These settlements were well served by the extensive network of villas that dot the area. Their distribution tends to focus around the east side of Great Dunmow and to the south-east of Braintree (Going 1988c, fig. 61), although recent fieldwork has revealed a villa or farmstead immediately west of Great Dunmow at Canfield (R Havis, pers. comm.), and a villa at Hatch Farm, east of Braintree, is a possibility (Medleycott 2002). Interventions at Rayne and Coggeshall have so far produced equivocal evidence for function and status; a villa at the former site is suspected (Smoothy 1989, 27). Stansted appears to have been a well-settled area, as a number of settlements are known from excavation. Among them is the Duckend Car Park site, whose settlement evidence was accompanied by a 1st and 2nd-century cremation cemetery, which included two comparatively rich 'box burials' (Havis and Brooks 2004, 216–31). Further burials were seen at the Social Club site (*ibid.*, 233–4), the Long-term Car Park site and the Mid-term Car Park site (Framework Archaeology 2004). This final site also produced significant settlement evidence, including roundhouses and rectangular structures, pits, and a relatively high-status stone building. East of Stansted, burials at Bourton End (HCR 4630), Takeley and Great Dunmow (Wickenden 1988) are further testament to a significant Roman-period population.

Occupation on the heavy clay soils during the early-mid Anglo-Saxon period was seemingly abandoned in favour of the more easily worked land in south-eastern Essex, particularly along the Blackwater and Crouch river valleys and the Thames estuary (Tyler 1996, fig. 1).

The distribution of known early Saxon settlements in north-west Essex is sparse and evidenced more by artefacts than structures, with the notable exception of the early to middle Saxon settlement at Wicken Bonhunt (*ibid.*). At the Social Club site, Stansted, a substantial quantity of 6th/7th-century pottery from two features was recorded (Havis and Brooks 2004, 346). More Anglo-Saxon pottery was found at the Roundwood and Long Border sites during fieldwalking (*ibid.*). Similarly, early Saxon pottery was recovered from Great Dunmow, but structures were absent until the middle Saxon period, as indicated by a sunken-featured building along with a collection of handmade pottery (Wickenden 1988, 45). Braintree, in contrast, offers tangible evidence for settlement in the form of two sunken-featured buildings located in the later Roman town (Hope 1982); a 'dark earth' uncovered in Rayne Road suggests that the settlement was occupied by a small agricultural community. This evidence has been accompanied by possible burials and chance finds of pottery, metal and glass. More substantial Anglo-Saxon evidence has come in the form of cemeteries. Extensive sites have been found at Great Chesterford in north-west Essex, Mucking in the south, and Springfield Lyons near Chelmsford. This final site was located on the Bronze Age enclosure (Buckley and Hedges 1987b).

Later Saxon sites are not much better represented in the archaeological record. Unification of the East Saxon Kingdom during the 8th century is evident with the emergence of royal *vills*. Some sites are known, for example at Witham (Rippon 1996, fig. 2). After the Viking conquest of Essex during the 10th century, the county experienced settlement expansion and with it increased production. Central Essex was not immune to these changes; place name evidence is consistent with this, while a number of 11th-century manors are known, for example, at Takeley and around Stansted (Rippon 1996, fig. 3). Great Dunmow and Braintree were established towns by Domesday (Medleycott 1996, 174). In general, archaeology has yet to catch up with the documentary evidence: Domesday records the provision of woodland, meadows and mills, and small farms and hamlets were almost certainly included in this landscape.

The early medieval period in Essex is characterised by a rising population and a diverse settlement pattern (Ward 1996, 130). This is true even on the heavy clay soils of north-west Essex, which had tended to hinder social and economic exploitation. Braintree and Great Dunmow were already well-established towns prior to their receiving market status in the early 13th century. Below this level, a range of settlement types is known. Colchester Hall was a 12th and 13th-century moated site excavated during Essex County Council work at Stansted (Havis and Brooks 2004, 368). Nearby at Molehill Green was another, contemporaneous, moated site (*ibid.*, 374–80). Slightly earlier in date was an 11th/12th-century hall-house at the Mid-term Car Park

site (Framework Archaeology 2004); a 13th/14th-century post-mill was also recorded. Excavation of a farm at Stebbingford revealed an economically varied landscape, with less-easily worked fields given over to pasture and fields with lighter soils devoted to market gardening. Towards Stane Street, wheat and barley, among other crops, were grown (Medlycott 1996, 173). The small market centre at nearby Felsted represented a 'green' settlement, characterised by open common fields for pasture. Place names betray a similar origin, for example at Stebbing Green and Fair Wood Common (Hunter 1995, 142). Stebbingford Farm, along with other farms (Roundwood, Stansted and Great Holts, Boreham, for example), was abandoned during the 14th century. These provide evidence for the phenomenon of settlement desertion and dislocation in rural mid Essex, for which the Black Death, adverse weather, poor economics and the Peasants' Revolt have all been cited as contributing factors (Medlycott 1996, 177).

Traces of the medieval landscape—field systems, the locations of farms and villages—have remained visible to the present day. Still, the 16th and 17th centuries heralded some changes to land organisation, the catalysts for which included population increase, and a greater demand for food, especially emanating from London (Everson 1996, 155). Map studies reveal a complex picture of changing land ownership, evidenced through field division and consolidation. Enclosure accelerated the disappearance of common land and the destruction of woodland. The parish of Cressing near Braintree provides a well-documented example of this (Hunter 1995, 133–8), though its story is unlikely to have been unique within the region. Notable sites in the area of the A120 include Thremhall Priory, Takeley, an 18th-century moated hall built on the site of a 12th-century Augustinian priory, and Bassingbourn Hall, a 15th/16th-century structure built on the site of a medieval manor (Havis and Brooks 2004, 546).

Chapter 2

The first settlers: Prehistoric activity

by Andrew Powell
with contribution by Edward Biddulph




Introduction

The distribution of prehistoric features and finds along the route of the A120 (Fig. 2.1) provides some insight into the processes and patterns of prehistoric settlement across the boulder clay landscape. As shown in Table 2.1, there is very limited evidence of activity before the middle Bronze Age, with flints of either Mesolithic and/or Neolithic date being found at only three sites, and no indications of early Bronze Age activity. The excavations revealed, however, that during the middle

Bronze Age the first significant appearance of prehistoric farming communities established a pattern of settlement that developed across the landscape through the Iron Age. Although the number of sites within each period would suggest a peak of activity in the late Bronze Age, falling sharply to the late Iron Age, when the duration of each period is considered there is a relatively consistent density of settlement within the landscape from the middle Bronze Age through to the Roman period.

Table 2.1 Prehistoric sites (west to east) by period (bold lines indicate watercourses)

Site no.	Site name	Meso/Neo	MBA	LBA/EIA	MIA/LIA	undated
1	Takeley Church					flints
38	East of Parsonage Lane					
2	Warish Hall					
5	Frogs Hall East					
39	North of Frogs Hall Stables					
6	Little Canfield Hall					
41	West of Stone Hall					
7/42	Stone Hall (also site 42)					
43	West of Strood Hall					
9/44	Strood Hall (also site 44)					
11	Highwood Farm					
12	Great Dunmow Roundhouse					
47	South of Great Dunmow					
14	Hoblongs Brook					
48	West of Ongar Road					
16	Chelmer River					crem. burial
17	Clobbs Wood					
17a	North of Clobbs Wood					
18	Clobbs Cottage					
19	Grange Farm					
20/49	Grange Lane (also site 49)					
22	Throes Farm					
50	East of Little Dunmow Road					
52	Stebbingford Farm Borrow Pit					
28	Greenfields					

Finds only	
Minor sites	
Major sites	

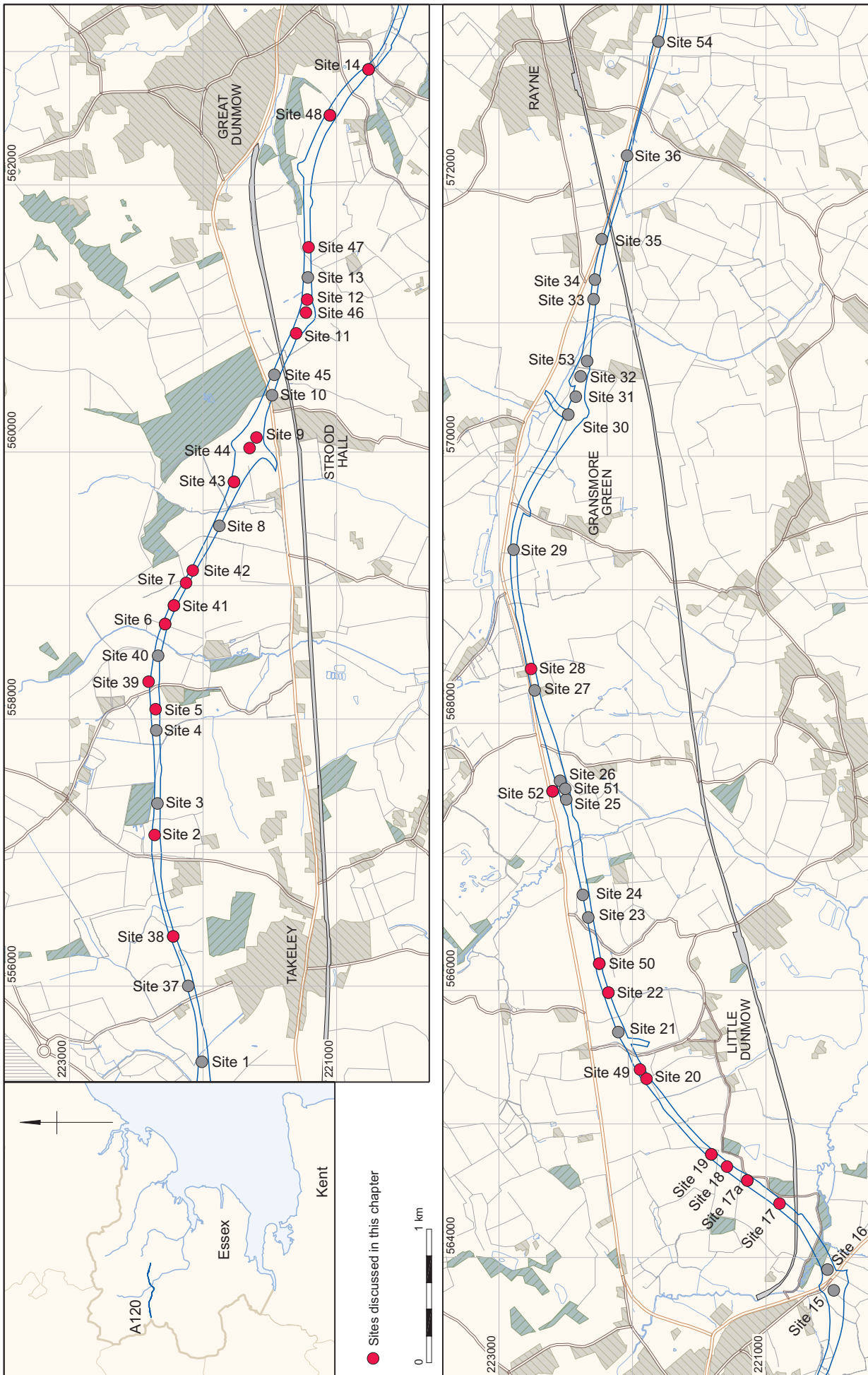


Fig. 2.1 Location plan showing all sites with earlier and later prehistoric activity

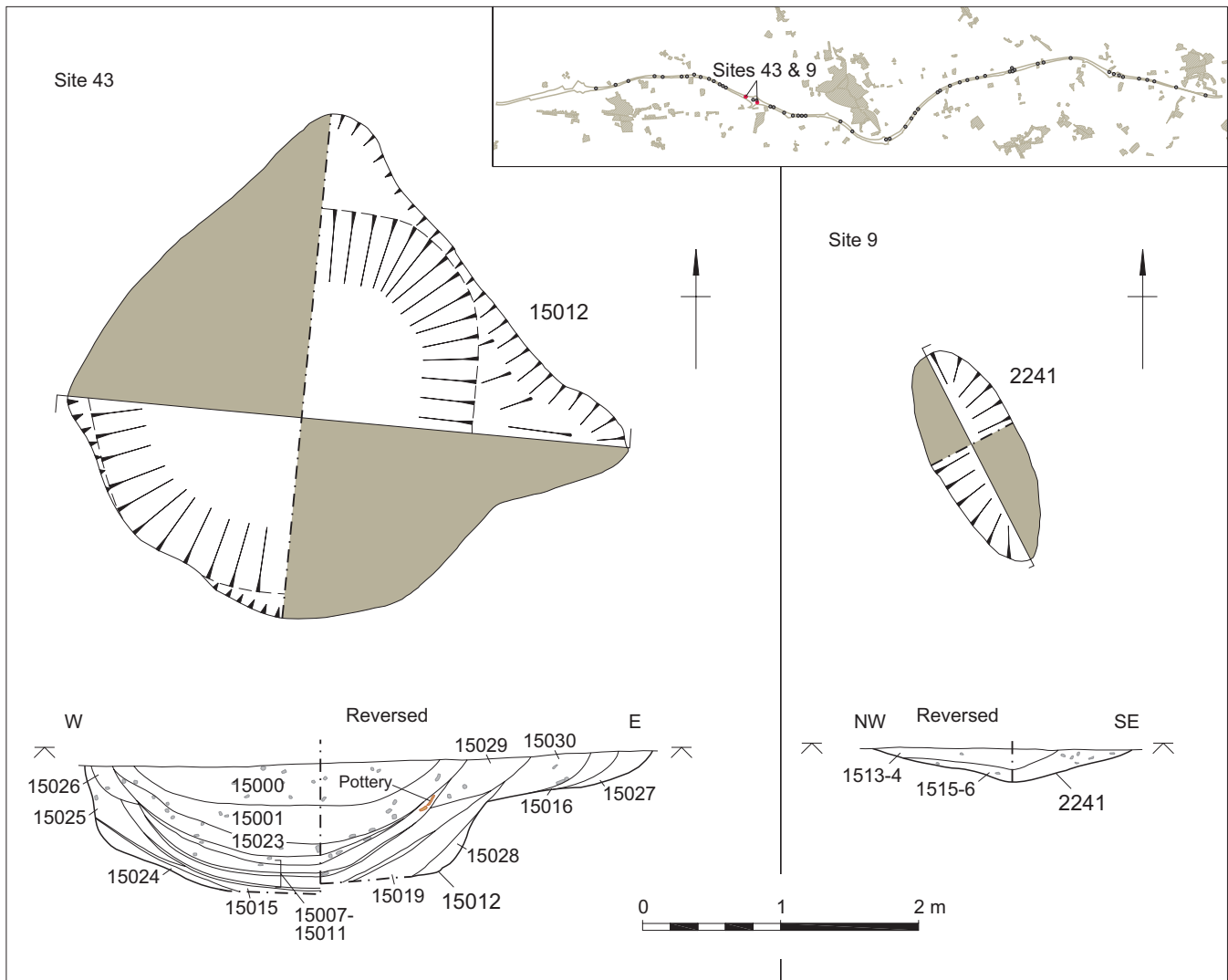


Fig. 2.2 West of Strood Hall (Site 43): plan and sections of pits 15012 and 2241

Table 2.2 Flint by type from pit 2241, Strood Hall (Site 9)

Category:	Context					Total:
	1513	1515	1516	1518	1519	
Flake	1	1	55	3	19	79
Blade		1	7		3	11
Bladelet			3			3
Bladelike flake	1	2	5		3	11
Irregular waste			1		1	2
Chip			25		10	35
Rejuvenation flake			1			1
Multi-platform flake core					1	1
Total:	2	4	97	3	37	143
No. of burnt struck flints:			16		23	39
No. of broken struck flints:	1	1	58	1	25	86

Mesolithic, Neolithic and early Bronze Age

No archaeological features that could be dated with certainty to the Mesolithic (8500–4000 BC), or early Bronze Age (2400–1500 BC) were identified during the excavations, and only a small number of finds from these periods were recorded, in some cases from later features. A single pit dating to the Neolithic (4000–2400 BC) was encountered at Strood Hall.

Early flint work includes two pieces of characteristic Mesolithic form—an obliquely truncated blade from Clobbs Wood (Site 18) and a simple burin from Ongar

Road (Site 48) (see below). Such isolated finds suggest the possibility of low-level activity in the area (evident also at Stansted Airport to the west (Healey 2004, 39)), probably involving small bands hunting woodland animals, gathering plants and fishing in the rivers. This type of activity is likely to have left few traces, and while such groups may have congregated on a more seasonal basis, settlements are likely to have occurred within the areas of more abundant coastal and estuarine resources to the east and south.

The evidence for activity by Neolithic farming communities was also very limited. A group of 143 flints

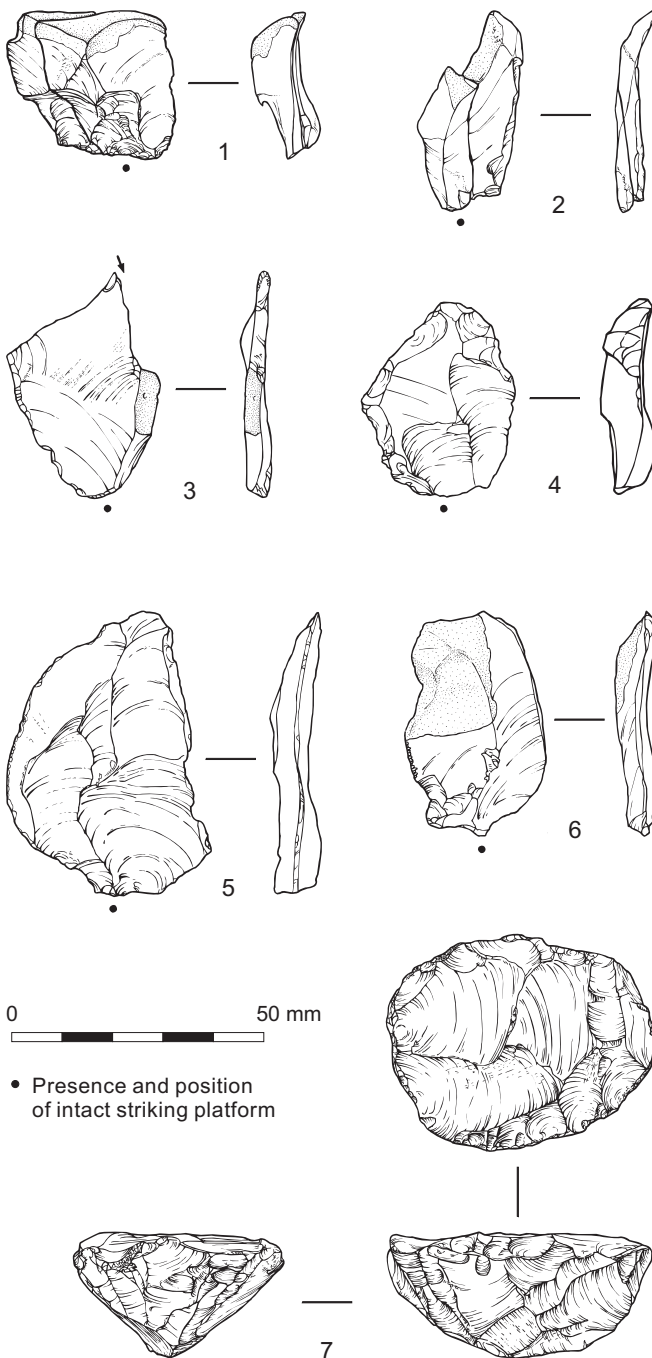


Fig. 2.3 Selection of flints. Nos 1–2 from Strood Hall, pit 2241. Nos 3–7 from West of Ongar Road (context 21016)

Flint

by Kate Cramp

A total of 866 struck flints was recovered, in varying quantities, from 35 sites along the route of the A120 trunk road (Tables 2.3 and 2.4; Fig. 2.3). A further 112 pieces (1024 g) of burnt unworked flint were retrieved from ten sites.

The flintwork represents, in varying quantities, a long period of human activity from the Mesolithic to the later Bronze Age. Earlier prehistoric activity seems to have been comparatively slight, with a small number of isolated residual finds representing brief Mesolithic activity. Evidence of activity in the Neolithic period is represented by an early Neolithic pit assemblage from Strood Hall (Site 9) and a late Neolithic flint scatter from West of Ongar Road (Site 48) (Fig. 2.3). Along with a late Bronze Age pit assemblage from West of Stone Hall (Site 41), much of the remaining flintwork can be dated to the later prehistoric period on technological grounds. Given the extensive evidence of late Bronze Age settlement along the route, it is likely that a substantial amount of the flintwork relates to activity in this period.

Fig. 2.3

- 1-2. Refitting flakes from Strood Hall, pit 2241, (contexts 1516/1519)
3. Burin from West of Ongar Road (context 21016)
4. End and side scraper from West of Ongar Road (context 21016)
- 5-6. Retouched flakes from West of Ongar Road (context 21016)
7. Levallois core from West of Ongar Road (context 21016)



Plate. 2.1 Strood Hall (Sites 9/44): Neolithic pit 2241

was found together in a pit (2241) at Strood Hall (Site 9) (see Fig. 2.2; Plate 2.1 and Fig. 2.3, nos 1–2); associated with 16 unfeatured sherds (52 g) of early Neolithic pottery.

Pit 2241 (see Fig 2.2) was 1.65 m long, 0.66 m wide and 0.22 m deep, with fairly shallow longitudinal sides, and moderately sloped east-west profile. Its lower fill, a 0.13 m thick layer of hard, dark grey/black clay (1515/1516, including finds contexts 1518 and 1519), produced 14 sherds of early Neolithic pottery as well as burnt unworked flint, with a further 2 sherds coming from the upper light brown fill (1513/1514). The pottery was quite well-fired with a sparse coarse irregular flint temper. The sherds although fragmented are in relatively fresh condition, most with an oxidised orange brown exterior and darker brown core and interior. There was a quantity of charcoal and burnt clay at the southern end of the feature suggesting that a fire had been lit in its base. It also produced 143 worked flints in fresh condition and of Neolithic character, over a quarter of them burnt (see *Cramp CD/Chapter 4*). The flint material, which included four refitting flakes (Fig. 2.3), spalls and a rejuvenation flake, consisted entirely of flint-knapping waste, the frequently diffuse bulbs of percussion suggesting the use of a soft hammer. Most of the pieces were flakes, although blades were also relatively common (Table 2.2). The presence of just one core, and the fact that only two preparatory flakes were recovered, suggest that the knapper was using cores that had already been partially prepared elsewhere, while the generally fresh condition of the flints indicates that any tools made

Table 2.3 Summary of the flint types from all sites along the A120 route.

Category	Total
Flake	577
Blade	40
Bladelet	4
Bladelike flake	53
Irregular waste	31
Chip	86
Rejuvenation flake	3
Single platform flake core	7
Multi-platform flake core	16
Levallois/other discoidal flake core	2
Single platform blade core	2
Opposed platform blade core	1
Core on a flake	1
Tested nodule	10
Unclassifiable/fragmentary core	5
Retouched flake	16
End scraper	1
Side scraper	1
End-and-side scraper	4
Scraper on a non-flake blank	1
Piercer	1
Other borer	1
Denticulate	1
Hammerstone	2
Total:	866
No. of burnt struck flints:	72
No. of broken struck flints:	293
No. of retouched flints:	26
No. of burnt unworked flints:	112
Weight (g) of burnt unworked flints:	1024

Table 2.4 Summary of flint by site from the A120 route.

Category	<i>evaluations and excavations</i>															
	1	2	3	5	6	7	8	9	11	14	16	17	17a	18/ 19	20	
	<i>Takeley Church</i>	<i>Warisb Hall</i>	<i>Fanns Wood</i>	<i>Frogs Hall East</i>	<i>Little Canfield Hall</i>	<i>Stone Hall (west)</i>	<i>Stone Hall (east)</i>	<i>Strood Hall</i>	<i>Highwood Farm</i>	<i>Hoblong's Brook</i>	<i>Chelmer River</i>	<i>Clobbs Wood</i>	<i>North of Clobbs Wood</i>	<i>Clobbs Cottage/Grange Farm</i>	<i>Grange Lane</i>	
Flake	9	3	1		17		1	161	13		2	1	4	2	9	
Blade	1							16								
Bladelet								3								
Bladelike flake				1	4			14	1	1				1		
Irregular waste					2			4								
Chip								36	5						6	
Rejuvenation flake								1								
Single platform flake core													1			
Multi-platform flake core		1				1		1								
Levallois/other discoidal flake core																
Single platform blade core								1								
Opposed platform blade core																
Core on a flake																
Tested nodule	1				1			1								
Unclassifiable/fragmentary core				1	1											
Retouched flake					1			2						1	1	
End scraper																
Side scraper																
End-and-side scraper																
Scraper on a non-flake blank																
Piercer																
Other borer																
Denticulate																
Hammerstone					1			1								
Total:	11	4	1	2	27	1	1	241	19	1	2	1	5	4	16	
No. of burnt struck flints:								42	2						2	
No. of broken struck flints:		2				1		125	5			1	2	2	7	
No. of retouched flints:				1				2						1	1	
No. of burnt unworked flints:	2							9			12				1	
Weight (g) of burnt unworked flints:	2							53			89				28	

here were taken away before being used. The flint was of good knapping material derived probably from the boulder clay or surface deposits of chalk flint. Some of the flints were burnt, and it is likely that this occurred at the time of the flint knapping. The feature also contained a single Roman sherd presumed to be intrusive.

Another, less closely associated, group of 44 flints, of middle/late Neolithic date, was found at West of Ongar Road (Site 48). As at Strood Hall, the waste

from flint-knapping dominated it, although the unusually high proportion of blades and blade-like flakes may reflect some specialised purpose for the tools being made. The group also contained four complete flake cores, as well as two retouched flakes and one end-and-side scraper, and at least 15 pieces showed signs of having been used, indicating that activities other than just flint-knapping were taking place at this location. However, although recovered from an area of subsoil (21016), the fresh condition of the material

woodland on the boulder clay plateau until the middle Bronze Age (Wiltshire and Murphy 2004a, 77). Moreover, while the distributions of flint and stone axes (Buckley 1980, figs 13 and 14) and other finds point to activity across most of the Essex landscape, there are few archaeological features, particularly on the boulder clay plateau crossed by the A120. Most of these consist of small isolated features, such as a pit containing possibly middle Neolithic plain wares at Braintree, pits at Pledgdon with Windmill Hill ware (and Beaker) and a hearth pit at Little Waltham that produced flints, pottery and a radiocarbon date of 4250–3650 cal BC (HAR—1087: 5120 ± 130 BP) (Drury 1978, 10). As at Stansted (Framework Archaeology 2004), there was no evidence from the A120 of either Neolithic funerary or ceremonial monuments, although these are known in Essex on the gravel terraces, brickearth and river valleys (Holgate 1996, fig. 2).

No material datable to the early Bronze Age (2400–1500 BC) was found during the excavations, although some of the undiagnostic flintwork could belong to this period. Nor has much evidence been found in the surrounding landscape, although Couchman (1980, 40) refers to a ‘dubious Beaker domestic structure’ at Dunmow, and a number of isolated barbed-and-tanged arrowheads have been found across the clay plateau. However, as in the Neolithic, most early Bronze Age sites in Essex have been found on the coast or along the major rivers, in areas with lighter soils than those found on the clay plateau.

Middle Bronze Age (Fig. 2.4)

After the dearth and ambiguity of the evidence for early prehistoric activity, a range of features and finds indicate that by the middle Bronze Age (1500–1100 BC) settlement was extending onto the clay plateau landscape. Nonetheless, it remains at a relatively low level and was unevenly distributed along the line of the A120.

One noticeable focus of activity was the combined watersheds of the River Roding and its tributary to the east, with middle Bronze Age features, including pits and possibly ditches, being recorded at three sites—North of Frogs Hall Stables (Site 39), Stone Hall (Site 7/42), and Strood Hall (Site 9). In addition, residual middle Bronze Age pottery was found in later (or natural) features at another four sites—Warish Hall, Site 2; Frogs Hall East, Site 5; Highwood Farm, Site 11 and South of Great Dunmow, Site 47. At most of these sites, all of which lie along a 5 km length of the A120 route, the middle Bronze Age was represented by only a small proportion of the finds or features, with the result that they provide limited evidence as to the nature of the activity.

The area to the east of the River Chelmer displayed evidence for far less extensive middle Bronze Age activity, with only four sites known. Clobbs Wood (Site 17) produced only finds, while Clobbs Cottage (Site 18),

Grange Lane (Site 49) and Greenfields (Site 28) also contained middle Bronze Age features. The latter two sites were both located on the watersheds—Grange Lane between the River Chelmer and the Stebbing Brook, and Greenfields between the Stebbing Brook and the River Tey.

North of Frogs Hall Stables (Site 39)

Even at the most westerly of these sites (Site 39), on the west side of the River Roding around Frogs Hall, where two features—ditch 12035 and nearby pit 12024—produced only middle Bronze Age pottery, the evidence is hard to interpret (Fig. 2.5). The 0.28 m deep, 1.75 m diameter subcircular pit contained eight sherds of middle Bronze Age pottery, 43 pieces of animal bone, six worked flints and two featureless pieces of fired clay from its single fill, as well as some charcoal. While such finds are generally characteristic of domestic waste, there were no detectable houses or other structures on the site from which such material might have come.

The ditch, aligned NE-SW some 12 m east of the pit, produced 25 sherds of middle Bronze Age pottery, possibly from a single dump of material in the upper of its two fills. It ran in a straight line for at least 30 m, although its dimensions and profile varied along its length, being up to 1.73 m wide and 0.6 m deep. It is likely to have had an agricultural function, as well as, potentially, a social function defining property rights. Although the middle Bronze Age witnessed the widespread establishment of rectilinear field systems it is noted that no field systems of this date were found at Stansted Airport, and it is possible that the ditch was of a later date.

The same applies to another length of straight ditch (12010), with similarly variable dimensions, running approximately east-west some 300 m to the east and possibly a related component of the same field system (Fig. 2.5). Its single fill produced both middle Bronze Age and post-Deverel-Rimbury pottery (six and seven sherds respectively), indicating either a later date for this feature or the continuation of its use into the late Bronze Age (1100–700 BC). There was similar dating evidence, in the form of 47 sherds of middle and late Bronze Age pottery, from an adjacent pair of slightly smaller pits (12004 and 12006), just 5 m north of the ditch. Whatever their date of construction, these three features again provide little information about the nature of activity on the site, although the combined contents of the pits, comprising pottery, flint, animal bone, burnt sandstone and charcoal, are again suggestive of domestic waste.

Stone Hall (Site 7/42)

There was similar evidence of activity at Stone Hall some 700 m to the east of Site 39, midway between the

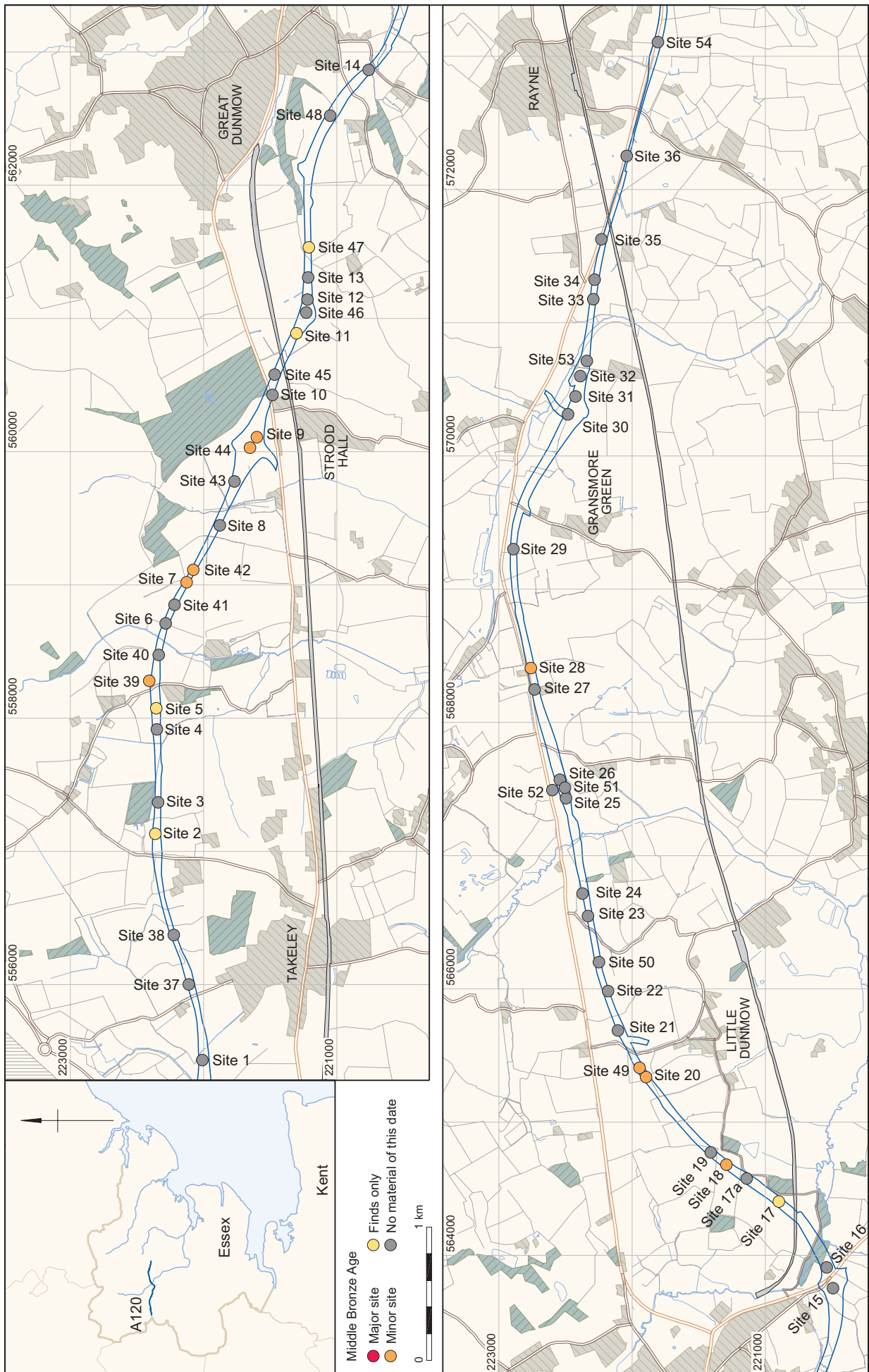


Fig. 2.4 Distribution of middle Bronze Age sites and finds

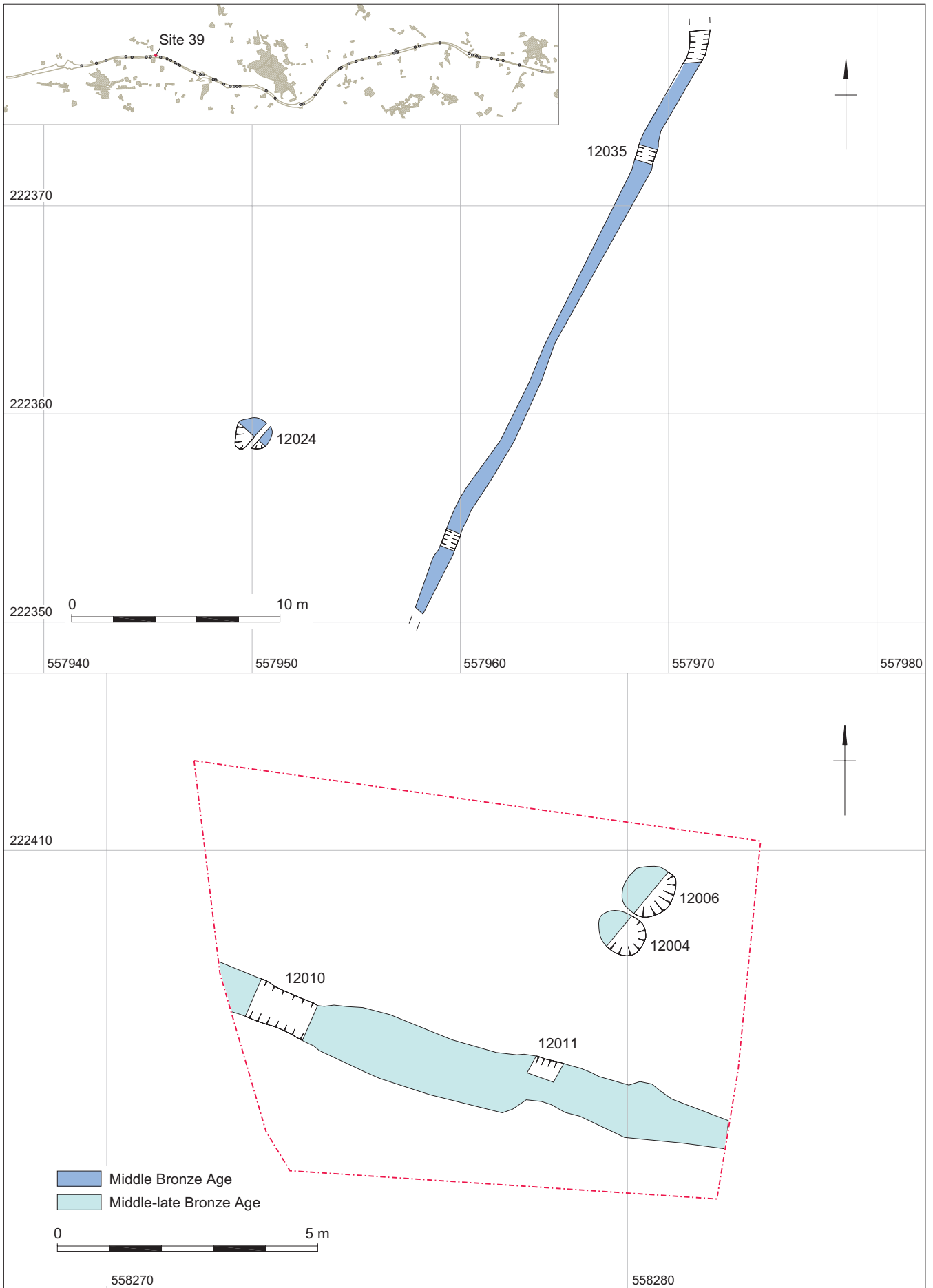


Fig. 2.5 North of Frogs Hall Stables (Site 39): site plan showing middle and late Bronze Age features

River Roding and its eastern tributary (see Figs 2.6–7 below). Here, two rounded pits (14115 and 14122) some 30 m apart, one just under 1 m wide the other just over, produced between them variable quantities of middle Bronze Age pottery, fired clay, worked flint, a sarsen whetstone and charcoal. They were located within a wider spread of late Bronze Age features, a significant number of which also produced middle Bronze Age sherds. While it is possible, therefore, that both pits were later features containing residual material, the distribution of middle Bronze Age pottery particularly across the north-western part of the site indicates quite intensive activity of this date, which continued into the Iron Age. Many of the smaller features at the site were undated, and it is possible that some of these, including a number of unurned cremation burials, could date to this period.

This significant group of vessels (140 sherds, weighing over 1 kg) are, like those from the other sites, all in flint-tempered fabrics, with both fine and coarse wares present. They represent both Bucket/Barrel and Globular urns, diagnostic of the Deverel-Rimbury ceramic tradition of southern England.

Strood Hall (Site 9)

Approximately 1.1 km further east at Strood Hall (Fig. 2.4) on the east side of tributary of the River Roding, 89 sherds of middle Bronze Age pottery (see Fig. 2.17, no. 1 below), as well as fragments of copper alloy, were recovered from a pair of overlapping linear features

(1031 and 1037) at the northern edge of the site. A later ditch had cut both and their forms and functions are unclear.

Clobbs Wood and Clobbs Cottage (Sites 17/18)

Two sherds of middle Bronze Age pottery were recovered from subsoil at Clobbs Wood (Site 17), on the north side of the River Chelmer (Fig. 2.4). A poorly defined shallow sub-rounded pit (128), 3.4 m by 3.8 m of undefined prehistoric date (see Chapter 5, Fig. 5.5), may be contemporary with the pottery. Some 500 m to the north-east at Clobbs Cottage (Site 18) an irregular rounded pit (180306) produced a further 104 sherds, including a lug handle, from a single flint tempered Globular Urn (see Fig. 2.17 no.12 below), and a single flint blade. The pit was 1 m by 0.7 m and was 0.6 m deep, with moderately steep sides and a flat base, and had a single fill. The blade, characteristic of a Mesolithic date, may be an accidental inclusion, or may, alternatively, have been found, curated and deliberately deposited.

Grange Lane (Site 49)

Middle Bronze Age activity at this site is represented by two widely spaced pits (28005 and 28006) (Plate 2.2) containing a narrow range of finds—pottery and worked and burnt flint only (see Fig. 2.15 below). Pit 28005, which at over 2 m wide and 0.8 m deep was significantly larger than the middle Bronze Age pits



Plate 2.2 Grange Lane (Site 49): middle Bronze Age pit 28005

recorded at the other sites, contained also a substantial dump of charcoal lying against one side, possibly indicating some non-domestic function.

Greenfields (Site 28)

A non-domestic function is almost certainly indicated by the features at Greenfields (Fig. 2.6) where middle Bronze Age (and later) activity was focussed around a large hollow (1057) up to 20 m wide at the top, and almost 2 m deep. The hollow had the appearance of a glacial pingo or frost mound. These are isolated localised phenomena resulting from local peculiarities of drainage and sediment. Basically water can be come trapped between impermeable geology and a permafrosted surface. The trapped water freezes and the resulting pressure causes a mound to push up, the larger ones being termed pingos. When the ice melts the ground collapses and, if the ice core is substantial and the water table high, a pond may be formed (West 1974, 74–6). Two monolith samples taken through the fills of the hollow produced very sparse pollen which was not further analysed.

A significant quantity of middle Bronze Age pottery (including from globular urns) was recovered mainly from the lower fills of the hollow and from a small pit (1072) cut into its side. Most of these sherds, however, were found in association with post-Deverel-Rimbury pottery, suggesting either a transitional middle/late Bronze Age date, or perhaps more likely given the presence within the same contexts of 9th–8th century BC fired clay mould fragments, the mixing of materials from different periods during the subsequent use of, and accumulation of silts in, the hollow (see Fig. 2.39, nos 8–10 for examples of pottery).

Some 12 m to the south-west, a 0.7 m wide pit (1035), 0.33 m deep, contained a complete upright middle Bronze Age flint-tempered vessel (1036) (111 sherds, 429 g) the fill of which (1038) produced a fragment of heavily leaded copper alloy scrap (13 g). The meaning of this apparently formalised deposit is unclear, but was almost certainly related to the large natural hollow, which may have had some lasting symbolic significance within the landscape. An adjacent pit or large posthole (1028) produced a further two middle Bronze Age sherds, seven pieces of animal bone and one piece of burnt flint, and further sherds were found in adjacent late Bronze Age features.

Discussion

The middle Bronze Age features recorded at the three sites in the western part of the A120 route, and the finds of residual pottery at the other four sites in the same area, point to some kind of activity within this quite closely confined part of the clay plateau landscape. Although there is evidence of a substantial middle Bronze settlement at Stansted Airport, also on the clay

plateau to the immediate west of this area comprising roundhouses, pits and ditches (Framework Archaeology forthcoming), such sites are not typical. Most middle Bronze Age settlements in Essex are still represented mainly by pits (Brown 1996, 26), and the clearest evidence for settlement has been found in south-east Essex.

Given the truncation of features along the A120 route, however, it is quite possible that insubstantial settlement structures have not survived as archaeological features. It is further possible that the features recorded represent activities at the margins of settlement, the foci of which lay just outside the road corridor, although at the extensively excavated middle Bronze Age settlement at North Shoebury (Wymer and Brown 1995), no evidence for roundhouses or other structures was found and the settlement evidence consisted of clusters of small pits within a series of rectilinear enclosures. The nature and function of such pits are unclear—at North Shoebury much of the pottery and also possibly the animal bones from them appeared to have been formally deposited, rather than being simply casually discarded as rubbish, a feature found also on contemporary settlements on the chalk (Barrett 1989).

It is not easy, however, to identify the formality with which materials, largely derived from domestic contexts, were placed within the pits along the A120; while it is possible that some of this material represents placed deposits, no consistent pattern of such behaviour was discerned. Nonetheless, the deposition of a complete vessel and a fragment of scrap metal in a pit adjacent to the glacial pingo at Greenfields shows a continuing concern for forms of ritual deposition as found in the Neolithic and early Bronze Age. The middle Bronze Age may still have been characterised by a largely semi-sedentary way of life, as suggested for the earlier periods. Although the process of agricultural intensification had its origins in the middle Bronze Age, it did not become widely established until the late Bronze Age (Yates 2001).

The pottery assemblages are purely domestic in nature and there is evidence of burnt residues and sooting on sherds from several sites (see *Every CD/Chapter 4 for details of prehistoric pottery*). The pottery, all of which is flint-tempered and diagnostic of the Deverel-Rimbury ceramic tradition of southern England, includes both fine and coarse ware and represents both Bucket/Barrel and Globular urns. The apparent lack of decoration means the assemblage has closer affinities with material from central and south Essex than with vessels from the Ardleigh cemetery to the north (Erith and Longworth 1960; Brown 1995; Brown 1996), although the presence of globular urns would be more characteristic of the Ardleigh group (these vessels are generally absent from assemblages in the south of the county). The date range for the central and south Essex Deverel-Rimbury tradition is later than

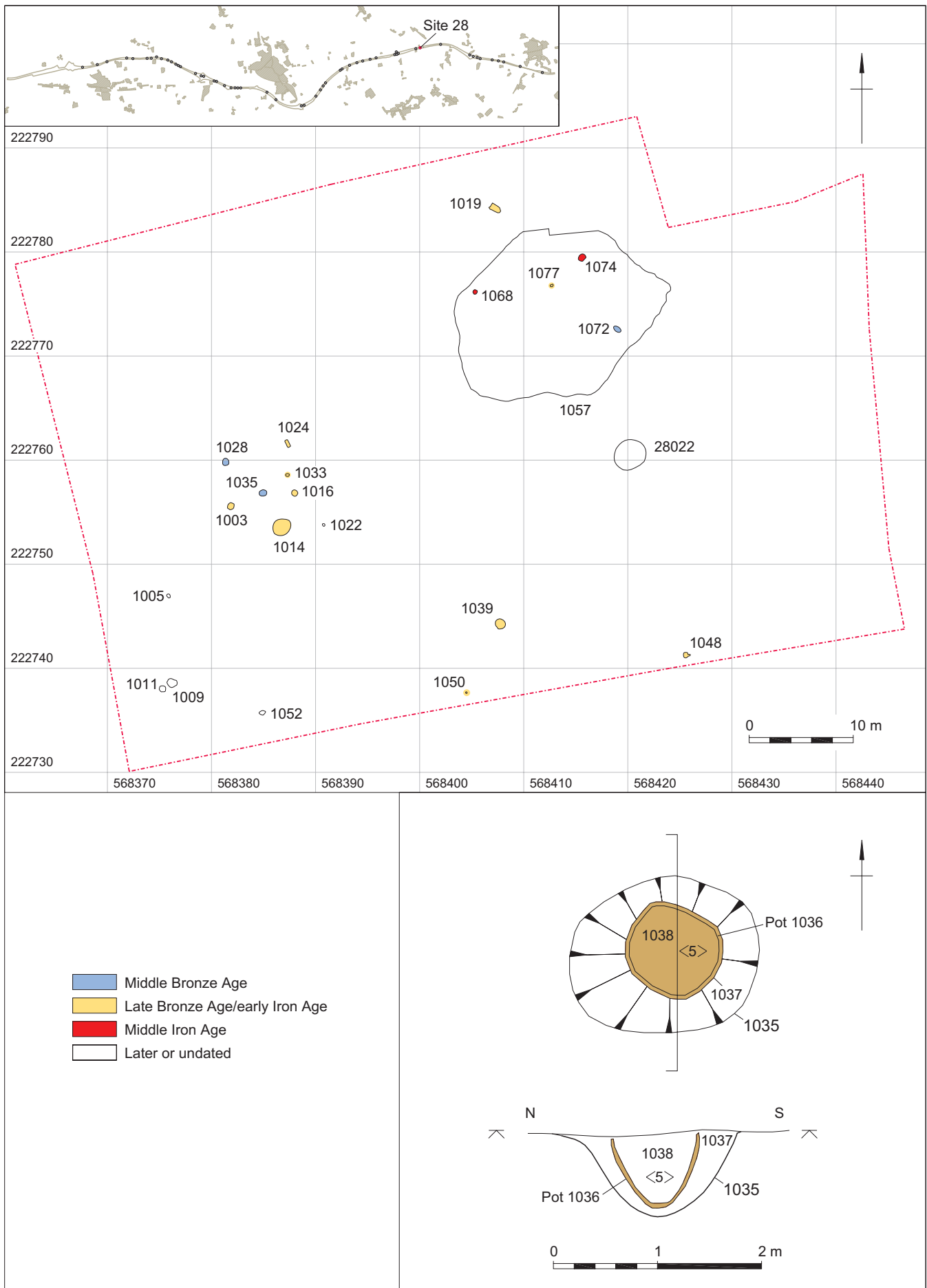


Fig. 2.6 Greenfields (Site 28): site plan showing prehistoric features

that for the Ardleigh vessels, ranging from 1680–1500 cal BC from Barling, with a later date of 1440–930 cal BC from Rook Hall (Brown 1995, 130–1).

The distribution of middle Bronze Age pottery along the A120—at seven sites in less than 5 km—suggests a quite intensive exploitation of land within easy reach of the two parallel watercourses that pass through it. It is possible that the exploitation of the landscape involved a significant acceleration in the clearance of woodland. Pollen analysis from Stansted Airport, for instance, points to a reduction in tree pollen, particularly lime, around 1400 BC, although the middle Bronze Age settlement there was still close to mixed woodland (Framework Archaeology 2004).

No evidence of middle Bronze Age fields or land boundaries were identified at Stansted, and the function of the small number of linear features producing exclusively middle Bronze Age pottery on the A120 is unclear (moreover, their attribution to this period is far from certain). While the evidence from Stansted suggests a predominantly pastoral farming economy, the presence of cereal pollen also points to arable cultivation, and it is possible that both elements of such a mixed economy might require the establishment of either fields or other explicit forms of land division. Such features have been recorded elsewhere in the south-east (Yates 2001), as at Mucking on the Thames estuary (Bond 1988; Jones and Bond 1980), on the Thames gravel at Heathrow (Barrett *et al.* 2000; 2001), on the fen-edge at Fengate, Cambridgeshire, and elsewhere (Peglar and Wilson 1978; Pryor 1988; Wiltshire and Murphy 1993). Unfortunately a single cattle bone from a middle Bronze Age context in the Greenfields pingo comprises the total direct evidence from the A120 for middle Bronze Age farming practices.

It is not possible to determine whether or not the contrasting distributions of middle Bronze Age sites to the east and west of the River Chelmer reflects a real difference in the use of the landscape. However, there was certainly a marked reduction in the evidence for activity towards the east, with no middle Bronze Age finds being recorded east of Greenfields. Moreover, the nature of the evidence from the sites east of the River Chelmer appears to be different in character. Although the presence of these more isolated sites imply nearby settlement activity, the features themselves suggest non-domestic activities.

In the absence of any evidence for middle Bronze Age mortuary practices the activity at the Greenfields pingo, in particular, have an added interest, indicating that natural features in the landscape may have held symbolic meaning (quite possibly preceding this period). The middle Bronze Age activity at the site might not, on its own, have pointed to a particular significance for the feature, but the further deposition of material in and around the hollow in the late Bronze Age and Iron Age suggests that this activity was formalised in nature from the earliest phase.

Late Bronze Age (Fig. 2.7)

The evidence from the excavations of late Bronze Age activity represents a continuation of the developments witnessed during the middle Bronze Age. The range of features is similar, comprising again mainly pits and ditches. However, by now more of the pits are found in more clearly defined clusters, and some of the ditches, particularly at Stone Hall (Site 7/42), can be seen to form a more recognisable layout of fields and drove-ways. In addition, there is for the first time an identifiable structure in the form of a four-post structure at Stone Hall (Site 42), and there is quite widespread evidence of burial practices.

The ceramic assemblages from these sites are dominated by flint-tempered post-Deverel-Rimbury pottery. Although the use of this pottery continued into the early Iron Age, it was seldom found in association with recognisably early Iron Age pottery fabrics and forms, and in most cases, therefore, can be assigned with some confidence to the late Bronze Age, this being confirmed at a number of sites by radiocarbon dating. Nonetheless, the occasional association of early/middle Iron Age sandy wares with the post-Deverel-Rimbury pottery indicates some continuation of activity into the early Iron Age.

The increase in the number of locations containing late Bronze Age features, from six (in the middle Bronze Age) to thirteen, points clearly to both the intensification of settlement in areas of the clay plateau landscape that were already occupied, and the expansion of settlement into previously unoccupied areas. With the exception of South of Great Dunmow (Site 47) and Clobbs Wood (Site 17), all the sites producing evidence of middle Bronze Age activity witnessed further activity in the late Bronze Age. Evidence for this continuity has already been referred to in relation to a ditch (12010) and two adjacent pits (12004 and 12006) in the eastern part of the Frogs Hall Stables site, which produced both middle and late Bronze Age pottery.

Warish Hall (Site 2)

Towards the western end of the A120 route, the evidence for late Bronze Age activity at Warish Hall (where a small number of middle Bronze Age sherds had been recovered) comprised a loose grouping of pits in an area some 30 m across (*for detailed plan see CD/Chapter 3*). The roughly circular pits (29, 79, 92 and 20311), which were between 0.7 m and 1.1 m across and up to 0.3 m deep, produced between them 25 sherds of post-Deverel-Rimbury pottery, worked flint, fired clay (including part of a possible loom-weight or spindle-whorl from pit 29), stone both burnt and unburnt (including two pebbles with smoothed surfaces probably used as rubbers from pit 92, and a very large stone in pit 79), and charcoal (*prunus* roundwood, Maloideae and oak). Although this material reflects a

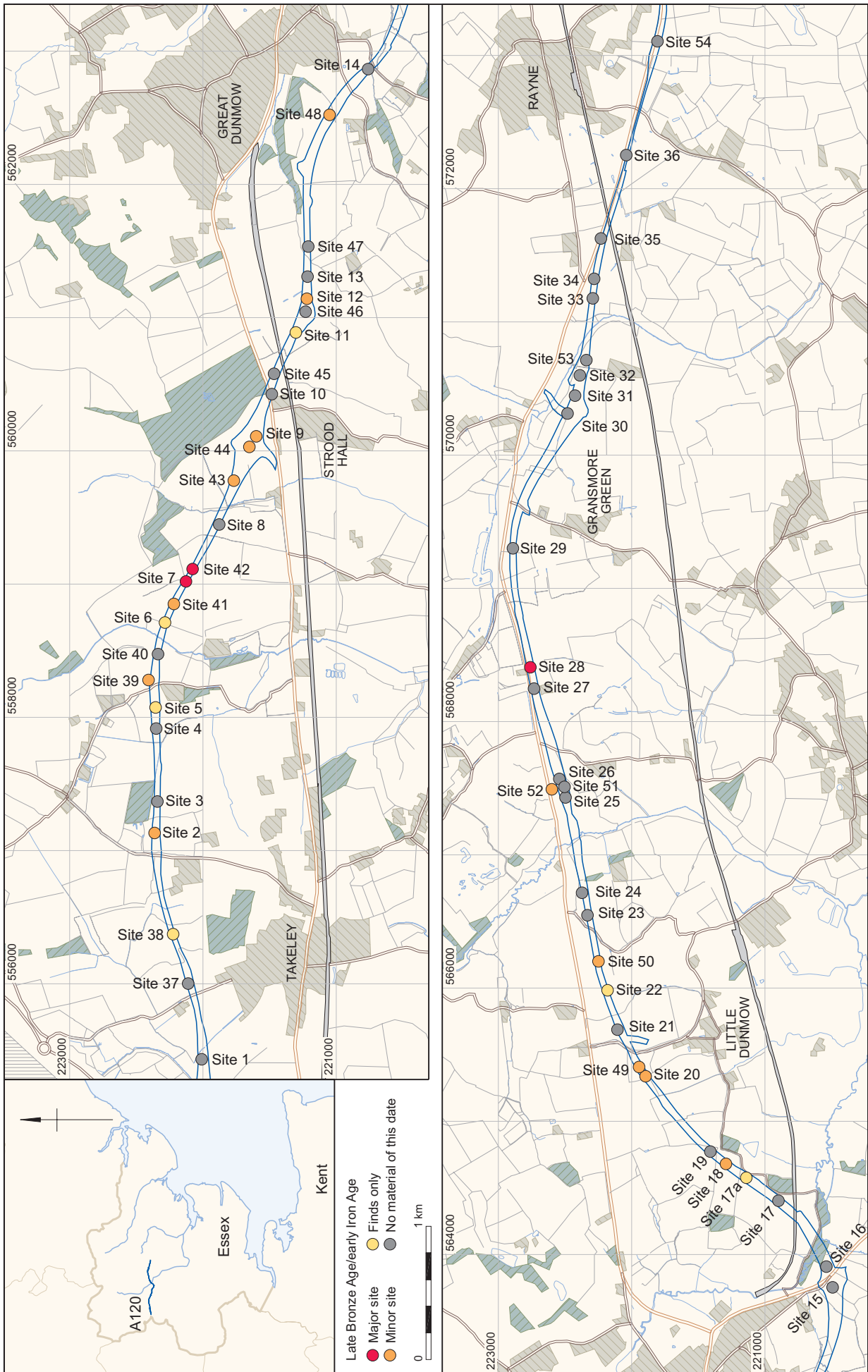


Fig. 2.7 Distribution of late Bronze Age-early Iron Age sites and finds

The prehistoric worked and utilised stone

by Ruth Shaffrey

Eight items of worked stone (excluding flint) were recovered from prehistoric contexts. These include six items which are best classified as rubbers or rubbed pieces, because they have remains of either worked or smoothed surfaces. These were found at Stone Hall (Site 7; middle Bronze Age pit 14122), Warish Hall (Site 2; late Bronze Age pit 93 – two items), Grange Lane (Sites 20/49; early-middle Iron Age enclosure ditch group 1041 – two items) and East of Little Dunmow Road (Site 50; late Iron Age ditch 30164). No identifiable saddle querns were recovered, although it is possible that one of the small worked fragments from Grange Lane is from a saddle quern. The two remaining items were a flat slice through a pebble from Stone Hall (pit 14122 SF 14905) which may have been a base for something and, from the same pit, a square sectioned whetstone. All the stones utilised are indistinguishable fine to medium grained sandstones which cannot be provenanced but were almost certainly locally available.

range of likely domestic activities there are suggestions, such as the apparent arrangement of burnt stones and pebbles around five sherds of post-Deverel-Rimbury pottery in the middle fill of pit 92, of some formality in the deposition of part of this material, as opposed to simply its casual disposal, although this is by no means certain.

Stone Hall (Site 7/42) and West of Stone Hall (Site 41)

Continuity of activity is evident at Stone Hall (Site 7/42), located in the *c* 1 km wide strip of land between the River Roding and its eastern tributary (Figs 2.8–9). Although the middle Bronze Age activity had been represented by just two pits, the site produced a significant pottery assemblage of over 140 middle Bronze Age sherds, and the continued importance of this location becomes apparent in the extensive array of late Bronze Age features that are distributed over some 240 m (Figs 2.8–9). Although the functions of all these features cannot be readily identified, they appear to represent a range of domestic, economic and mortuary activities.

Perhaps the easiest of the features to interpret is the regular layout of ditches in the western part of the site. Although later ploughing appears to have destroyed significant lengths, these appear to comprise a pair of parallel ditches (1012 and 1010) some 6 m apart aligned NE-SW, and probably forming a droveway, with two other ditches, probably representing associated field boundaries, running perpendicular to the droveway—14103 to the north-west and 1020 to the south-east (Fig. 2.8). The ditches were up to 0.7 m wide and 0.25 m deep (Fig. 2.10). Up to two fills were recorded, producing post-Deverel-Rimbury pottery, as well as residual middle Bronze Age sherds and a single sandy ware sherd of early/middle Iron Age date.

To both the north-west and the south-east of the

droveway there were concentrations of mainly small features whose varying contents point to a variety of functions. These included, at the furthest north-west extent of the site, a rectangular arrangement of four postholes, 0.35–0.55 m wide and up to 0.2 m deep, forming a structure (14222), probably a granary, measuring 2 m by 1.5 m with its long axis aligned east-west (Fig 2.11). The postholes produced pottery, fired clay, burnt flint and burnt stone, one (14126) providing a radiocarbon date of 1010–820 cal BC (NZA 19587: 2769 ± 40 BP) (Table 2.5). (The small number of residual middle Bronze Age sherds probably reflects the proximity of middle Bronze Age feature 14122, above).

Between the four-post structure and the droveway there were a number of other features on either side of ditch 14103, not all of them excavated, and all severely truncated. They included two graves (14029 and 14111), both around 0.5 m in diameter and 0.2 m deep, containing cremation burials. Grave 14029, which produced a radiocarbon date of 980–810 cal BC (NZA 19586: 2748 ± 35) (Table 2.5), was for a possible female, aged *c* 30–40 years (504 g of bone), while grave 14111 was for an individual aged over 20 years (339 g). The grave fills contained pottery (three sherds and 41 sherds respectively), and charcoal probably representing pyre debris (*see McKinley CD/Chapter 5 for human bone report*).

A third feature (14026), represented by a largely complete vessel in an unidentifiable cut, produced only 1 g of cremated human bone; whether or not this small quantity of bone is residual, deriving from cremation and burial activity in the area, cannot be determined, although the apparently formal deposition of a complete vessel is perhaps more likely to be associated with the burial activity than with any nearby domestic settlement. The location among this relatively tight cluster of features of a small pit 14112 containing further pottery,

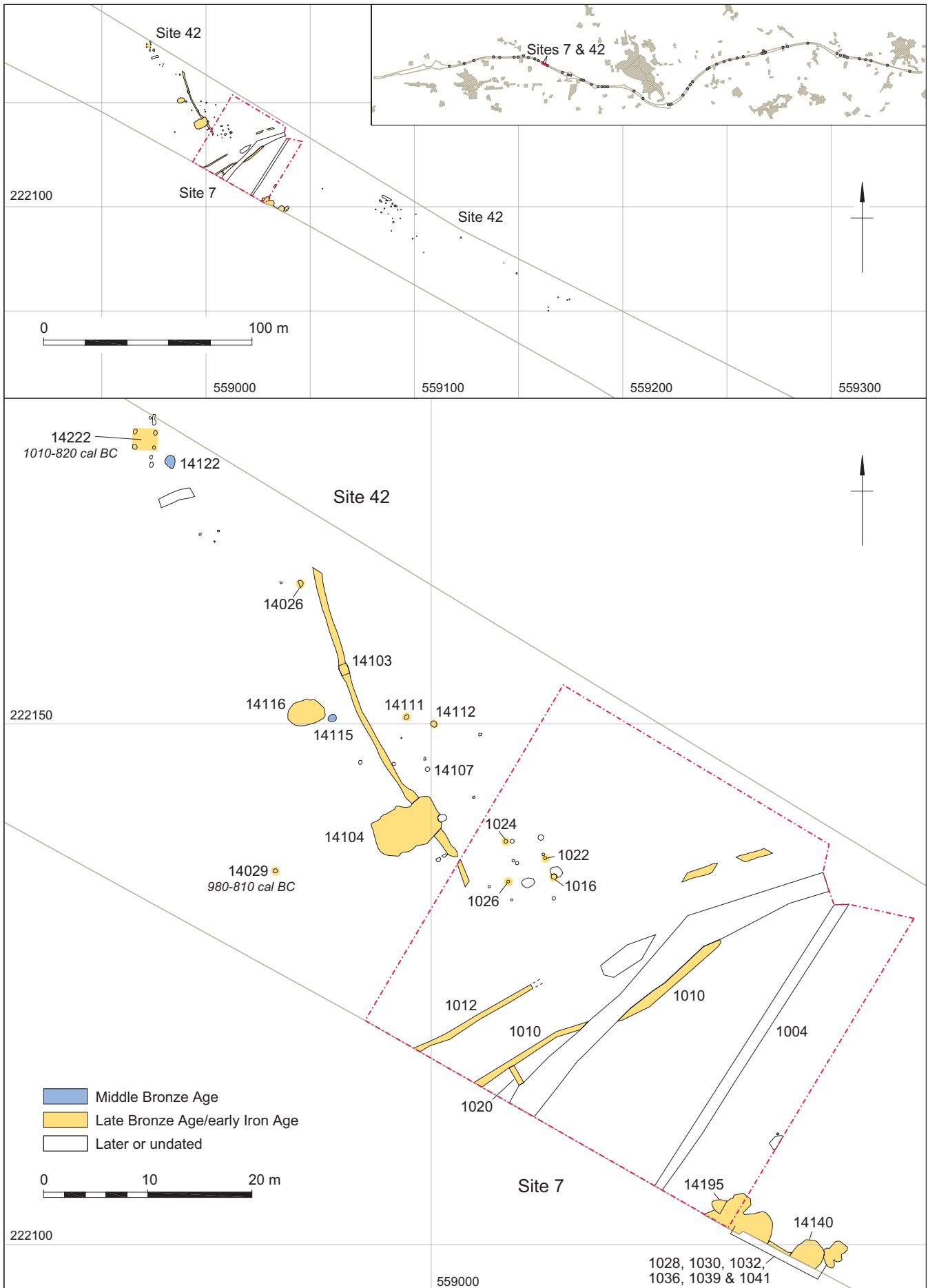


Fig. 2.8 Stone Hall (Sites 7/42): site plan showing location of middle Bronze Age and late Bronze Age-early Iron Age features

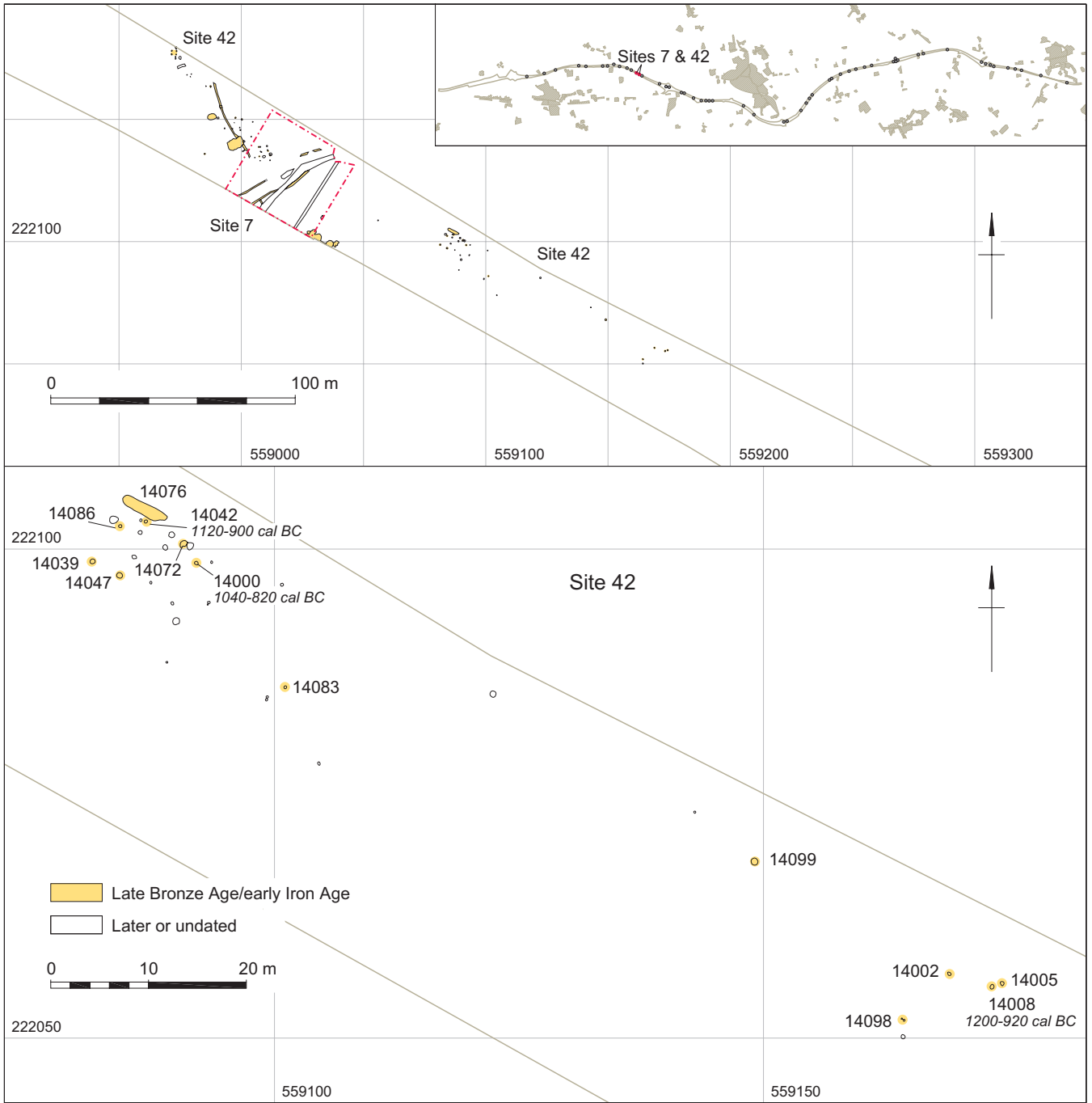


Fig. 2.9 Stone Hall (Site 42): details of south-west group of late Bronze Age/early Iron Age features

Table 2.5 Late Bronze Age radiocarbon dates

Lab No.	Site	Feature	Context	Material
NZA 19582	West of Ongar Road	Cremation burial 21013	21011	Charred plant remains
NZA 19583	Grange Lane	Cremation burial 28004	28021	Charcoal (maloideae, alnus, corylus)
NZA 19584	Stone Hall	Cremation burial 14008	14011	Charred plant remains
NZA 19585	Stone Hall	Cremation burial 14000	14001	Charcoal (maloideae)
NZA 19586	Stone Hall	Cremation burial 14029	14030	Charcoal (maloideae)
NZA 19587	Stone Hall	Posthole 14126 in 4-post structure	14201	Charcoal
NZA 19588	Stone Hall	Cremation burial 14042	14041	Fraxinus sapwood

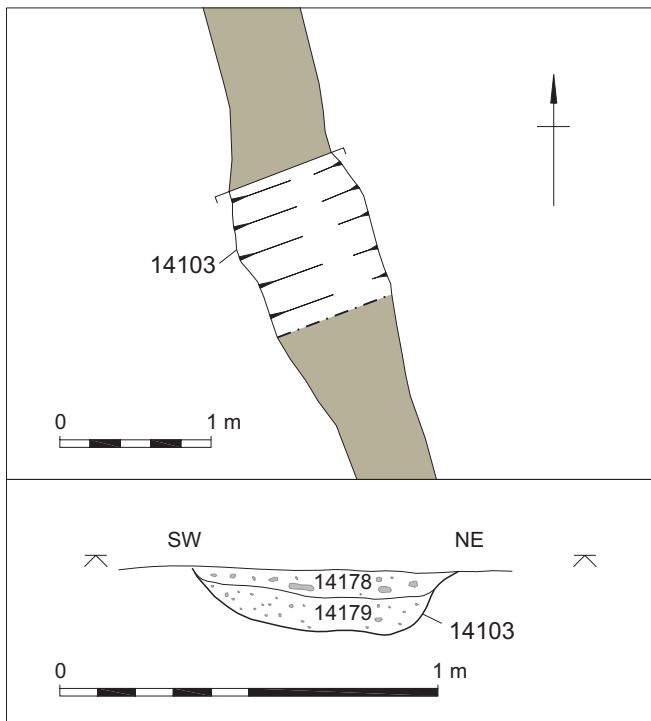


Fig. 2.10 Stone Hall (Site 42): section of ditch 14103

and an undated posthole (14107), raises the possibility that these too had some function related to the burials, although this cannot be established. A small group of four possibly associated postholes (1016, 1022, 1024 and 1026) at the south-eastern end of ditch 14103, one producing seven post-Deverel-Rimbury sherds, formed no apparent structure.

There was a similar, although more extensive spread of features distributed over 130 m to the south-east of the droveway and probably extending beyond the road corridor to the north-east (Fig. 2.9). These were most densely concentrated at the north-west, thinning in their distribution to the south-east. Approximately half of them were excavated, and while some contained cremation burials others are less easy to interpret, although as with the features to the north-east it is reasonable to assume that many were associated with the mortuary activity. Among them were nine containing varying quantities of cremated human bone, four of which (14000, 14008, 14039 and 14042) contained over 100 g

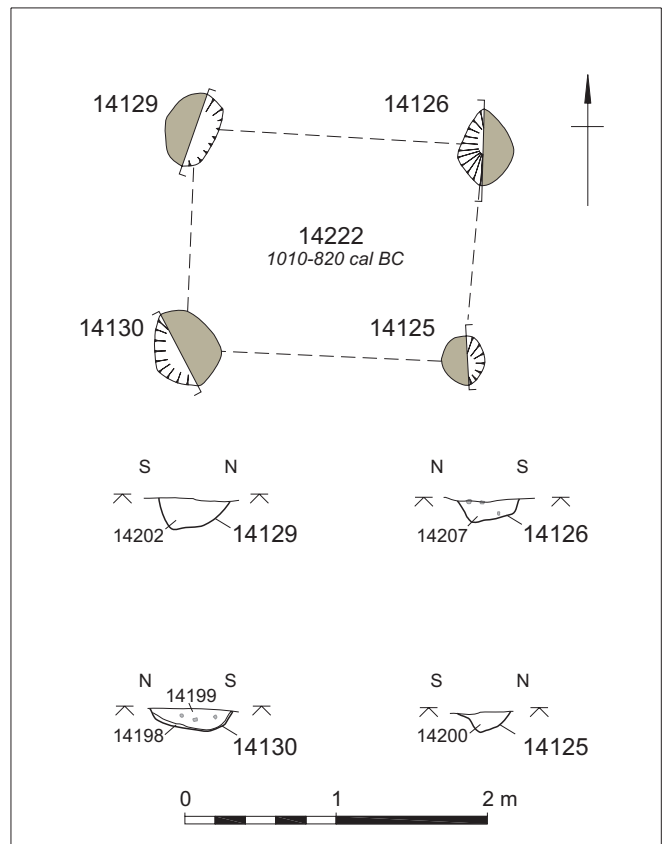


Fig. 2.11 Stone Hall (Site 42): plan and sections of four-post structure 14222

of bone and can be most readily characterised as graves. These were between 0.34 m and 0.6 m in diameter and up to 0.3 m deep. Three of them (14000, 14039 and 14042) had single fills, containing bone from individuals aged over 20 years, that from grave 14039 possibly being female. Feature 14008 had three fills, most of the bone, from a female aged over 15 years (241 g), coming from the main upper fill (14011). Pyre debris from three of the burials provided three radiocarbon dates falling within the late Bronze Age: 1200–920 cal BC from burial 14008 (NZA 19584: 2878 ± 40 BP), 1120–900 cal BC from burial 14042 (NZA 18588: 2838 ± 40), and 1040–820 cal BC from burial 14000 (NZA 19585: 2806 ± 35 BP) (Table 2.5).

Five other features of varying size (14002, 14005, 14083, 14098 and 14099) contained much smaller quantities of bone, less than 10 g. While it is possible that some of these were deliberate deposits—two of the features for example (14002 and 14005) contained bone from infants (0.5 g and 1.8 g respectively)—it is also possible that much of the material represents redeposited pyre debris within features that had other functions. They varied in size, feature 14098, for instance, which contained 4.1 g of bone from an individual aged over 13 years, being only 0.2 m in diameter and 0.1 m deep, while feature 14099 (Fig. 2.12) containing less than 1 g of bone, was up to 0.65 m wide and 0.3 m deep with moderately steep, irregular

Radiocarbon age (BP)	Calibrated date range cal BC (95% confidence)
2678 ± 40	905 - 796
2838 ± 40	1120 - 900
2878 ± 40	1199 - 922
2806 ± 35	1037 - 84
2748 ± 35	976 - 818
2769 ± 40	1002 - 824
2838 ± 40	1120 - 900

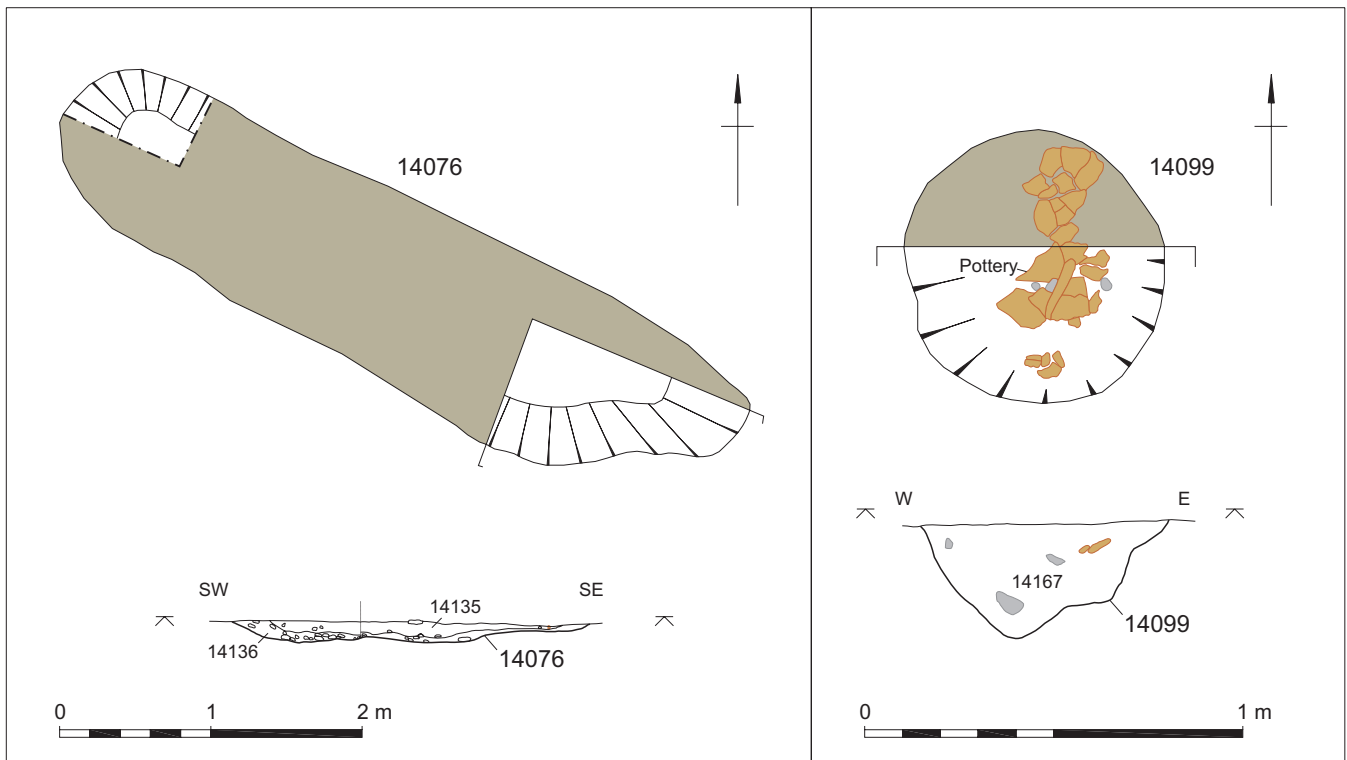


Fig. 2.12 Stone Hall (Site 42): plan and sections of features 14076 and 14099

sides. The latter also contained 84 sherds of post-Deverel-Rimbury pottery (plus three sandy ware sherds of early/middle Iron Age date) (see Fig. 2.17 no.5 below). The only other pottery from these features comprised a single post-Deverel-Rimbury sherd from feature 14083, which contained bone from an individual aged over 20.

No pyre sites were identified, although a linear feature (14076), *c* 5 m long and 1.2 m wide aligned approximately NW-SE, may have had some function in relation to either the cremation or the burial rites (Fig. 2.12). At the south-east end it had two fills, the lower fill of densely packed flint pebbles and sandstone being overlain by a layer dark brown/black silty clay containing a high percentage of burnt inclusions including cremated human bone, burnt clay and charcoal. Both fills produced post-Deverel-Rimbury pottery, the upper fill also producing a number of residual middle Bronze Age sherds and one sandy ware sherd of early/middle Iron Age date.

A further 25 mainly small features were excavated in this area, of variable size, shape and content, although none produced human bone. Most of the pottery from these features was post-Deverel-Rimbury date, although in some cases with a few residual middle Bronze Age sherds. One feature (14072) may date to the early Iron Age. Again, there was little to indicate their function, although feature 14047, possibly a posthole, had a dense packing of burnt stone, burnt flint and charcoal on its north side, while feature 14086 had burnt stones covering its base. Eleven of the features contained no datable finds.

The other main component of the site was a series of large pits, on both sides of the driveway (Fig. 2.8). There were two pits to the north-west (14104 and 14116). Pit 14104 straddled the perpendicular ditch 14103, and it is possible that the Bronze Age material in it was residual. It was 6.5 m by 4.1 m wide and 1 m deep, with steep sides and an irregular base. The primary fill was overlain by a 0.21 m thick layer containing four middle Bronze Age sherds, one post-Deverel-Rimbury sherd and eleven pieces of animal bone. Above this was a similar layer with no finds, then a layer tipped in from the north side of very dark grey/black gritty silt containing much charcoal and burnt shattered flint fragments, as well as a further 15 sherds of post-Deverel-Rimbury pottery and a piece of animal bone. A piece of post-medieval ceramic building material (CBM) found in this layer probably dates to the subsequent silting up of the feature, the upper two thirds of the cut being filled with a pale brown silty clay which produced further middle and late Bronze Age sherds and pieces of CBM.

The smaller, oval pit (14116) (Fig. 2.8) was 3.6 m by 2.4 m wide and over 0.5 m deep, with irregular sides and a flattish base. Above the sterile primary fills was a 0.12 m thick silty clay layer (14206) with moderate amounts of charcoal, producing three sherds of post-Deverel-Rimbury pottery, suggesting the date of the pit's construction. A 0.34 m thick deposit on the eastern side of the pit (14207) produced 41 sherds of an early/middle Iron Age jar (see Fig. 2.39 no.2 below) as well as further middle and late Bronze Age sherds; this layer appeared

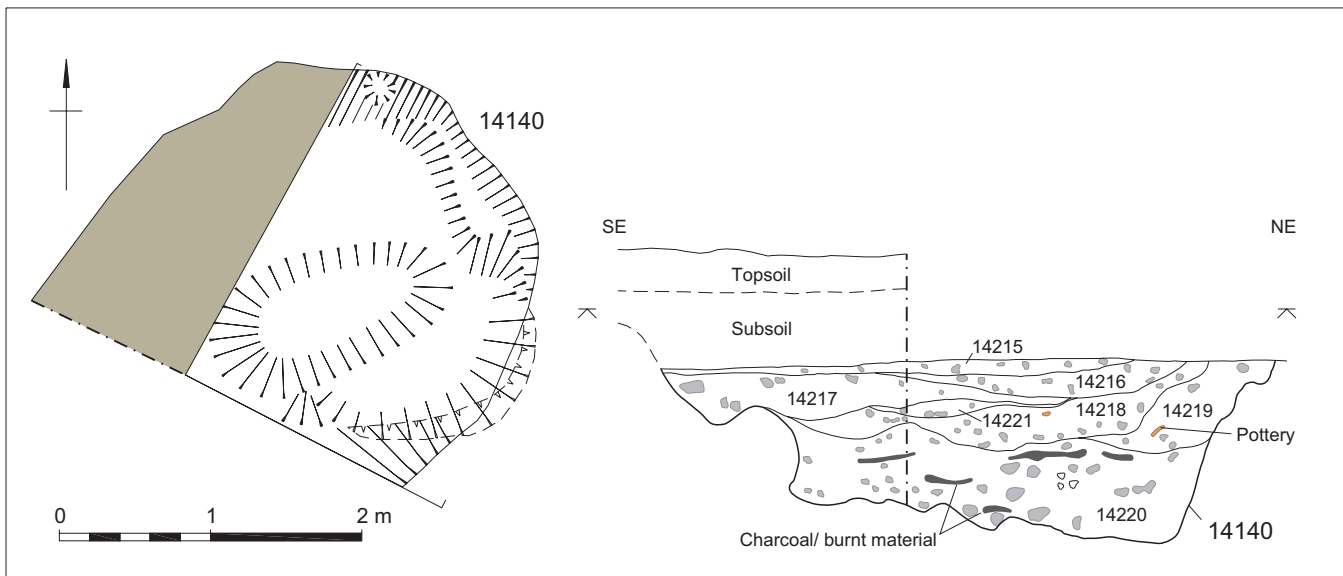


Fig. 2.13 Stone Hall (Site 42): plan and sections of pit 14140

to fill a cut in layer 14206, suggesting the clearing out and continued use of this feature in the Iron Age. The upper fill, a 0.28 m thick layer of light brownish grey silty clay sealing both layers, produced a further mix of Bronze Age and Iron Age sherds, as well as five worked flints and burnt flint.

There were a number of the inter-cutting pits, covering an area some 12 m by 15 m, at a similar distance from the driveway on its south-east side, some of which were excavated (1028, 1030, 1032, 1036, 1039, 1041, 14195 and 14140). Between them they produced a number of post-Deverel-Rimbury sherds and fragments of either very degraded pottery or fired clay. Most pit fills contained some charcoal, although the lowest of the three fills in pit 1032 had a very high charcoal content. Most were between 1 m and 2 m in diameter, with an average depth of 0.35 m, with generally concave sides and rounded bases.

The largest excavated pit (14140), however, was 4.3 m in diameter and 1.4 m deep, with a subcircular shape, an irregular, steep and stepped profile and uneven base (Fig. 2.13). The primary fill, a 0.3 m thick layer of pale brown silty clay with lenses of charcoal, redeposited natural and silts, produced 11 post-Deverel-Rimbury sherds, a flint scraper and ten pieces of animal bone. A dump of material tipped in from the east side of the pit covered a complete horse skull that had been placed on one of the level 'steps' around the edge of the pit. Overlying both fills was a 0.35 m thick layer of very dark brown silty clay (14218) with much charcoal flecking, containing further pottery, a copper alloy brooch pin, and single pieces of worked flint, burnt flint and burnt stone. There were four further fills, 14217, 14216, 14215 and 14217, which contained 15 pottery sherds of late Bronze Age to early/middle Iron Age date.

The function of these pits is unclear, and their varying

dimensions suggest that no single interpretation is likely to suffice. The excavation of pit 14140, for instance, would have produced a large volume of the mixed chalk and clay natural, which might have had different uses within different domestic and economic contexts. The resulting pit may have been used as a waterhole, although the deliberate placing of the horse skull on a ledge on one side suggests some symbolic significance additional to any simply practical function. Subsequently, material including pottery and charcoal was placed (or dumped) in the pit, although the small range of material is not what might be expected from domestic waste, there being, for instance, little animal bone recovered other than horse skull.

Another large subcircular pit (13002) was excavated some 240 m to the north-west of pit 14140 at West of Stone Hall (Site 41). It was 6.7 m in diameter and 1.2 m deep, with a generally shallow concave profile, and produced 56 post-Deverel-Rimbury sherds and 15 sandy ware sherds (see Fig. 2.17 no. 4 below). All but two of the latter sherds came from the upper of its three fills, suggesting a late Bronze Age date for its construction, but continuing to silt up into the early Iron Age. There were also 68 worked flints, stone and charcoal, the flintwork representing largely a dump of knapping waste, although use-wear was noted on six of them. Two undated features to the east of this pit—a c 1 m diameter pit (13001) producing charcoal and two pieces of animal bone, and a tree-throw hole (13003) with signs of burning—may be associated.

Strood Hall (Sites 43/44)

As in the middle Bronze Age, the evidence for activity around Strood Hall continues to be very fragmentary, consisting of a small scatter of pottery in adjacent, but later, features.

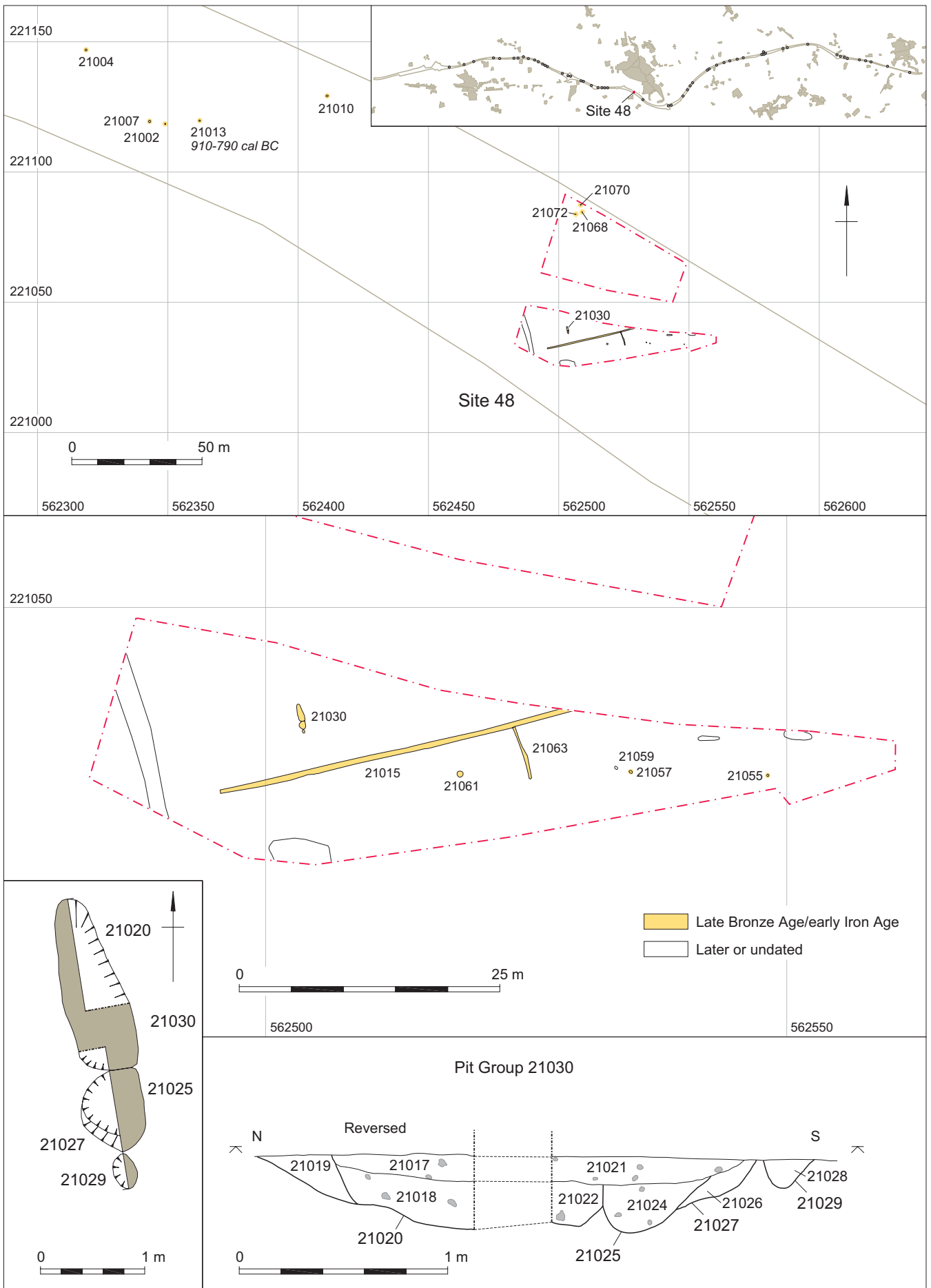


Fig. 2.14 West of Ongar Road (Site 48): plan showing prehistoric features. Detailed plan and section of pit group 21030

At Site 43 a single large isolated pit, 15012, produced a moderate collection of late Bronze Age pottery including two fineware bowls and a shoulder jar (*see Every CD/Chapter 4 prehistoric pottery*), along with worked and burnt flint, animal bone and fired clay. A further small isolated late Bronze Age pit, 16103, was recorded on Site 44.

Great Dunmow Round House (Site 12)

The evaluation trenches at Great Dunmow Round House (Site 12; Fig. 2.7) recorded a series of largely undated ditches. One of these (120211), however, produced 16 sherds of post-Deverel-Rimbury pottery at the base of its single fill and 97 pieces of animal bone (horse mandible) towards the top (*see Evans CD/Chapter 6 for animal bone report*). The ditch was recorded over a distance of at least 75 m running ENE-WSW, and was *c* 1.4 m wide and 0.4 m deep. A second, undated, ditch (120209), over 4 m wide but of a similar depth, ran parallel to it 1.3 m to the south-east and was recorded for *c* 35 m. It is possible that these ditches formed part of a late Bronze Age field system.

The evidence for late Bronze Age activity at Highwood Farm (Site 11) some 230 m to the north-west consisted entirely of a low-density scatter of sherds recovered from Iron Age features.

West of Ongar Road (Site 48)

Further east, a number of widely dispersed features point to activity on the west side of the River Chelmer, overlooking Hoblong's Brook to the south (Fig. 2.14). Although the majority of these features were undated or insecurely dated, all of the pottery (76 sherds weighing 552 g), with the exception of a single sandy ware sherd, was post-Deverel-Rimbury, and the array of undated features are therefore assigned to the late Bronze Age.

The features included a curving line of the five small cuts, all under 1 m wide and 0.25 m deep, three of which (pits 21002, 21004 and 21007) contained small quantities of post-Deverel-Rimbury pottery, as well as, between them, a few pieces of animal bone, worked flint, fired clay and charcoal. A fourth feature (21010) of similar size interpreted as a posthole, had a compact packing of interlocking flint nodules and occasional pebbles, and a post-pipe containing patches of burnt clay and charcoal flecks. It produced over 50 sherds (including the site's single early/middle Iron Age sandy ware sherd), and single pieces of animal bone and flint.

The fifth feature was a cremation burial (21013), the grave being 0.6 m in diameter and 0.2 m deep, with shallow sides and concave base. The lower fill of mid brown-yellow clayey silt contained no finds, but the upper fill, in the centre of the cut, contained 1085 g of cremated human bone of a possible male aged over 40 years, in a loose black soil containing much charcoal

and burnt clay, probably representing redeposited pyre debris and indicating the likely proximity of the pyre site. The burial provided a radiocarbon date of 910–790 cal BC (NZA 19582: 2678 ± 40) (Table 2.5), making it potentially contemporary with the other features.

Some 130 m to the ESE, there was a tight group of postholes (20168, 21070 and 21072) spaced some 5 m apart and forming a near right angle. As such they possibly represent part of a rectangular structure, although this would have been considerably larger than the four-post structure at Stone Hall (above). The postholes were up to 0.3 m wide and 0.26 m deep, and although only posthole 21070 contained a single post-Deverel-Rimbury sherd, the three are likely to be associated.

Approximately 90 m to the south of the three postholes was a group of varied but largely undated features, including a number of ditches and other features in a rectilinear arrangement. The main element was a straight ditch (21015) aligned approximately east-west and recorded for some 65 m. It was up to 0.55 m wide and 0.27 m deep, with a variable profile, and produced a sherd of post-Deverel-Rimbury pottery, a flint blade and a piece of featureless fired clay. Running south at a right angle from its east end was a 10 m long shallow gully (21063), while to the north, also at a right angle, there was a linear structure (21030), 2.4 m long and up to 0.6 m wide, of unknown function, comprising a short linear slot with two postholes, 0.6 m and 0.4 m in diameter, in its base and a third, 0.2 m in diameter, immediately to its south (Fig. 2.14). In isolation this feature, which produced just three worked flints, is hard to interpret, although it may have formed part of some rectangular, post-in-slot structure. In the same general area there was a shallow circular scoop (21061) containing charcoal, one pair of postholes (21057 and 21059), and one single posthole (21055).

Clobbs Cottage (Site 18), Grange Lane (Sites 20/49) and East of Little Dunmow Road (Site 50)

The low level of middle Bronze Age activity recorded between the River Chelmer and Stebbing Brook continued in this period, being represented by a small number of features at three sites, and residual sherds at North of Clobbs Wood (Site 17a) and Throes Farm (Site 22).

Two features containing post-Deverel-Rimbury pottery were recorded in evaluation trenches at Clobbs Cottage (Site 18). A single posthole (180804) from trench 1808, which showed evidence of burning, produced two sherds and fragments of fired clay, while an irregular, possibly natural feature (180304) in trench 1803 produced 25 sherds from a single vessel, five of them with tooled decoration.

Less than 1 km to the north-east, two shallow pits containing post-Deverel-Rimbury pottery were recorded

among features associated with the middle Iron Age enclosure at Grange Lane, in approximately the same area as the earlier middle Bronze Age pit 28005 (above). Subcircular pit 1128, which was *c* 0.8 m in diameter, produced 10 sherds (and four residual middle Bronze Age sherds). Pit 28010 (Fig. 2.15; Plate 2.3), however, which was *c* 1 m in diameter, contained 228 sherds of pottery, 23 pieces of animal bone (including red deer), as well as fired clay, burnt flint and stone, charcoal and a worked flint. The base of the cut had not been scorched, and this appears to represent a deposit of mixed materials, possibly of domestic origin, although the proximity of two unurned cremation burials (28004 and 28006) could point to some other function.

The burials, just over 10 m apart (see Fig. 2.15), contained the remains of two possible females, one aged *c* 11–12 years (238 g), the other aged *c* 30–45 years (1238 g). Each had been placed in small flat-based

graves *c* 0.3–0.4 m wide, the fills of both graves containing charcoal, probably the remains of pyre debris. Although neither produced datable finds, charcoal from grave 28004 (Plate 2.4) produced a radiocarbon date of 1120–900 cal BC (NZA 19583: 2838 ± 40 BP) (Table 2.5).

Further post-Deverel-Rimbury sherds were found in the fills of the Iron Age enclosure ditch, particularly near the entrance, as well as in adjacent features. Although a number of ditches (1033, 1039 and 1050) to the east of the enclosure produced only post-Deverel-Rimbury pottery, they are all aligned on the enclosure entrance, suggesting that they are probably associated with it (they are described below).

At the west end of the East of Little Dunmow Road (Site 50), two features (pit 30216 and shallow scoop 30573) in the vicinity of the middle Iron Age round-house (48205) (see Fig. 2.26 below) produced small

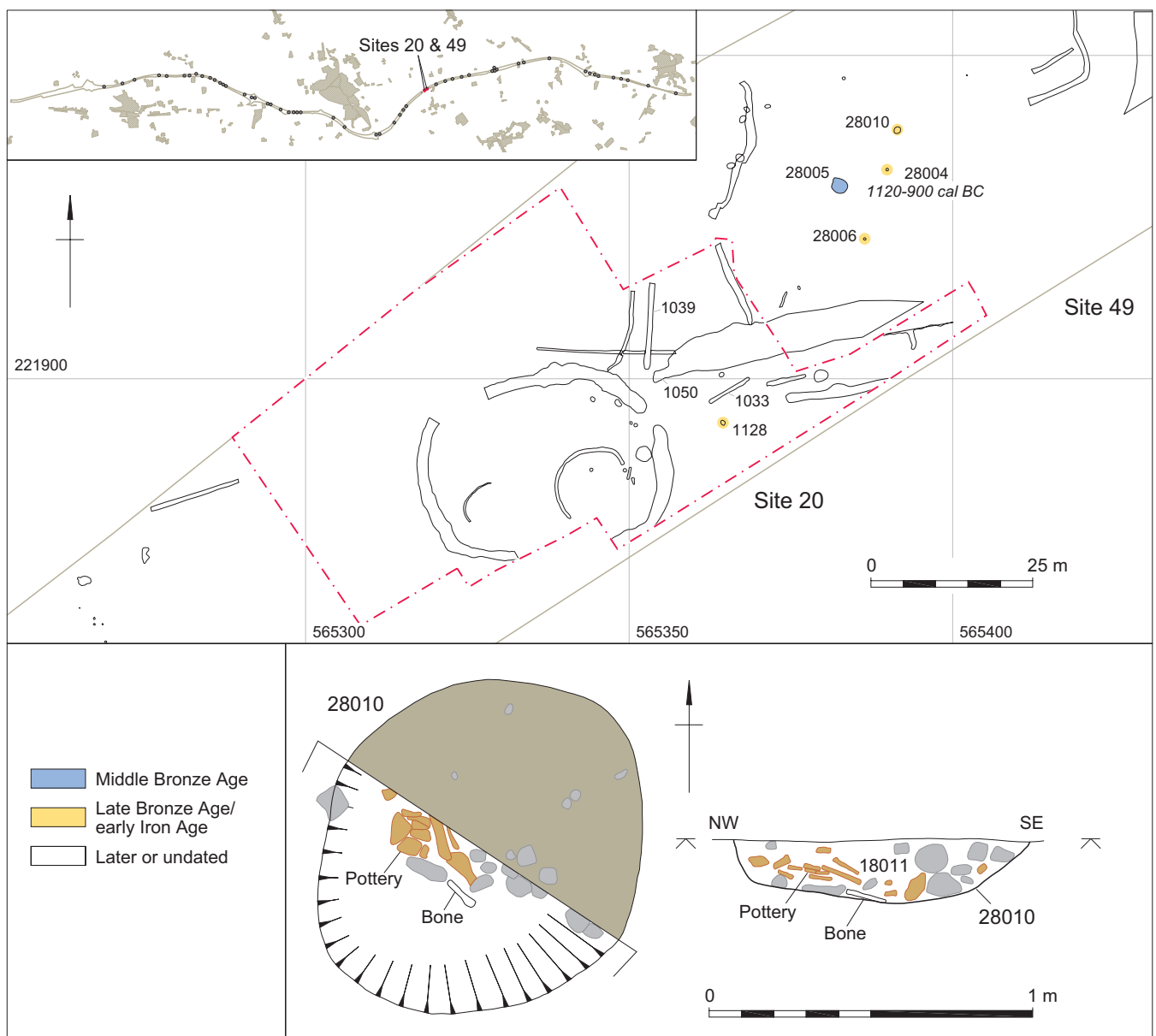


Fig. 2.15 Grange Lane (Sites 20/49): site plan showing location of prehistoric features. Detailed plan and section of pit 28010

amounts of exclusively post-Deverel-Rimbury pottery. A third pit (30203) containing animal bone but no datable finds was stratigraphically earlier than the roundhouse (see section Fig. 2.28 below) and may be associated with the late Bronze Age activity. In addition, a short angled length of gully (30073) 85 m to the ENE produced a

fragment of post-Deverel-Rimbury pottery, as well as slag (14 g) and animal bone (3 g). The gully, which was up to 0.45 m wide and 0.15 m deep with concave sides and base, ran south-east from the edge of the excavation, turning at an angle to the east before being truncated by ploughing.



Plate 2.3 Grange Lane (Site 49): late Bronze Age pit 28010



Plate 2.4 Grange Lane (Site 49): late Bronze Age unurned cremation 28004

Greenfields (Site 28)

The early significance within the landscape of the pingo (1057) at Greenfields, as suggested by the possibly formalised deposit of a complete middle Bronze Age vessel in an adjacent pit and the recovery of middle Bronze Age pottery from the hollow's lower fills (see

above), appears to continue during the late Bronze Age, with further special deposits in the hollow and a range of other features around it (see [Figs 2.6 and 2.16](#); [Plates 2.5–6](#)).

Post-Deverel-Rimbury pottery was found throughout the fills of the hollow, including in the lower layers where



Plate 2.5 Greenfields (Sites 27/8): pingo working shot



Plate 2.6 Greenfields (Sites 27/8): pingo

it was associated with animal bone (mostly cattle but also pig tooth), worked flint (including one deposit of six very freshly struck flakes), burnt sandstone and burnt flint. Butchery cut marks were noted on one cattle humerus, and carnivore gnawing on a cattle metatarsal suggests the presence of dog on the site. Also found with the pottery (but only in the three lowest fills and in two small features, one cutting the hollow's south-east side, the other cutting the primary fill) were over 500 fragments (weighing over 2 kg) of clay moulds used in bronze metalworking (Fig. 2.18). Most derived from the inner valves of bivalve casting units, with a smaller proportion of 'outer wrap' fragments, their form and curvature suggesting they had been used in the manufacture of sword blades. The material augments the considerable body of late Bronze Age casting moulds from elsewhere in the region, most notably the large assemblage from Springfield Lyons, Chelmsford, which, like the Greenfields assemblage, appears to represent almost exclusively sword manufacture within the Ewart Park tradition of the 9th to 8th centuries BC (Needham 1987).

No crucible fragments were identified, and there was no other associated metalworking debris from the site, but it appears that, as at Springfield Lyons, the mould fragments represent material deliberately selected for deposition rather than a general dump of metalworking debris. Apart from a few possible cross-context joins, the mould fragments from the different layers in the hollow have distinct characteristics suggesting that they represent a number of separate deposits, rather than one single dump subsequently reworked into several different contexts. Some mixing, however, had taken place, the second lowest fill containing also early/middle Iron Age pottery. No mould fragments, however, were found in the five upper fills within the hollow (and a number of associated small features) where the pottery was of predominantly Iron Age and Romano-British date (for a selection of pottery from the site see Figs 2.39–40 below).

The significance of the hollow must remain a matter of conjecture, although it is likely to have provided some of the context for a cluster of other late Bronze Age

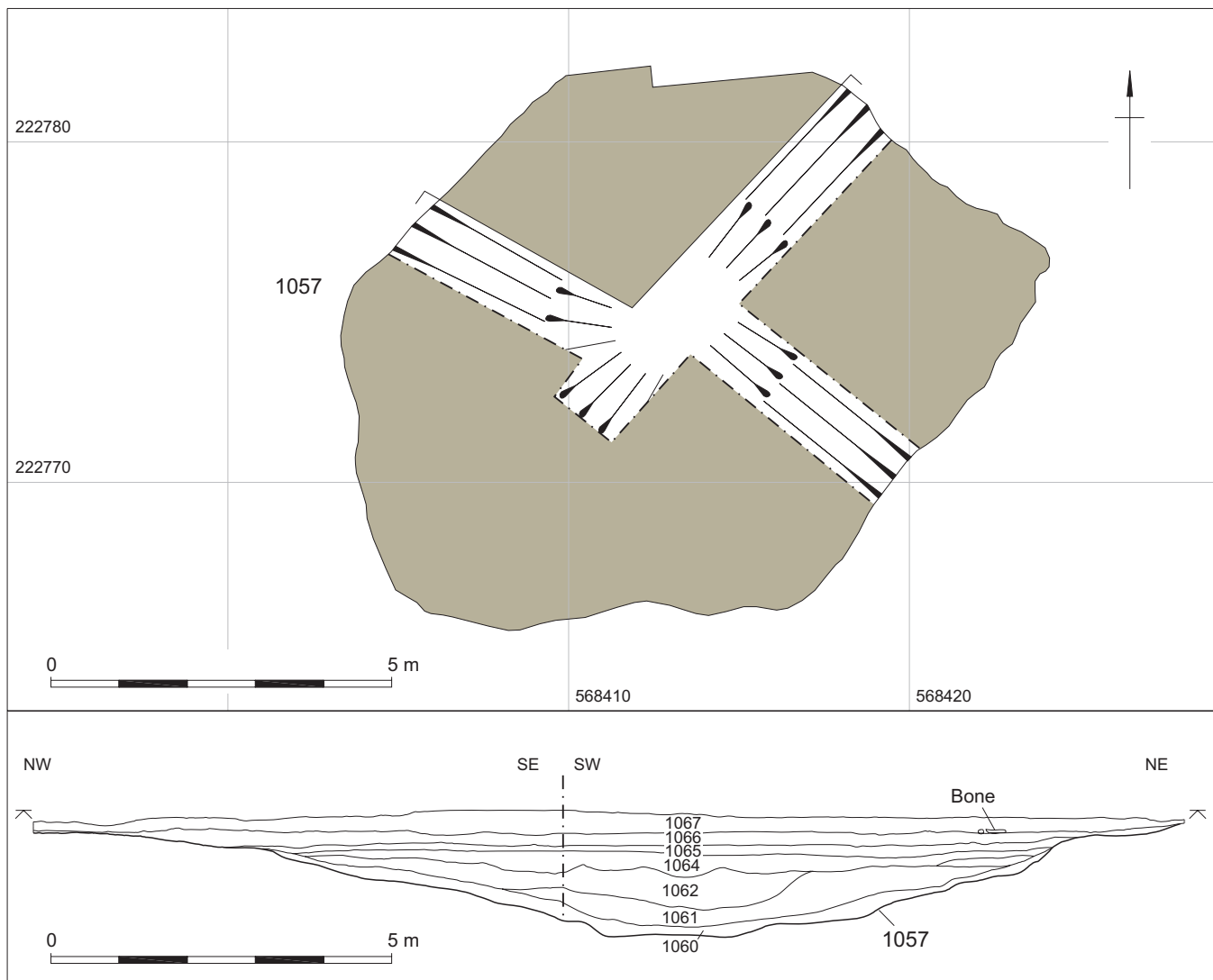


Fig. 2.16 Greenfields (Site 28): plan and section of pingo feature 1057

features around it. These include a largely undisturbed cremation burial (1048) some 14 m to the south. The circular grave, which was *c* 0.5 m in diameter and 0.3 m deep with vertical sides and a flat base, contained the cremated bone (1054 g) from a male aged *c* 25–40 years. The bone appeared charcoal stained, suggesting some aspect of the mortuary practise that rendered the bone more absorbent—perhaps the use of oils or other semi-liquid substances poured over the bone after cremation but prior to final deposition. The grave fill included pyre debris in the form of *c* 50% charcoal, and burnt flint, indicating the likely proximity of the pyre site, as well as four sherds of post-Deverel-Rimbury pottery. The charred plant remains from the grave included weeds from cultivated or waste ground, grass stems possibly from the burning of hay and a few hedgerow fruit and nut remains possibly added to the pyre as part of the rites accompanying the cremation.

Some 10–20 m to the south and south-west of the hollow, in the same area as the two middle Bronze Age features (1028 and 1035, above) there was a group of small pits and postholes, seven of them dated to the late Bronze Age, and a further six (with a seventh to the north of the hollow) being undated. The largest of them (pit 1014), which was *c* 1.2 m in diameter and 0.3 m deep with moderately steep sides and a concave base, produced 89 sherds of post-Deverel-Rimbury pottery, a copper alloy fragment, seven flints (including two flake and a broken blade) and five pieces of animal bone, as well as charcoal, burnt flint, burnt stone and fired clay. Charred plant remains included chaff fragments of emmer and spelt wheat, with some hulled barley as well

as a few cereal grains and weed seeds, probably representing fine-sieving waste from piecemeal processing of grain prior to cooking.

A slightly smaller pit (1039), 1 m in diameter and 0.2 m deep, with shallow to moderately steep sides and a flat base, produced 13 sherds of post-Deverel-Rimbury pottery (and a residual middle Bronze Age sherd), burnt clay, charcoal and a piece of animal bone. Feature 1003, which was 0.55 m in diameter and 0.1 m deep with near vertical sides and a flat base, produced a pig's tusk and 132 sherds of post-Deverel-Rimbury pottery from seven different vessels (including finewares), as well as burnt flint and charcoal. Four other smaller features (1016, 1024, 1033 and 1050), some possibly postholes, contained similar material, feature 1024 producing similar crop processing waste to that in pit 1014.

Immediately north of the hollow was a subrectangular hearth (1019) (Plate 2.7) measuring 0.63 m by 1.15 m and 0.06 m deep, containing a number of large pieces of charred wood, as well as fired clay, burnt animal bone, and 131 sherds of post-Deverel-Rimbury pottery (plus five sandy ware sherds of early/middle Iron Age date, possibly intrusive). In contrast to pit 1014 and feature 1024, the charred plant remains from the hearth contained a much higher ratio of grain to chaff (*c* 2:1), this material possibly originating as semi-processed grain in spikelet form that was being parched over the fire in order to remove the chaff prior to cooking. Since the weed seeds from these features were general weeds of waste and disturbed places, such as docks, cleavers and chess, they provide little information about crop husbandry.

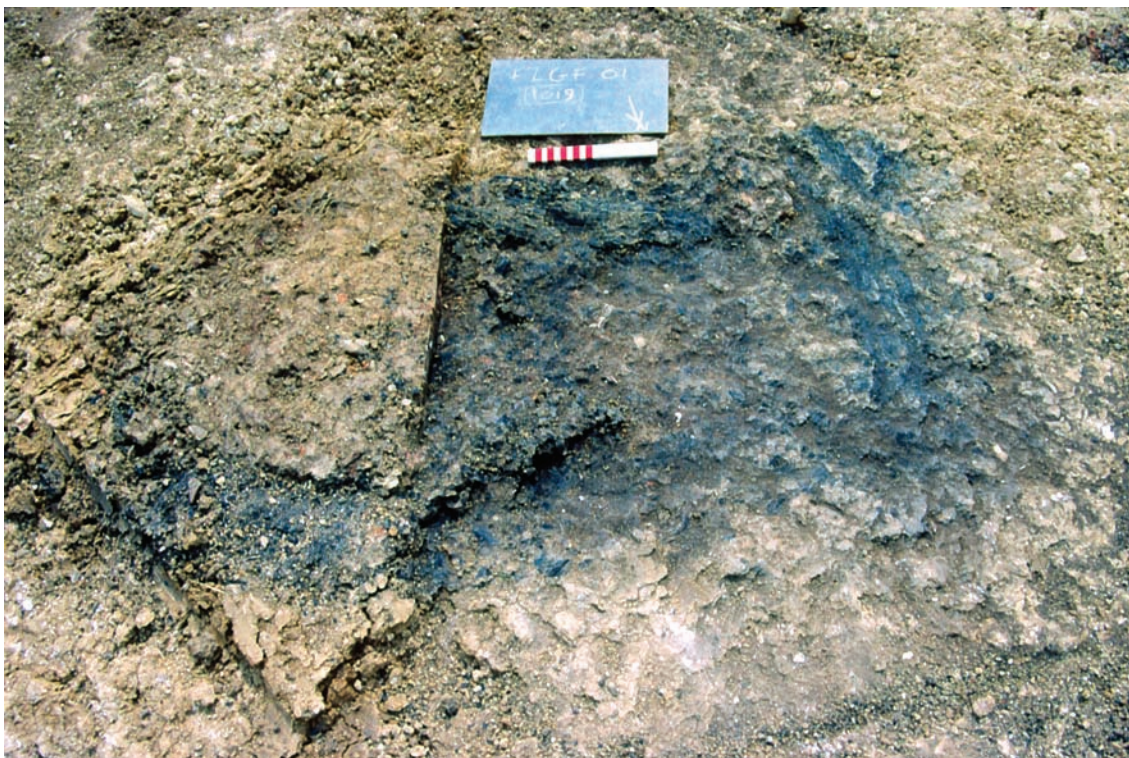


Plate 2.7 Greenfields (Sites 27/8): late Bronze Age hearth 1019

The range of activities represented by the material recovered from the varied features on this site—much of the pit contents probably deriving from a domestic context, the cattle and pig bone and cereal grain indicating agricultural and subsistence activities, the cremation burial representing mortuary activity and the mould fragments the by-product of industrial activity—point to the likely presence nearby of a substantial settlement. Whether any of these features, however, formed part of that settlement is open to question. Even the hearth, potentially a symbol for domesticity, seems unlikely in this case to have had a domestic role, its position on the edge of the pingo making it more likely to be associated with the particular activities undertaken in and around this distinctive feature.

To the immediate south-west of Greenfields, two large circular late Bronze Age pits were recorded during the evaluation stage at Stebbingford Farm Borrow Pit (Trench 5) (see CD-Rom section 3). A single sherd of flint-tempered post-Deverel-Rimbury pottery and two flint flakes were retrieved indicating low-density late prehistoric activity.

Discussion

The increase in the number of sites providing evidence of activity, from 11 in the middle Bronze Age to 19 in the late Bronze Age, and the more than doubling in the number of sites with archaeological features, indicates the steady expansion of settlement across the clay plateau landscape during this period. A similar pattern of dispersed settlement has been recorded at Stansted to the west (Framework Archaeology 2004). As in the middle Bronze Age, this activity is represented at the majority of sites by just pits and ditches. However, along the A120 as a whole a far wider range of features was recorded, and a number of sites, in particular Stone Hall, contained complex arrangements of features offering a much fuller picture of domestic, economic and other social practices.

The pottery assemblage is generally characteristic of the post-Deverel Rimbury ceramic tradition found at many other sites in the region (Fig. 2.17 nos 3–12), and marking a continuation of the ceramic sequence from the middle Bronze Age. The predominance of flint-tempered wares in coarseware jar forms, and the low incidence of decoration, suggests that the assemblages from Stone Hall, Grange Lane and Greenfields were relatively early within the tradition, perhaps broadly contemporary with those from Broads Green and Springfield Lyons lower ditch silts (Brown 1988b; 1987) dated approximately to the 10th to 8th century BC.

All the settlements along the A120 appear still to be unenclosed, in contrast to some of the ditched enclosures in the Chelmer Valley, such as Springfield Lyons (Buckley and Hedges 1987b), Great Baddow (Brown and Lavender 1991; 1994), Lofts Farm, Heybridge (Brown 1988a), and possibly Felsted (Champion 1980) as well as

at North Ring, Mucking on the Thames estuary (Bond 1988). Moreover, settlement structures remain elusive—there was no evidence for roundhouses, such as the post-built roundhouses at Stansted, Springfield Lyons, Lofts Farm and North Ring, Mucking.

The only clearly recognisable structure was the four-post structure recorded at the north-west end of Stone Hall (Sites 7/42). Similar features, frequently found in Iron Age settlements and usually interpreted at granaries/stores, have also been found on late Bronze Age settlements such as at Lofts Farm, Essex, and Bradley Fen, Cambridgeshire (Knight 2000). If this interpretation is correct, it would suggest that the focus of any settlement would have been in the immediate vicinity. The range and extent of other features at Stone Hall indicate that such a settlement formed an integral part of an organised landscape, exploited for varied purposes.

Other possible structures may be represented by the right-angled arrangement of three postholes, and the linear slot and posthole feature at West of Ongar Road (Site 48), the latter being similar, for example, to elements of the rectangular post-in-slot and beam-slot structure at the late Bronze Age settlement at Broads Green, also sited on the boulder clay plateau (Brown 1988b, fig.3).

In spite of the possible granary at Stone Hall, Greenfields (Site 28) was the only site to produce useful quantities of charred plant remains from this period, providing evidence for the cultivation of emmer and spelt wheat, probably in roughly equal proportions, and some barley. The assemblages from four of the features at the site point to different aspects of the activities both on the site and within the surrounding landscape. Although the number of barley grains was not great, this cereal was found in all three samples producing cereal remains and was more frequent than in any of the Iron Age and Romano-British samples. Only a few leguminous weed seeds and no seeds from wetland plants were present. The charred grass stems from the cremation burial may indicate the cultivation of hay, although there were few meadow taxa to support this suggestion, while the thistles, clover/trefoil and sheep's sorrel also found in the deposit are common grassland and waste ground plants, the last of these reflecting the acidic nature of the soil.

These remains suggest, therefore, that fairly low intensity cultivation of the better-drained, more fertile soils in the area was taking place during this period. Pollen analysis from the clay plateau at Stansted Airport points to an intensification of clearance associated with arable farming from about 1050 BC (Wiltshire 1991) and continuing through the late Bronze Age.

The small and fragmentary animal bone assemblages from the A120 during this period provide little information about animal husbandry techniques, although they indicate the presence of cattle, sheep/goat and pig. The assemblage from the quarry pit at West of Strood Hall

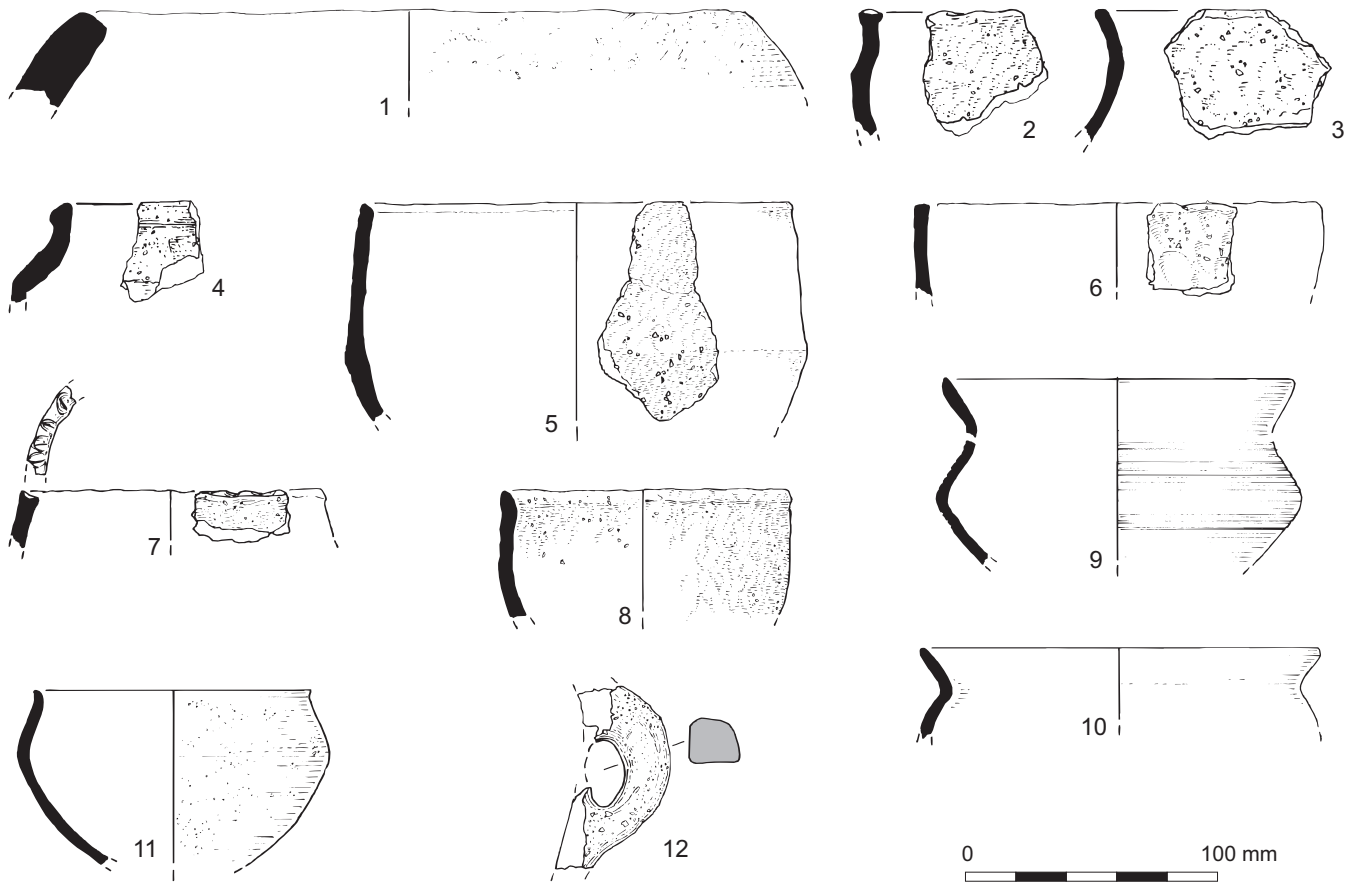


Fig. 2.17 Selection of middle-late Bronze Age-early Iron Age pottery

(Site 43), points to the killing of these animals as juveniles under the age of one year. Horses were also present, while the dogs are implied by the incidence of gnawing found on a number of bones.

The various linear ditches recorded at five of the sites provide further indirect evidence of farming practices. Again, the clearest evidence of possible fields systems was found at Stone Hall (Sites 7/42) where a ditched trackway passed between an arrangement of rectangular fields represented by ditches running perpendicular to it. These features would suggest both arable cultivation within clearly defined fields and animal husbandry—the trackway probably used as a droveway for the movement of stock between grazing areas, pounds and settlements. The droveway ran approximately east-west, so possibly linking the two parallel watercourses, the River Roding *c* 500 m to the west, and its tributary a similar distance to the east.

While the evidence of field systems provides the wider economic and subsistence contexts for the settlements, the wider social context is provided by the evidence for burial practices and other types of symbolic and formalised activity. As well as the clusters of cremation burials at Stone Hall (Site 7/42), single cremation burials dated to this period were recorded at West of Ongar Road (Site 48) and Greenfields (Site 28), and an

adjacent pair at Grange Lane (Sites 20/49). A further unurned cremation burial at Chelmer River (Site 16) may also date to this period. These add significantly to the small number of late Bronze Age cremation burials from other sites on the clay plateau, which include Stansted and Broads Green (Brown 1988b).

There were clear similarities between the burials at the different sites on the A120. Although no pyre sites were identified, all these burials contained pyre debris, suggesting that the pyre sites were probably close by. Moreover, in each case the burials were located close to groups of small pits and/or postholes, some of which contained a relatively wide range of cultural material associated with burnt deposits. For example, pit 28010 immediately adjacent to the two burials at Grange Lane, and pit 1014 at Greenfields both contained pottery, animal bone (including red deer at Grange Lane), fired clay, worked flints, burnt flint, burnt stone and charcoal. Pit 1014 at Greenfields, located west of the deposits of metalworking debris in the pingo, also contained a copper alloy fragment. However, it is unclear whether these features and deposits represent settlement activity, or were associated more narrowly with the mortuary and burial activities.

The pattern of evidence, however, indicates that there was a close spatial relationship between burials and

Prehistoric pottery

by Rachel Every and Edward Biddulph

Approximately 11,000 sherds of prehistoric pottery, weighing 76 kg, was recovered from 30 sites along the route of the A120 improvements. The overall assemblage ranges in date from the early Neolithic through to late Iron Age, and finds a number of local and regional parallels amongst published assemblages from Essex and the lower Thames valley. Two sites appear to show a continuous ceramic sequence at a significant level from the middle Bronze Age through to the middle Iron Age: Greenfields (Site 28) and Stone Hall (Sites 7/42). The overall condition of the pottery is fair to poor; there are very few reconstructable profiles, despite a number of probable single-vessel deposits being identified, and in general the material is fragmentary, with varying degrees of abrasion.

A small but significant group of early Neolithic pottery was recovered from a pit at Strood Hall (Site 9) associated with flint knapping debris. An important group of middle Bronze Age vessels was found at Stone Hall (Sites 7/42), with smaller groups from Greenfields (Site 28), Strood Hall (West) (Site 44) and North of Frogs Hall Stables (Site 39). These vessels are all in flint-tempered fabrics. Both fine and coarse wares are present, representing both Bucket/Barrel and Globular urns, diagnostic of the Deverel-Rimbury ceramic tradition of southern England.

Large groups of post-Deverel-Rimbury pottery came from Stone Hall (Sites 7/42), Grange Lane (Sites 20/49), Greenfields (Site 28) and Strood Hall (West) (Site 43), with smaller groups from Grange Farm (Site 19), West of Ongar Farm (Site 48) and East of Little Dunmow Road (Site 50). Four sherds (from a single vessel) were associated with a cremation burial of this date at Greenfields, and other vessels at Stone Hall were also associated with cremated human remains; otherwise, the site assemblages are purely domestic in character. Most of the fabrics within these groups are flint-tempered (including both coarseware and fineware fabrics), with a small proportion of sandy wares. There is a fairly restricted range of vessel forms, and a general scarcity of decorated sherds; decorative traits include fingertip/fingernail impressions on coarseware rims and shoulders, with a few decorated fineware vessels.

The predominance of flint-tempered wares in coarseware jar forms, together with the low incidence of decoration, suggests that the majority of this pottery falls relatively early within the post-Deverel-Rimbury sequence, perhaps broadly contemporary with the assemblages from Broads Green and Springfield Lyons lower ditch silts (Brown 1988b; 1987), with a date range of perhaps 10th to 8th century BC. This would seem an appropriate date range for the assemblages from Stone Hall, Grange Lane and Greenfields (see Fig. 2.39 below).

The group of post-Deverel-Rimbury pottery from Strood Hall West, however, would fit more comfortably within the later Darmsden-Linton style, providing the only clear example of an early Iron Age assemblage. Pottery of middle Iron Age date, occurring mainly in sandy wares with smaller proportions of shelly and organic-tempered wares, was recovered in reasonable quantities from Grange Lane (Sites 20/49) and East of Parsonage Lane (Site 38), with smaller groups from Stone Hall (Sites 7/42), Highwood Farm (Site 11), East of Little Dunmow Road (Site 50) and Greenfields (Site 28). The assemblages consist of generally well finished sherds in a restricted range of vessel types, mainly slack-shouldered and rounded jars. There is a low incidence of scored decoration.

The late Iron Age ceramic assemblages from East of Little Dunmow Road (see Fig. 2.40 below) and Highwood Farm were dominated by locally-produced grog-tempered wares, which were available in a range of wheel-thrown forms, largely copying continental prototypes. Indeed, such imported Gallo-Belgic pottery was present at East of Little Dunmow Road, and included fine *terra nigra* platters and North Gaulish white ware flagons, attesting to trade contacts beyond local suppliers. (Further material of late Iron Age character was recovered from sites founded during the Roman period and is discussed in the following chapter.)

features directly associated with settlement and agriculture. This is demonstrated mostly clearly at Stone Hall where an extensive cremation cemetery was closely associated with pits, postholes and a four-post granary. Moreover, the locations of the two main foci of burial activity, one on either side of a droveway, suggests that there may have been a relationship between the community's burial ground and the formalised division of the landscape, the features to the north-west actually straddling a field boundary.

The radiocarbon dates provided by four of the Stone Hall burials may indicate the development of the burial ground during the late Bronze Age, the earliest (grave 14008: 1200–920 BC) being located at the south-east, and the latest (grave 14029: 980–810 BC) at the north-west. However, further dates would be needed to estab-

lish this sequence with certainty, and it is also possible that rather than being part of a single extended burial ground, these features represent two separate and largely contemporaneous cemeteries, perhaps serving different communities, the definition of those communities being expressed in part through the formalised division of the landscape, and particularly by the droveway running between them.

Whether the series of large pits on either side of the Stone Hall droveway relate to this spatial division of the site is unclear. Large early Iron Age pits were found at two other sites (West of Stone Hall (Site 41) and West of Strood Hall (Site 43)), these three sites all lying within just a 1 km stretch of the road corridor. Such features may have had varying functions, serving perhaps initially as quarry pits and used subsequently as

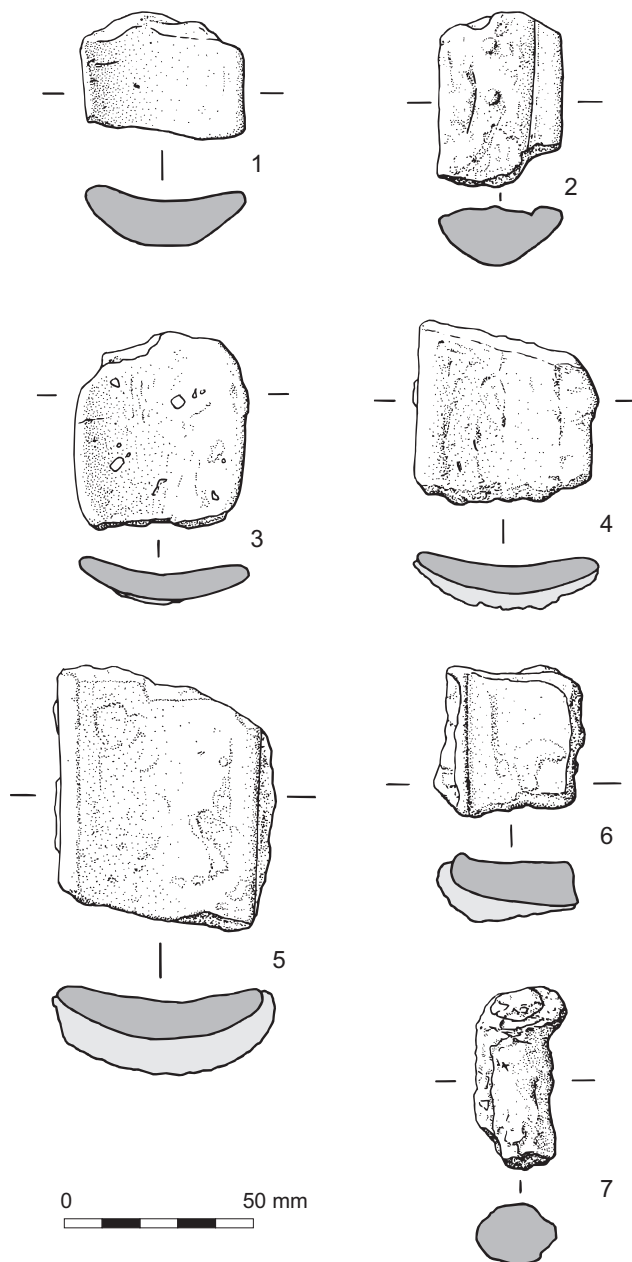


Fig. 2.18 Greenfields (Site 28): mould fragments

Metalworking debris

by Lorraine Mephram

A small group of metalworking debris, in the form of ceramic mould fragments, was recovered from Greenfields (Site 27–8), from several contexts within a pingo and associated features. The mould fragments were associated with middle and late Bronze Age pottery.

Most of the fragments derive from the inner valves of bivalve casting units, with a smaller proportion of 'outer wrap' fragments (Fig. 2.18). The form and curvature of the inner valves suggests that this group of material represent fragments of moulds from the manufacture of sword blades. No crucible fragments were identified, and there was no other associated metalworking debris from the site.

Apart from an overall visual homogeneity, and a few possible cross-context joins, the different context groups do have distinct characteristics which might suggest that they represent several different episodes of dumping of metalworking debris, rather than one single dump subsequently reworked into several different contexts.

This relatively small group of clay mould debris augments the considerable body of Bronze Age casting moulds from elsewhere in the region, most notably the large assemblage from Springfield Lyons which, like the Greenfields assemblage, appears to represent almost exclusively sword manufacture within the Ewart Park tradition of the 9th to 8th centuries BC.

watering holes and rubbish pits, although the deliberate placing of a horse skull on a ledge on the edge of pit 14140 at Stone Hall suggests such features, and some of the deposits in them, could have had symbolic as well as practical functions.

Certainly, the deposits of metalworking debris in the natural pingo at Greenfields point to more than just the informal disposal of waste, and similar formalised deposits have been found at Springfield Lyons, in the enclosure ditch terminals at the main east and west entrances (Buckley and Hedges 1987b). While we might characterise this material as industrial waste, it was waste from an industry producing objects of particular significance in late Bronze Age society, the sword being not just a practical weapon but also, and perhaps more importantly, a visible symbol of status. The production, acquisition, exchange and disposal of such objects was one way in which competing social groups could convert agricultural surpluses into prestige and power. It is possible that some of this by-product of their manufacture was subject to formalised deposition, perhaps reflecting the frequent recovery of the swords themselves, sometimes deliberately broken, from contexts interpreted as having symbolic significance. Moreover, this material points to the integration of local settlements within a network of longer distance trade or exchange, the Ewart Park metalwork represented by the mould fragments at both sites being the dominant type during this period in the south-east.

Early Iron Age

As described above, the excavations along line of the A120 provided evidence for the establishment and subsequent expansion of permanent settlement activity across the clay plateau landscape from the middle Bronze Age into the late Bronze Age. This was probably accompanied by large-scale clearance of woodland, first, perhaps, for a largely pastoral economy, but intensifying during the late Bronze Age with increasing evidence for arable cultivation.

The organised nature of the mixed economy is reflected in the construction of formal boundaries in the form of fields and droveways, and the associated social developments. This was probably accompanied by an increase in population, being evident for instance in the extended cremation cemetery at Stone Hall (Site 7) and the evidence for industrial-scale metalworking in the vicinity of Greenfields (Site 28). However, there is little evidence that this process continued into the early Iron Age. As discussed above, little of the post-Deverel-Rimbury pottery (excluding residual sherds) was found in association with recognisably early Iron Age fabrics and forms, and it appears therefore to have been substantially late Bronze Age in date. While it is possible that some of the contexts containing post-Deverel-Rimbury pottery spanned the late Bronze Age and early Iron Age date, the latter period is otherwise poorly

represented along the A120, a possible quarry pit at West of Strood Hall (Site 43) providing the only relatively clear example of early Iron Age activity.

West of Strood Hall (Site 43)

The possible quarry pit (15012) was the only feature on this site (see Fig. 2.2 above). This subrectangular feature was over 4 m wide and at least 1 m deep, with stepped sides and a concave base. It contained many separate fills, and although the initial natural infilling of the pit produced no finds, subsequent layers, filling the upper 0.9 m of the feature, produced over 2 kg of pottery, predominantly post-Deverel-Rimbury but including 24 sandy ware sherds (160 g). The pottery suggests an early Iron Age date, comparable, for example, with the much more extensive group from Stansted Airport, which had a high proportion of tripartite and shouldered jars with decorated rims and/or shoulders, and fineware bowls, and an associated radiocarbon date of 518–384 BC (Brown 2004, pit SCS 2187). As well as fired clay, worked and burnt flint, and a possible whetstone, the quarry pit contained cattle, sheep and pig bone, from juvenile animals (one of the sheep bones was burnt, probably from cooking). A gnawed cattle bone indicates the presence of dogs. This material suggests the feature had been used subsequently as a refuse pit for domestic waste and burnt material, probably from a contemporary settlement somewhere in the immediate vicinity.

Middle-late Iron Age

By the middle Iron Age the number of sites with evidence of activity had increased to eleven (seven with features) (Fig. 2.19). Although this fell again to just five sites (three with features) (Fig. 2.19) by the late Iron Age, this reflects a change in the pattern and distribution of settlement, with a greater emphasis on the nucleation and in some cases the enclosure of settlement. These are processes well illustrated by three of the Iron Age sites—the unenclosed middle Iron Age settlement at Highwood Farm (Site 11) subsequently partly overlain by a small late Iron Age enclosure, the small middle Iron Age settlement enclosure at Grange Lane (Site 20) and the more extensive settlement at East of Little Dunmow Road (Site 50), which although apparently unenclosed had developed by the late Iron Age into a complex of bounded fields and enclosures.

A number of sites produced pottery of both late Iron Age and Roman date, reflecting the use of imported Roman goods in late Iron Age contexts, and the continuity of native forms in the post-conquest period. Those sites where this material was predominantly of late Iron Age date, such as Highwood Farm and East of Little Dunmow Road, are described in this chapter, while other sites, such as Strood Hall where the material was predominantly Roman in date, are described in the following chapter.

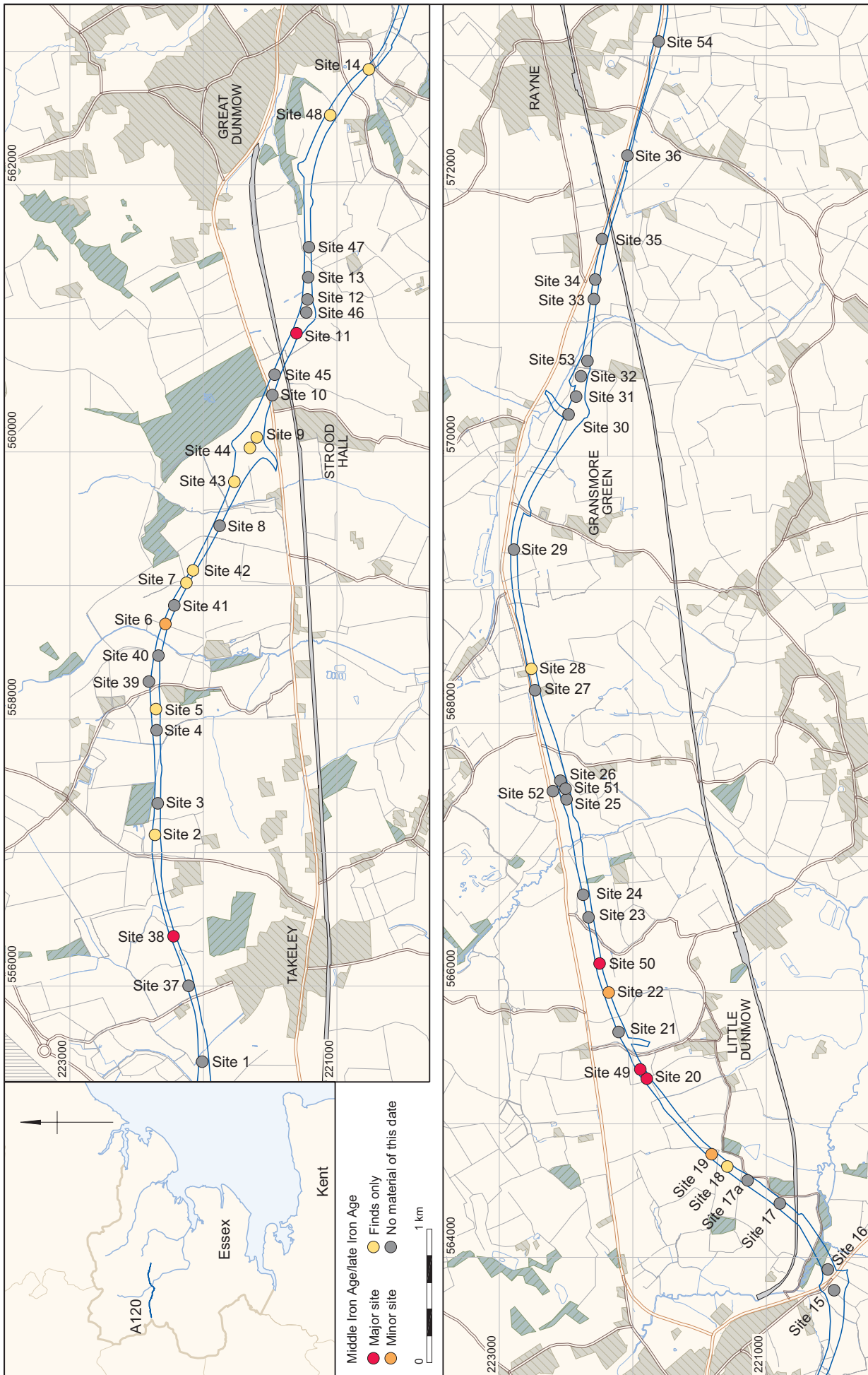


Fig. 2.19 Distribution of middle and late Iron Age sites and finds

Highwood Farm (Sites 11/46)

Features relating to the middle Iron Age settlement at Highwood Farm were recorded over c 100 m in both the eastern and western excavation areas (Fig 2.20). There were three curvilinear gullies dated to this period, probably representing the truncated remains of round-houses. That at the east (2036) described the southern and eastern arc of a circle c 12 m in diameter, potentially with its entrance facing north-east. A further short length of curved gully (2028), 20 m to the east, was undated and while it could represent a contemporary structure, it may have been associated with the late Iron Age enclosure in this part of the site.

A further two similar gullies (1064 and 1066) some 75 m to the west described the western and northern arcs of circles c 9 m in diameter. These latter two circles,

although not overlapping, would have had a gap between them of only 2–3 m, suggesting that they may represent more than one phase of construction. Gully 1066, was certainly replaced by a polygonal gully 1065 of similar dimensions, also possibly representing some form of structure. Moreover, all three of the western gullies were located immediately east of a substantial V-shaped ditch (1048), 1.6 m wide and almost 1 m deep, running almost north-south, (possibly associated with an parallel ditch 13 m to the east (1015) and with an unexcavated ditch running at a right angle to it noted at the northern edge of the excavation area). Apart from gullies 1065 and 1066, any relative phasing between these features, which appear to have been too closely spaced to be contemporary, could not be ascertained.

The curvilinear gullies had been severely truncated and it is possible that the small number of other features

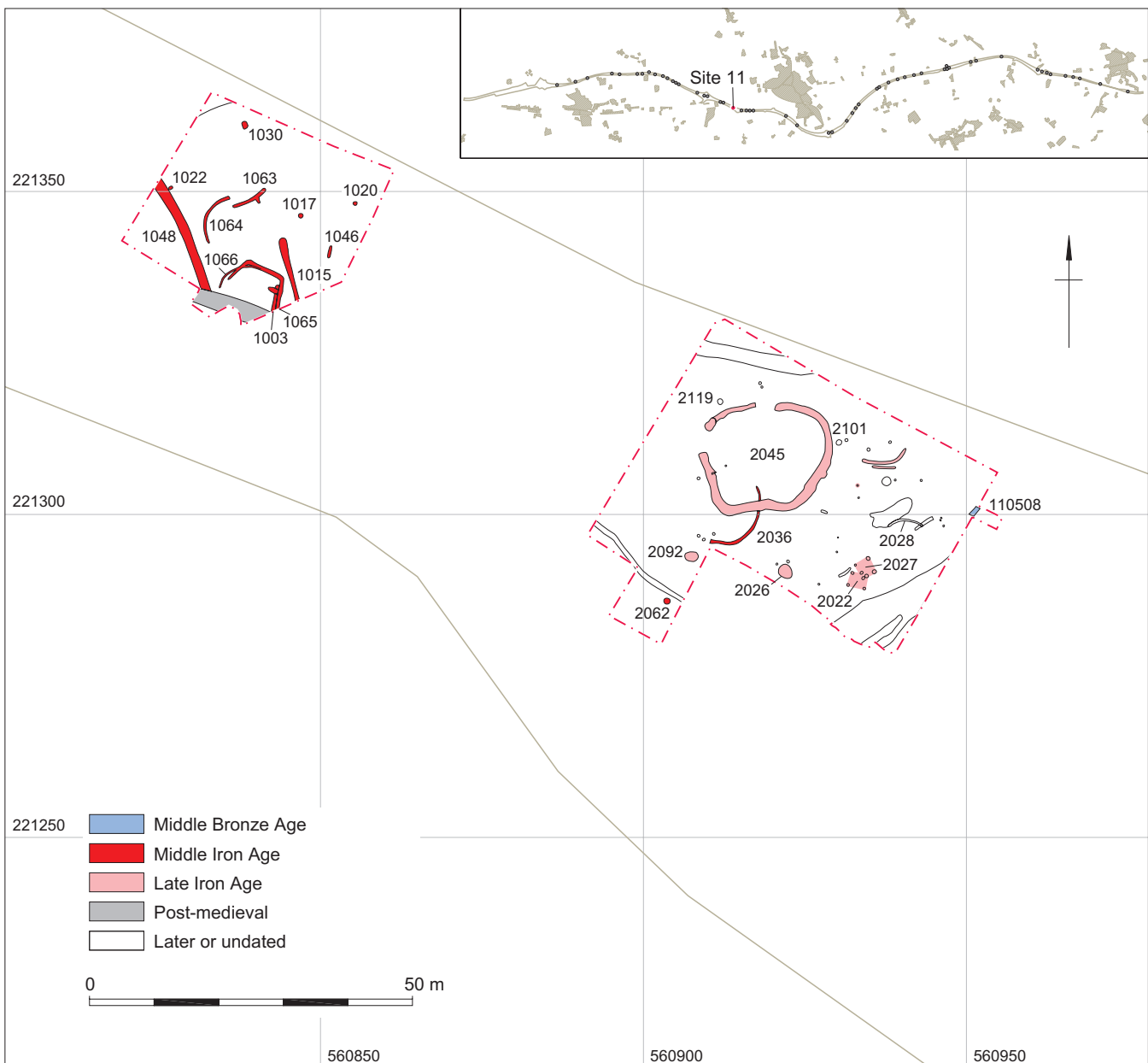


Fig. 2.20 Highwood Farm (Site 11): site plan showing location of prehistoric features



Plate 2.8 Highwood Farm (Site 11): middle Iron Age pit 1020 with flint nodules

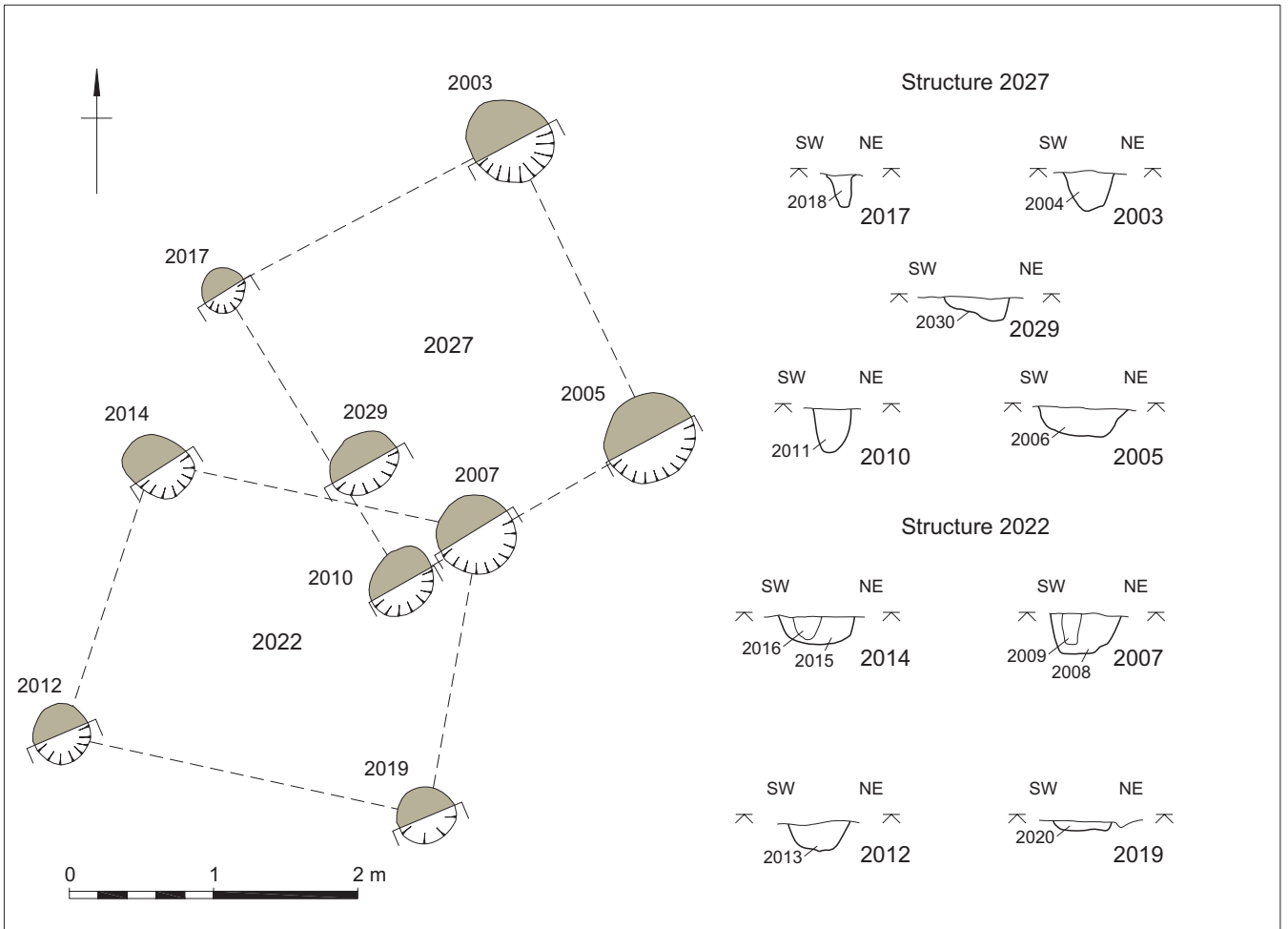


Fig 2.21 Highwood Farm (Site 11): plan and sections of four-post structures 2027 and 2022

in the western area, including pits (Plate 2.8) and other short linear features, represents only a small sample of the features associated with the settlement. There were also a significant number of undated features in the eastern excavated area and while these could, potentially, be of middle Iron Age date and associated with the roundhouse, it is perhaps more likely that they are associated with the greater density of late Iron Age features in this area.

The range and arrangement of the late Iron Age features, which were confined to the eastern excavated area, differed considerably from those of the middle Iron Age, comprising a small subrectangular enclosure (2045), a pair of pits (2092, 2026) and a series of postholes most of which appear to represent two small overlapping four-post structures (2022, 2027; Fig. 2.21). In addition, a series of linear features were recorded to the east of the enclosure, some during the excavation, others during the evaluation, although those recorded during the different stages of fieldwork do not appear to correspond.

Whether there was continuity of occupation between the middle and late Iron Age sites is hard to determine from the stratigraphic or ceramic evidence, but the fact that grog-tempered pottery, introduced to the region during the second half of the 1st century BC (Drury 1978, 131), was rarely found alongside middle Iron Age wares, means that a break in occupation cannot be dismissed.

The enclosure (2045) was an irregular shape bounded by a ditch of quite variable dimensions, being up to 1.7

m wide and 0.7 m deep on the south side, but as narrow as 0.6 m on the northern side. In most sections it had a V-shaped profile and there were suggestions from western side that there had been an outer bank. There were two entrances—a 3 m wide gap at the north-west corner and a slightly narrower gap approximately midway along the north side.

There were no features within the enclosure, apart from the northern end of the middle Iron Age roundhouse gully 2036, and the fact that this survived as a visible feature suggests that there was no corresponding late Iron Age structure within the enclosure. The enclosure measured internally only *c* 18 m long by 14 m wide, and its small size, irregular shape and the two entrances at its north and north-west (ie opposite the entrances of most roundhouses) suggest that the enclosure had some non-domestic function, possibly a small animal pound. Some 73% of the animal bone from the site came from the enclosure ditch, including a possibly deliberate deposit of cattle mandibles and other bones at the base of the eastern terminal of the north entrance (2112) (Plate 2.9) as well as an antler weaving comb (object 2001) (Fig. 2.22 no. 1; Plate 2.10). The material from the ditch represents primary butchery waste, and cattle appear to have been present in large numbers. The southern terminal of the western entrance contained parts of a spindlewhorl and a cylindrical loomweight (Fig. 2.22 no. 3). The association of this material in the enclosure ditch may also have had symbolic significance, the artefacts, for example, all being related to fabric production.



Plate 2.9 Highwood Farm (Site 11): animal bone deposit in late Iron Age enclosure ditch terminal 2112

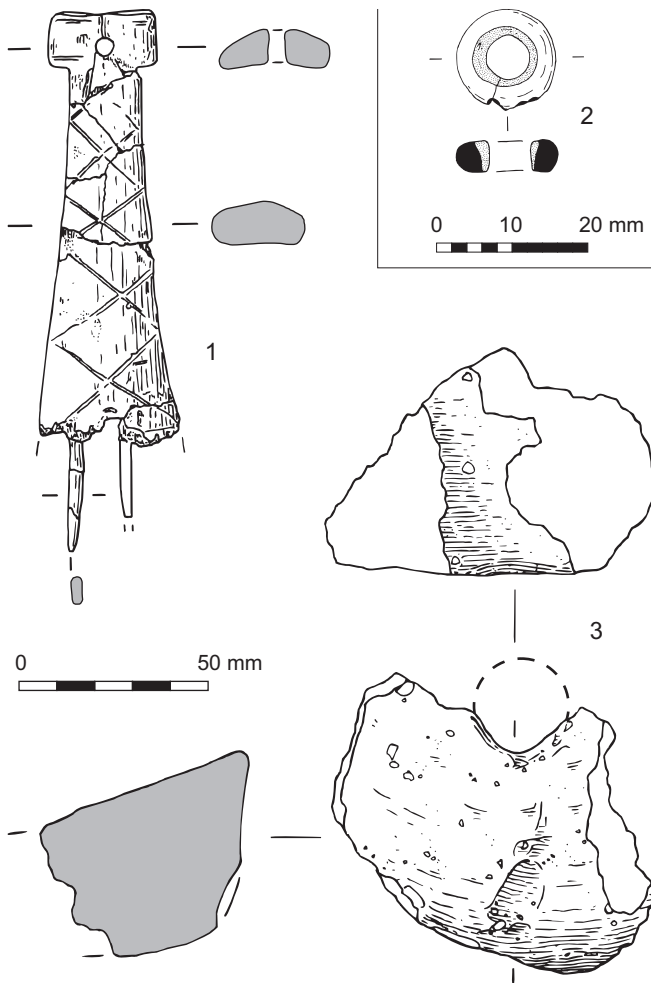


Fig. 2.22 (left) Highwood Farm (Site 11). antler weaving comb, glass bead and clay loomweight



Plate 2.10 Highwood Farm (Site 11): bone weaving comb SF 2001

Other finds (Fig. 2.22)

by Lorraine Mepham

Two objects of worked bone or antler were recovered from late Iron Age contexts at East of Little Dunmow Road and Highwood Farm, indicating bone- and antler-working at a household craft level. They include a single antler offcut from the former site, and a decorated comb from the latter (Fig. 2.22, no. 1), the comb being an object more readily paralleled on sites in central southern or south-western England, and probably indicative of textile-working.

A single late Iron Age glass bead (Fig. 2.22, no. 2; Plate 2.10) was recovered from East of Little Dunmow Road, an example of a large, colourless annular form with an opaque yellow band around the inside of the perforation.



Plate 2.11 Highwood Farm (Site 11): two four-post structures

The presence of other features (some undated) such as pits, postholes, hearths, four-post structures (probably granaries) and other small indeterminate features, suggest that the enclosure was part of a larger, more complex settlement lying largely outside the eastern excavation area. Among these features was the undated 5.5 m long curved gully (2028) already referred to, describing the northern arc of a near circle *c* 9–10 m in diameter, and probably representing a roundhouse. It was at least 0.15 m wide, and up to 0.18 m deep at its eastern terminal, with moderate to steep sides and variable flat/concave base with a single fill (2059/2072).

Two possible four-post structures are represented by a tight group of nine postholes some 12–16 m south-east of the enclosure (Fig. 2.21; Plate 2.11). The suggested structures (2022 and 2027) overlap at one corner and are on different alignments, indicating the rebuilding of the structure in the same general location, and suggesting therefore the maintenance of some spatial organisation within the settlement over a period of time. Both structures were of similar dimensions—*c* 2.5 m by 2.7 m externally—with postholes up to 0.6 m in diameter and 0.3 m deep.

The ninth posthole in the group (2029) was not necessary to either structure, and could be one of a number of other undated postholes distributed around the enclosure. Some of these appeared to form pairs, possibly representing looms, drying racks or other structures, such as a close pair 2.5 m outside and aligned on the north entrance of the enclosure, and another, slightly wider pair, immediately east of the enclosure.

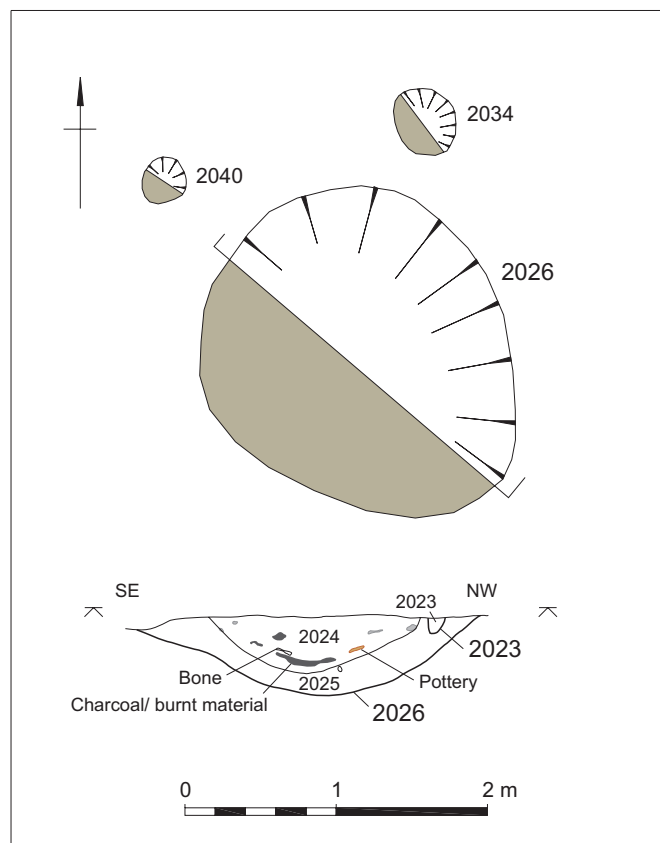


Fig. 2.23 Highwood Farm (Site 11): plan and section of pit 2026 (with adjacent postholes)

exclusive post-conquest date suggests that the late Iron Age settlement fell within the period *c* 50 BC to AD 43.

Grange Lane (Site 49)

In contrast to the late Iron Age enclosure at Highwood Farm (Site 11), the enclosure at Grange Lane, dated to the middle Iron Age, was clearly intended as a settlement enclosure, containing two roundhouse structures, the larger (1140) probably the main domestic dwelling, and a smaller, possibly ancillary structure (1139) (Fig. 2.24). The subrectangular ditched enclosure, 1041, was also significantly larger, measuring 33 m long and 26 m wide, aligned approximately east/west, with a 3 m wide entrance on the eastern side. The ditch was, on average, *c* 3 m wide and 1.3 m deep with a moderately steep V-shaped profile, surviving to a greater width and depth on the eastern side, and the nature of the soils at its base suggest that it was dug to below the water table (Fig. 2.25, section 2). A selection of pottery from ditch 1041 and other features is shown in Fig. 2.39, nos 3, 7, 11, 13, below).

There were a series of pits and postholes immediately inside the enclosure entrance, including a pair of postholes (1146 and 1149) set obliquely within, but slightly back from the entrance, and a kidney-shaped slot (1110) to the north-west that may have held a further two posts on the inside edge of the ditch. These together possibly formed some type of structure designed to direct the movement of animals into the northern part of the enclosure, the roundhouses being located in the southern half. Both postholes in the slot contained abundant charcoal, that to the south-east being possibly the remains of a burnt post, that to the

north-west also producing four sherds of middle Iron Age pottery, fired clay, burnt flint, burnt stone (including material identified in the field as possibly quartz—presumably imported, but not retained) and animal bone. Against the inner edge of the enclosure ditch on the opposite side of the entrance there was a shallow circular feature (1107), 2.4 m in diameter and 0.28 m deep with moderately steep sides and a flat base. Its function is unclear but its two fills produced 66 sherds of middle Iron Age pottery (as well as 10 Post-Deverel-Rimbury sherds), fired clay and animal bone.

The main feature within the enclosure, sited within its south-east quadrant, was a roundhouse represented by the northern to western arc of a circular gully, 1140, (Fig. 2.24), 12.5 m in diameter. It had a clear terminal on the east side, indicating the northern side of an entrance aligned approximately ENE, while a tear-shaped feature (1141) *c* 2 m to the south-east may represent the opposing terminal. The gully was on average 0.5 m wide and 0.25 m deep, being deepest (0.4 m) near the entrance where it had steep sides and a flat base, but it had been severely truncated around its southern half. All the finds from the gully, comprising middle Iron Age pottery, fired clay and animal bone (including cattle), came from near its entrance. No evidence was found of any structural timbers within the gully, and only one internal feature (1131), possibly a posthole for a roof support, was recorded. There was a 2 m long linear slot (1154) set obliquely between the gully terminals, possibly representing some form of entrance screen, and an irregular shallow feature (1003) in the remaining gap containing some charcoal.

There was a smaller, apparently oval structure (1139) measuring approximately 8 m east-west by 6 m north-

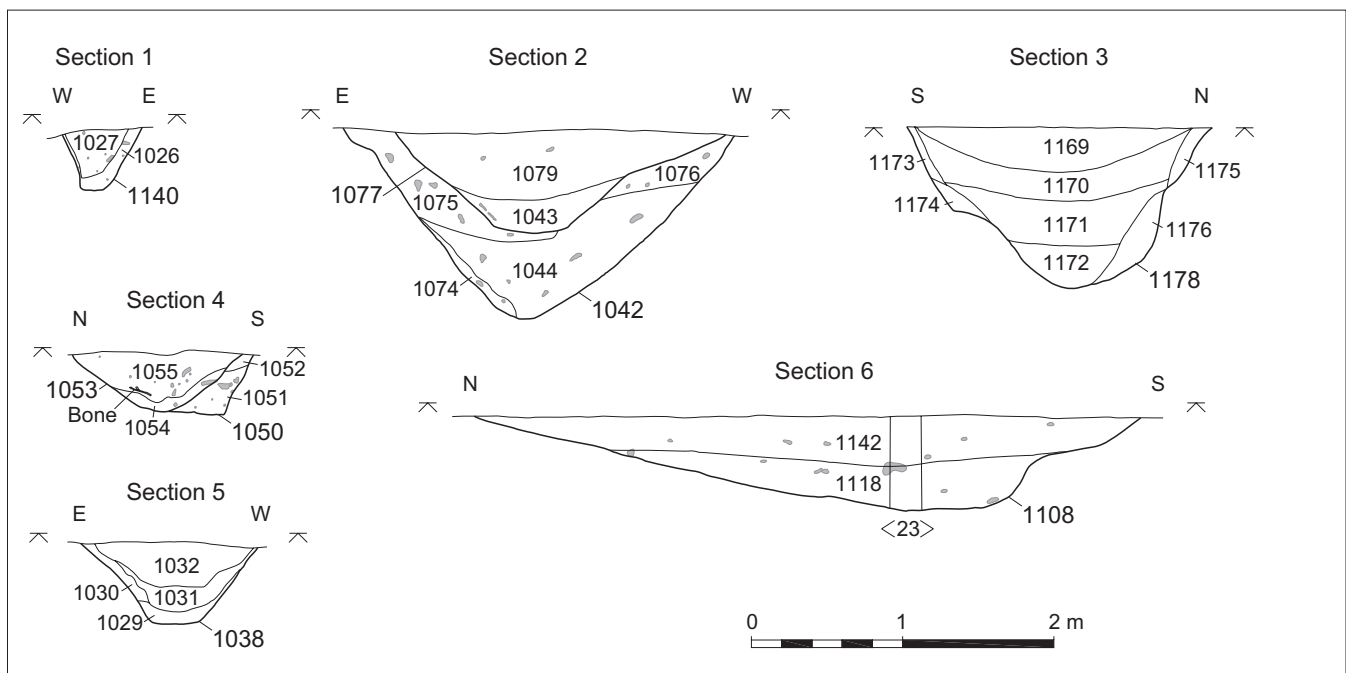


Fig. 2.25 Grange Lane (Sites 20/49): sections through features 1140, 1042/1077, 1178, 1050, 1038 and 1108

south in the south-western quadrant of the enclosure. It was represented by the north-western arc of a less substantial gully up to 0.3 m wide and 0.18 m deep. It produced no finds, but may have been an associated ancillary structure, rather than representing a different phase of activity within the enclosure.

A number of different phases of activity, however, are evident in the fills of the main enclosure ditch, as exemplified by those in the southern ditch terminal (1042) (Fig. 2.25, section 2; [Plate 2.12](#)). There, the primary silt was overlain by a 0.5 m thick layer yielding 23 sherds of middle Iron Age pottery (plus two residual post-Deverel-Rimbury sherds), animal bones and fragments of fired clay, probably representing domestic refuse associated with occupation of the enclosure. The layer above, apparently filling the rest of the ditch, contained no finds, possibly indicating a period of abandonment (or at least reduced activity). Subsequently, the ditch was re-cut to less than half its original depth, the lower fill of the re-cut producing further large quantities of middle Iron Age pottery, animal bones and fired clay, indicating renewed (or continued) occupation of the enclosure, while the upper fill, with few finds, may represent a second phase of abandonment and eventual disuse. Apart from in the southern terminal, and at the north-east corner of the enclosure where a single dump of material produced 514 g of pottery and 734 g of animal bone, there were generally low levels of finds below the re-cut (including from the northern ditch terminal). Interestingly, the same two locations contained the highest levels of finds from above the re-cut.

Outside the enclosure entrance, and radiating from it to the east and north, there were a series of ditches which would appear to have had the function of controlling the movement of animals, both funnelling them in towards the enclosure entrance and possibly managing and segregating them on the outside. More than one phase of activity is evident, although most of the ditches cannot be phased. Ditch 1178 ran from the east to within 20 m of the enclosure entrance on which it was aligned. It was generally up to 1.3 m wide and 1 m deep with steep, slightly stepped sides and a flat base (Fig. 2.25, section 3). It produced middle Iron Age pottery, worked flint, animal bone and charcoal, these occurring throughout the ditch fills at the west, but only in the upper fill to the east, away from the enclosure.

Two short, less substantial ditches (1019 and 1033), both up to 0.6 m wide and 0.2 m deep, were recorded on the same general alignment, being 6 m and 7.6 m long, respectively. Also approximately parallel, was a pair of overlapping ditches (1050 and 1053) ending at adjacent terminals just 2 m from the enclosure (Fig. 2.25, section 4). Ditch 1050 was 0.55 m wide and 0.37 m deep, with a very steep north side and a moderately steep and slightly concave south side. Its two fills (the lower producing a single post-Deverel-Rimbury sherd and two horse bones) were cut on its north side by ditch 1053 which was 1.1 m wide and 0.4 m deep with moderately steep sides and a narrow flat base.

Ditches 1050 and 1053 (and gully 1109) were completely truncated at the east by the terminal of a wider ditch (1108) again running approximately west/east. This ditch, of uncertain date, was up to 5.4 m



Plate 2.12 Grange Lane (Site 49): middle Iron Age enclosure ditch terminal 1042

wide and 0.8 m deep, shallow and slightly concave on the north side, with a steeper convex side to the south (Fig. 2.25). It contained two fills, the lower (1118) being a mid grey/brown silty clay gley deposit, 0.35 m thick, formed while the ditch was holding water, possibly from the surrounding water table. The only datable material from the ditch was medieval pottery and roof tile, recovered from the single fill (1018) recorded in a partial section 13 m east of the terminal, and it was substantially wider than any of the Iron Age ditches within the site (Although it is similar to an unexcavated ditch, 28050, recorded running at a right-angle to it some 45 m to the north-east, and possibly forming part of a later possibly medieval or post-medieval field system). However, its similar alignment to some of the Iron Age ditches, and the proximity of its terminal to the enclosure entrance, suggests that it may have been associated with the enclosure, although this correspondence may be entirely fortuitous.

Analysis of the pollen from the terminal of ditch 1108 (see *Druce CD/Chapter 7*) indicates disturbed grassland and hazel scrub, with nearby cereal cultivation, followed by the possible regeneration of hazel. Subsequently increased burning coincided with a decrease in hazel and a return to more open conditions. However, without secure dating for the ditch the pollen sequence is of limited value.

A second set of ditches/gullies, also apparently aligned on the enclosure entrance, ran approximately north/south. The most westerly, gully 1037, was slightly curved running north from the outer edge of the enclosure ditch, and was up to 0.65 m wide and 0.15 m deep with moderately steep sides and a slightly concave base. It was

cut at a right angle by a narrow gully (1109), which in turn cut ditch 1039, indicating three phases of activity. Ditch 1039, which was aligned on the north terminal of the enclosure ditch, its rounded terminal being only 1 m north-west of the terminal of ditch 1053, was up to 0.9 m wide and 0.22 m deep with moderate to steep concave sides and concave base. Further to the east, ditch 1038 ran SSE to the edge of ditch 1108, the position of its terminal being possibly related to the projected lines of ditches 1050 and 1053, as well as being aligned on the western terminal of ditch 1178 with which it was comparable in scale and form (1.17 m wide and 0.54 m deep with moderately steep sides and a flat base) (Fig. 2.25, section 5), leaving a 12 m gap between them.

The northwards extension of these three north-south ditches were not recorded during the subsequent watching brief, the only feature to their north being an irregular curved ditch (28019), 1.1 m wide and 0.3 m deep with moderate to steep concave sides and a flat base. Its western edge, on the inside of the curve, was cut by a series of four possibly associated pits (28016, 28058, 28059 and 28060), only one of which (28016) was excavated, containing cattle bone.

Although a number of these ditches were undated, and three, (1033, 1039 and 1050), produced only post-Deverel-Rimbury pottery, their positions and alignments in relation to the middle Iron Age enclosure entrance strongly suggests a direct association. As with the enclosure ditch, there was clear evidence at some of these features for different phases of activity. Other finds from the ditches include animal bone, worked flint and fired clay, and variable amounts of charcoal.

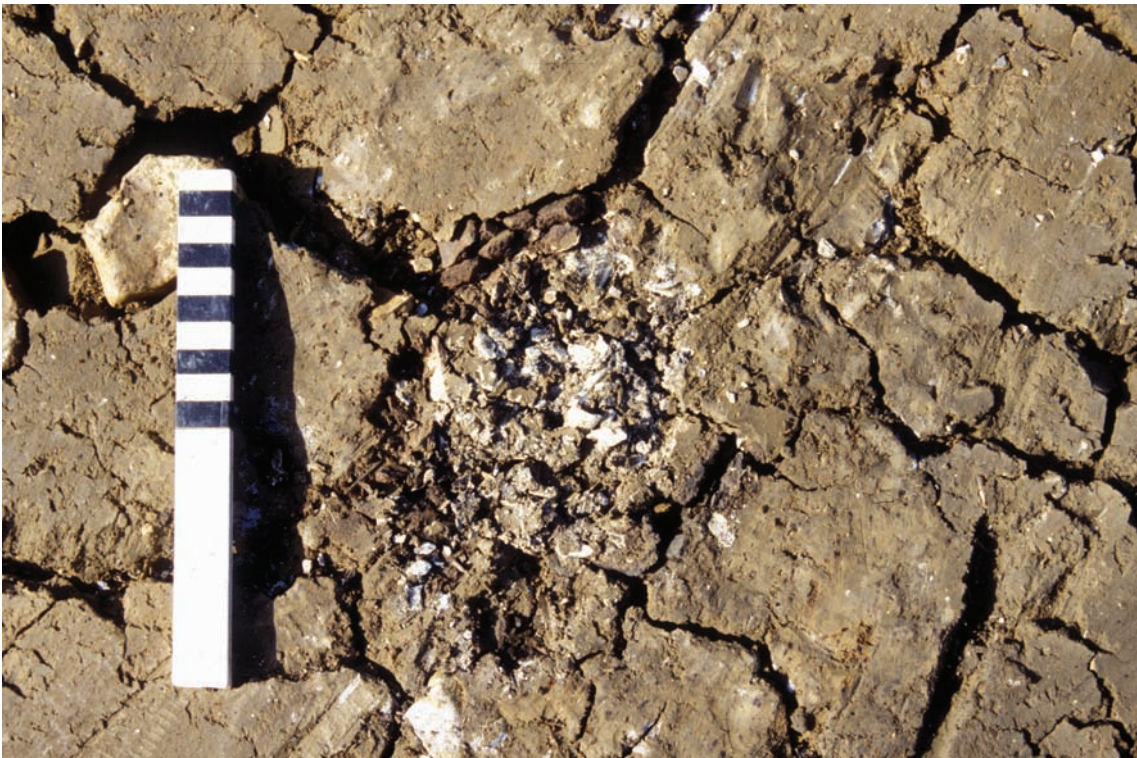


Plate 2.13 Grange Lane (Site 49): late Iron Age urned cremation 28023

In among the ditches there were a number of small middle Iron Age features. Pit 1155, immediately south ditch 1108, was 0.75 m in diameter and 0.3 m deep, with moderately steep sides and a rounded base. Its single fill produced eight sherds of middle Iron Age pottery. Subrectangular pit 28016, cutting the western side of ditch 28019, was 1.35 m by 0.9 m and 0.59 m deep, with moderate to steep sides and a rounded base. It produced nine sherds of middle Iron Age pottery (as well as single residual sherds of middle and late Bronze

Age date), and 27 pieces of animal bone, one of them burnt. A number of other undated features (1134, 1151 and 28007) were potentially of the same period.

A single, undated, 15 m length of ditch (28066), 0.42 m wide and 0.19 m deep with concave sides and base, was recorded south-west of the enclosure aligned NW-SE (Not shown on plan). In addition a small oval pit containing a single early/middle Iron Age sherd was recorded some 600 m to the south-west at Grange Farm, Site 19.



Fig. 2.26 East of Little Dunmow Road (Site 50): site plan showing Iron Age and earlier features

The enclosure had been abandoned by the late Iron Age, possibly corresponding to the large-scale reorganisation of the landscape just 1 km to the north-east at East of Little Dunmow Road (Site 50; see below). The only evidence from this period was a single late Iron Age urned cremation burial (28023) (Plate 2.13) *c* 70 m north-east of the enclosure. The urn, placed in an oval grave, 0.15 m by 0.2 m wide (but truncated by the machine bucket), contained the cremated bone (530 g) of a possibly female adult aged *c* 18–22 years. The fact, however, that this burial lies within 15 m of a late Bronze Age unurned cremation burial (28004; radiocarbon dated to 1120–900 cal BC), and an adjacent undated burial probably also of late Bronze Age date, is either a remarkable coincidence, or reflects some enduring significance to this particular location. A continuing significance to this location would seem unlikely, however, given that the earlier burials lie within the ‘funnel’ of ditches focussed on the enclosure entrance that may have been designed to control the movement of animals.

East of Little Dunmow Road (Site 50)

While Highwood Farm (Site 11), on the watershed between the tributary of the River Roding and the River Chelmer, may represent one focus of Iron Age activity,

the high ground between the River Chelmer and the Stebbing Brook appears to represent another, with four sites, over some 1.7 km, producing middle Iron Age features. By the late Iron Age, however, substantial activity had concentrated at just one of these sites—East of Little Dunmow Road (Site 50; Fig. 2.26).

Middle Iron Age

The arrangement of middle Iron Age features at East of Little Dunmow Road contrasts with those at Grange Lane. First, the settlement features, in the form of roundhouse gullies, are not bounded by any enclosure ditch but are distributed over some 100 m, indicating an extensive open settlement (Fig. 2.26). Furthermore, although a range of other features were recorded, including pits, postholes and possible rectangular structures, there was little evidence in the middle Iron Age for any system of ditches used for controlling animals (although by the late Iron Age the whole site had been divided into a series of regular, rectangular fields and enclosures).

A series of irregular linear ditches/gullies was recorded, however, less than 200 m to the west at Throes Farm (Site 22) (Fig. 2.27). A slightly meandering north-south ditch (108/150), whose single fill produced three sherds of middle Iron Age pottery and two pieces of animal bone, was cut at its southern end by a bomb

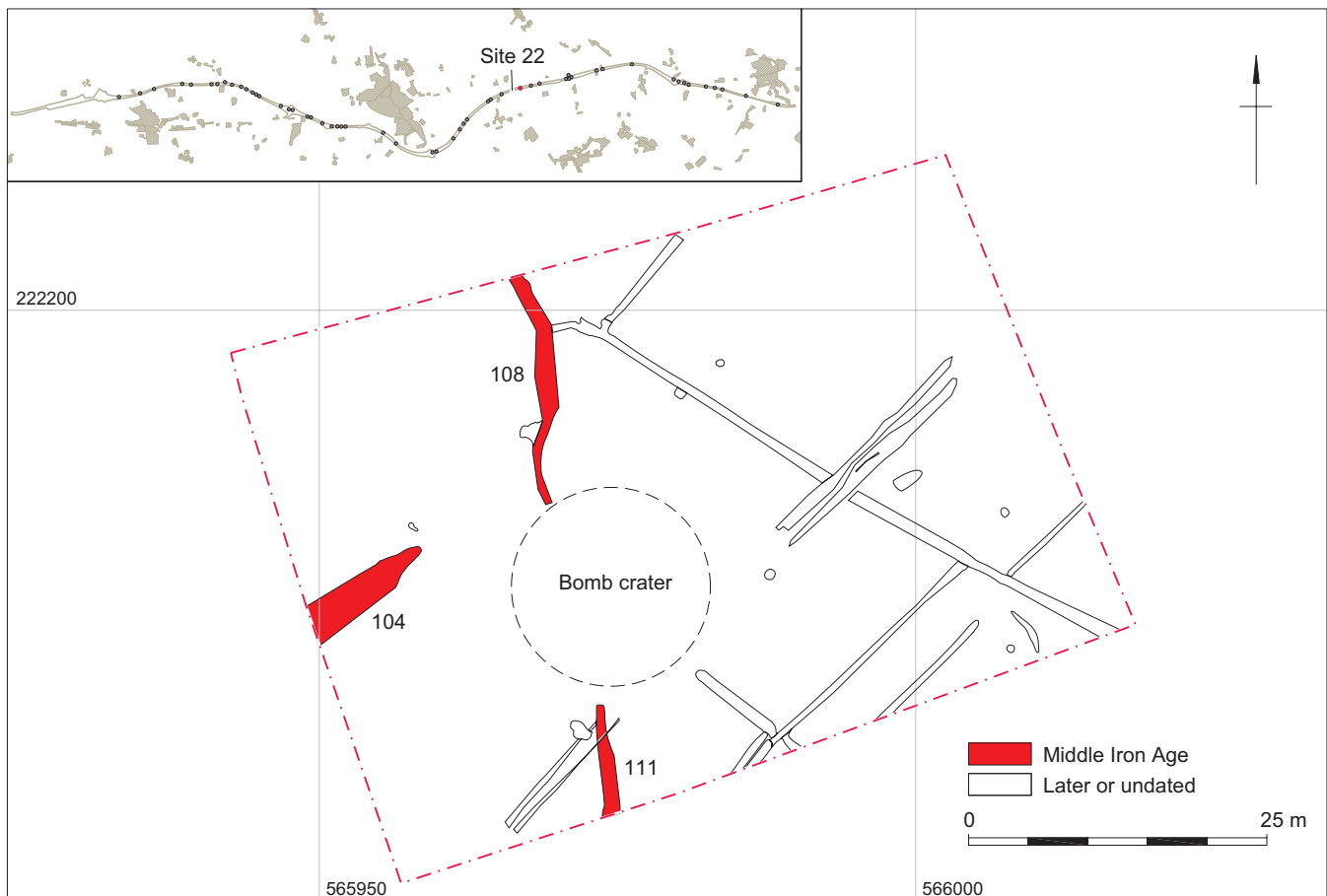


Fig. 2.27 Throes Farm (Site 22): site plan showing Iron Age features

crater, but its line was continued to the south by a second, undated but probably associated ditch (111/158). These ditches were variable in their dimensions being up to 1.7 m wide and 0.48 m deep. A third linear feature (104/187) ran south-west from a terminal some 11 m west of ditch 105/150. At its terminal it was 1.07 m wide and 0.42 m deep, with steep sides and a slightly concave base, the lower fill producing a single middle Iron Age sherd, and the upper fill producing a further 32 sherds and two pieces of animal bone as well as burnt clay and 15% charcoal. However, 2 m to the west the feature had widened to 2.77 m but was only 0.12 m deep with very shallow sides and a flat base. Although not perpendicular to the other ditches, the proximity of the ditch terminals suggests that they were part of a contemporary field system.

The low level of finds from these features may reflect the proximity of contemporary settlement at East of Little Dunmow Road, where middle Iron Age pottery, although recovered in small quantities from later features across the site, was concentrated in two main areas—at the south-west and in the middle of the site (Figs 2.26). Activity in the south-west was represented by roundhouse 48205 (which extended south of the excavation area) (Figs 2.26 and 2.28; *Plate* 2.14). This comprised three lengths of gully in a circular plan, 12 m in diameter, with two narrow gaps at the north and north-west (0.75 m and 1 m wide respectively) and an entrance gap, between 2.8 m and 4.4 m wide, to the south-east. The gully was up to 0.8 m wide and 0.5 m deep with generally steep sides and a narrow base, containing up to three fills (*Fig.* 2.28). Although it

produced pottery of late Bronze Age to late Iron Age date, all the late Iron Age pottery came from a single context—the upper fill of one excavated segment on the northern side, which was overlain by a spread of late Iron Age material probably associated with an adjacent, later roundhouse (30144, below). The gully also produced animal bone, worked flint and burnt stone, but because the southern arc of the gully lay outside the excavation area, it was not possible to analyse fully the distribution of finds around its full circuit. However, 64% of the excavated animal bone (by weight) came from the terminal on the north side of the entrance (48017), along with four quartz pebbles (identified in the field but not retained). In contrast, most of the pottery came from towards the rear of the building, 95% of it coming from between sections 48050 (section 1) and 48162.

There was no evidence for any structural timbers within the gully. A number of small features were recorded inside the roundhouse, including a large posthole (30208), 0.65 m in diameter and 0.23 m deep, just inside the entrance, near the likely position of the south-eastern entrance terminal. As roundhouse entrance features are usually marked by one or more pairs of postholes it is possible that this posthole, which had no matching feature to the north-east, was not associated with the structure of the roundhouse. There was also a pair of adjacent small postholes (30204 and 48176), up to 0.3 m in diameter and 0.11 m deep, near the western side and a similar single posthole (30206) centrally towards the back. None of these features could be dated, and while it is possible that they are associated



Plate 2.14 East of Little Dunmow Road (Site 50): roundhouses 30144 (foreground) and 48205

with the structure, it is also possible that they are associated with the range of later (and earlier) features, including spread 30210, distributed south-west of roundhouse 30144.

Approximately 50 m to the ENE of roundhouse 48205 was a 4 m length of curved gully (30120), possibly representing the truncated remains of another roundhouse (Fig. 2.26). Because of its short length it is possible only to estimate its diameter as within the range of 10–12 m, but it ended at a rounded terminal at the south, probably marking the north side of an ESE facing entrance. It was up to 0.4 m wide and 0.33 m deep with

a variable profile, its single fill containing sherds of post-Deverel-Rimbury and middle Iron Age pottery, small quantities of fired clay and animal bone.

Some 20 m north-east of gully 30120 was a further length of curvilinear gully (30106) with a projected diameter of 9–11 m, extending beyond the north edge of the excavation area (Fig. 2.26). It was 0.62–0.9 m wide and up to 0.33 m deep, with moderately steep sides and a concave base, one section producing a relatively large quantity (417 g) of fired clay (Fig. 2.28, section 2). Although five late Iron Age/early Romano-British sherds were recovered from its upper fill, most of the pottery was of earlier date, the late pottery possibly deriving from two late Iron Age features that cut it—ditch 30093 and a gully 30097 (Fig. 2.32). For this reason the gully has also been assigned to the middle Iron Age. The gully was different significantly, however, in profile from that of roundhouse 48205, being shallower and wider, and it is possible it had a different function, representing either some other method of construction for a roundhouse (see below), or some other type of feature.

A further 20 m to the east there was a 14 m long curved gully (30078) describing the south-western arc of a circle *c* 11 m in diameter, a terminal at the south-east probably representing one side of the entrance of a fourth possible roundhouse. The gully was up to 0.4 m wide and 0.17 m deep; with moderately steep sides and a concave base. All the pottery (apart from a single post-Deverel-Rimbury sherd) was of middle Iron Age date, 86% (by weight) of which came from section 30353 adjacent to the south-eastern terminal, along with 54% of the animal bone and all of the worked and burnt flint. A posthole (30075) near the centre produced two small late Iron Age sherds, suggesting a later date, although these may have been intrusive given the extent of late Iron Age activity in this area, including the large spread of late Iron Age material (30079) immediately to the north-west. Towards the projected line of the rear wall of the roundhouse was an oval hearth (30076), *c* 0.4 m wide by 0.6 m long and 0.1 m deep with steep sides and a flat base containing large pieces of burnt flint (1344 g) and a high level of charcoal. Significant quantities of charcoal also were recorded in the gully, except towards the entrance at the south.

Between these two roundhouses (30106 and 30078), and possibly associated with them, were two other linear features. Gully 30100, to the north-west, was recorded curving very slightly for 4 m, but as it had a maximum depth of 0.05 m it was not possible to determine whether its ends represented terminals. Although it had no datable finds it was cut near its west end by late Iron Age gully 30098 and could potentially, therefore, be of middle Iron Age date, particularly given its proximity to the two flanking roundhouses. Middle Iron Age feature 30101 was a very truncated L-shaped gully, 7.7 m long and of a similar depth, its single fill produced three sherds of pottery. The function of this rectangular structure is not known—if a building, it may have had

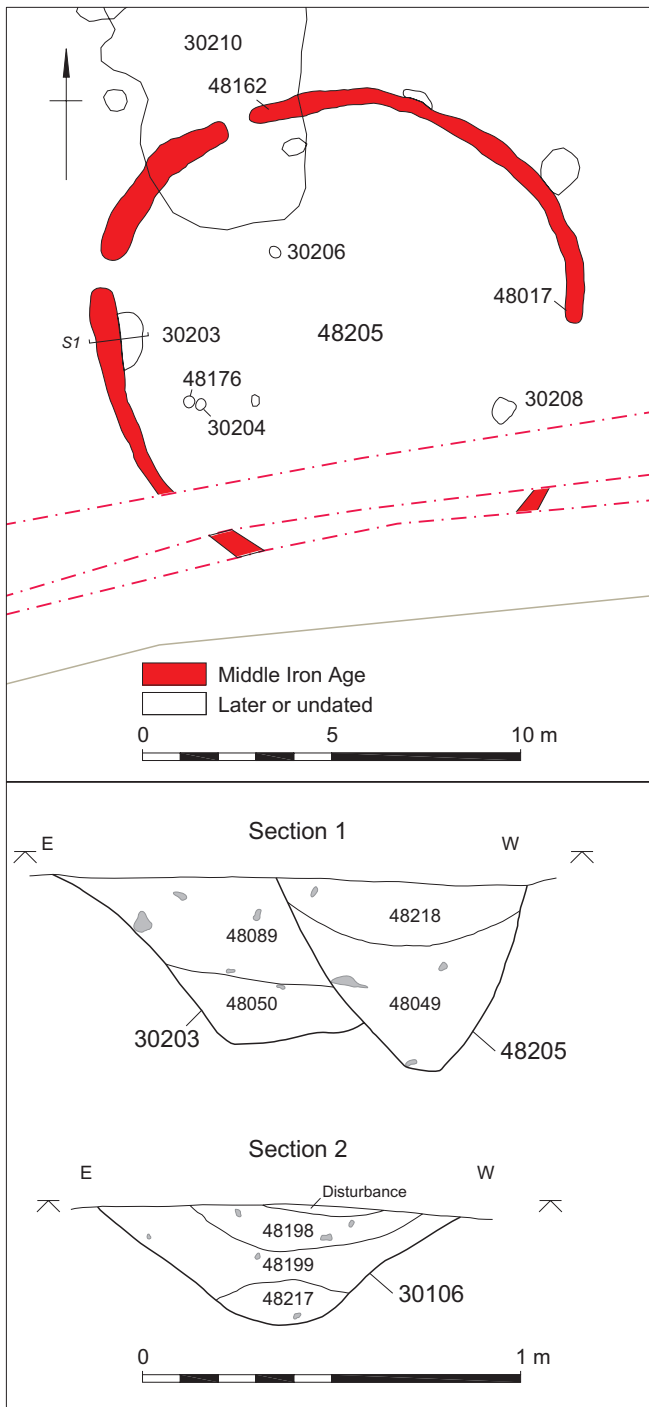


Fig. 2.28 East of Little Dunmow Road (Site 50): plan of roundhouse 48205 with sections 48205/30203 and 30106

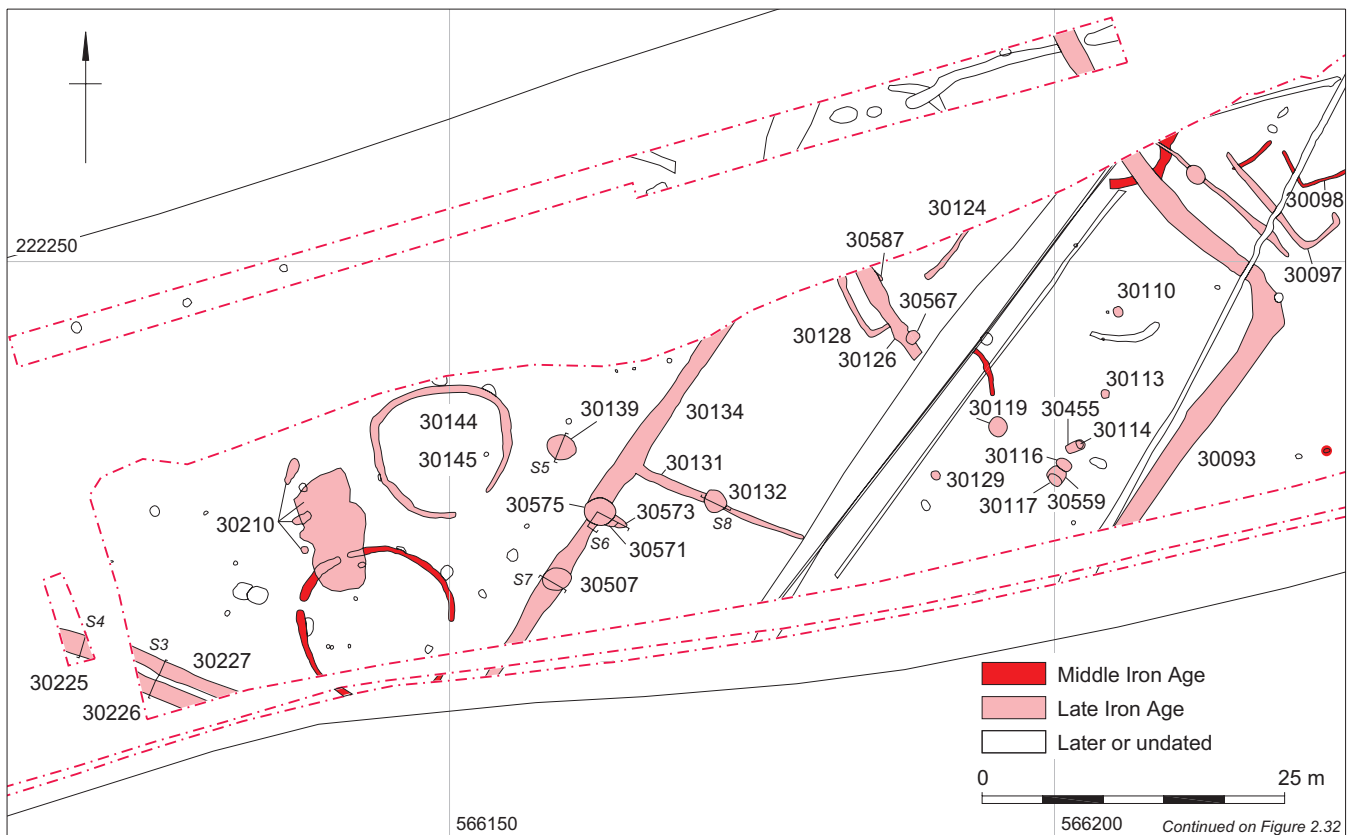


Fig. 2.29 East of Little Dunmow Road (Site 50): plan of features in the western part of the site

some agricultural function such as a byre or barn, or a symbolic function, such as those ascribed to the square or rectangular 'shrines' recorded at the centres of the settlements at Little Waltham and Stansted (Drury 1980, 52; Havis and Brooks 2004).

As well as a single oval posthole (30070), 0.45 m by 0.7 m wide and 0.1 m deep, producing two sherds of middle Iron Age pottery, fired clay and animal bone, some 10 m north-east of roundhouse 30078, there was also a cluster of small subcircular features (30085–8, 30092 and 48141 (Fig. 2.26)) some 12–23 m to the SSW. They were generally shallow, no more than 0.2 m deep, but varied in their size between 0.2 m and 0.55 m wide. Two of the features (30087 and 30088) contained between them four sherds of middle Iron Age pottery, the rest being undated, although their proximity to each other, and the absence of any late Iron Age finds suggest that they are associated. Feature 30092 produced numerous charred grains of emmer/spelt wheat (as well as indeterminate cereal grains and seeds of the arable weed, chess), possibly indicating grain storage associated with these features. It also produced a single grain of naked barley, the only incidence of a crop not found in large quantities from sites later than the middle Bronze Age (see Carruthers CD/Chapter 7).

These middle Iron Age structures and features appear to have been part of an extensive open settlement, extending over at least 120 m along the road corridor, and while the some of the roundhouses may represent the replacement of domestic structures in different

locations over time, this cannot be demonstrated with any certainty. The range of other features, however, was quite limited, being restricted to a small number of postholes, which although some of them were grouped together, formed no recognisable structures, such as the four-post granaries that one might expect on such a settlement. While the L-shaped gully may represent some form of non-domestic structure, there were no substantial pits. Moreover, none of the ditches recorded on the site date to this period, although the possible field system at Throes Farm indicates agricultural activity immediately to the south-west.

Late Iron Age

During the late Iron Age, however, the site was transformed with a remarkably regular grid of field ditches and enclosures being imposed on the landscape, but incorporating further roundhouses and other evidence of settlement activity (Figs 2.29 and 2.32). Because the features clearly extended well beyond the narrow confines of the road corridor, it is difficult to determine the nature of the settlement based solely on the features recorded. It did appear to be bounded by a ditch (30011) to the east (Fig. 2.32), and possibly by the double ditches (30225 and 30227) to the south-west (Fig. 2.29), but these can be interpreted as field boundary ditches rather than components of a large enclosure.

The dominant feature of the site is the rectilinear grid of straight ditches, the main axis of which is aligned NE-

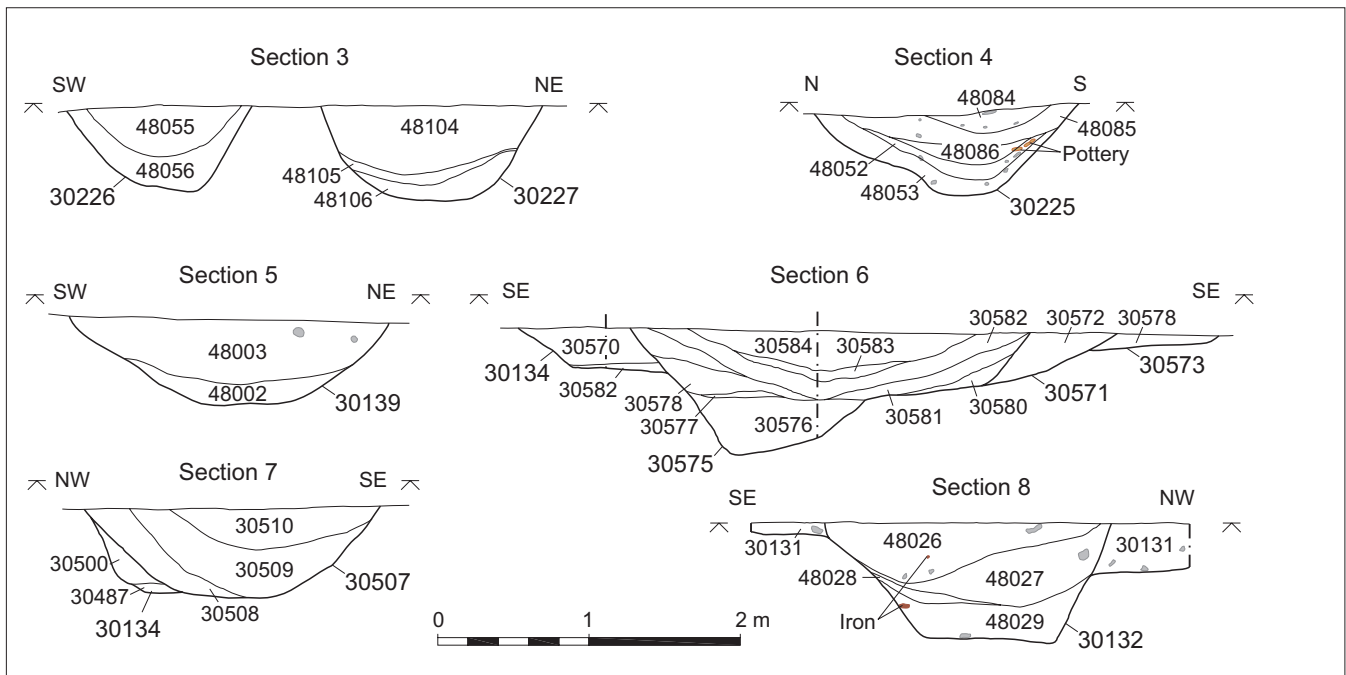


Fig. 2.30 East of Little Dunmow Road (Site 50): sections through features 30226, 30227, 30225, 30139, 30575, 30134 and 30132

SW, with other elements running perpendicular (or close to perpendicular) to it. At a number of locations, there is evidence for the development of this field system over time, in the form of changes in ditch alignment, possible ditch terminals subsequently extended over and ditches being re-cut. It is not possible, however, to provide more than localised phasing. Moreover, it is not possible to determine the chronological relationship between the development of this layout of ditches and the other features, including roundhouses and other structures, apparent spreads of occupation debris and assorted pits and postholes, that lie within the resulting blocks of land. There are five main elements to the ditch system, defining four main blocks of land. None of these blocks appears to have been 'empty' fields, although the range of features in each block gives each a distinctive character, pointing possibly to varied and complementary functions.

The westernmost block was bounded to the south-west by parallel ditches 30226 and 30227, aligned WNW-ESE, and to the south-east by ditch 30134 (Fig. 2.29). The parallel ditches, which were both around 1.3 m wide and 0.55 m deep (Fig. 2.30, section 3), were 1 m apart within the main excavation area, although some 4 m to the north-west only a single, wider ditch (30225) was recorded (Fig. 2.30, section 4). As there was no clear evidence of a re-cut, it is possible that ditch 30225 represents the convergence of two contemporary ditches. The outer ditch, 30226, produced a sherd of residual post-Deverel-Rimbury pottery from the lower fill and late Iron Age pottery, fired clay and animal bone from the upper. The inner ditch, 30227, as well as late Iron Age pottery from its middle fill, also produced a number of pieces of possible briquetage from its lower and upper fills.

Ditch 30134 spanned the whole of the main excavation area, although it was not recorded in the trench on the north side of the haulage road. At its intersection with ditch 30131, there is the suggestion of a re-cut truncating all but one (48018) of the earlier ditch fills, although there were no similar indications in the other excavated sections (Figs 2.29–30, sections 6–7). The ditch was up to 2 m wide, and up to 0.6 m deep, with moderate to steep sides and a flat base, although immediately south-west of a later pit that cut it (30575, below) it was only 0.9 m wide and 0.26 m deep (Fig. 2.30, section 6). Apart from a dump of mixed burnt waste, including charcoal and cereal grain, hazelnut shell and celandine-type tuber (possibly indicating the use of wild food resources), the ditch appears to have filled up through natural processes, with up to ten fills recorded incorporating late Iron Age to early Romano-British pottery and animal bone.

There were two roundhouses within the angle formed by these ditches. Roundhouse 48205, at the south, has been assigned to the middle Iron Age (see above) and therefore pre-dated the ditches. Its entrance was just 3 m from the edge of ditch 30134 (Fig. 2.29) (probably closer given the subsequent truncation of the ditch); with the width of the eaves extending outside the wall, there would have been little space in front of the entrance had the roundhouse and the ditch been contemporary. The entrance to roundhouse 30144, in contrast, was 7.5 m from the ditch, leaving adequate room for access in and out. This was represented by a penannular gully just over 10 m in diameter internally, although it was noticeably flattened on its northern side, possibly due to the presence of some other structure immediately to the north (but outside the excavation area). There was a 3 m wide entrance to the SSE. The

gully was up to 0.74 m wide and 0.3 m deep with, around much of its circuit, moderately steep sides and a flat base. In most sections two fills were recorded, but as with the other roundhouse gullies no traces of posts were recorded in its base. Most of the finds, which included pottery (99% of late Iron Age date), fired clay, animal bone and burnt stones, came from towards the back of the roundhouse (96.8% of the pottery being recovered from a *c* 10 m length of the gully around the north-west 'corner'); no contemporary finds came from the sections flanking the entrance. Interestingly, a pair of quartz pebbles found in the gully north of its eastern terminal was in a comparable location to the four quartz pebbles in the northern terminal of the adjacent, earlier roundhouse.

There was no evidence of internal posts, the only feature being a small, undated pit (30145) on the east side inside the entrance. There was, however, a range of features outside, although most of them were undated. None was closer than 2.4 m to the gully, possibly indicating the width of the eaves and the maintenance of a clear space around the building. Immediately south-west was a large irregular spread of material (30210), approximately 10 m north to south and 5 m east to west and up to 0.4 m thick, producing late Iron Age pottery, fired clay, animal bone and burnt flint, burnt stone and slag.

Immediately east of the building there was a large subcircular pit (30139), 2.1 m by 2.5 m wide and 0.56 m deep, with shallow sides and a flat base (Fig. 2.30, section 5). The upper of its two fills produced 314 g of late Iron Age/early Romano-British pottery, as well as fired clay and shell. It is possible that this pit was associated with three other large pits in the same general area. Two of these (30575 and 30507) cut the silted up ditch 30134, appearing to have been deliberately located over its centre, while the third (30132) was similarly located over ditch 30131 (which abutted 30134 at a right angle) (Fig. 2.29).

Pit 30575 was over 2.2 m in diameter and 0.8 m deep with moderately steep side and an irregular base (Fig. 2.30, section 6). Nine fills were recorded, most of them accumulating naturally, although one layer (30582) included a dump of hearth debris. Other layers produced between them 290 g of late Iron Age pottery and a small quantity of animal bone. It cut an earlier pit (30571) immediately south-east of ditch 30134, which in turn cut the shallow late Bronze Age feature 30573.

Pit 30507 produced only a single late Iron Age sherd and a small quantity of animal bone from the middle of its three naturally accumulating fills (Fig. 2.30, section 7). It was almost 1 m in diameter and 0.6 m deep with moderately steep concave sides and a flat base. Pit 30132, cutting ditch 30131, had four fills all containing finds and representing at least two episodes of deliberate backfilling (Fig. 2.30, section 8). As well as pottery, animal bone and fired clay, the pit also produced an iron buckle (object 30906), two other pieces of iron (objects

30907 and 30914) and slag. If all four pits were contemporary, and associated with roundhouse 30144, this would date the structure to some time after the active use of these two ditches, when they had already silted up to a considerable depth (although no such association could be proved).

The second block of land, *c* 35 m wide, was bounded by ditch 30134 at the west and ditch 30093 at the east (Fig. 2.29). It contained an array of features within which a number of phases of activity can be discerned, although the localised stratigraphic relationships cannot be combined to produce an overall phasing.

The southern section of ditch 30093 ran SW-NE for some 30 m, then turned at a near right angle towards the north-west. This northern section was recorded for a further 30 m curving slightly towards the north where it cut the middle Iron Age curvilinear gully 30106. The ditch, which was up to 2 m wide (although wider at the corner) and 0.95 m deep, had moderately steep straight sides and a flat base, and appears to have filled up through natural processes, up to seven fills being recorded. There were suggestions of a possible re-cut on the inside of the corner. The finds, including pottery, fired clay, burnt stone and animal bone, were relatively evenly distributed along its length, and while there were similar quantities of late Iron Age and late Iron Age/early Romano-British pottery, the latter was found almost exclusively in the upper fills of the ditch. The upper fill also contained two sherds Dressel 1B amphora.

There were two lengths of ditch, 30131 and 30126, on the north-western side of this block of land, neither of them extending beyond a modern field boundary running through the centre of the block. It is possible, therefore, that although they varied considerably in their profiles they turned towards each other to create a small trapezoidal enclosure, comparable in its setting to the rectangular enclosure (30248, below) at the eastern end of the site (Fig. 2.32). Ditch 30131, abutting ditch 30134 and with a similar alignment to ditches 30225 and 30227, was cut by pit 30132. To the west of this pit the ditch was up to 0.9 m wide and 0.3 m deep with steep sides and up to three fills, but to the east it was up to only 0.4 m wide and 0.1 m deep. It produced a small quantity of pottery ranging in date from the late Bronze Age to the late Iron Age, as well as fired clay, animal bone and worked and burnt flint. Ditch 30126, which ran almost parallel to the northern part of 30093, was up to 1.25 m wide and 0.47 m deep, with generally moderately steep sides and a flat base. It contained up to four fills, producing relatively small quantities of mostly late Iron Age pottery, fired clay and animal bone.

Ditch 30126 cut two small lengths of gully (30128 and 30587), whose spatial relationship with a third gully (30124) suggests some functional association. Gullies 30124 and 30587 both ended at the south in rounded terminals, 3.4 m wide apart, probably repre-

senting the south facing entrance of a subcircular structure, possibly oval in shape and of uncertain diameter. Gully 30124, which produced a single late Iron Age sherd, had only a slight curve. The gullies were up to 0.5 m wide and 0.2 m deep with moderately steep sides and flat bases. Gully 30128, to the immediate south-west and of similar dimensions, turned at an angle to the north-east before presumably ending at a terminal in front of the structure entrance (although its terminal was cut by ditch 30126).

Ditch 30126 was in turn cut by a shallow pit (30567), 0.6 m by 1 m wide and 0.17 m deep, with a shallow concave profile and a single fill producing 11 late Iron Age sherds. It was one of a broad group of ten possibly associated pits (30110, 30113, 30114/30455, 30116, 30117, 30119, 30129, 30559, 30567) and a posthole (30118) spread over some 30 m, mostly in the south-eastern part of this same block of land. Many contained variable quantities of pottery, most of it of late Iron Age to early Romano-British date, as well as animal bone and fired clay.

The most north-easterly of these, pit 30110, was 0.86 m in diameter and 0.37 m deep with moderate to steep sides and a flat base, the very dark grey soil filling most of the pit producing almost 3 kg of late Iron Age/early Romano-British pottery including three sherds of imitation Gallo-Belgic platter. The largest of this group of pits (30119), to the west of the linear group, was 1.55 m in diameter and 0.5 m deep with moderately steep concave sides and base. It contained a naturally accumulated fill, with most of the finds—late Iron Age to Romano-British pottery (including a further two sherds of imitation Gallo-Belgic platter), fired clay, animal bone and shell—coming from the lower fills.

At least five of the pits were in a linear arrangement of uncertain function or significance, matching the orientation of the adjacent ditch 30093 (Fig. 2.29). Pit 30559, which was at least 1.35 m wide and 0.3 m deep but contained no finds, was cut to the north-east and south-west by pits 30116 and 30117 (Fig. 2.31). These were oval in plan (*c.* 0.9 m by 1.35 m, and 0.7 m by 0.45 m, respectively), and both *c.* 0.4 m deep. The main fill of pit 30116 produced middle Iron Age and late Iron Age/early Romano-British pottery, almost 0.5 kg of fired clay, burnt sandstone, charcoal, animal bone and a glass bead (object 30905) (see Fig. 2.22, no. 2 above). Similar finds, but in smaller quantities, came from pit 30117. Just over a metre to the north-east, feature 30114, (either a pit or a posthole), had a large undressed stone placed on its base. It was cut on its south-west side by pit 30455. Pit 30113, a further 4 m north-east on the same alignment, was 0.75 m in diameter and 0.25 m deep. Along with sherds of late Iron Age grog-tempered pottery, including a pot base possibly deliberately placed on the base of the cut, were four sherds of an imitation Gallo-Belgic platter, and a fragment of samian.

The third block of land (Fig. 2.32), bounded by ditch 30093 to the west and ditch 30080 to the east, was 15

m wide towards the south, possibly representing the end of a driveway, but opening up towards the north where ditch 30093 turned to the north-west. This angle in the ditch appears to be related to the position of a late Iron Age/early Romano-British rectangular structure 30098, which in turn closely matched that of the middle Iron Age gullies 30100 and 30101. Whether ditch 30093 turned to avoid a pre-existing structure, or whether the corner of the ditch influenced the structure's location, cannot be determined. The structure was represented by a gully forming three sides of a rectangle with slightly rounded corners, possibly the beam slot for a rectangular building at least 10.7 m long and 4 m wide. The gully was up to 0.64 m wide and 0.22 m deep with steep sides and a flat base, and as well as pottery it produced relatively small quantities of fired clay, animal bone and worked flint.

There was a second straight gully, 30097, on a slightly different alignment and truncated at both ends, midway between structure 30098 and the ditch. At its north end it cut middle Iron Age roundhouse 30106, and was in turn cut by a pit 30105 and a later ditch 30096. The replacement and rebuilding in the same location, although with slightly different alignments, of a number of rectangular structures from the middle Iron Age to the late Iron Age points to some continuity in the

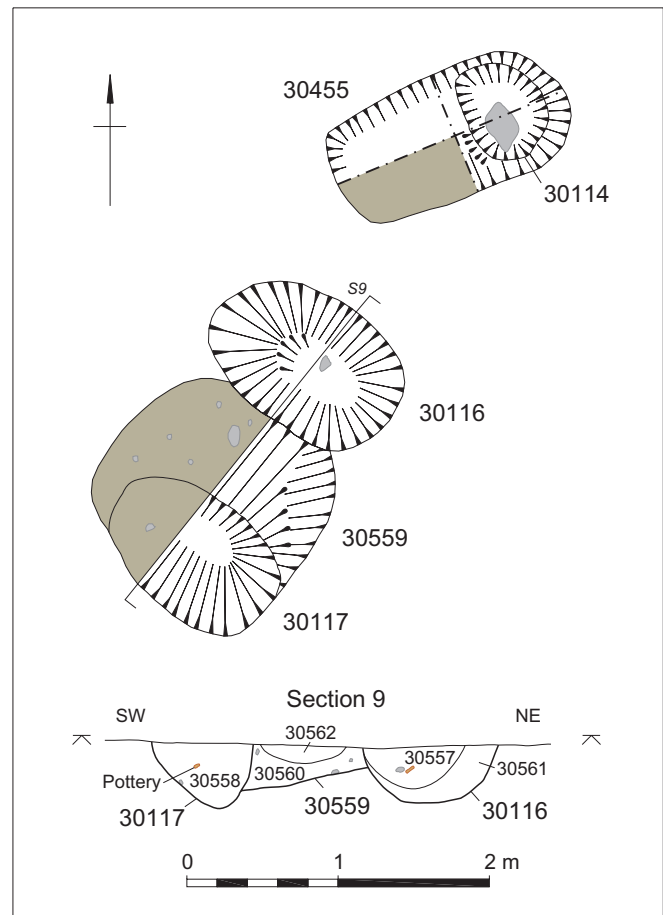


Fig. 2.31 East of Little Dunmow Road (Site 50): plan of pit 30114; plan and sections of pits 30117, 30559 and 30116

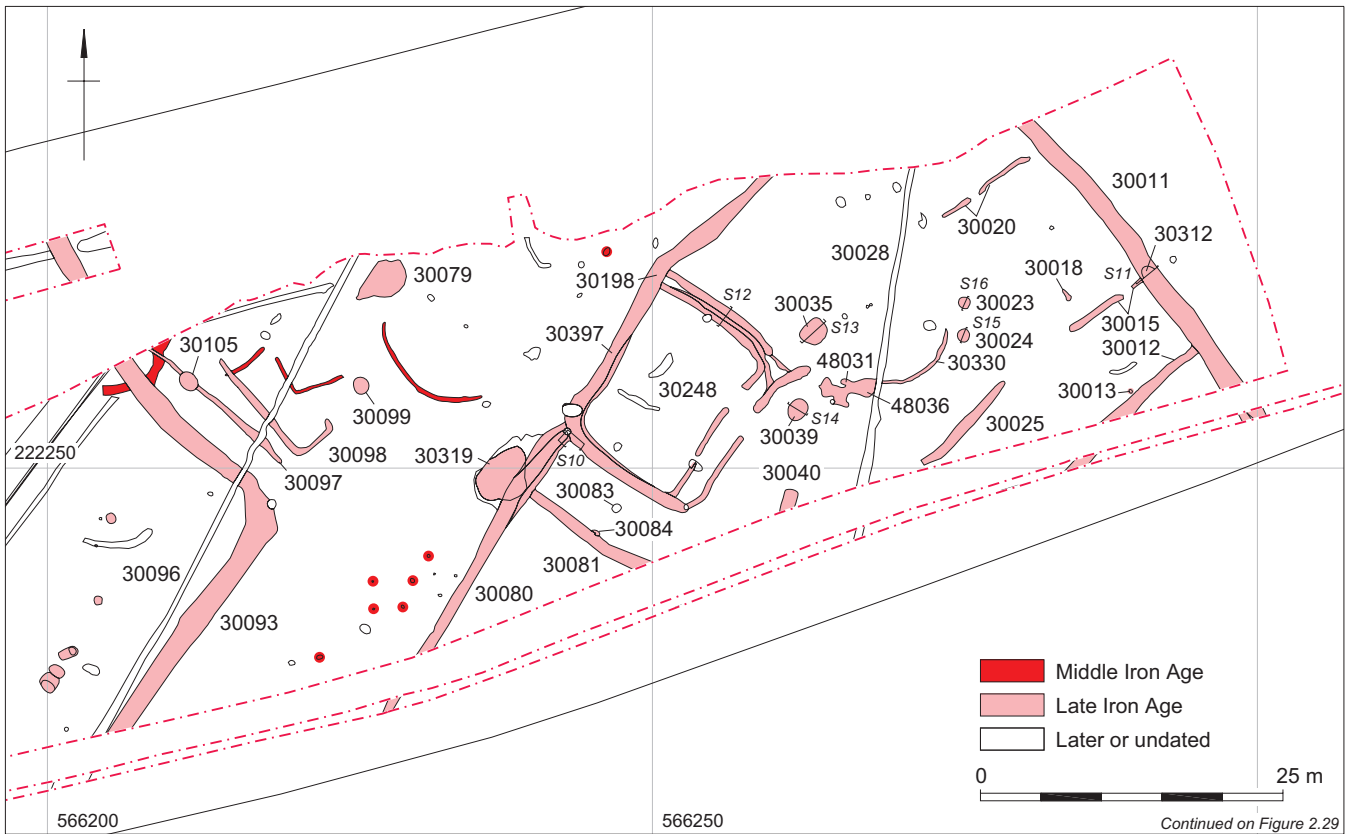


Fig. 2.32 East of Little Dunmow Road (Site 50): plan of features in eastern part of site

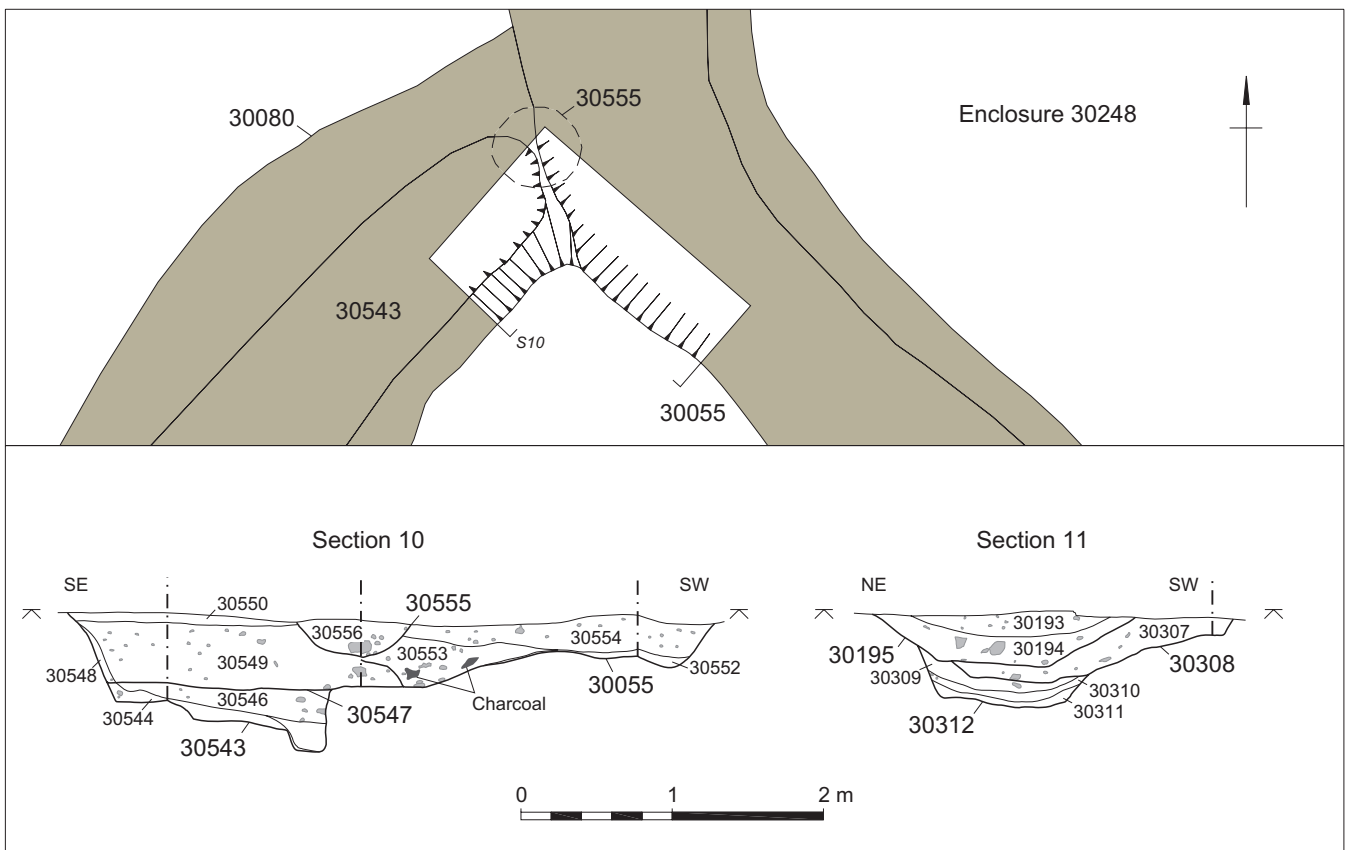


Fig. 2.33 East of Little Dunmow Road (Site 50): plan and sections of ditches 30080, 30543, 30055 and 30555

organisation of activities on the site in spite of the establishment of the field system.

In the same general area a pit (30099), 1.4 m in diameter and 0.2 m deep, immediately east of structure 30098 might date to this period, while pit 30105, which cut gully 30097, produced pottery of late Bronze Age to late Iron Age date, as well as fired clay, animal bone and a small quantity of slag. It was up to 1.65 m wide and was *c* 1 m deep, its base being below groundwater level. There was also a homogenous spread of dark brown soil (30079), up to 0.16 m thick and covering 5 m by 3 m, contained large concentrations of burnt flint, as well as six sherds of late Iron Age pottery and fired clay, while to the south-east, there was a large pit 30319, possibly a quarry pit, 7 m by 4 m and up to 0.5 m deep, cutting the western side of ditch 30080.

The fourth and most easterly block of land (Fig. 2.32) was bounded at the west by ditch 30080 and at the east by ditch 30011, the two ditches probably meeting at a near right angle to the north of the excavated area. Ditch 30011 may represent the north-eastern boundary of the settlement, as no features were recorded in the small area of the excavation beyond it. It contained up to three fills, all producing substantial quantities of late Iron Age pottery, but relatively small quantities of animal bone, fired clay and other finds. A feature, 30312, 1.13 m wide and 0.6 m deep, in the base of the ditch, in the central of the three excavated sections, may represent the north-western terminal of an original ditch

cut running from the south-east (comparable to the early ditch terminal in ditch 30080, below) (Fig. 2.33, section 11). This had moderately steep sides and a flat base, and was truncated by ditch 30011 which continued to the north-west. In the same section there was evidence that ditch 30011 had been re-cut, although in both phases it had a similar profile, with moderately steep sides and a wide flat base. The earlier ditch was over 1 m wide and 0.45 m deep, the re-cut being shallower (0.37 m) but apparently wider (1.74 m). Another section of the ditch produced a quantity of Central Gaulish fineware with a date range of AD 150–250 (111 sherds, 261 g), possibly dating the re-cut and providing a clue to the continued activity on the site in the early Roman period.

A complicated sequence of development in ditch 30080 is matched by, and related to, that of a small rectangular enclosure (30248) that abutted its south-eastern side (Figs 2.33–4). The initial element of ditch 30080 (30543) appears to have run from the south-west to a terminal almost 1 m deep, possibly containing a post, close to the south-west corner of the rectangular enclosure 30248 (Fig. 2.33). As it shared the same alignment as the other main ditch elements, it would appear to represent a component of a single systematic organisation of the local landscape. The ditch was subsequently extended to the north-east, the existing section also possibly being re-cut and widened with moderate/steep sides and a concave base. The extension

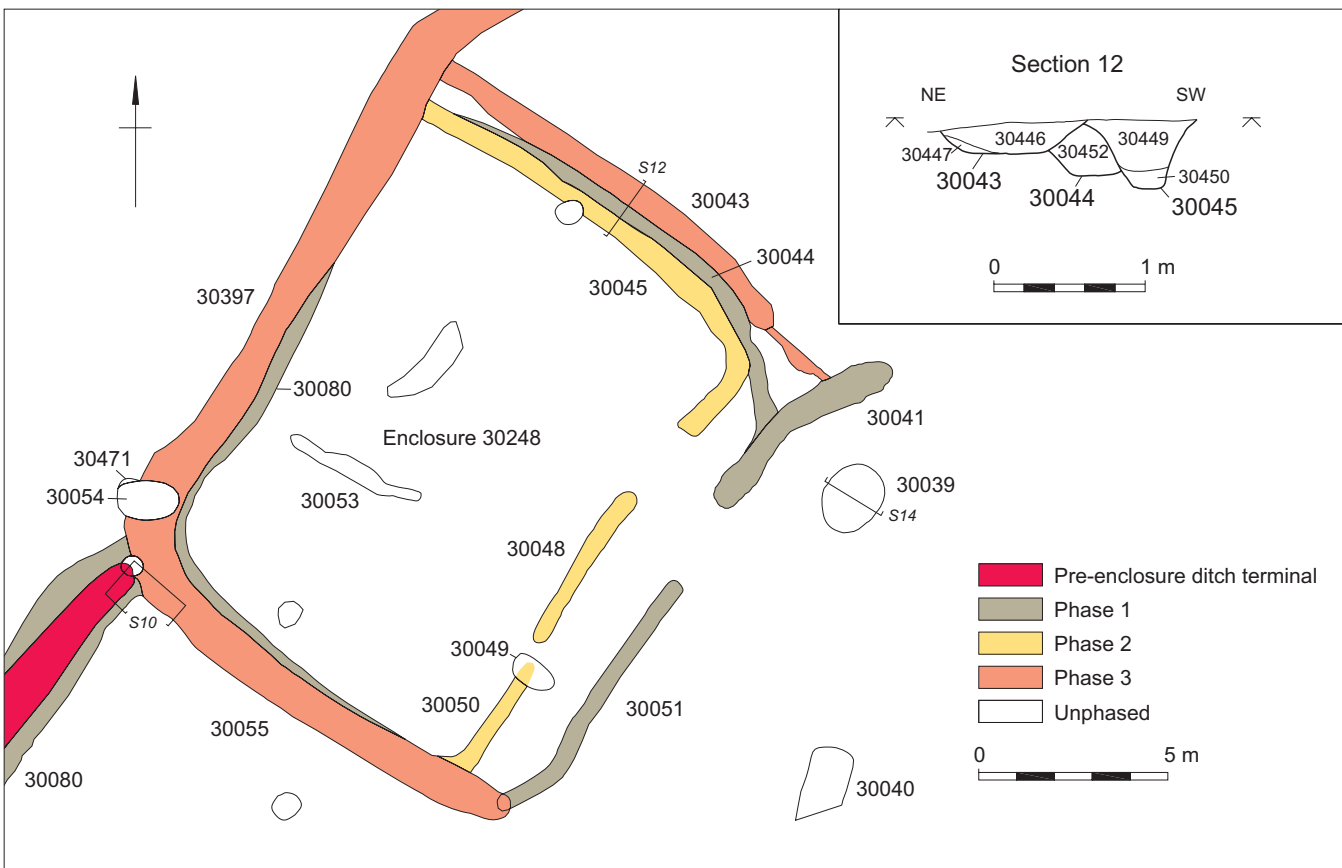


Fig. 2.34 East of Little Dunmow Road (Site 50): phase plan of enclosure 30248

started with a slight eastward kink, as if the ditch was being re-aligned to meet ditch 30011 at a right angle. However, it then resumed its original line until it reached the northern corner of the enclosure, at which point there was a clear re-alignment. This suggests that the extension of the ditch and the initial construction of the enclosure were part of the same phase of works. Late Iron Age pottery was distributed relatively evenly along the ditch, being found in layers both below and above the re-cuts. Fired clay, however, was weighted towards the north-east, 90% of it (by weight) coming from the upper fills in sections 30379 and 30198, the same sections producing 87% of the animal bone.

The enclosure was approximately 10 m by 14 m internally, and 12 m by 17 m externally (Fig. 2.34). It had an entrance placed off-centre on its long south-east side. There were at least three phases apparent in the construction of the enclosure. In the first phase, contemporary with the extension of ditch 30080, which formed

the rear boundary to the enclosure, the main elements of the design were laid out, with the shorter, slightly bowed sides and a 2.4 m wide entrance off-centre towards the north-east. There was a short curved extension to the front ditch at the eastern corner (30041). The side and front ditches were less substantial than ditch 30080, being up to 0.8 m wide and 0.36 m deep. Apart from two residual post-Deverel-Rimbury sherds and small quantities of fired clay and animal bone from the north-east side of the enclosure, all the remaining finds—predominantly late Iron Age pottery—came from along the south-eastern side.

In the second phase it appears either that the size of the enclosure was slightly reduced by pulling back the front ditch by up to 2 m, or that an inner ditch of similar dimensions was created along the front, creating a 'corridor' between the two ditches and a slightly staggered main entrance. There was a second narrower gap in the inner ditch providing access between the

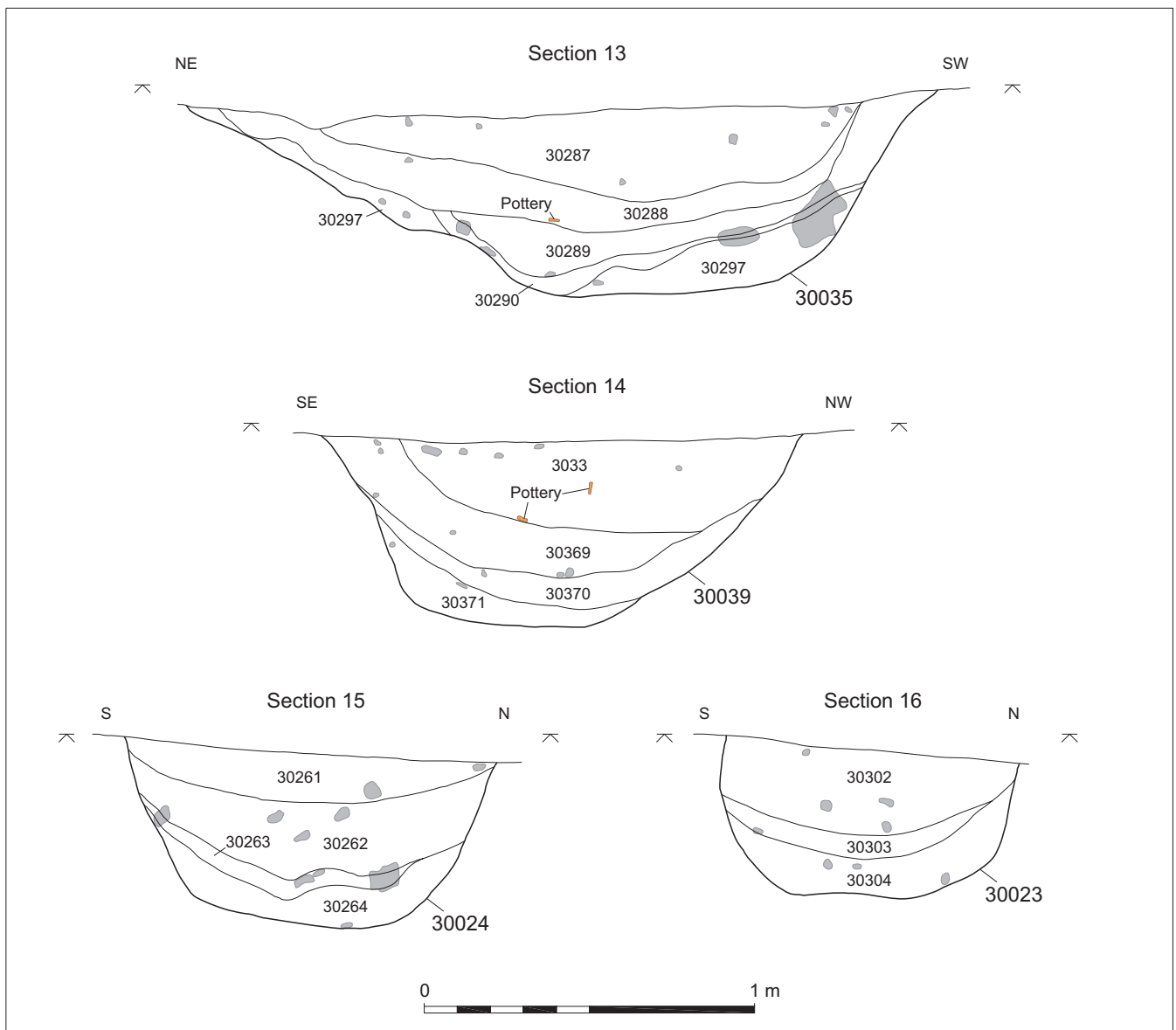


Fig. 2.35 East of Little Dunmow Road (Site 50): sections through ditches 30035, 30039, 30024 and 30023

corridor and the main part of the enclosure. If the enclosure was used for some form of stock management, these features may have facilitated the control, movement and segregation of animals. In most of the excavated sections two ditch fills were recorded, and while all the animal bone came from towards the south-western end of the enclosure, this area produced little of the pottery, the distribution of which was weighted to the north-east.

In the third phase the side ditches were recut, the re-cut on the south-west side continuing round the western corner and some way along the back in ditch 30080. Most of the finds, including 71% of the pottery (by weight), 83% of the fired clay and 85% of the animal bone came from a single section in the middle of the north-east side (section 12). A shallow oval pit (30054), measuring 1.2 m by 1.6 m, was subsequently cut into the enclosure ditch at the western corner, truncating an earlier, but otherwise undated feature (30471), possibly also a pit.

The only internal features within the enclosure were a small pit, 30049, cutting the second phase front ditch terminal at its narrow entrance, and a 3.7 m long gully 30053 running front to back towards the rear ditch, and to the left of centre. The only finds were nine sherds of middle to late Iron Age pottery and three fragments of animal bone from the gully. The purpose of the enclosure is not immediately apparent—it may have been used as an animal pen, although the relatively large number of charred cereal grains and chaff from the phase 1 ditch (section 30280) suggests crop processing or storage in the immediate vicinity.

It is possible that these remains derived from activity associated with the adjacent late Iron Age roundhouse (30330), immediately east of the enclosure (Fig. 2.32). This was represented by an 8 m length of curved gully describing the southern arc of a circle *c* 10 m in diameter, ending at a terminal representing the south side of an east facing entrance. The gully was 0.42 m wide and 0.12 m deep, its single fill producing two sherds of pottery and part of a possible fired clay loomweight (Object 30902).

A pair of circular pits 1.7 m apart, lay *c* 1.0 m outside the roundhouse gully (30023 at the north and 30024 at the south) (Fig. 2.32). Both were approximately 1 m in diameter and 0.5 m deep with vertical sides and flat bases, containing three and four fills respectively (Fig. 2.35). Pit 30023 produced a few sherds of middle to late Iron Age pottery, while pit 30024 produced a large quantity (725 g) of late Iron Age to early Romano-British pottery. Both also contained small quantities of fired clay and animal bone. Their similarity in form and their position in relation to the gully terminal, raise the possibility that they were actually large postholes forming a short entrance porch to the roundhouse. However, no such porch features were found in any of the other suggested roundhouses, either on this site or any of the other A120 sites, and it seems more likely,

given their sequence of fills, that they were pits, possibly associated with the series of features to the west and south-west of the roundhouse.

One of these, pit 48036, which was 1.1 m diameter, impinged on the projected line of the roundhouse's foundation trench. It was overlain by an irregular spread of dark brown soil (48031), measuring 3.4 m by 4.8 m and up to 0.03 m thick, and producing substantial quantities of late Iron Age/early Romano-British pottery (1150 g), as well as fired clay, burnt stone, animal bone and worked flint. The spread slumped into the top of the pit forming its upper fill (48034). There were also two large subcircular pits (30035 and 30039), around 2 m in diameter and 0.6 m deep, (Figs 2.32; 2.35, sections 13–4) containing similar material, including pottery with a date range of late Iron Age to early Romano-British, fired clay, animal bone and flint. Pit 30039 also produced a 1st-century AD Colchester-type copper alloy brooch (Object 30903) (Fig. 2.36, no.2).

It is clear that not all these features were directly associated, but it is not possible to phase them in relationship to the enclosure. It is feasible, however, that the roundhouse was contemporary with at least one phase of the enclosure, representing therefore evidence as to the layout and internal structure of the settlement, in particular the functions of, and the relationship between, the adjacent blocks of land. Although the eastern block of land, which contained both the enclosure and the roundhouse, was bounded to the north-east and north-west by ditches 30080 and 30011, respectively, it contained a number of smaller ditches creating possible rectangular internal divisions.

Running south-east from ditch 30080, some 5 m to the south-west of enclosure 30284, was ditch 30081. It was *c* 0.9 m wide and up to 0.35 m deep with steep sides and a flat base (Fig. 2.32) and although its fills were cut by ditch 30080, it is possible that they were in fact associated with the original phase of this ditch, prior to its re-cut. As it approached the southern edge of the excavation it curved slightly towards the east but was not observed in the modern ditch 3 m south of the excavation area, suggesting that it turned towards east, running just outside the excavation area. It is possible, therefore, that feature 30040, recorded 12 m further east, represents the continuation and terminal of the same ditch, so creating a flanking arm around the south side of the enclosure. Feature 30040 ran north-east for 2 m to a slightly squared, steep-sided 'terminal' some 5.5 m outside the entrance of the enclosure. It was 1.2 m wide and, like ditch 30081, had steep sides and a flat base. A 0.2 m deep depression in the base close to its end terminal gave it an overall depth of 0.75 m. However, unlike ditch 30081—which had two fills producing small quantities of late Iron Age pottery, animal bone and fired clay—four fills were recorded in feature 30040, between them producing 355 g of late Iron Age to early Romano-British pottery, animal bone, fired clay and an iron nail. Another Colchester-type copper alloy

Metalwork

by Philippa Walton and Ian Scott

Only a few pieces of metalwork dating to the prehistoric period were found, these including the pin of a copper alloy brooch recovered from a large late Bronze Age to Iron Age pit at Stone Hall (Site 7/42), and possible copper alloy fragments from Strood Hall (Site 9) in a middle Bronze pit cut by later features. A small pit at Greenfields (Sites 27–8), close to the deposits of Ewart Park type sword mould fragments, produced a further copper alloy scrap fragment associated with post-Deverel-Rimbury pottery.

An iron buckle was found in an Iron Age pit at East of Little Dunmow Road (Site 50), but the most notable items of metalwork were two late Iron Age/early Roman Colchester type brooches from the same site (Fig. 2.36). They are very similar in design, size and decoration and may have been the work of the same workshop or craftsman. The form dates from the early to third quarter of the 1st century AD.

brooch (Object 30901), very similar in design, size and decoration to that from pit 30039 (Object 30903) and possibly the work of the same craftsman, was recovered from the second lowest fill (30259) (Fig. 2.36, no.1; [Plate 2.15](#)). This form dates from the early 1st century to the third quarter of the 1st century AD.

Ditch 30081 cut a small pit 30084 (Fig. 2.32), that produced a single sherd of late Iron Age pottery, while a similar pit (30083) 2.5 m to the north-east produced no finds.

Three ditches also ran perpendicular to ditch 30011 on its south-west side, none of them continuing on the north-east side. The fill of ditch 30015 was indistinguishable from that of ditch 30011, both being truncated by the later re-cut of the larger ditch. The fill of ditch 30012 was also cut by ditch 30011, and although no re-cut of ditch 30011 was evident at this location it is possible that such a re-cut could have removed all traces of the original ditch. Ditch 30012, which appeared to bend slightly to the south (possibly matching the bend on ditch 30080), was up to 1.08 m wide and 0.55 m deep with moderately steep sides, flat to the north-west and convex to the south-east, and had a narrow flat base. Late Iron Age pottery came from both its fills, and there was a small pit (30013) with a charcoal rich fill, but no finds, on its north edge (see Fig. 2.32).

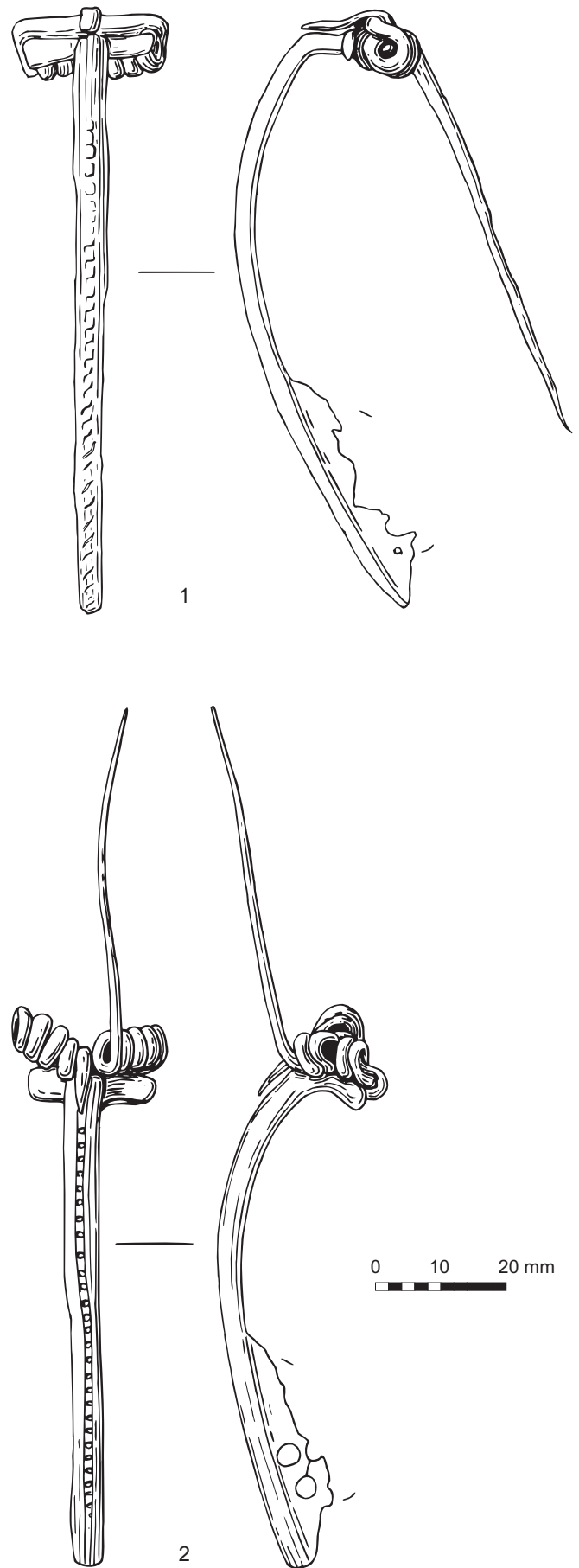


Fig. 2.36 East of Little Dunmow Road (Site 50): copper alloy brooches

Parallel to ditch 30012 and some 7–8 m to the north-west were two lengths of ditch (30025 and 30015) separated by a gap of almost 7 m (Fig. 2.32). Both had steep sides and flat bases, with a maximum width of 0.85 m and depth of 0.4 m. Ditch 30015 ran south-west for some 7 m to a rounded terminal, while ditch 30025 ran from a matching terminal for a further 10 m before curving slightly to the west and continuing beyond the excavated area. Like ditch 30081 it was not observed in the modern ditch just outside the excavation area, raising the possibility that it, rather than feature 30040, was the continuation of ditch 30081. If so, the widely spaced terminals would represent the entrance into a larger subrectangular enclosure located in the corner formed by ditches 30011 and 30080, in turn containing enclosure 30248.

Some 13 m north-west of ditch 30015 there were two lengths of gully (30020), 0.3 m wide and just 0.06 m deep, probably a very truncated ditch. They had an overall length of 8.7 m, running south-east from close to ditch 30011, having probably originally intersected with it.

Discussion

During the course of the Iron Age the character of this site changed markedly. Small quantities of post-Deverel-Rimbury pottery were found across the site, as well as a few indeterminate features, indicating likely late Bronze Age/early Iron Age settlement in the vicinity, probably on a small scale. By the middle Iron Age the site was the location for a potentially more extensive open settlement containing at least four roundhouses as well as

other rectangular structures, pits and postholes. Nonetheless, the site produced a relatively small assemblage of middle Iron Age pottery (240 sherds), when compared to the single roundhouse at East of Parsonage Lane (522 sherds). The pottery was also relatively abraded, reflecting the high degree of truncation of the settlement features.

The area of settlement probably extended both to the north and south, as well as to the west where evidence for a middle Iron Age field system was recorded at Throes Farm. The character of the site suggests a wholly agricultural settlement, although the function of the rectangular structure in the centre of the site is not known. It probably had an agricultural or industrial function such as a byre, barn or production activity area, although it could possibly have had some alternative social or ritual function, square or rectangular structures suggested to be ‘shrines’ being recorded at the centres of the nearby settlements at Little Waltham (Drury 1980, 52) and Stansted (Brooks 1989b), as well as further afield (Sealey 1996, 58).

During the late Iron Age and into the 1st century AD, however, a grid of rectilinear fields, enclosures and ditches dominated the site, with further settlement evidence in the form of round and rectangular structures and pits. While elements of this sequence, such as the proximity of the middle and late Iron Age roundhouses at the western end of the site and the relative position of the rectangular structures in the centre of the site, reflect continuity of occupation, the overall regularity of the late Iron Age features suggest a relatively rapid and fundamental reorganisation of the



Plate 2.15 East of Little Dunmow Road (Site 50): brooch in ditch close-up

site. Unfortunately, the narrow road corridor makes it hard to interpret the relationships between the different components of the late Iron Age occupation, and while most areas of the site provided evidence for different phases of activity in the 1st century BC, these could not be combined across the site to show how the settlement developed.

The late Iron Age pottery assemblage is characterised by a general absence of Roman-period wares and the presence of typically pre-conquest forms in grog-tempered fabrics, but without well-dated, diagnostic imports, close dating of locally-produced

pottery is almost impossible. Sand-tempered pottery of middle Iron Age tradition found in association with wheel-thrown grog-tempered wares, appeared to indicate limited occupation within the second half of the 1st century BC, with the main phase of activity probably during the first half of the 1st century AD. Shell-tempered ware, relatively abundant within the ceramic assemblage, was crucial as a chronological landmark—the fabric was manufactured well before AD 43, and simple-rimmed, bucket-shaped jars, present in number at the site, were among the earliest products (these were replaced after the conquest by

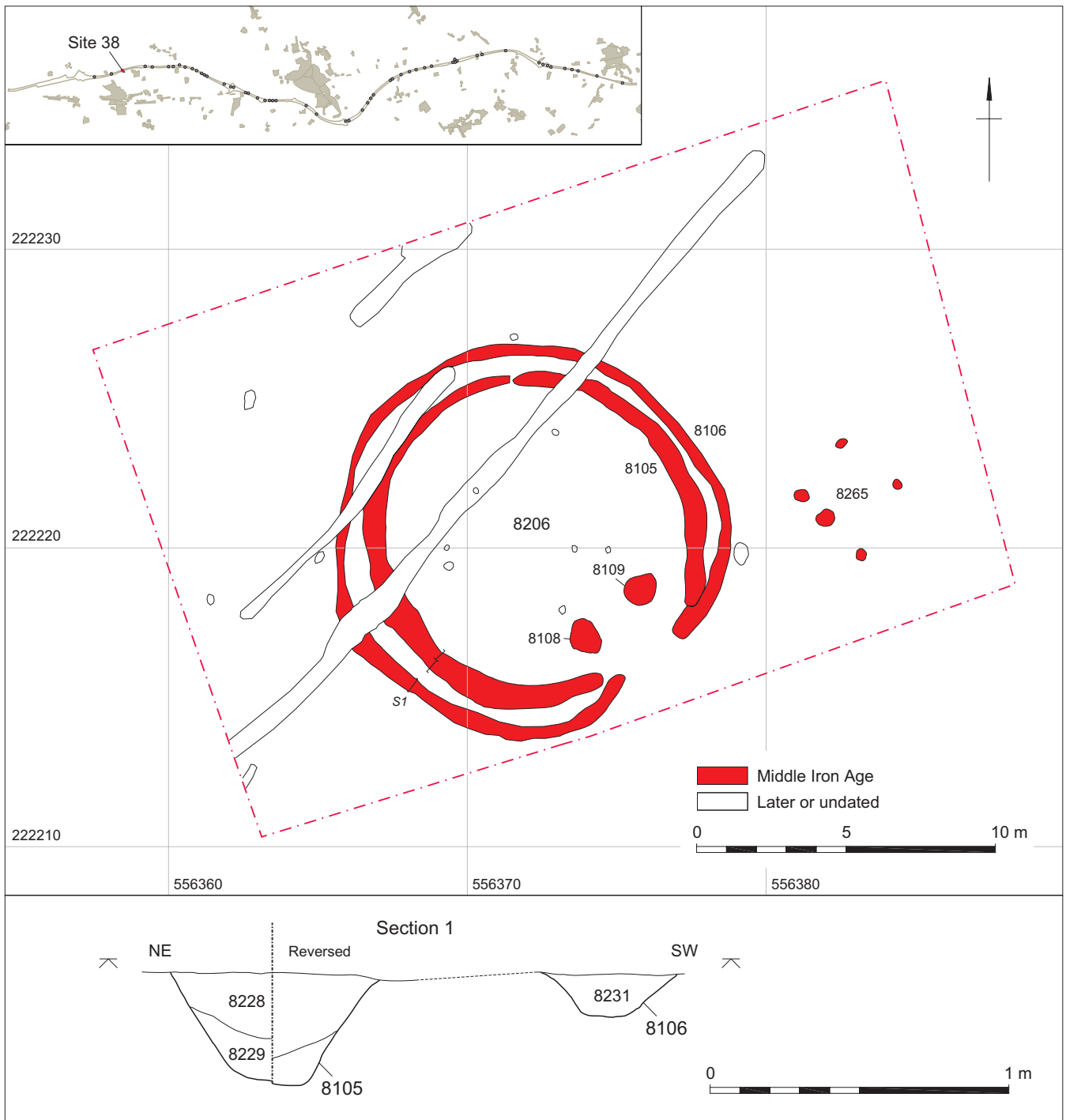


Fig. 2.37 East of Parsonage Lane (Site 38): site plan showing Iron Age features and section through gullies 8105 and 8106

ledge-rimmed jar types that were absent from the site) (Cheer 1998, 89–93). A small proportion of sandy grey wares, a mortarium, and continental imports, including *terra nigra*, offer evidence for continued occupation up to *c* AD 55/60, but overall the settlement barely survived the conquest.

Little Canfield Hall (Site 6)

Less extensive evidence of middle Iron Age activity was found at Little Canfield Hall (Site 6) where a 7 m long, slightly curved ditch (but not having the curvature of a roundhouse), 0.35 m wide and 0.2 m deep, produced 23 sherds of middle Iron Age pottery (Fig. 2.19). Other undated features in the same area, including a second slightly curving ditch (which produced a flint hammerstone) and several truncated postholes, may represent contemporaneous activity. In addition, two lengths of straight, approximately east-west ditch (1008 and 1016), up to 0.55 m wide and 0.15 m deep, produced a small number of late Bronze Age to middle Iron Age sherds as well as five worked flints including two blade-like flakes. There were a number of other, undated linear features on different alignments. The majority of the undated features were sealed by a relict ploughsoil of possibly medieval or later date.

East of Parsonage Lane (Site 38)

Although the small area excavated at this site contained only a single middle Iron Age roundhouse (8206) and a four-post structure (Fig. 2.37), the roundhouse repre-

sents the most complete example of its type found at any of the sites along the route of the A120, being marked by a circular foundation trench and a less substantial external drainage gully, with a doorway on the south-east side being represented by two large internal postholes.

The inner gully, 8105, which was up to 1 m wide and 0.5 m deep (Fig. 2.37), was just less than 10 m in diameter internally with a 3.6 m wide entrance gap. Although appearing largely circular in plan, the irregular lines of its inner and outer edges suggest that in fact it comprised a series of slightly flattened segments, resulting in a slightly polygonal form. Around most of its circuit, it had two fills—a primary fill consisting of re-deposited natural and containing few finds, and an upper fill containing significant quantities of pottery, fired clay, animal bone and other artefacts.

At a number of locations around its circuit there was a distinct layer of charcoal up to 0.08 m thick between the upper and lower fills (Plate 2.16), and it is possible that the charcoal and fired clay (probably burnt daub), found also in the entrance postholes indicates that the house was damaged or even destroyed by fire. Most of the finds from the inner gully came from the front half of the building, with the four excavated sections west of the entrance producing 77% of the pottery, with a further 20% coming from the two sections north of the entrance (see Fig. 2.39, nos 4–6, 12 below). The same lengths of the gully produced, respectively, 70% and 10% of the flint, 30% and 51% of the worked flint, and 20% and 75% of the animal bone. All the burnt and worked stone

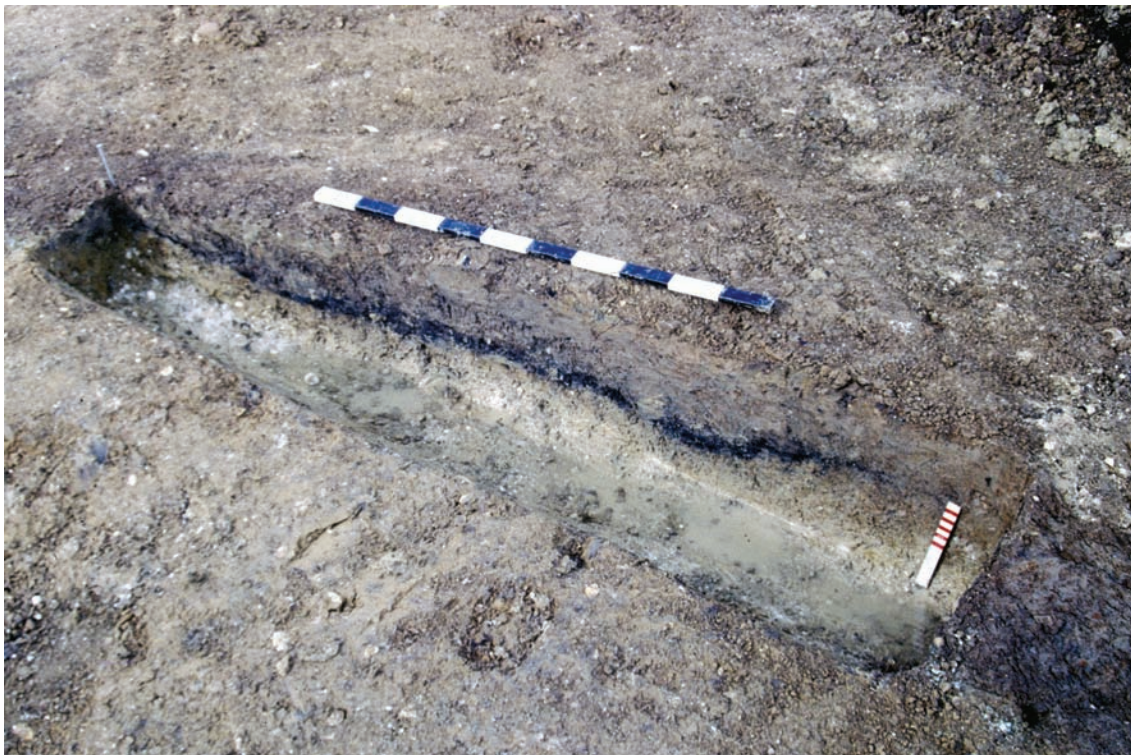


Plate 2.16 East of Parsonage Lane (Site 38): charcoal layer in gully 8105



Plate 2.17 East of Parsonage Lane (Site 38): entrance posthole 8109

came from the three sections west of the entrance.

There were two substantial postholes (8108, 8109) just inside the gap in the inner gully each over 1 m in diameter and 0.45 m deep (Plate 2.17). Each had distinct grey/brown silty clay fills indicating both the packing around the post and the positions of the post-pipes on their inner sides, effectively narrowing the entrance to no more than 1.5 m. Posthole 8109 produced small quantities of pottery, fired clay and worked and burnt flint.

The outer gully, 8106, was up to 0.66 m wide but no more than 0.2 m deep, with a shallow U-shaped profile.

It was concentric with the inner gully apart from at the entrance where it turned inwards.

The four-post structure, 8265, immediately east of the roundhouse and level with its entrance, was represented by an approximately square arrangement of postholes measuring *c* 3 m by 2.2 m, the longer NW-SE axis matching that of the roundhouse. The postholes, one of which had a visible post-pipe, were up to 0.5 m wide and 0.3 m deep. There was a fifth, slightly larger but shallower pit along its longest side, containing charcoal and large quantities of burnt stone (almost 3 kg) and burnt flint as well as two sherds of middle Iron

Age pottery. If this feature is associated with the four-post structure, this would seem to suggest it was not in fact a granary.

While this combination of structures, roundhouse and four-post structure (Plate 2.18), is typical of many Iron Age settlements, the limited extent of the excavation makes it impossible to say more about the likely nature and extent of the settlement. However, it is unlikely to have consisted of just two closely associated but isolated structures, and these features may point to the general location of a more extensive settlement, either open or enclosed. Apart from a single sherd of middle Iron Age pottery from Frogs Hall East, East of Parsonage Lane was the only site between the Pincey Brook and the River Roding to produce any evidence of Iron Age activity.



Plate 2.18 East of Parsonage Lane (Site 38): conjectural reconstruction of roundhouse and four-post structures

Discussion by Andrew Powell and Edward Biddulph

In contrast to the widespread evidence for settlement and agriculture along the A120 corridor in the late Bronze Age, there is little clear evidence of continuity into the early Iron Age, suggesting a significant abandonment of settlement at the end of the Bronze Age, as found also along the Thames estuary and valley (Yates 2001). Although post-Deverel-Rimbury pottery continued in use into the early Iron Age, it was seldom found in association with recognisably early Iron Age fabrics and forms.

The distribution of middle and late Iron Age settlements along the A120 suggests that settlement was becoming increasingly concentrated within the landscape. It is clearly found at two main locations along the A120 route—on the higher ground between the Roding and Chelmer valleys at Highwood Farm, and between the Chelmer valley and the Stebbing Brook at Grange Lane and East of Little Dunmow Road. The area around the roundhouse and four-post structure at East of Parsonage Lane (probably components of a more extensive settlement) between the Pincey Brook and the River Roding, could represent a third. The three late Iron Age sites all produced evidence of activity stretching back to the late Bronze Age, and at Grange Lane back to the middle Bronze Age, indicating that these were locations that clearly offered economic and possibly also strategic advantages to their occupants.

Nonetheless, the principal sites vary considerably in their morphology and apparent scale, ranging from small open settlements suggested by the middle Iron Age features at Highwood Farm and East of Little Dunmow Road, to small enclosures either for domestic settlement or stock management (or both) as at Grange Lane in the middle Iron Age and Highwood Farm in the late Iron Age. There were also settlements located within extensive areas of clearly defined and bounded field systems such as the late Iron Age phase at East of Little Dunmow Road. Such diversity is, however, a feature of Iron Age settlement in the wider landscape of Essex, which included small farmsteads or hamlets such as Wendens Ambo (Hodder 1982) and the varied forms of open and enclosed settlement revealed by excavations at Stansted, including enclosed sites like the Stansted ACS village (Havis and Brooks 2004).

Pottery has tended to provide an access-point into the issue of status, with the presence or absence of particular

types, such as prestigious continental imports, having been seen as indicating relative economic or social positions. Imported Dressel 1B amphorae and Gallo-Belgic pottery from East of Little Dunmow Road suggests that the settlement represented there enjoyed wider trade links and therefore potentially a higher status than the contemporaneous settlement at Highwood Farm, which yielded no such material. The presence of imported *terra nigra* platters and a mortarium at the former site reveals the adoption or practice of Mediterranean dining habits within a few years of the conquest.

Traces of 13 possible Iron Age roundhouses were identified during the excavations (the form continuing in use after the Roman conquest at Strood Hall, see below). They are represented by lengths of curved gully with diameters of between 8 m and 12 m (Table 2.6), although it is possible that some of these features represent other forms of structure, such as curved windbreaks or screens. At least four gullies had terminals indicating the likely positions of the entrances, in each case between north-east and south-east, an easterly orientation being typical for roundhouses. All the other gullies could potentially have had similarly aligned entrances. All the possible roundhouses, with the exception of East of Parsonage Lane, were represented by single gullies, and while a number of postholes recorded within their interiors may have been associated with their structures, no such relationships could be established with certainty. The gullies varied in their profiles, although the majority were between 0.3 m and 0.5 m wide and up to 0.3 m deep with moderate-steep sides and concave or flat bases.

Due to the damage caused by ploughing the majority of the roundhouses were represented by only short arcs of gully, relatively complete gullies surviving only at East of Parsonage Lane and at roundhouses 30144 and 48205 at East of Little Dunmow Road (Fig. 2.38). Little can be deduced therefore about roundhouse construction. Encircling gullies can have a number of possible functions, and their various interpretations as recorded during the excavation—including *roundhouse ditch*, *drip gully* and *wall foundation trench*—reflect the uncertainties in reconstructing such buildings when so little of their structure has survived.

The interpretations of parallel features at other sites has been similarly varied. The large mid 1st century AD structure (S9) at Orsett Cock (Carter 1998, 23) had a

Table 2.6 Possible roundhouses

	Middle Iron Age	Late Iron Age	Iron Age
Highwood Farm	3	-	1
Grange Lane	2	-	-
East of Parsonage Lane	1	-	-
East of Little Dunmow Road	4	2	-

gully, flat in profile and no more than 0.3 m deep, which, in common with many ring ditches on the Thames gravels, was interpreted as a sump or soakaway (ibid. 121). Internal postholes held posts that supported a ring beam and ultimately the roof (ibid. 127). The gully defining structure S1 from the same site, though dating to the late Iron Age, was interpreted as a foundation trench for a wall, being relatively narrow and shallow with a discontinuous and somewhat polygonal circuit (ibid. 11).

The excavation at Little Waltham (Drury 1978) revealed numerous roundhouse gullies, most of them better preserved than the A120 examples. The Period III houses (C1 and C2: late 2nd to mid 1st centuries BC) were represented by relatively shallow V-shaped gullies with sharply-defined profiles, as if subjected to 'regular cleaning' (Drury 1978, 32). These gullies, both *c* 15 m

in internal diameter, may have been dug to aid the drainage of storm water, or to supply material for a turf 'mass wall' (ibid. 122). They may also have provided formalised and symbolic boundaries around the dwellings. These roundhouses had internal postholes for posts supporting the roof. The middle Iron Age gully, 30106, at East of Little Dunmow Road may have had a similar function, its generally V-shaped profile showing signs of having silted up naturally, although at *c* 10 m internal diameter it was substantially smaller than the other roundhouses recorded on the site, perhaps indicating some other, non-domestic function.

The majority of the roundhouse gullies at Little Waltham (Periods I, II and IV), however, were interpreted as representing wall trenches, holding the upright timbers of the external walls. These gullies generally had moderately steep sides and a flattish base, comparable

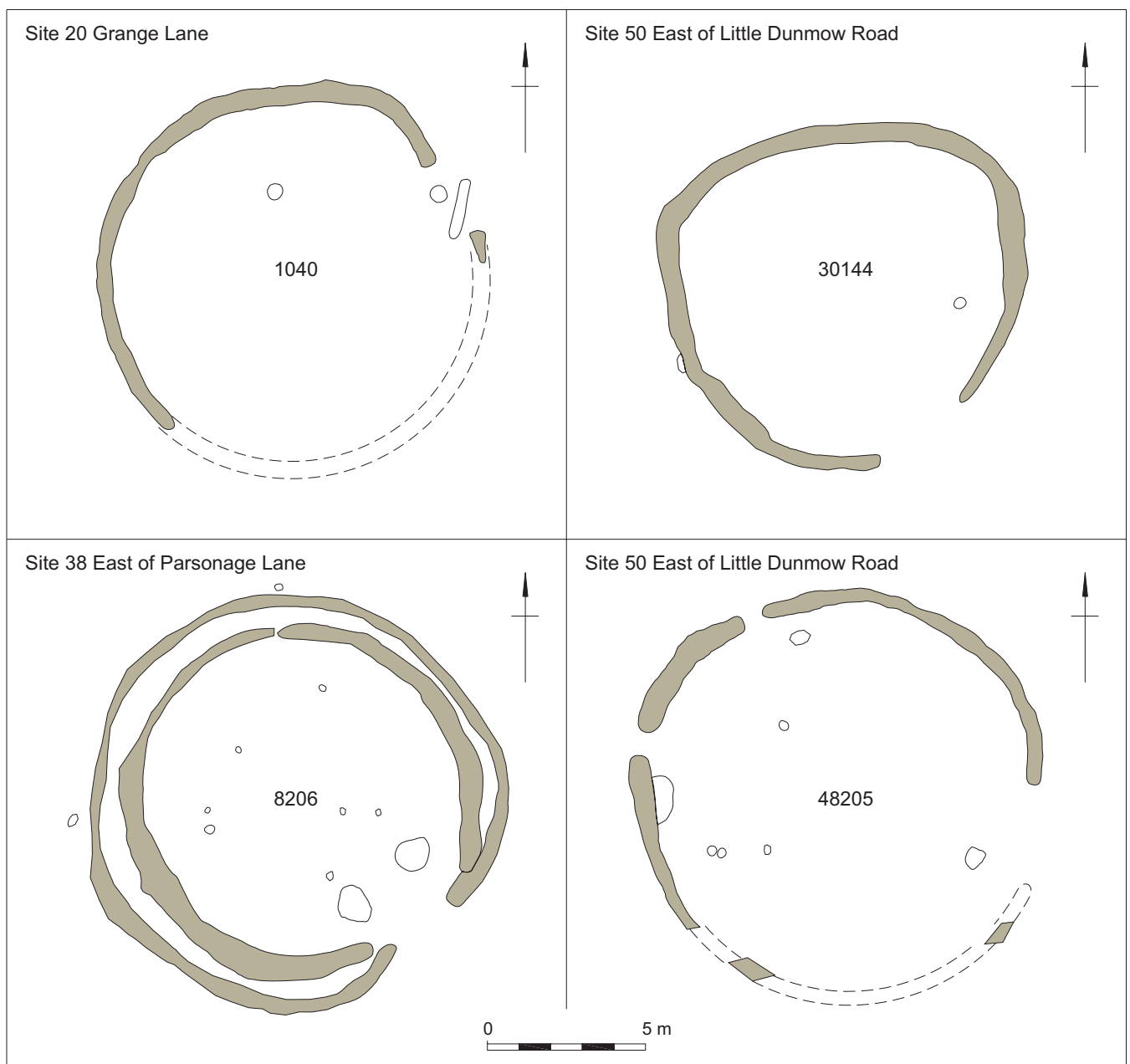


Fig. 2.38 Comparative plans of A120 roundhouses, Sites 20, 38 and 50

to many of the A120 roundhouse gullies. The Period IV gully of Structure C5 even had a number of post settings visible in the base of the gully indicating that the feature was wall-bearing (*ibid.*, 36). Clarke, in his discussion of roundhouse 820/821 at Chignall St James (1998, 132), also concludes that the gully was dug as a wall trench, being shallow, and given the absence of internal features. He argues that an open gully would have resulted in collection of water in the terminals and flooding of the entrance.

The late Iron Age roundhouses at the Airport Catering Site, Stansted (Havis and Brooks 2004) are superficially similar to those at Orsett and Little Waltham. The gully defining structure 21 measured 0.47 m deep and 0.6–1 m wide, a relatively substantial feature and regarded as a wall-trench because of its size. Structure 550 was larger and included internal postholes, but the gully profile was smaller, 0.45 m wide and 0.06–0.2 m deep. Its interpretation as a wall-trench was strengthened by the discovery of a coin hoard within it, which was unlikely to have been placed in an open feature. In contrast, the profile of the gully defining Structure 52, which was of similar dimensions (0.4 m wide and 0.9–0.32 m deep), was interpreted as an eaves-drip. However, Peter Reynolds's experimental work on roundhouses at Butser Ancient Farm suggests that gullies were always likely to be deliberately cut, rather than naturally-eroded by water dripping from the eaves (Reynolds 1988). The long-term observations of reconstructed houses (based on Iron Age structures from, among others, Maiden Castle and Bredon Hill) recorded no natural formation of drip-gullies; instead a build-up of vegetation occurred, resulting in a ridge of soil and humic material (*ibid.*).

The best preserved roundhouse from the A120 was recorded at East of Parsonage Lane, although it is far from typical of the rest, having two concentric gullies and substantial postholes flanking its entrance. The inner gully was slightly polygonal in form, similar to some of the Period II (mid 3rd to late 2nd centuries BC) roundhouses at Little Waltham. This was most evident on the western side where the gully widened and narrowed alternately at the junctions between generally straight segments (Fig. 2.38). Although there was no evidence for timbers set within the gully, the gully was frequently deeper at these junctions. This suggests, as at Little Waltham (*ibid.* 120–1, fig. 67.3), that the gully was a wall trench holding upright wall posts that were tied around the top by a series of straight wall plates (forming a polygonal 'ring-beam'), which in turn supported the principal rafters of the roof. The 'ring-beam' would prevent the top of the wall being pushed out by the weight of the roof.

In this model, the gaps between the posts would be filled either with further timbers, or more likely given the quantity of fired clay found in the gully and entrance postholes, with wattle-and-daub wall panels. One problem with this model, however, is posed by the

presence of a charcoal layer between its lower and upper fills, and the quantity of finds in the upper fill, which suggest that the gully was left at least partially open during the use of the building, rather than being backfilled around the wall timbers, as might be expected.

If the gully was a wall trench, with the timbers tied by a 'ring-beam', there may have been little need for internal posts supporting the roof—any such posts would have been subject just to downward pressure, so requiring only shallow postholes to prevent lateral movement at their bases. Such postholes, possibly represented by the two small examples *c.* 1.5 m inside the inner gully on either side towards the rear, would be readily truncated by ploughing. The break in this relatively rigid construction at the entrance was compensated for by the insertion of two substantial earthfast posts, which may have served also to allow the elaboration of the entrance structure, although at neither this roundhouse, nor any of the others along the A120, were any external porch features identified.

Also likely to be lost if the site was deeply ploughed would be the shallow outer gully. This is perhaps best interpreted as a drainage gully, dug around the house to prevent water, including rainwater from the roof, draining in towards the wall. Its inward turning terminals at the entrance may reflect the fact that the entrance structure, formed by the two postholes, lay inside the line of the suggested wall trench. While it would be unwise to suggest that similar construction methods applied to all the other potential Iron Age roundhouses identified along the A120, particularly in light of the evident differences—such as the general absence of entrance posts—it is possible that most of the recorded Iron Age roundhouse gullies were wall trenches.

The general lack of internal features within the roundhouses, and the uncertainty of association of those features that were recorded, limits any discussion of the organisation of space within the interiors of these buildings, although some clues may be provided by the distribution of finds within the wall trenches. The concentration of finds on either side of the entrance at East of Parsonage Lane is mirrored by a similar pattern at Grange Lane. Different patterns, however, were evident at East of Little Dunmow Road. At middle Iron Age roundhouse 30078 most of the finds came from near the entrance, while at the contemporary roundhouse 48205, in contrast, although most of the animal bone was found around the entrance, most of the pottery came from the rear of the building. In the adjacent late Iron Age roundhouse 30144 the bulk of the pottery again came from the rear of the building.

Whether the occurrence of white quartz pebbles close to the entrances of both the middle and late Iron Age houses (48205 and 30144) represents their coincidental incorporation within the gully fills or the continuation of some symbolic practice cannot be determined. However, the occurrence throughout prehistory of similar objects in mortuary and other formalised

contexts attests to the potential significance of their particular visual quality, and one can speculate these pebbles, either collected locally from natural deposits or imported, may have been deposited during house construction, possibly as good-luck or protective charms, or as elements of a wider symbolic discourse relating to the form and structure of the domestic arena.

As in the earlier periods the structures and finds assemblages from these sites are typically domestic in character, reflecting relatively low-status settlements with a predominantly agricultural character. The middle Iron Age pottery consists of jar and bowl forms probably representing coarse storage and/or cooking vessels, with examples of burnt residues and sooting on the exterior (Fig. 2.39). The assemblage, dominated by sandy fabrics, is comparable with others of this period in Essex, such as from Little Waltham (Drury 1978), Howell's Farm in the lower Blackwater Valley, and from Stansted Airport (Brown 1998; 2004). The presence of very small quantities of shell-tempered fabrics, however,

is interesting, these being absent from Little Waltham, and largely confined to the south of the county, along the Thames estuary (Sealey 1996, 50) (see *Every CD/Chapter 4 for report on prehistoric pottery*).

At both Highwood Farm and East of Little Dunmow Road there is the possibility that there was continuity of occupation from the middle Iron Age into the late Iron Age and early Roman period (see Chapter 3). While there are difficulties in dating these small late Iron Age assemblages, which are characterised by forms and fabrics that continued into the Roman period, the overwhelming presence of grog-tempered pottery would seem to place them within the late Iron Age, with settlement at East of Little Dunmow Road ending by *c* AD 70/80, if not before (Fig. 2.40). The character of both sites changed significantly over this period, but they remained largely low status agricultural settlements, although the presence at East of Little Dunmow Road of continental finewares points to wider trade links and the adoption of Roman-style kitchen and dining habits.

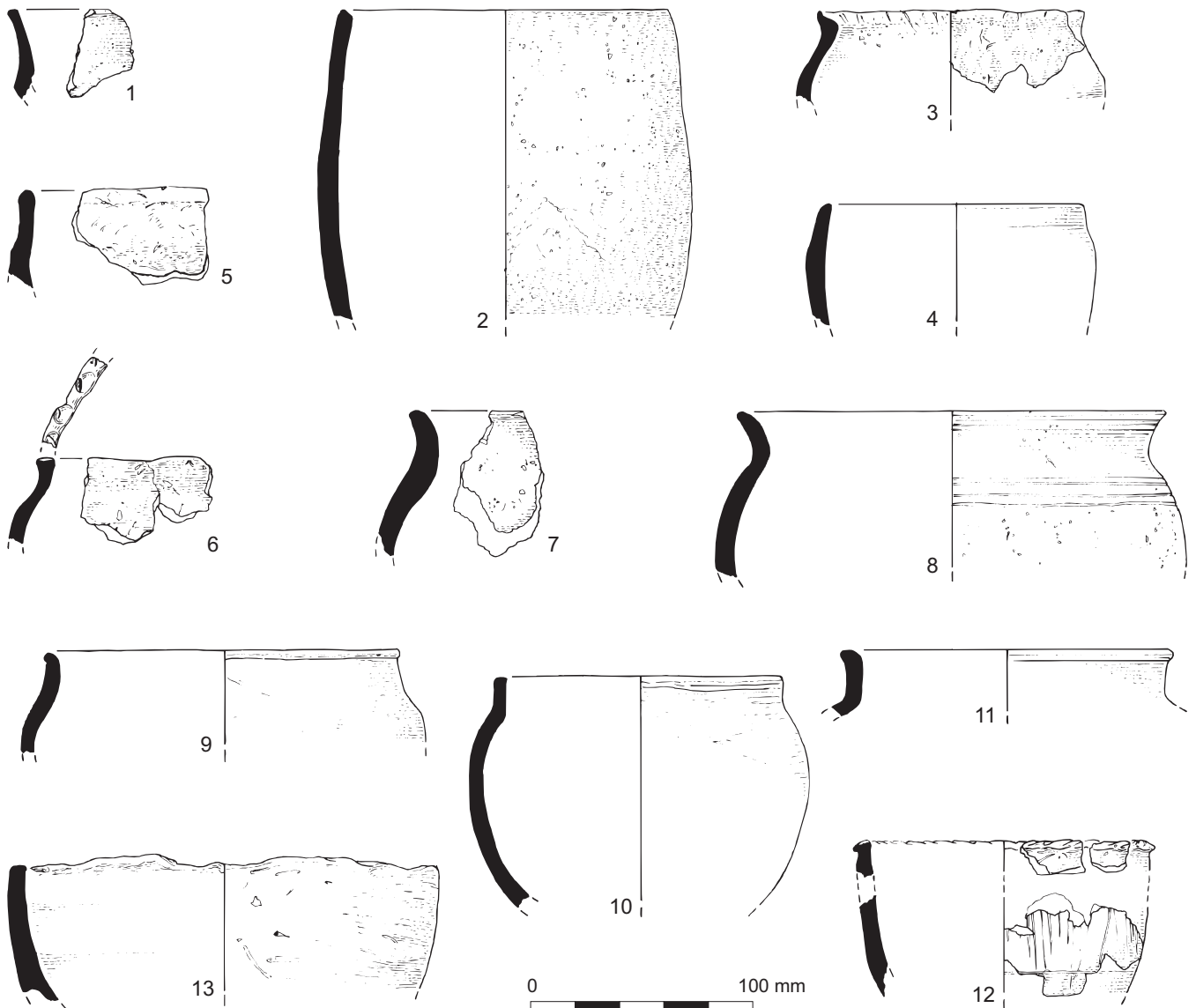


Fig. 2.39 Selection of early-middle Iron Age pottery

Direct evidence for the farming regimes practised from these settlements, however, remains limited. All the evidence for cereal production came from East of Little Dunmow Road, where the plant remains were typical of the period—mainly emmer and spelt wheat, with a little hulled barley and one sample with a few oat grains, although these could be either wild or cultivated. The three most productive samples—from middle Iron Age posthole 30092 (sample 30826) and from the late Iron Age boundary ditch 30134 (sample 30807) and subrectangular enclosure ditch 30051 (30832)—were all grain-rich and may, therefore, have originally contained semi-cleaned spikelets rather than crop processing waste. This suggests that the initial stage of crop-processing, to remove stalks and weed contaminants, was carried out away from the settlement, presumably much closer to the crop fields. There was a range of arable weeds, and indicators of damp soils were absent. Associated evidence such as leguminous weeds are characteristic of cultivation in nutrient-poor soils and help place the site into the established regional pattern of more intensive arable farming during this time.

The moderately rich sample from late Iron Age boundary ditch 30134 may have contained mixed burnt waste, since a wider range of non-cereal taxa were represented, possibly indicating the use of wild food resources including hazel nuts. Indirect evidence for cereal production is provided by the four-post structures, usually interpreted as granaries/stores, at

Highwood Farm and East of Parsonage Lane. Similar structures of Iron Age date are recorded at Stansted site CIS (Havis and Brooks 2004).

All of the middle and late Iron Age sites produced animal bone, but again in variable quantities. The fullest assemblage was recovered at Highwood Farm, where the small subrectangular enclosure has been interpreted as a stock enclosure rather than a domestic enclosure. Cattle were present in large numbers, although they varied in their age at death, with one at 30–36 months, three as young adults, one as old adult and one senile. Butchery marks were noted and it is likely that the cattle remains from the enclosure ditch represent primary butchery waste, where long bones have been dismembered and skulls and mandibles removed. Cattle were also the most abundant animals at Grange Lane, and again dismemberment marks indicate processing. Here, the arrangement of ditches aligned on the enclosure entrance suggests that the enclosure may have been used for both domestic settlement and stock management. The snail evidence from Highwood Farm (ditch 1048 and possible re-cut 1051), and to a lesser extent Grange Lane also, indicates established grazed pasture in the middle Iron Age, with taller vegetation in a ditch prone to containing water in the winter months.

Sheep/goat and pig were also represented at these sites, as were horse and dog. The ages at death for sheep/goat suggests the animals were killed at the

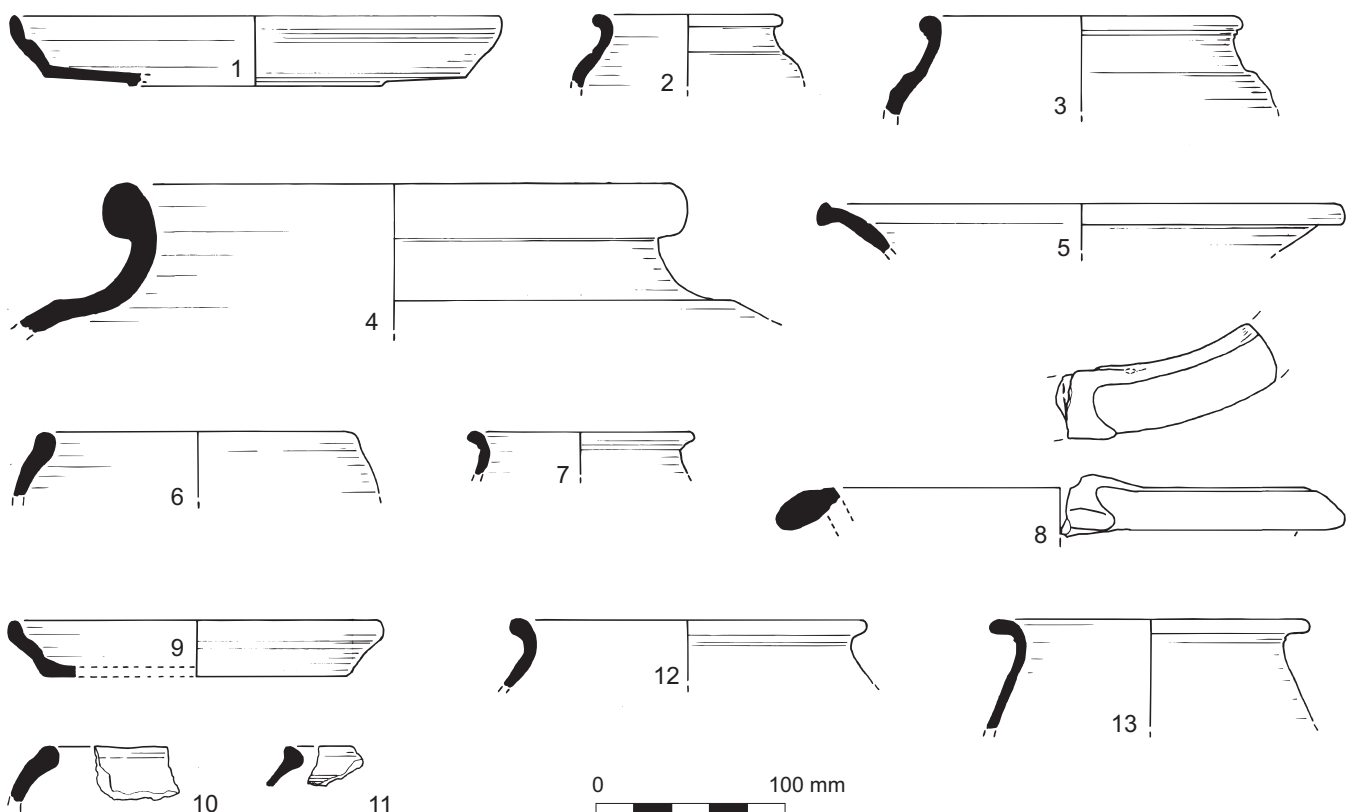


Fig. 2.40 Selection of later Iron Age pottery

Human bone

by Jacqueline I. McKinley

Middle Bronze Age

A largely undisturbed unurned burial with redeposited pyre debris was recovered from Greenfields (Site 28), containing the remains of a single individual. The weight of bone from the burial falls within the upper range of weights recovered from contemporary cremation cemeteries (McKinley 1997c, 142). The majority of the bone was well oxidised (Holden *et al.* 1995a and b) with some variation seen in the hand bones. This is the only period from which these skeletal elements showed poor levels of oxidation which suggests there may have been a difference in the way the body was laid on the pyre and/or that it was of a narrower construction than later ones—the hands laying to the sides of the body on the pyre’s peripheries. Tooth roots and the small bones of the hands/feet were relatively common amongst the identified remains—particularly in comparison with later burials—which may indicate a temporal variation in the process by which bone was collected from the pyre site for burial; en masse collection of the upper levels of debris with subsequent winnowing (by water or air) would facilitate easier recovery of small as well as large skeletal elements. Given the common occurrence of fuel ash in grave fills from across the temporal range, bone from relatively few of the burials—mostly prehistoric and including this one—appeared charcoal stained, indicating that the mere presence of fuel ash in the grave fill was not a significant factor. A variable in the mortuary practice is likely to have rendered the bone more absorbent—perhaps the use of oils or other semi-liquid substances poured over the bone after cremation but prior to final deposition.

Late Bronze Age

Cremated bone was recovered from 16 contexts at Stone Hall (Site 42) and West of Ongar Road (Site 48)—all disturbed to some degree as a result of ploughing—including the remains of eight unurned burials, each containing the remains of a single individual. This small number adds to the relative dearth of material from Essex for this period (Brown 1996, 29). A few minor pathological lesions were observed in the remains of one individual but they are insufficient to offer any comment on general health or lifestyle.

The weight of bone from the singleton at West of Ongar Road falls in the upper range of weights recovered from contemporary cremation cemeteries (McKinley 1997c, 142). The low average from the Stone Hall burials may be misleading in view of the probable loss of at least some bone from these deposits, but the difference in weights between the singleton and the small groups of burials may also reflect a genuine cultural variation. The burials from Stone Hall differed from those recovered from West of Ongar Road and elsewhere in being the only ones to show universally high levels of oxidation, suggesting some variation in the cremation process leading to a more consistent efficiency in the oxidation process, or possibly some cultural variation regarding the level of oxidation considered necessary within the rite.

Differences in the frequency of the recovery of tooth roots and the small bones of the hands/feet may reflect temporal and geographic variations in mortuary practice. They represent common inclusions within the singleton from West of Ongar Road suggesting—as with the middle Bronze Age burial—that the bone may have been collected en masse from the pyre site with subsequent winnowing to recover both small and large skeletal elements. Recovery from Stone Hall was substantially lower possibly reflecting a mode of recovery involving hand collection of bone fragments direct from the pyre site which would potentially lead to a bias in the recovery of larger skeletal elements.

Pyre debris was recovered from many of the grave fills both from this and other periods; the presence of this material is common throughout most of the temporal range and British geographic areas (McKinley 1997c; 2000b, 41–2; forthcoming), and is indicative of the proximity of the pyre site to the place of burial. At least one feature from Stone Hall appears to contain a formal deposit of redeposited pyre debris (McKinley 1997c, 139). It is not clear why such deposits were made; from a purely practical view point, clearance of the pyre site would have maintained a ‘tidy’ cemetery; but there are features of these deposits which suggest they were made as a formal part of the mortuary rite (McKinley forthcoming).

Late Iron Age

Cremated bone was recovered from 14 contexts at Strood Hall (Site 9) and Grange Lane (Site 49)—all disturbed to some degree as a result of ploughing—including two urned and two unurned burials, each containing the remains of a single individual.

The small size of the group from Grange Lane renders it similar to other cemeteries of this date in Essex (Whimster 1981, 362–71; Sealey 1996, 58). Minor pathological lesions were observed in the remains of one individual but they are insufficient to offer comment on general health and lifestyle.

As with the late Bronze Age burials there appears to have been both temporal and geographic variations in the frequency of inclusion of the smaller skeletal elements (tooth roots, hand and foot bones) within the burials; such elements being more common in the Strood Hall singleton than in the Grange Lane group, but both showing a higher frequency than their later counterparts. En masse collection of bone from the pyre site for burial is suggested, with an additional variable in the case of the Strood Hall burial perhaps reflecting a greater expenditure of time in recovery. Small quantities of cremated animal bone—the remains of pyre goods included in the primary part of the mortuary rite as opposed to grave goods added only at the time of burial—were recovered from two of the four burials. The inclusion of cremated animal remains in burials of this date is relatively common, and there are close similarities between this and the later Romano-British period in terms of frequency of occurrence and the species recovered. Details of the burial formation process could be distinguished in the remains of one of the urned burials, which had been emptied in spits. The position of the bone within the vessel indicated that it had been tipped or laid on its side for the bone to be inserted and not levelled out before burial. As with the two Romano-British urned burials emptied in this way, there was no ordered deposition in terms of skeletal elements or side represented.

Non-specific prehistoric

Six contexts of uncertain prehistoric date within the sites of Parsonage Lane (Site 37), East of Parsonage Lane (Site 38), Strood Hall stage III (Site 44) and Chelmer River (Site 16)—all disturbed to some degree as a result of ploughing—contained cremated human bone, including the remains of five unurned burials, each containing the remains of a single individual. A few minor pathological lesions were observed in the remains of one individual but they are insufficient to offer comment on general health or lifestyle.

Animal bone

by Emma-Jayne Evans

Animal bone was recovered from 24 sites along the route of the A120 from Stansted to Braintree, from sites dating from the Bronze Age through to the post-medieval period. The majority of the sites did not have sufficient quantities of animal bone to allow any detailed analysis into specific butchery practices, but some conclusions may be drawn.

The animal bones from the Bronze Age consist mainly of domestic animals, with cattle, sheep/goat, pig and horse present. Cattle and sheep/goat were the main domestic stock in the Bronze Age, with horse and pig present in fewer numbers (Yalden, 1999). Pigs were likely to have been foraging around the site, suggesting the presence of woodland in the area. Horses were domesticated later than cattle, sheep/goat and pig, but were certainly present by the Bronze Age (Yalden 1999) and it is not unusual to find them on such sites.

Red deer were also present during this period, although only a single bone was recovered. This single bone suggests that wild animals were being exploited by the local population, but to what extent they contributed to the diet of the inhabitants cannot be inferred from such a small sample. Although not common on sites in the Bronze Age, dogs were also present, as suggested by the presence of carnivore gnawing on several bones.

Domestic animals continued to be present into the Iron Age, with cattle appearing to be present in larger numbers than the other domesticates. Dog is also represented in this period, as are red and roe deer.

optimum age for meat production; pigs, too, were often killed for their meat before reaching maturity. Horses would often have been kept for riding, and dogs for hunting and as guard dogs. The presence of red deer and roe deer—represented mostly by antler—suggests that some hunting of wild animals occurred, and were likely caught for their meat (*see Evans CD/Chapter 6 for animal bone report*).

The regularity of the field system at East of Little Dunmow Road may be as much a pointer to the dynamics of the late Iron Age society as it is a reflection of the organisation of agricultural practices. As noted above, there are indications of boundaries, either agricultural or territorial, from the late Bronze Age (as at Stone Hall), although it is likely that many earlier field systems were marked by less archaeologically visible features. Although the full extent of the field system is not known, there are suggestions that ditch 30011 at the east end of the site may represent its north-eastern limit, and that its south-western edge was defined by double ditches 30226

and 30227. It certainly did not extend the extra 200 m west to Throes Farm, indicating that these features had limited extent; nor was a comparable array of features recorded at any other location along the route of the A120. These features appear, therefore, to represent the localised reconfiguration of a particular agricultural settlement, rather than a wholesale reorganisation of the landscape. Despite the fact that the formal layout of ditches, incorporating the small rectangular enclosure, appears to have been imposed over a pre-existing settlement, some of the spatial organisation of that earlier settlement was preserved, indicating some level of continuity. The excavations, however, provided few clues as to the impetuses for such change.

The Iron Age settlements produced limited evidence for craft and industrial activities outside farming, offcuts from East of Little Dunmow Road revealing antler-working and an antler comb from Highwood Farm (*see Fig. 2.22*) providing tentative evidence for textile-working.

Chapter 3

Conquest and change? The Roman period

by Edward Biddulph

with contributions by Grace Perpetua Jones and Dan Stansbie

Introduction

The discoveries of Roman archaeology along the A120 between Braintree and Stansted Airport have been made at an opportune time, as an assessment of research priorities for the Roman period in the Eastern counties highlighted fundamental gaps in knowledge (Going and Plouviez 2000, 19). Understanding rural societies was chief among them. Specifically, farmsteads and villages were deemed to be under-represented compared with villas, despite being home to a greater proportion of the population (*ibid.*; Going 1996, 100). The plans of rural settlement much beyond individual structures or enclosures are relatively few, while aspects of industrial production, reliant on resources from the countryside—most obviously water and woodland—are rarely identified, let alone connected with settlement. Going and Plouviez (2000, 19–20) hint at the growing dataset of cemetery evidence, although funerary practices, especially outside urban centres, desperately require further study. As Going and Plouviez note (*ibid.*), the lack of direction and progress in researching these issues has been caused partly by the instability of modern cultural fashion: themes that once held currency, such as the Roman army, villas and other grand statements of Roman occupation, have given way to ‘people-focused’ ideas of social inclusion, identity, and interaction. But there has also been a problem of data, with a bias towards urban centres, from the cities of Colchester and Chelmsford to the ‘small towns’ of Braintree, Great Dunmow and Heybridge; rural evidence has tended to focus around villas. Advances in techniques of collection and analysis have meant that environmental data are only now routinely addressing the long-posed questions of land use and economy.

In recent times, however, the archaeological record has begun to achieve a greater balance in north-west Essex. The expansion of Stansted Airport has led to the discovery of traces of rural settlement and extensive field systems (Havis and Brooks 2004; Framework Archaeology 2001). The investigation of the A120 Trunk Road by Oxford Wessex Archaeology has provided its own rewards. Five sites yielded *in situ* evidence for late Iron Age and Roman-period activity

(Fig. 3.1) with a further five with more ephemeral remains. Strood Hall (Sites 9/44) was the largest. Excavation revealed the near complete plan of a mid 1st to mid 4th-century farmstead, with roundhouses, at least one rectangular building, and a cemetery. Investigation at Rayne Roundabout (Site 33/34) provided evidence of field systems and enclosures. Another field system was encountered at Parsonage Lane (Site 37), this time confined to the late 1st to early 2nd century AD, although some resumption of activity is evident from the later 3rd century. Slighter traces of Roman-period activity were recorded at Valentine Cottage (Site 53), early Roman in date, and West of Panners Roundabout (Site 54), which dated to the late Roman period. Ditches dating to the late Iron Age/early Roman period were recorded at Warish Hall (Site 2) and Stebbingford Farm Borrow pit (Site 52). Artefactual scatters incorporating late Iron Age or Roman pottery were collected Greenfields (Site 28), Blatches (Site 24) and Clobbs Cottage/Grange Farm (Site 18/19) (*see CD/Chapter 3 for detailed description of all sites*).

This wealth of evidence has allowed a range of research questions to be addressed, which relate to, among others, settlement pattern, rural funerary practices, the rural economy, and trade (OWA 2002). This report draws together the main findings of the analysis undertaken on a site-by-site basis. The late Iron Age sites of Highwood Farm (Site 11/46) and East of Little Dunmow Road (Site 50) are also referred to in the discussion, since the Roman period cannot be viewed in isolation from its late Iron Age past.

Principal sites

Strood Hall (Sites 9/44) by Edward Biddulph

Of all the Roman sites investigated Strood Hall provides the most complete settlement plan (Fig. 3.2; Plate 3.1), and was associated with a small cemetery comprising some 27 cremations and a single inhumation. The earliest occupation dates to the mid 1st century AD (Phase 11.1; *see Chapter 1, Table 1.2 for explanation of periods/phases*) (Fig. 3.3), although the cemetery

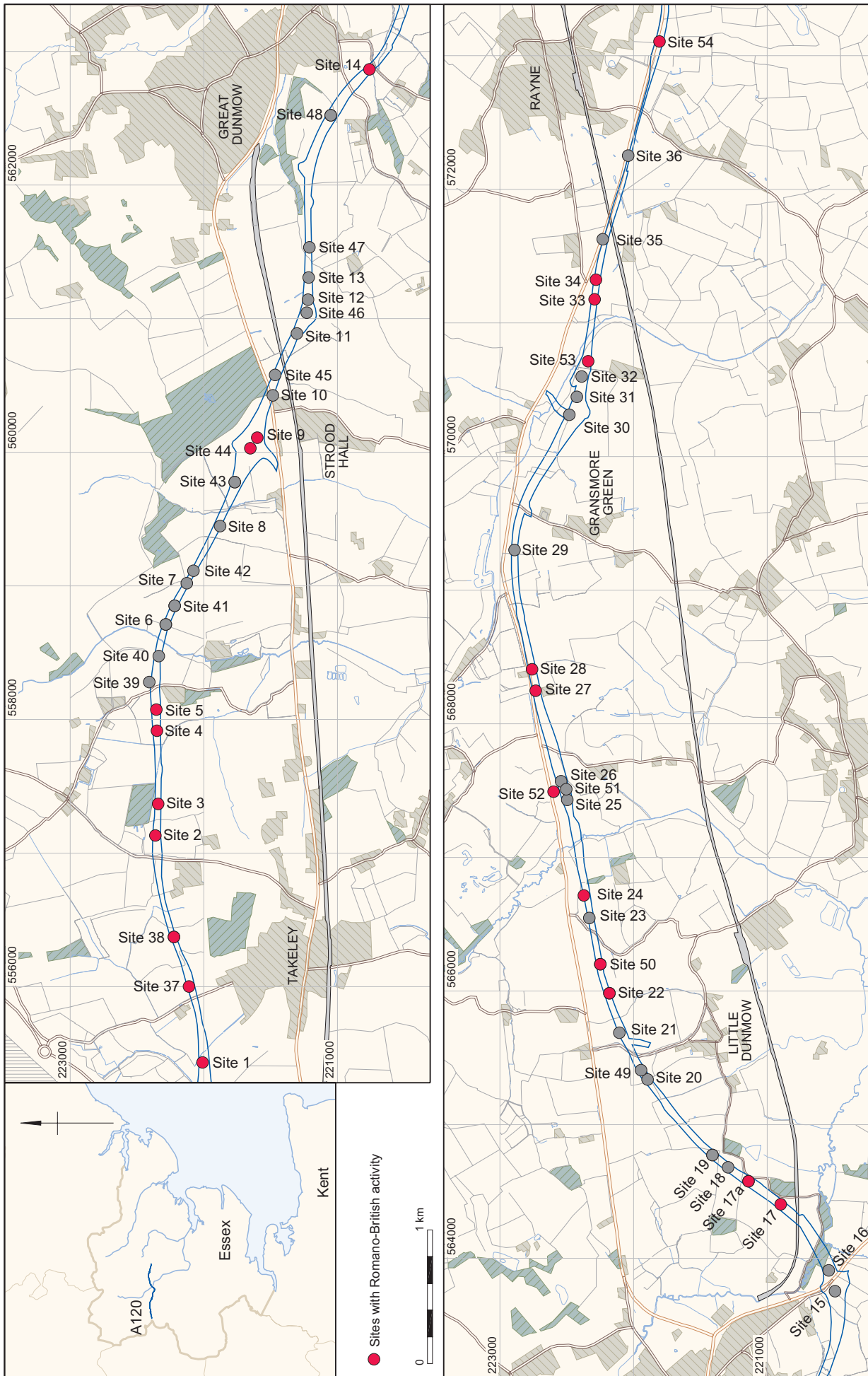


Fig. 3.1 Location plan showing all sites with Romano-British activity

appears to date from the early 1st century AD through to the early 2nd century.

In the mid 1st century AD a series of enclosures was established in the southern part of the site (Fig. 3.3). Ditch 2268, orientated NW-SE and measuring 0.79 m wide and 0.32 m deep, bounded the enclosures on the western side. It was opposed some 30 m to its east by ditch 2265a. Evidence for this feature is conjectural; at some points along its length, the profile of the later, mid Roman ditch (2265) appears to preserve the base of an earlier ditch. In between the two ditches, NE-SW aligned gullies (2273, 2269 and 2267) were dug to create three plots of different sizes (see Fig. 3.4, sections 8 and 9).

The northernmost plot enclosed an area of 600 m². A structure may once have been located within it, though there is now little trace of it; evidence for a potential domestic function is confined to a hearth and a possible water-storage pit. A second plot was narrower, enclosing an area of 300 m². No features were uncovered within it, for which an agricultural function, most obviously an enclosure for a few animals, goats or horses perhaps, may be suggested. The third and southernmost plot extended beyond the limit of excavation, but it was clearly the largest of the three, having an area of at least 1350 m². The enclosure may have confined larger herds of animals.

More enclosures were established in the northern half of the site. All were connected in some way to a major ditch (comprising 2204, 2250, 2255 and 2259) that formed the western and northern boundary of the settlement. The dimensions of the ditch varied along its

length, but overall averaged 0.81 m wide and 0.44 m deep (see Fig. 3.4, sections 11–13). Smaller ditches or gullies met ditch 2255, the western NW-SE orientated part of the boundary, at 90°, and extended eastwards for relatively short distances. These created a number of plots. Some of these were provided with entrances; access to an inner enclosure (defined by ditches 2202, 2209, 2256 and 2257) was permitted only after moving through an outer enclosure (incorporating 2203 and 2205). This implies a functional separation. A trace of a curvilinear gully (2295), located outside the inner enclosure and probably structural, suggests that the outer space was domestic. This seems to be confirmed by the presence of pits and postholes in the vicinity. The inner enclosure may have confined animals. The probable roundhouse, tucked away outside the lower corner of the enclosure, would have avoided close contact with the animals as they progressed through the plots.

The chronology of the boundary ditch and associated enclosures cannot be established precisely, but all appeared to be in use during the second half of the 1st century AD. A larger enclosure was established in the northern part of the site during the later 1st century AD. This initially comprised ditches 2247 and 2248, with part of the boundary ditch (2250) forming its northern limit. At a later stage, perhaps during the late 1st or early 2nd century, ditch 2249 was dug on the western side, completing the enclosure. The ditches averaged 0.7 m wide and 0.3 m deep, and in total an area of over 1500 m² was enclosed. A livestock-related function seems likely. There were no certain contemporaneous features within it, except a short gully (1235) that



Plate 3.1 Strood Hall (Sites 9/44): view of the site



Fig. 3.2 Strood Hall (Sites 9/44): overall site plan showing all excavated features

spanned the entrance, which may have controlled movement. Ditches on the eastern side of the site, also dating to the second half of the 1st century AD, are likely to have defined a droveway which took livestock away from the settlement centre and towards the northern enclosure entrance and the fields beyond. The droveway comprised two NW-SE parallel ditches (2243 and 2246), some 50 m long and set 20 m apart. They averaged 0.58 m wide and 0.29 m deep. A third ditch (2245) replaced ditch 2246 on a slightly different alignment (Fig. 3.4, section 4), but the integrity of the droveway was maintained. Ditch 2229 (Fig. 3.4, section 3), perpendicular to and south of these features, formed another component of the droveway, although it must

also have contributed to a more general landscape division, as it continued beyond the droveway and the eastern limit of excavation.

At some stage, probably in the late 1st century or early 2nd century AD, a major ditch (16008 (Plate 3.2), 2251, 2252 and 2253) was dug across the centre of the excavated area. It extended towards the north-west, and cut ditch 2250 before turning sharply at right angles. The total length of the ditch was some 150 m; it was up to 1 m wide and 0.6 m deep (see Fig. 3.4 for ditch sections 14 and 10). The ditch represented a major division of the settlement, and may have helped to further segregate domestic and agricultural areas. The digging of enclosure ditch 2249 may have been coinci-

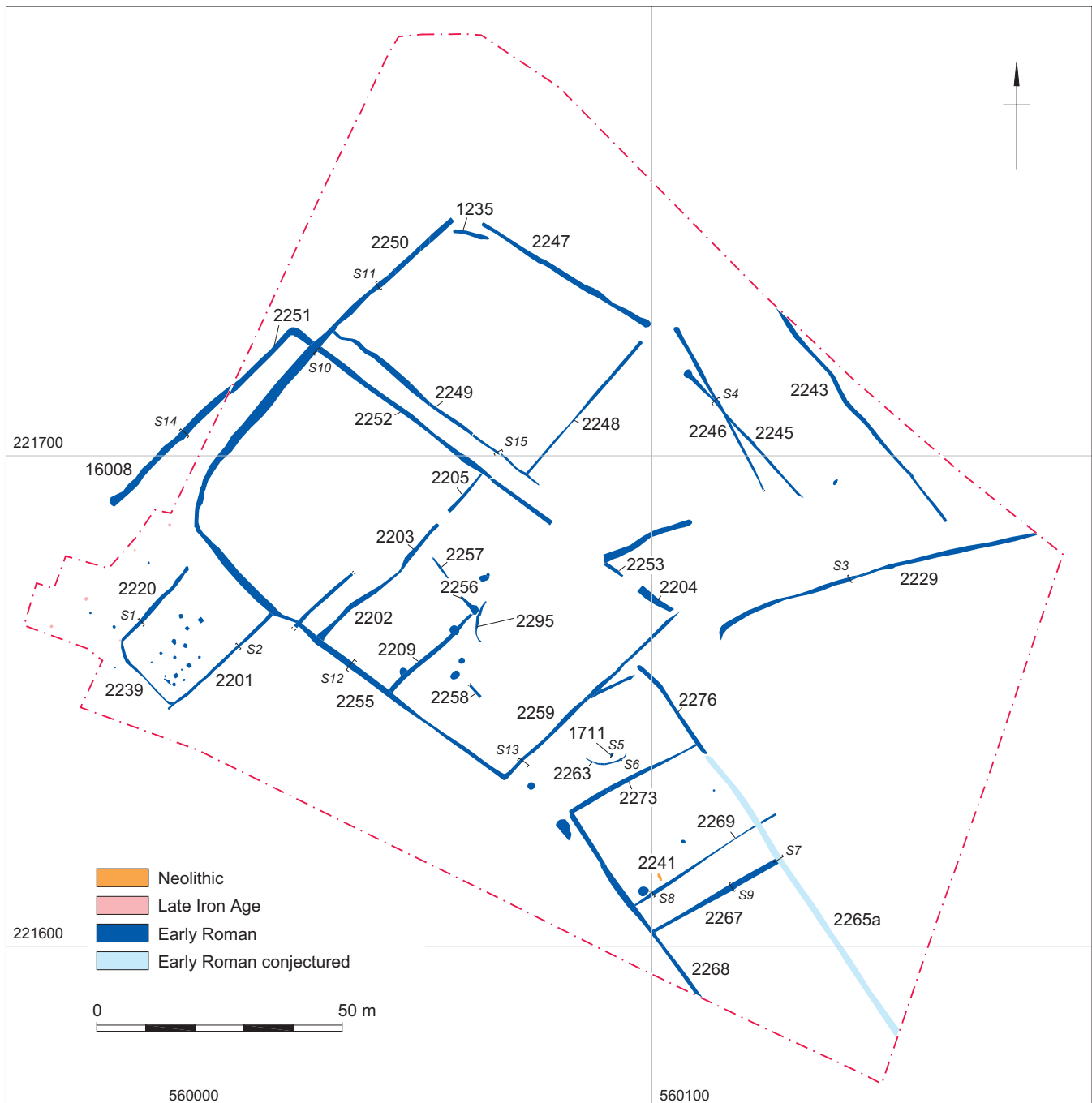
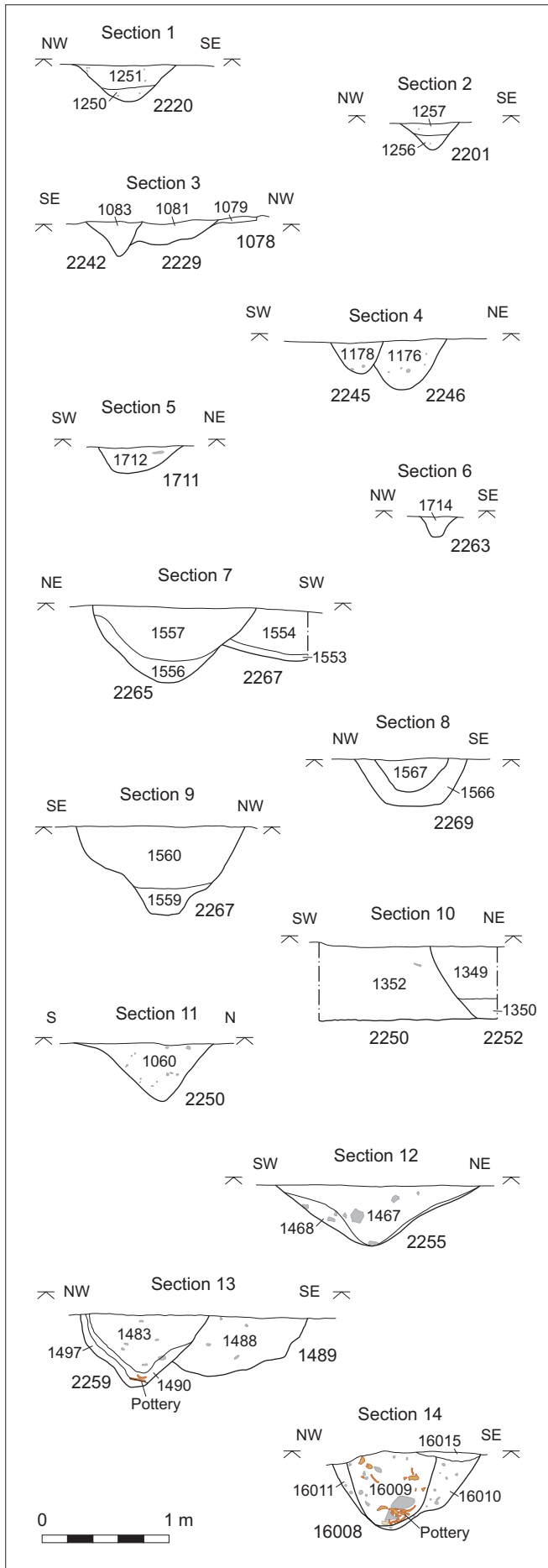


Fig. 3.3 Strood Hall (Sites 9/44): plan showing early Roman (Phase 11) excavated features



dent with this development. The major ditch was relatively short-lived; by *c* AD 125/130, it had been infilled. A large deposit of pottery—much larger than any other single ditch assemblage—was recovered from the western end of the ditch (16008). Individually, the pottery is not of particular intrinsic interest. The assemblage is remarkable for its size, but no other evidence can point to this being part of a ditch termination rite.

The site was re-modelled during the mid Roman period (Phase 12: AD 120/5 and 260/70) (Fig. 3.5). The southern enclosures had been abandoned probably in Phase 11.2. The rather complex enclosure that replaced them was established on a slightly different alignment, and comprised ditches 2266, 2274 and 2275. A second set of ditches—2270, 2271 and 2272—also formed part of the enclosure. This latter group joined the southernmost ditch belonging to the Phase 11 western boundary. The enclosure may have been open at its eastern end. Ditch 2265 replaced 2265a (Fig. 3.6), beginning from the southern extent of the site and continuing on a NW-SE alignment before turning towards the west to become 2266.

No features dating to Phase 12 were uncovered within the enclosure. Phase 12 may therefore mark a time when the domestic aspect was re-located away from this area, which assumed an exclusive agricultural function. Further clues to this, in terms of site morphology, are suggested by structure 2286, which was located near to the eastern droveway. The structure would doubtless have impeded movement through the droveway, confirming a Phase 11 date for the droveway's abandonment and suggesting that the south-western area of the site became the focus for accommodating livestock. In addition, the trackway was now formally defined by parallel ditches (2265 and 2226). Its ditches were set 10 m apart and measured an average of 1.5 m wide and 0.5 m deep (Fig. 3.6, section 19). Although the western ditch (2265) turned to become 2266, a short ditch section further north (2278), continues the line of the trackway into the centre of the settlement. The eastern ditch (2226) turned 90° to become ditch 2242. This cut the droveway ditch 2229, but appeared to kink in order to avoid structure 2286, an indication, perhaps, that the structure pre-dated the ditch. The date of the trackway, or at least its ditches, is determined in part by the infilling date of ditch 2229 and the disuse deposits of ditch 2226. This provides a period of use from the late 1st to late 2nd or early 3rd century AD.

The northern enclosures appear to have been abandoned, or at least were not maintained, by the mid Roman period. However, ditch 2259, which extended from the early Roman western boundary ditch 2255, was recut, suggesting a degree of residual use. The pottery was not closely dated within Phase 12, but it is

Fig. 3.4 (left) Strood Hall (Sites 9/44): sections through early Roman (Phase 11) southern enclosures and related features

Coins

by Nicholas Wells

Six Roman coins were recovered through excavation, all of copper alloy and all from Strood Hall. The earliest is a copy of a *dupondius* of Antoninus Pius (AD 138–60). Four are contemporary copies of late 3rd century AD *antoniniani*, which circulated AD 270–84. The latest coin is an *Æ3 nummus* of Constantine I (BEATA TRANQVILLITAS type) issued between AD 321 and 324 and which could have remained in circulation until AD 348.

A further 75 Roman coins were recovered with the metal detector at Takeley Church. This may have derived from a hoard. Forty coins were identified and range in date from the 1st to 4th centuries AD.

entirely feasible that the final infilling of ditch 2255 occurred in the first half of the 3rd century AD.

The space north-west of the subsequent Phase 13 midden (1206) and formerly defined by Phase 11 enclosure 2247, 2248 and 2249, provided, in Phase 12, the location of two structures (Fig. 3.5). Roundhouse 2237, as with the other roundhouses, survived as a short arc of a gully (Fig. 3.6, sections 15–16). Pottery from the feature suggests that it was abandoned between the late 2nd and mid 3rd century, placing it within Phase 12. However, it was proximate to Phase 13 enclosure or byre 2296 (Fig. 3.7) and it remains possible that the two structures were associated.

The 3rd century and first half of the 4th century AD (Phase 13) (Fig. 3.7) was marked by a centralisation of settlement and continued activity in the northern part of the site. The southern enclosures had been abandoned and the trackway ditches were no longer maintained. Ditches in the western part of the site were also infilled, resulting in a comparatively open settlement. The centre of the site was dominated by a roughly oval-shaped cobbled surface (1207) (Plate 3.3). This was over 20 m long and up to 5 m wide, and was formed from closely packed chalk and flint nodules. It was bound on its western side by ditch 2293, which measured up to 1.06 m wide and 0.76 m deep. It must have been open when



Plate 3.2 Strood Hall (Sites 9/44): Phase 11: ditch 16008, showing pottery in section

the surface was laid or in use, since some of the cobbles had slumped into it. No features were observed on the surface itself, and its function remains enigmatic. The rough cobbles are perhaps too coarse to be a floor within a domestic structure, though it might be suitable for a byre. It should be noted, however, that rough or cobbled surfaces characterised the late Iron Age and early Roman structures at Skeleton Green, Hertfordshire (Partridge 1981, 37–40), while Havis and Brooks speculate that cobbled surfaces at Bury Lodge, Stansted—similarly dated mid to late 3rd century—were platforms for non-earthfast timber structures (2004, 256). Adjacent ditch 2293 could be seen as a beamslot, but may equally be regarded as a drainage gully. A large

artefactual assemblage was recovered from the surface, but need not be associated with its use. The ceramic and coin evidence dates the final disuse deposits to the late 3rd century. Given its shape and size, and paucity of structural features, the surface may simply be identified as a yard with probable agricultural use, similar to that uncovered at Chignall St James (Clarke 1998, 34). An area of cobbling uncovered at the villa complex at Gorhambury, St Albans, was interpreted as a stock pen (Neal 1990, 73).

A kidney-shaped hollow, 1734, was located immediately east of the surface. It was at least 7.5 m long and 1 m deep. The feature has been interpreted as a pond or waterhole; this is supported by the sequence of filling,

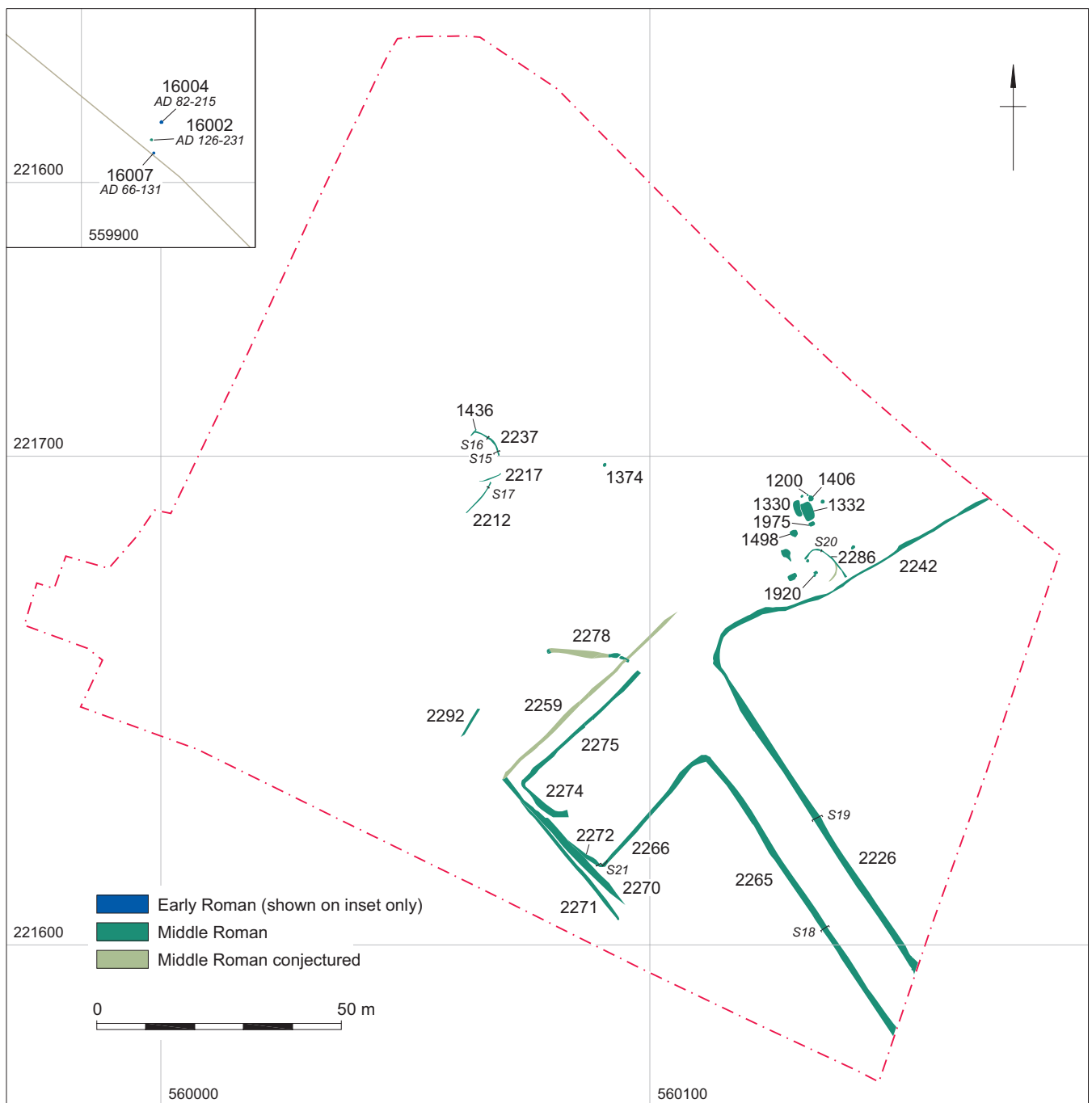
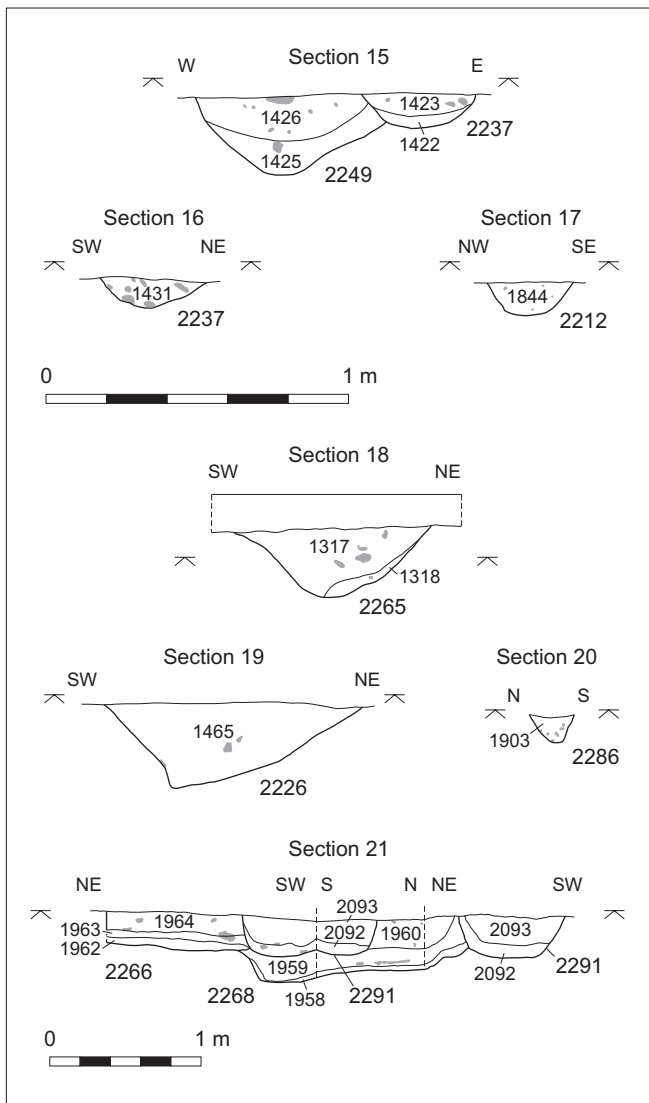


Fig. 3.5 Strood Hall (Sites 9/44): plan showing mid Roman (Phase 12) excavated features



which began naturally with the formation of silting deposits. The upper fills yielded pottery consistent with a late 3rd or first half of the 4th century date for the final stages of infilling.

An extensive, amorphous area of dark and artefact-rich soil was located to the east of the pond. This was the dispersed remnants of a midden (Fig. 3.7; Plates 3.4–5). Darker soil defined two reasonably regular shapes (1206 and 1329). Layer 1206 sat within a hollow some 14 m long, up to 8 m wide and 0.3 m deep (Fig. 3.8). The silty clay soil yielded a large assemblage of pottery, brick, tile, iron nails, a possible millstone, and animal bone among other categories. This represents the deliberate dumping of domestic and agricultural waste into a hollow that may have once formed part of a rectangular structure. All episodes of deposition occurred within the second half of the 3rd century, extending possibly into the early 4th century. The midden (1301) extended towards the south-east until it reached a second darker area of soil perhaps up to 20 m in width and depth. This was a more irregularly shaped midden spread (1329) that sat within a 0.17 m deep hollow. The midden comprised black or dark grey silty clay containing abundant finds, including pottery, animal bone, glass, ironwork and ceramic building material, as well as a concentration of crop-processing waste. The soil became lighter as it reached the edges away from the central area of deposition. Like 1206, the midden 1329 may represent the abandonment of a

Fig. 3.6 (left) Strood Hall (Sites 9/44). Section 15 through early Roman (phase 11) ditch and Sections 16–21 through mid Roman (Phase 12) southern enclosures and related features



Plate 3.3 Strood Hall (Sites 9/44): Phase 13: cobbled surface 1207, during excavation

structure which was agricultural in nature. Excavation of the midden revealed a number of underlying pits. Most approached or were over 1 m in diameter; pit 1332 was 2.7 m wide, while 1916 was 3 m wide. The remaining pits, including 1330, 1406, 1975, 1200 and 1498, ranged from 0.8 m and 1.4 m wide. Depth varied

from 0.2 to 0.9 m, the average being 0.4 m. Finds were few, with the dating evidence for their final use deriving mainly from the midden that sealed them. The little pottery from the pits, such as 1332, was mid or late Roman in date. On spatial and chronological grounds the features could have been associated with the

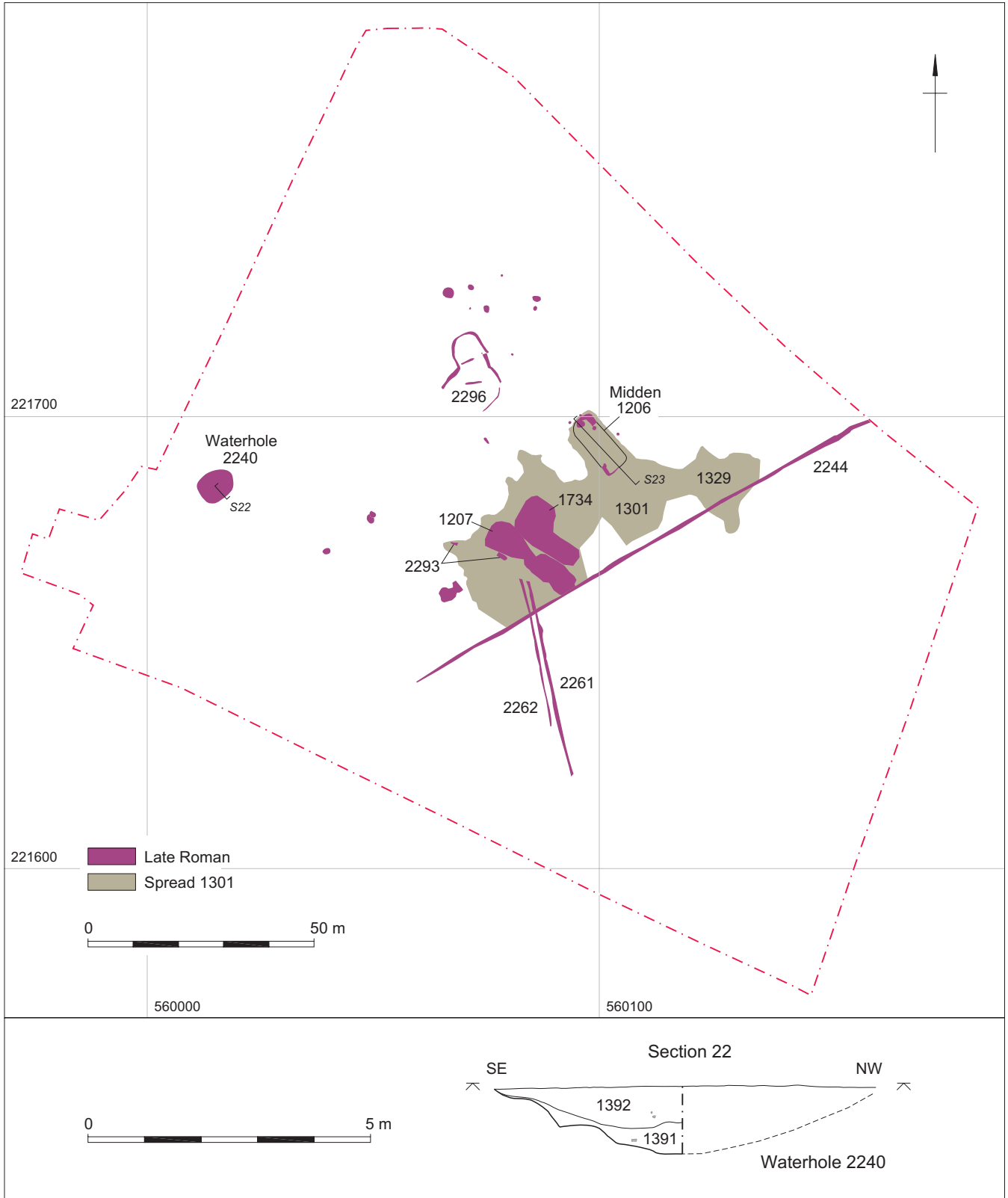


Fig. 3.7 Strood Hall (Sites 9/44): plan showing late Roman (Phase 13) features and spread 1301. Section of waterhole 2240



Plate 3.4 Strood Hall (Sites 9/44): Phase 13: structure/midden 1206/1301, before excavation



Plate 3.5 Strood Hall (Sites 9/44): Phase 13: structure/midden 1206/1301, during excavation. Section of west quadrant, with view towards NW



Plate 3.6 Strood Hall (Sites 9/44): Phase 13: waterhole 2240, cut 1390

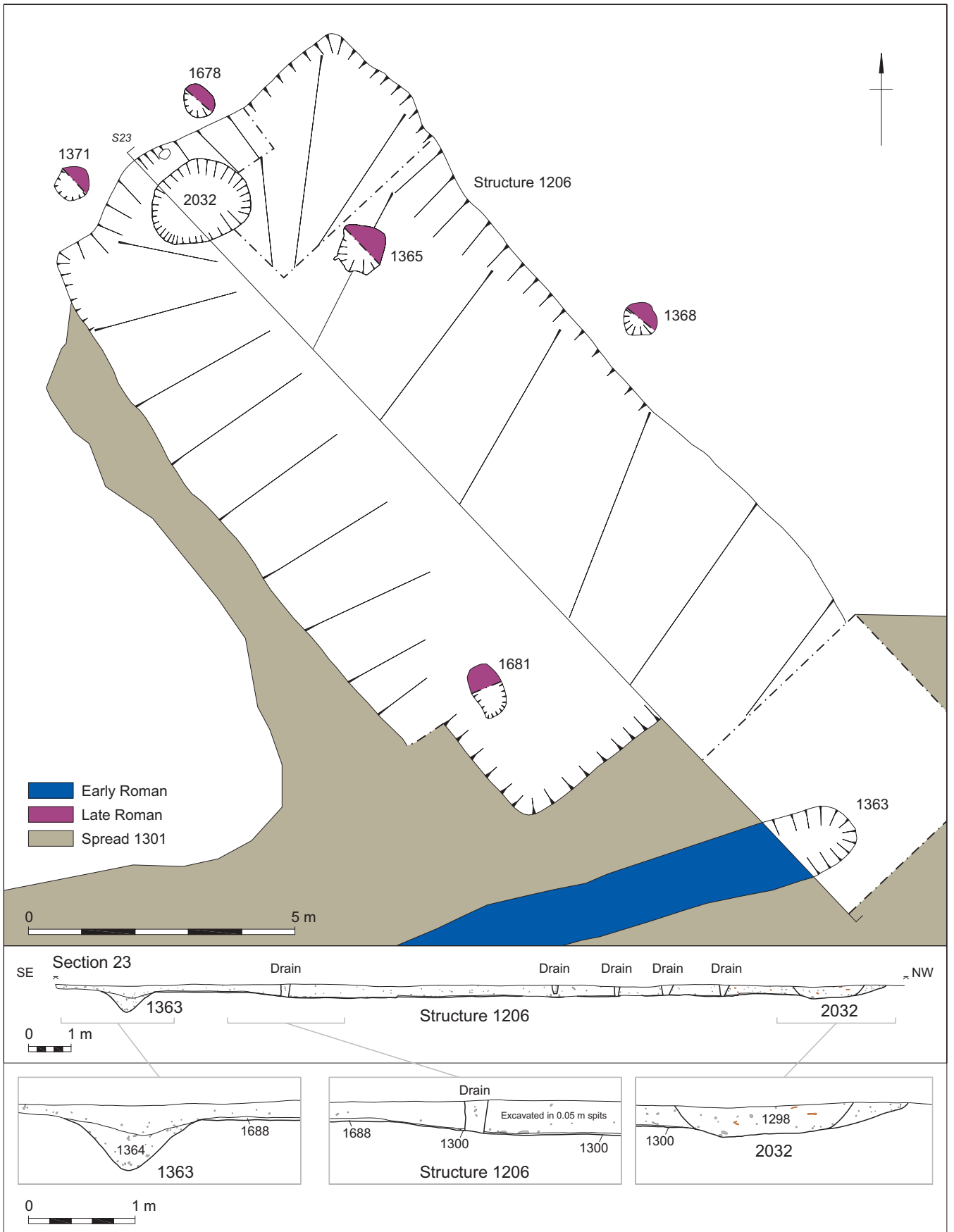


Fig. 3.8 Strood Hall (Sites 9/44): detailed plan and section of midden 1206

region and beyond, for example at Little Oakley (Barfield 2002, fig. 29) and Brettenham, Suffolk (Mudd 2002, fig. 24). Returning to Strood Hall, the field defined by the western boundary ditch 2250 and 2255 (Fig. 3.3) continued to serve an agricultural function even though the ditches had long since filled up.

Strood Hall was abandoned during the second half of the 4th century. The virtual absence of fine red colour-coated pottery from Oxfordshire and certain continental imports make early 5th-century occupation unlikely. No Anglo-Saxon pottery was recovered, nor was there any trace of occupation in the immediate post-Roman period. By the medieval period, the entire site was given over to agriculture and substantial field boundary ditches divided the land (Fig. 3.9).

Rayne Roundabout (Sites 33/34) by Grace Perpetua Jones

At Rayne Roundabout a sequence of field ditches was excavated across the site area (see Fig. 3.13; Plate 3.7). Several features datable to the late Iron Age or early

Roman period (Phase 10/11) were found in the western, central and eastern parts of the investigated. In the west, Gully 348 formed part of a circular enclosure later truncated to the south-west by the northern-most Roman enclosure ditch 344. The gully measured 19 m in length curving from north-east to north-west and had a maximum width of 0.75 m and depth of 0.16 m. Filled by a single mid grey brown silty clay deposit, the gully produced a quantity of animal bone and pottery sherds dating to Phase 10 (c AD 1–70). A series of three large enclosure ditches (350–1, 344–5) extended NW-SE across the north-east corner of this area (Fig. 3.14, sections 1–3). They crossed the central stripped area and continued to the south-east corner of the eastern site. Enclosure ditch 350 was the first of the three to be constructed and measured 37 m in length within the western area and 78 m in total across all three sites before turning to the north-east to form one corner of the enclosure area. Ditch 350 had convex sides and a variable base, being irregular in one segment (137), and having two shallow rounded bases formed by a slightly raised central strip in another (259). While this may

Late Iron Age and Romano-British pottery

by Edward Biddulph

Some 26,500 sherds of Romano-British pottery, weighing over 200 kg, were recovered from twelve sites along the route. Assemblages varied in size ranging from well under 100 g from Warish Hall to 155 kg at Strood Hall. The patterns of pottery supply were broadly similar across the A120 route, perhaps reflecting the unifying influence of Stane Street. During the early Roman period, locally produced grey wares dominated pottery supply. Hadham grey wares arrived from c AD 70; manufactured some 12 km west of Stansted, Hadham potters were serving essentially a local market (see discussion above). Jars were the commonest type in the assemblage, as they were throughout the Roman period, followed by beakers and bowls. A more varied range of forms was retrieved from Strood Hall's early Roman cemetery, including platters and cups, flagons and a rare ceramic lamp from Lyon. The mid Roman assemblage retained its local character, but received pottery from an expanding Colchester-based industry, which was producing fine colour-coated beakers and black-burnished cooking or serving dishes. Samian cups and dishes from central and eastern Gaul, buff ware mortaria, and olive oil containers from southern Spain attest to Mediterranean-style eating and drinking habits at Strood Hall, Rayne Roundabout and others. Late Roman pottery, seen at Strood Hall, Rayne Roundabout and West of Panners Roundabout, was characterised by a burgeoning Hadham-region industry, now widely exporting fine oxidised jars, bowls, flagons and beakers. The Nene Valley and Oxfordshire industries were also represented, mainly by way of colour-coated beakers and white ware mortaria respectively. Oxfordshire red colour-coated ware, among the latest of arrivals to the region, is virtually absent, strongly hinting at a cessation of settlement activity along parts of the western end of Stane Street by c AD 360/70.

Overall, the pottery comprised standard regional types fulfilling everyday household functions (see Figs 3.10–12 for a selection of pottery from Strood Hall). There were, however, some unusual pieces. A small glazed vessel that probably held cosmetics was recovered from Strood Hall. West of Panners Roundabout yielded a late 4th-century Nene Valley colour-coated face-flagon. From East of Little Dunmow Road, a mid 1st-century AD mortarium—locally-made, but based on a Germanic prototype—was among the earliest of its class, normally of mid and late Roman date, to arrive in the western end of Stane Street. These demonstrate the varied use of ceramics, and the role of pottery to spotlight the status and trade connections of even modest farmsteads.

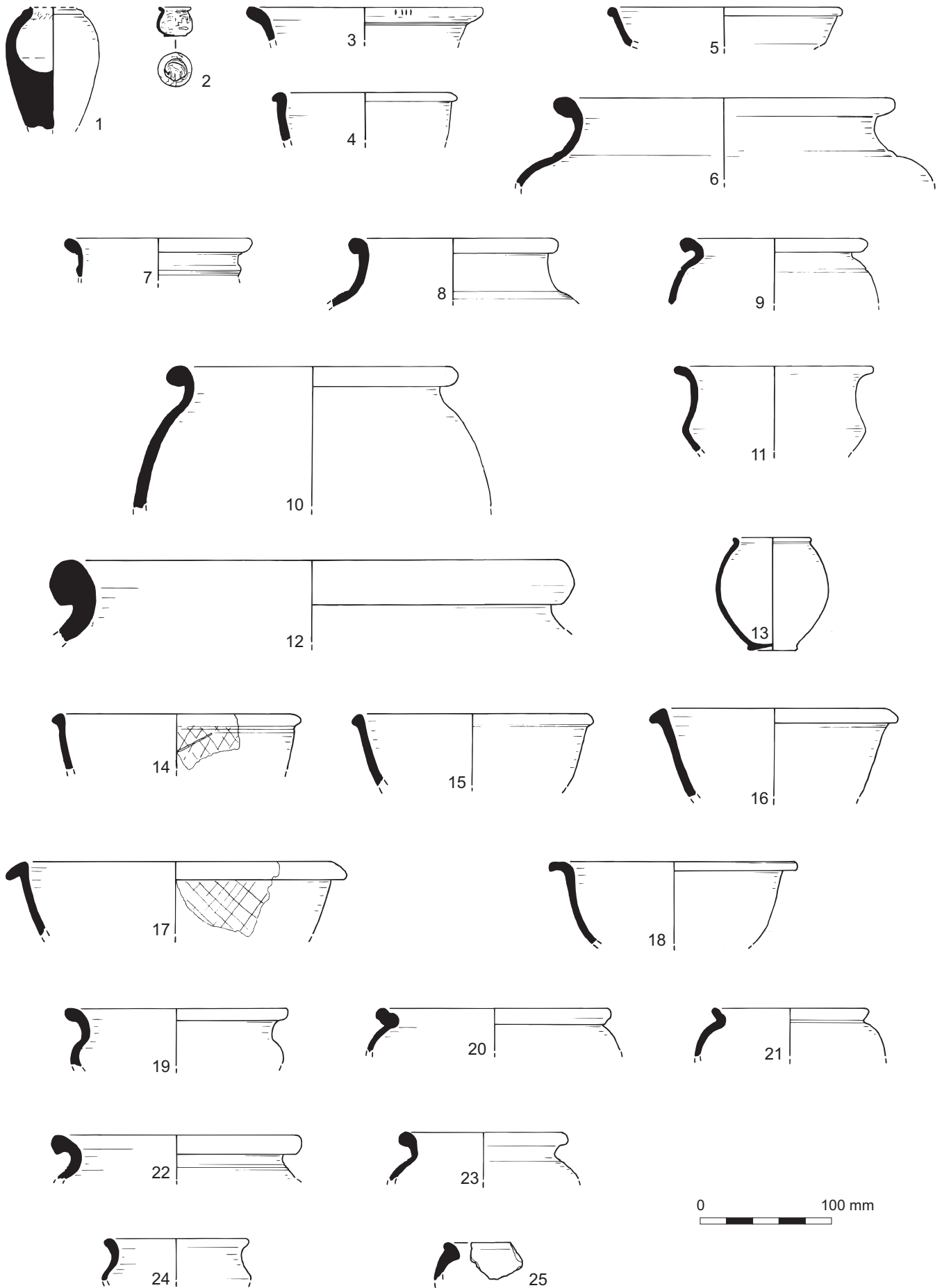


Fig. 3.10 Strood Hall (Sites 9/44): Roman pottery

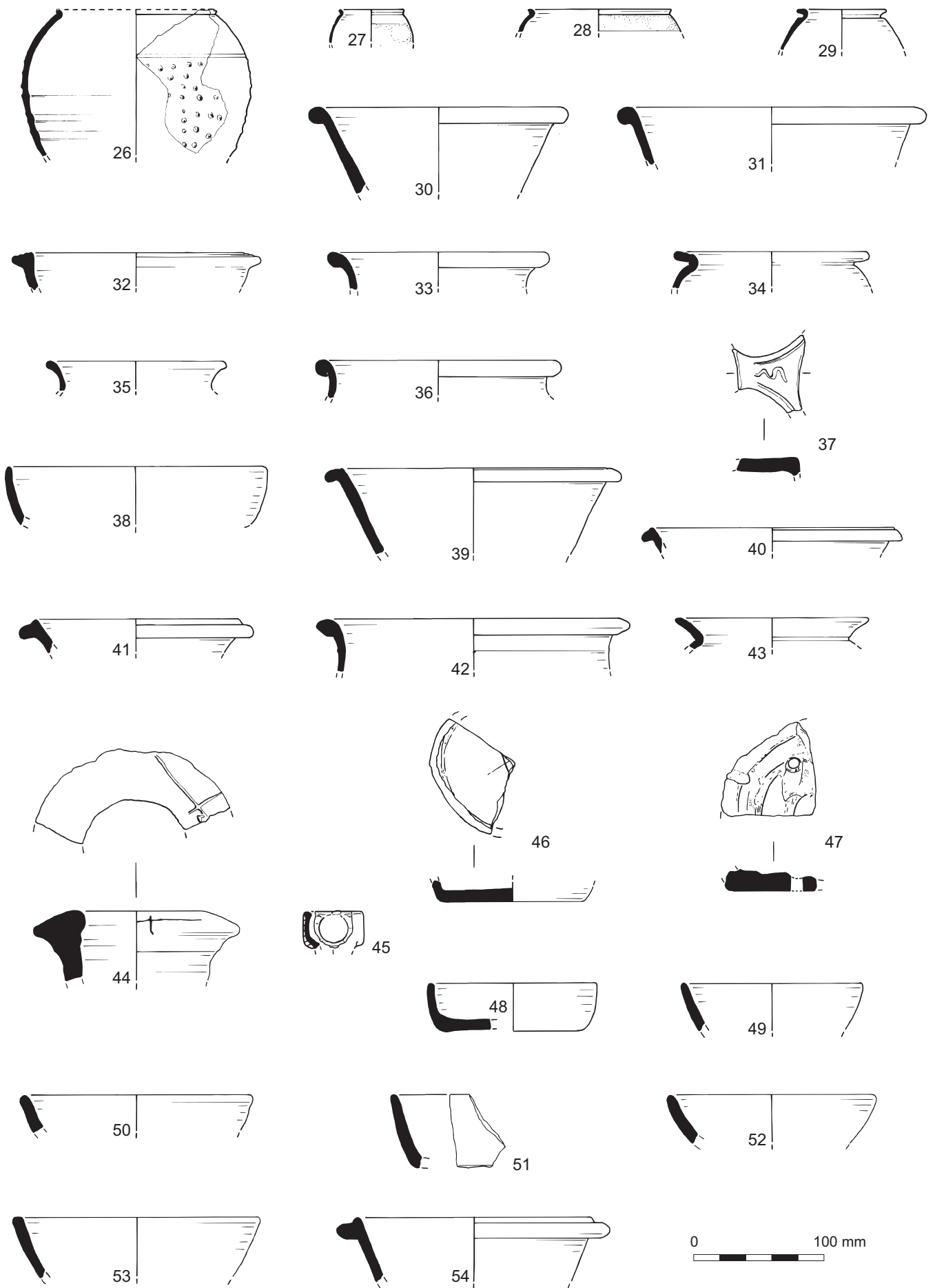


Fig. 3.11 Strood Hall (Sites 9/44): Roman pottery



Plate 3.7 Rayne Roundabout (Site 33/4): working shot in the western area, showing the depth of the ditches

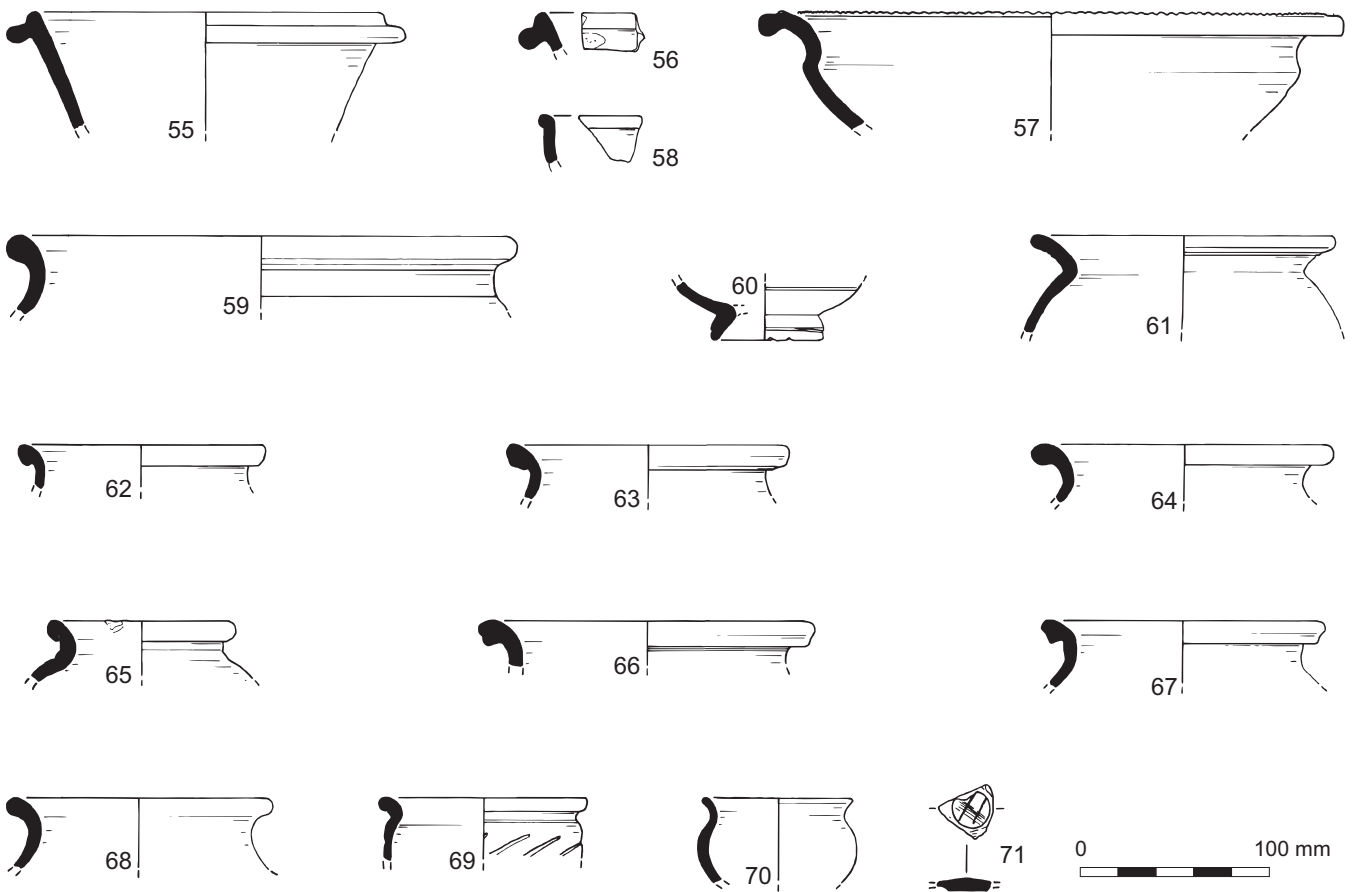


Fig. 3.12 Strood Hall (Sites 9/44): Roman pottery

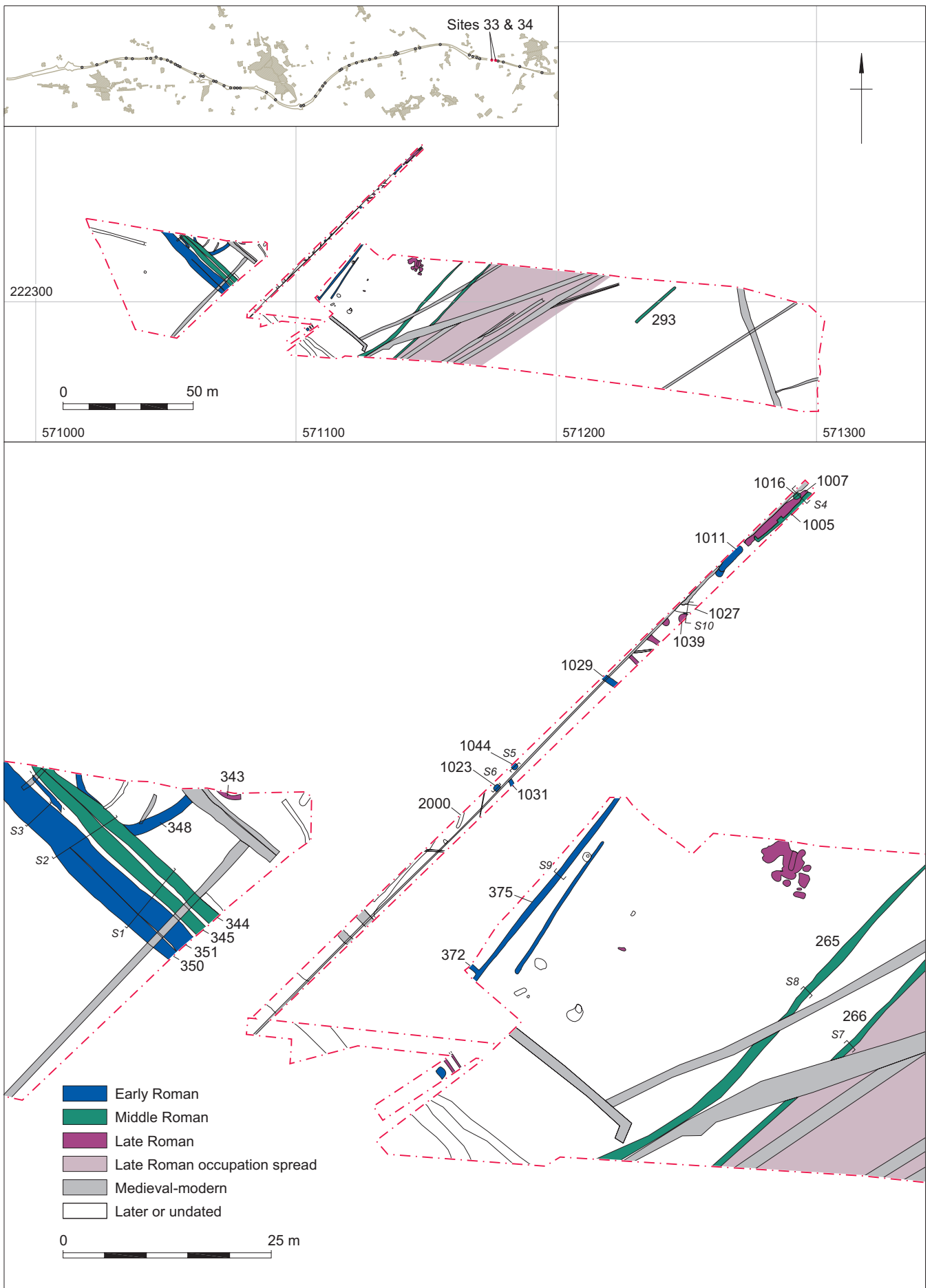


Fig. 3.13 Rayne Roundabout (Sites 33/34): plan showing all features

appear as though there was originally two ditches the deposits showed no evidence of recutting and the shallow dips either side were not sufficient to make this practical. The average size of the ditch was 4 m wide by up to 1 m deep and contained up to seven fills. The sequence of deposits within the ditch varied between interventions, though the principal deposits were seen throughout. These consisted predominantly of silty clay layers, sealed occasionally by episodes of gravel deposition. The deposits produced large quantities of animal bone and late Iron Age-early Roman pottery (for a selection see Fig. 3.15, nos 1–12). A blue grey silty clay was seen sloping in from the south-western bank, separating deposits in cut 137. This suggests an episode of bank erosion, though it may also represent localised flooding from the River Ter. The ditch was finally sealed by

alluvial deposits, probably also from flooding.

Gully 351 to the north of, and parallel to 350, ranged from 0.6 to 1.04 m wide and 0.24–0.32 m deep with moderately sloping sides and a flat base. It produced a small quantity of early Roman pottery.

Excavation in the central area revealed ditch 1011, which had concave sides, a flat base and measured 4.5 m long by 0.9 m wide. It was filled by two silty clay deposits and contained several abraded sherds of early Roman pottery. Ditch 1029 to the south of this was aligned NE-SW and had concave sides and a rounded base. Measuring over 1.8 m long by 0.75 m wide and 0.25 m deep, it contained a single dark grey brown silty clay deposit. Animal bone, fired clay and late Iron Age/early Roman pottery was retrieved. A small group of domestic waste pits and gullies were identified some

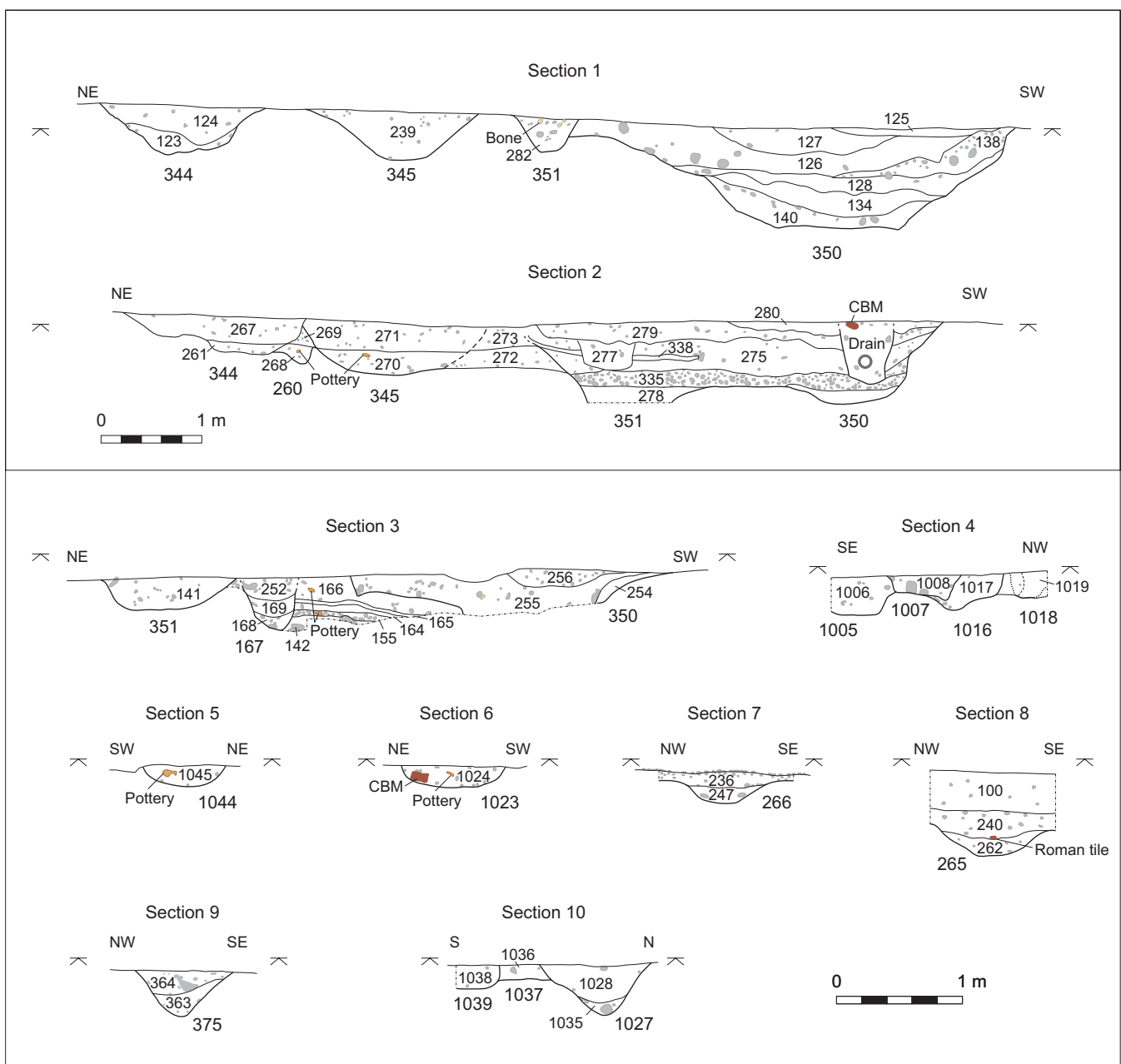


Fig. 3.14 Rayne Roundabout (Sites 33/34): sections through ditches

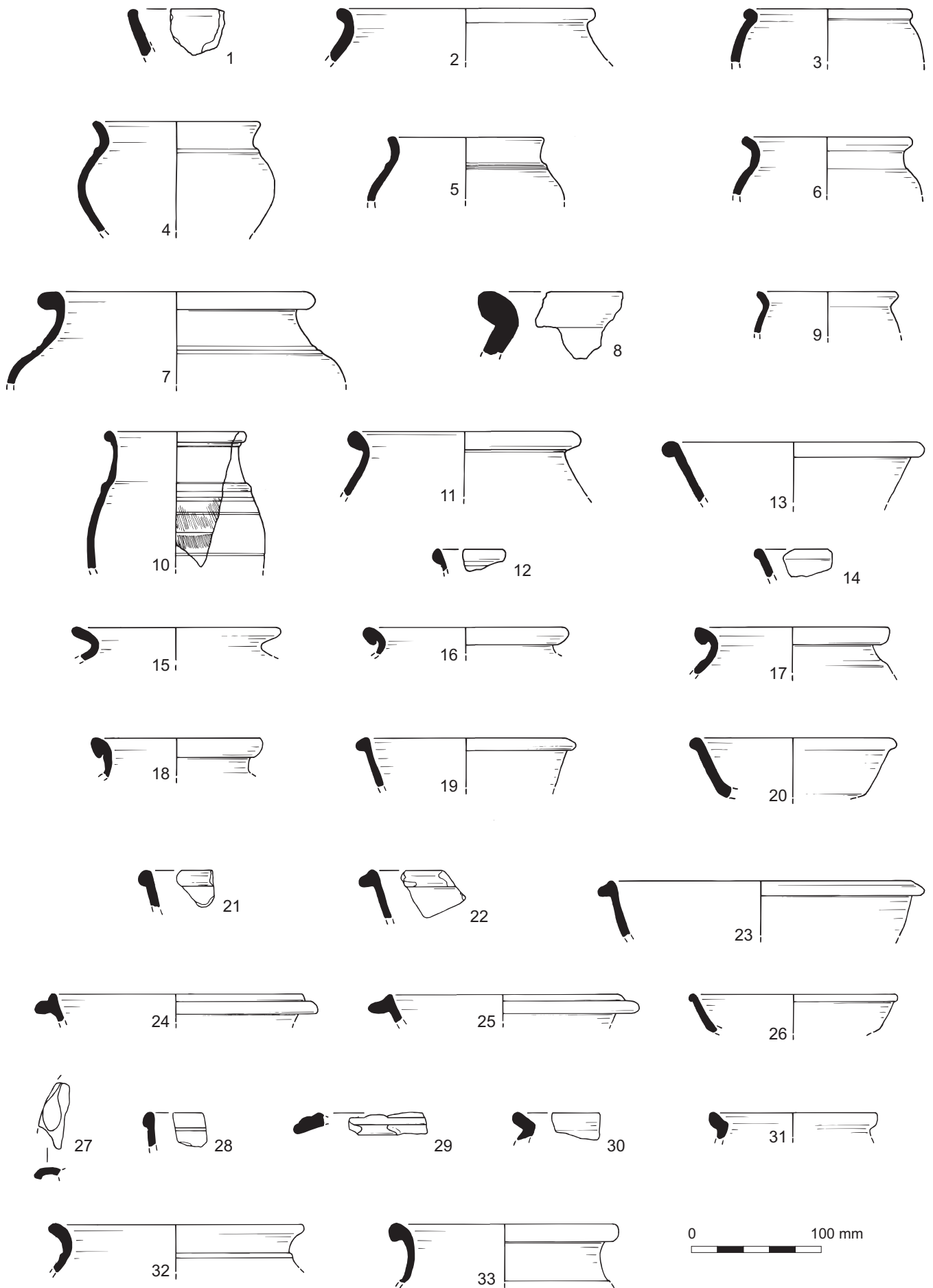


Fig. 3.15 Rayne Roundabout (Sites 33/34): Roman pottery

14 m further south. Pits 1044 and 1023 (Fig. 3.14, sections 5 and 6; [Plate 3.8](#)), measuring up to 0.81 m in diameter and 0.18 m deep, produced large quantities of animal bone, oyster shell, tile, fired clay and pottery. Gully 2000 terminated to the south-west and measured over 2.15 m long by 0.38 m wide. It contained an orange brown silty clay up to 0.07 m deep. No finds were retrieved. A NW-SE gully terminus (1031) was located between the pits, which measured 0.9 m in length by 0.51 m wide. It shared the same profile as gully 2000, having concave sides and shallow rounded base and was filled by dark grey brown silty clay (1032) containing animal bone and pottery of early Roman (Phase 10) date.

Early Roman (Phase 10/11) features in the east included ditch 293, which had concave sides and a shallow rounded base, though was heavily truncated by ploughing. It measured 20 m long by 1.2 m wide and over 0.19 m deep. The ditch was filled by light orange brown silty clay from which early Roman pottery was retrieved. Ditch 372, a very shallow linear aligned NW-SE was heavily truncated. It was probably cut by later ditch 375. Early Roman pottery was recovered from the secondary fill. Ditch group 375 (Fig. 3.14, section 9), comprising cuts 353, 362 and 367, was aligned NE-SW and ran the length of the stripped area.

Activity continued in the western part of the site during the mid Roman period (Phase 12). Ditches 345 and 344 appear to be successive replacements to ditch 350. Enclosure ditch 345 was situated roughly 0.5 m from and parallel with ditch 350 (Fig. 3.14, sections 1–2). It was substantially smaller in size than 350 and

though it performed the same function the pottery associated with it suggests it may be a later replacement. Cut 227 was recorded as having two fills. The primary fill (270) measured 0.4 m deep and was overlain by another deposit up to 0.3 m deep. The former produced pottery dated to the early Roman period while the latter produced sherds broadly dated to the mid Roman period. However, the fills were difficult to discriminate and may explain why only one fill was recorded in cut 238. This deposit was a blue grey silty clay deposit and had a greater, well-sorted clay composition towards the bottom of the ditch indicative of low-energy alluvial deposition and similar in character to the fills in segment 227. Enclosure ditch 344 (Fig. 3.14 section 1; [Plate 3.9](#)) ran roughly parallel to ditch 345 and at the north-western end started to cut its northern side. Its two silty clay fills contained animal bone and pottery. The primary fill yielded pottery of late Iron Age/early Roman date but these accompanied sherds of mid Roman date, suggesting some redeposition.

In the central part of the site, ditch 1005 had concave sides, a rounded base and measured 0.8 m wide by 0.37 m deep and over 8.85 m long (Fig. 3.14 section 4). The ditch contained animal bone, ceramic building material and pottery of mid Roman date (AD 120/5–260/70). Pit 1016 lay immediately to the north-west of the northern terminus of ditch 1005 (Fig. 3.14, section 4). Though no finds were recovered, the ditch, along with 1005, was truncated by ditch 1007, suggesting that both were broadly contemporaneous.

Further east, ditches 265 and 266 were positioned 7.5 m apart, and measured over 0.9 m wide and 0.25 m

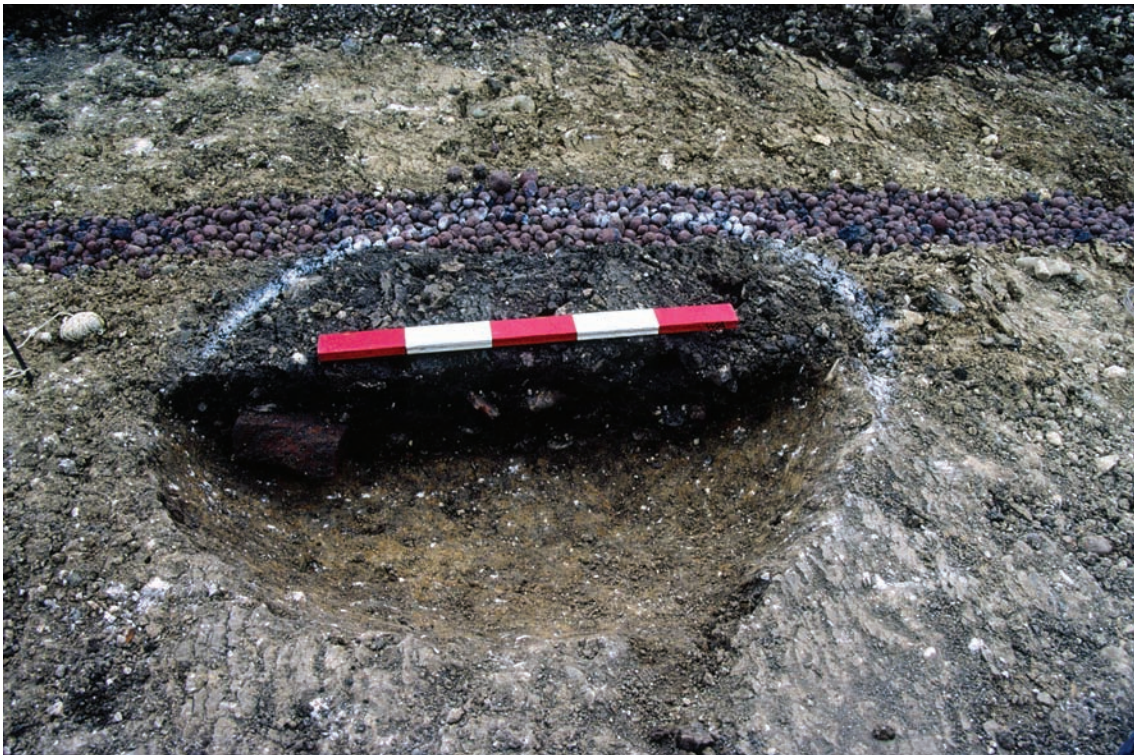


Plate 3.8 Rayne Roundabout (Site 33/4): pit 1023, W facing section

deep (Fig. 3.14, sections 7, 8). Pottery of mid Roman date was recovered from their fills. Their position, parallel alignment and size suggest that they were roadside ditches forming a droveway, which appears to be orientated directly towards the River Ter.

Late Roman (Phase 13) features were somewhat scarcer across the entire site, although the largest

proportion of pottery belongs to the phase—primarily from a former river channel—suggesting increased activity in the vicinity of the excavation area (for a selection of pottery from the former river channel see Figs 3.15, nos 13–33, and 3.16, nos 34–68; Plates 3.10–11). In the western part, gully 343 consisted of two adjoining segments. Gully terminus 185 measured 0.59 m wide by

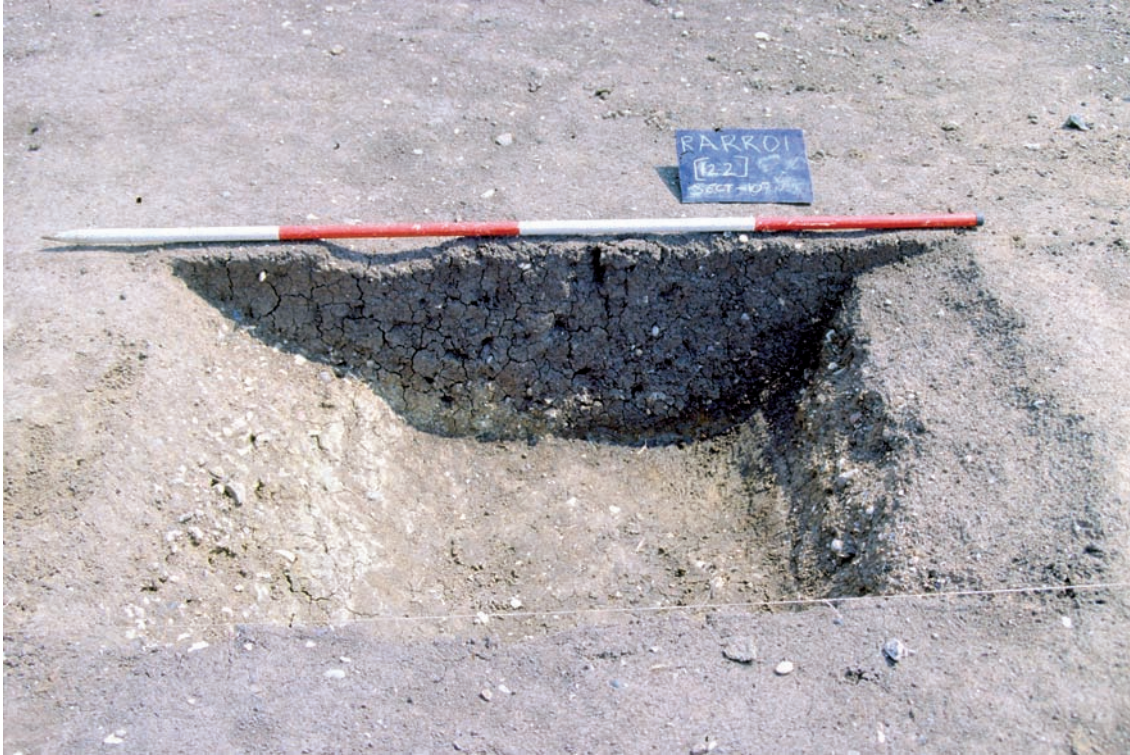


Plate 3.9 Rayne Roundabout (Site 33/4): intervention 122, ditch 344 (late Iron Age-early Roman), NW facing section 107



Plate 3.10 Rayne Roundabout (Site 33/4): SW facing section of stream channel midden deposits east of land drain (NE view)

0.2 m deep and overlapped an earlier gully (183) to the north-east. This measured 0.33 m wide by 0.7 m deep. Both gullies were filled by a silty clay deposit. Several sherds of late Roman pottery were retrieved from gully 185 and, by association, gully 183 can be given a similar date. Both mid Roman ditch 1005 and pit 1016 in the central part of the site were cut by later ditch 1007 (Fig. 3.14 section 4). It contained a single clay silt fill, which produced animal bone, oyster shell, ceramic building material, non-diagnostic Roman pottery and an iron nail. Given its stratigraphic relationships, a mid or late Roman date is likely. Ditch 1027 (Fig. 3.14 section 10) extended east-west across the stripped area for over 2.5 m. It contained non-diagnostic Roman pottery, animal bone, oyster shell, ceramic building material and iron fragments.

Parsonage Lane (Site 37) by Dan Stansbie

A late 1st to early 2nd century AD rectilinear field system occupied the central and western part of the site (Fig. 3.17). This was defined on the east by ditch 8023, which ran NW-SE (Fig. 3.18, section 2). Running off ditch 8023 at a right-angle was a second linear ditch, 8004, which ended in a terminal 19 m to the south-west. After a gap of approximately 5 m that provided north-south access, the line of ditch 8004 was continued by ditch 8000 (Fig. 3.18, section 1), which ran in a south-westerly direction for 34.3 m until it terminated in a second NW-SE orientated boundary ditch (7022). Running parallel to ditch 8000, some 4 m to the south for a distance of 23 m and possibly forming some kind

of stock pen with ditch 8000 was ditch 8003. Lying in the north-eastern corner of the enclosure created by these ditches was another linear ditch, 7012, which was orientated NE-SW and ran beyond the limit of excavation to the north. Ditch 7012 cut a large amorphous pit (7143/7146), while two smaller subcircular pits (7020 and 7023) lay between it and ditch 8000 (Fig. 3.18, section 3 for pit 7020). Ditch 8023 (Fig. 3.18, section 4) cut a large amorphous pit (7117) containing a substantial assemblage of early Roman pottery that may have dated to just before the laying out of the field system. The final fills of ditches 8000 and 8004 were cut by recuts of ditches 7022 and 8023 respectively, indicating that the NE-SW ditches had silted up earlier than the NW-SE ditches creating a larger enclosure which, however, did not continue in use beyond the early 2nd century AD. See Fig. 3.19, nos 1–11, for a selection of Phase 11 pottery from ditch 7022 and pit 7117 (7128).

During the late 1st or early 2nd century AD the earlier field system had silted up and gone out of use. The easternmost of the field system ditches was now cut by a linear boundary ditch 7121, the westernmost of three linear boundary/drainage ditches (7121, 7093, 7124), which extended across the site from north-west to south-east at the eastern end of the excavation. These ditches probably delineated enclosures to their east and west. Although only the middle ditch (7093) contained any dating evidence, it seems likely that these features were broadly contemporary as they share a similar alignment. They could have defined a trackway, which was shifting over time; alternatively they represented successive boundaries, again shifting over time.



Plate 3.11 Rayne Roundabout (Site 33/4): section 105 – infilled stream channel

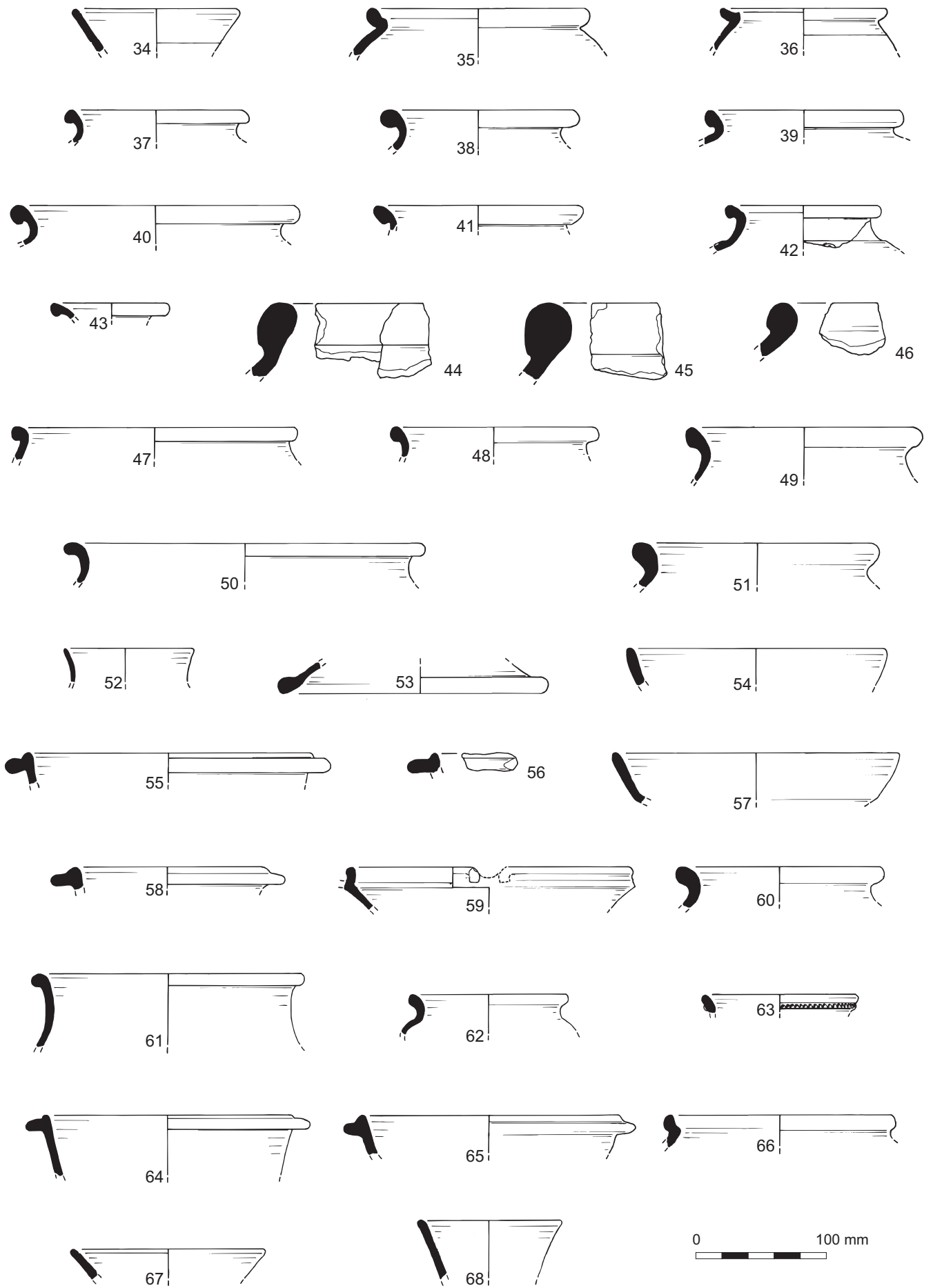


Fig. 3.16 Rayne Roundabout (Sites 33/34): Roman pottery

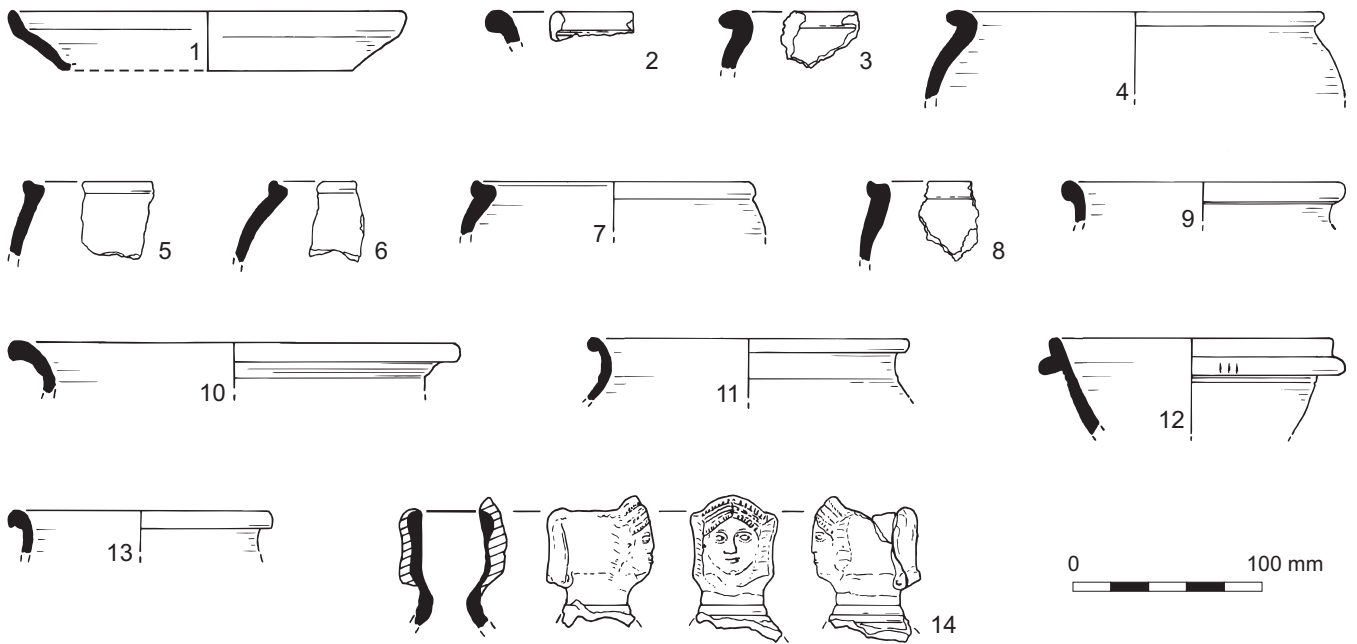


Fig. 3.19 Selection of Roman pottery from Parsonage Lane and West of Panners Roundabout

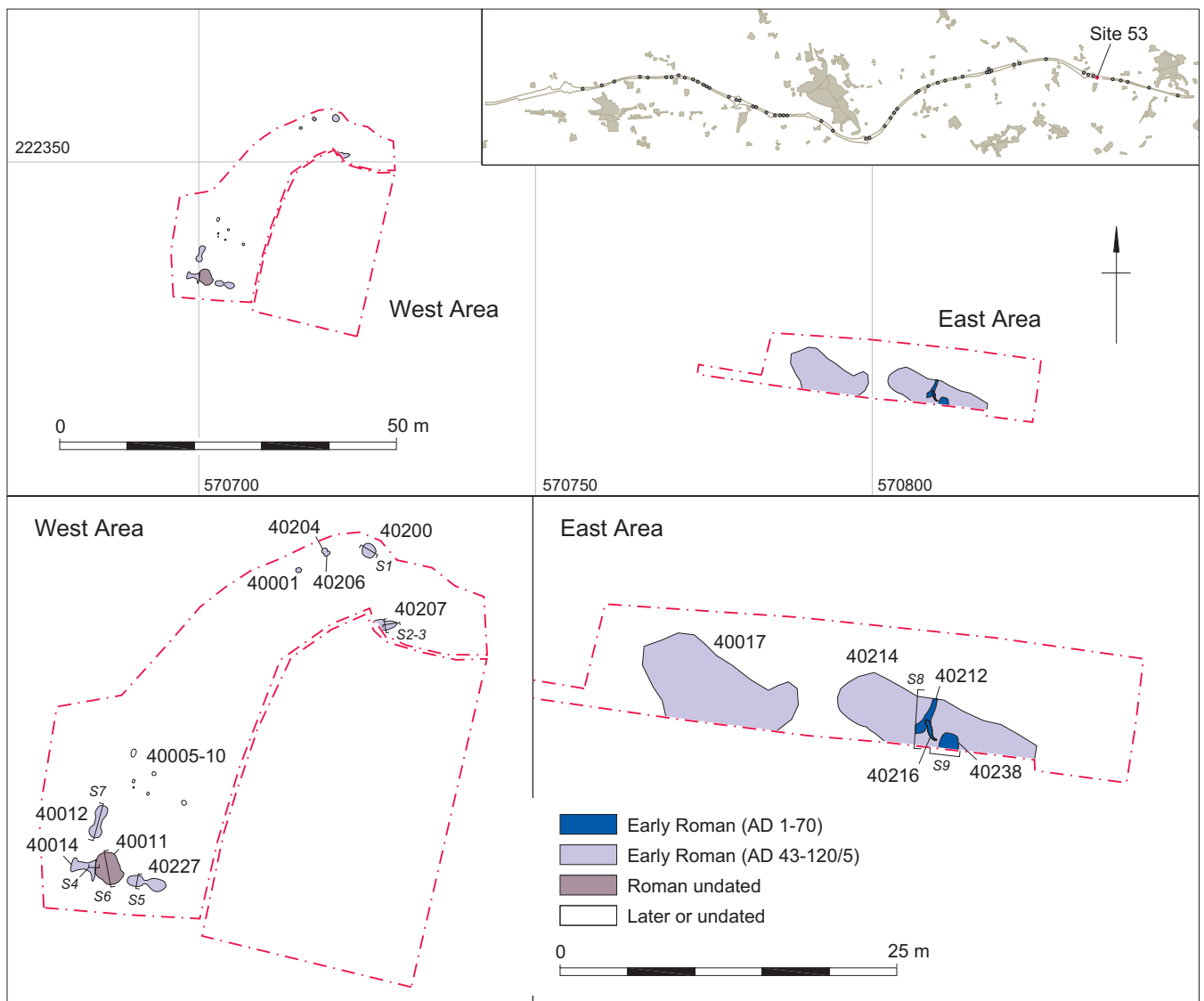


Fig. 3.20 Valentine Cottage (Site 53): plan showing excavated features

3.21, sections 5, 7–8), which contained no finds. Cutting one of these ovens (40014) and probably post-dating all three was a large amorphous pit (40011) (Fig. 3.21, sections 4 and 6), the upper fill of which contained a small amount of pottery broadly dateable to the Roman period. Lying to the north-east of the ovens was a second cluster of pits/postholes (40005–40010) none of which was excavated.

Excavation in the eastern area revealed a cluster of features containing a relatively substantial assemblage of pottery. Two large amorphous quarry hollows (40214 and 40017) lay in the southern part of the excavation, running under the section defining the southern limit of the site. Of these 40017 was not excavated. Early Roman pottery and ceramic building material was recovered from the quarry hollows, which derives from a nearby settlement.

Following the silting up of these features a curvilinear ditch and a well (40212 and 40238) (Fig. 3.21, section 9) were cut through quarry hollow 40214. All the pottery from these features was early Roman in date and this may indicate that the hiatus between the silting up of the quarry hollows and the digging of the other features was short lived. Alternatively it may be that the pottery from the stratigraphically later features was residual and originally derived from quarry hollow 40214. A tree-throw hole (40216) may have been stratigraphically earlier than ditch 40212 and quarry hollow 40214 but also contained early Roman pottery.

West of Panners Roundabout (Site 54) by Dan Stansbie

The earliest Roman activity at this site is represented by part of an enclosure ditch (44064) and a ring ditch (44000), both containing early Roman pottery (Phase 11) (Fig. 3.22). Ditch 44064 was situated towards the western end of the site and extended beyond the northern limit of excavation. Ring ditch 44000 was situated at the far western end of the site and ran beyond the limits of the excavation to the north and the south. It may have linked with ditch 44002 forming part of an enclosure or system of enclosures lying to the north of the site. A small segment of an undated curvilinear drip-gully, 44005, was recorded in the very south-west of the site.

The remaining features recorded were mainly of 3rd to 4th century AD in date (Phase 13). By the late 3rd century both ditch 44000 and ditch 44064 had silted up and gone out of use. At the eastern end of the site a linear ditch (44001) cut the earlier ring ditch and terminated just inside the area formerly enclosed by it. At its eastern end ditch 44001, which cut tree-throw hole 44038, extended beyond the eastern limit of the excavation. At the centre of the site a large amorphous natural hollow, 44040, that may have been in existence for some time began to silt up, incorporating a substantial assemblage of late Roman pottery in the process (Fig. 3.23 section 5). An amorphous pit (44043), which cut tree-throw 44006, was recorded to the west of the hollow.

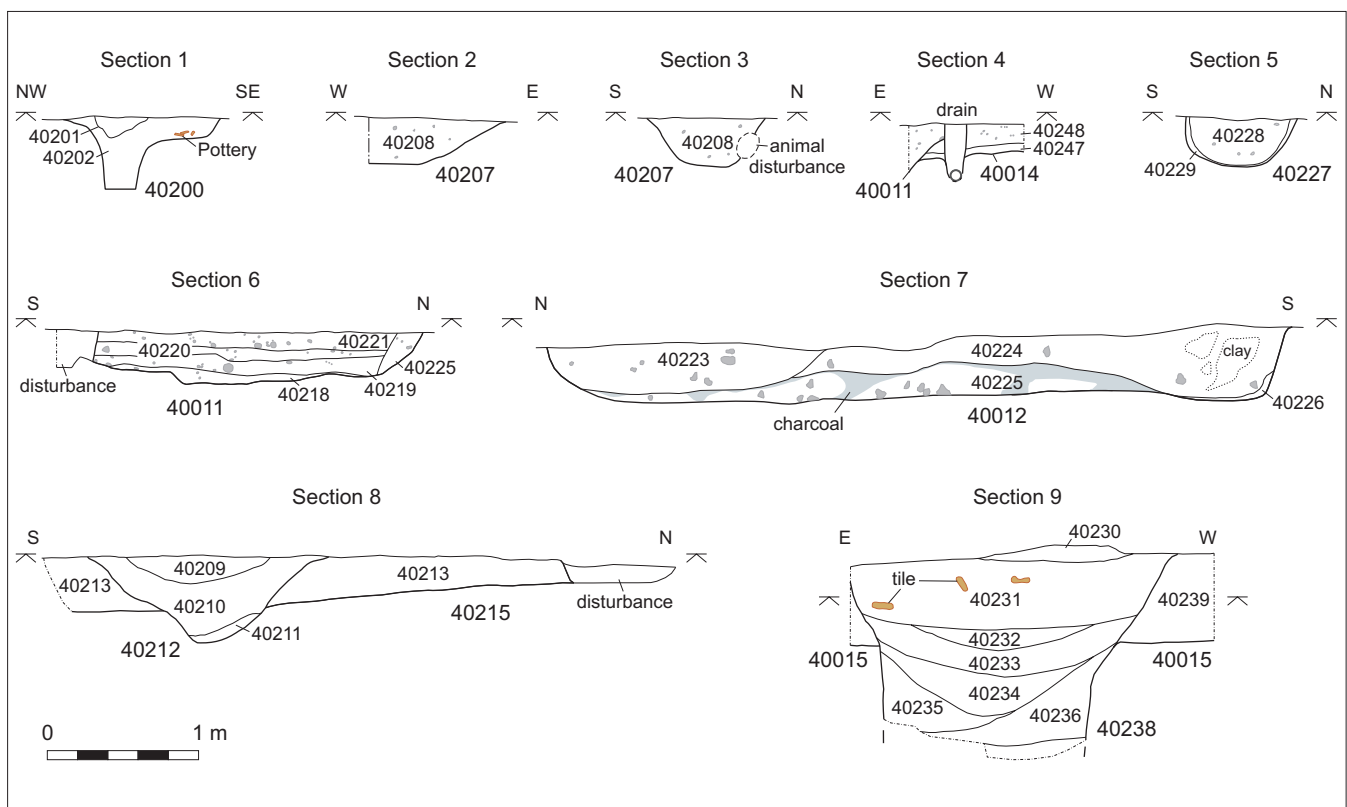


Fig. 3.21 Valentine Cottage (Site 53): sections

A horseshoe-shaped enclosure ditch (44007), its open end facing north-east, was situated towards the western end of the site, just to the south of the northern limit of excavation. It was accompanied by an oval pit (44053/44056) which lay just to the south-east of its northern terminal, within the entrance to the enclosure. Both features contained assemblages of 4th-century pottery but the enclosure ditch contained a greater quantity of later material, including the neck of a distinctive Lower Nene Valley face flagon (see Fig. 3.19, no.14 above).

After the Roman period there appears to have been

little activity on the site until the post-medieval or modern periods. A substantial post-medieval/modern drainage ditch, 44015, ran across the eastern end of the site from north to south and various land drains criss-crossed the site from east to west and north to south, cutting the Roman features.

Settlements: origins and appearance

The period around the time of the Roman conquest, or a few decades after it, is characterised by a shift in settlement patterns along the Stane Street corridor. The shift

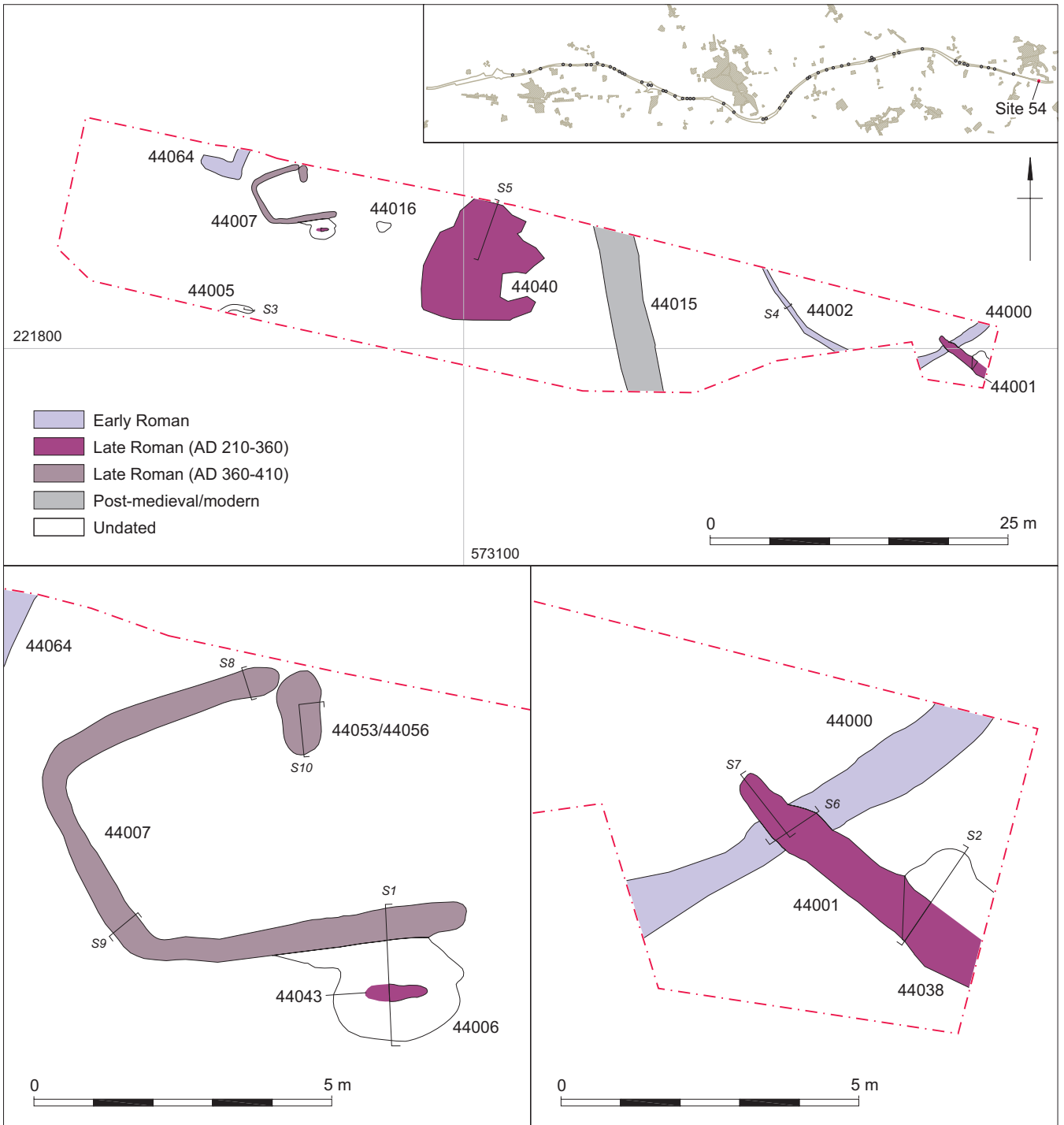


Fig. 3.22 West of Panners Roundabout (Site 54): plan showing excavated features

was not necessarily of 'seismic' significance with the complete abandonment of farmsteads and villages, but perhaps merely a re-focusing of settlement as land boundaries, structures and the like were set short distances from their previous locations. Some settlements were abandoned before or soon after AD 43. The middle and late Iron Age settlement at East of Little Dunmow Road (Site 50) yielded a small proportion of sandy grey wares, a mortarium, and continental Gallo-Belgic imports, which offered evidence for continued occupation up to *c* AD 55/60. Overall, however, the settlement barely survived the conquest. Highwood Farm (Sites 11/46) was similarly occupied during the late Iron Age. Its ceramic assemblage was also devoid of wares of exclusive post-conquest date, suggesting that this period of settlement was confined to the late 1st century BC or the first half of the 1st century AD. Valentine Cottage (Site 53) again offers a constricted chronology. Activity was evidenced by kilns or ovens of probable early Roman date. The ceramics suggested that occupation at the site had ceased by *c* AD 70.

The evidence of settlement shift at Strood Hall (Sites 9/44) is tentative. The earliest settlement features—roundhouses, enclosures and pits—date to the mid 1st century AD, probably belonging to the period from AD 43 to 70. Grog-tempered pottery, found in association with sand-tempered, post-conquest wares, either belonged to that period too, or represented redeposited late Iron Age material. Despite the lack of strong evidence for late Iron Age occupation, up to seven

cremation burials were assigned a pre-conquest date. These were located alongside graves dating as late as the mid 2nd century AD. This presents a remarkable contrast between the cemetery and settlement: continuity of funerary location from the late Iron Age to early Roman period is met by no corresponding continuity in the settlement. The domestic activity commenced after the Conquest, but the settlement's inhabitants continued to be buried in an area first used before that time. The implication is that the excavated site of Strood Hall lay near to an earlier, late Iron Age settlement, and represented a spatial shift of the domestic focus, with the cemetery acting as the pivot. This recalls the relationship between cemeteries and settlements at Anglo-Saxon Mucking, where habitation areas shifted through time, but the location of the cemeteries remained static. The cemeteries represented a 'sacred zone' that reinforced ancestral ties and legitimised claim to the land and its resources (Hamerow 1993, 89). The motivations that prevented the Anglo-Saxon migrants from re-locating their dead may have differed from those of the early Roman inhabitants at Strood Hall, yet a common thread links them: both communities were connecting with the past in a period of social, economic and political change. Rayne Roundabout (Site 33/34) offers some evidence for continuity. The earliest features, gullies seen in the western part of the site and the TRANSCO Pipeline trench (see Fig. 3.13 above), date to the first half of the 1st century AD. The pottery is relatively clear in this case; an imported fineware beaker with 'herringbone'

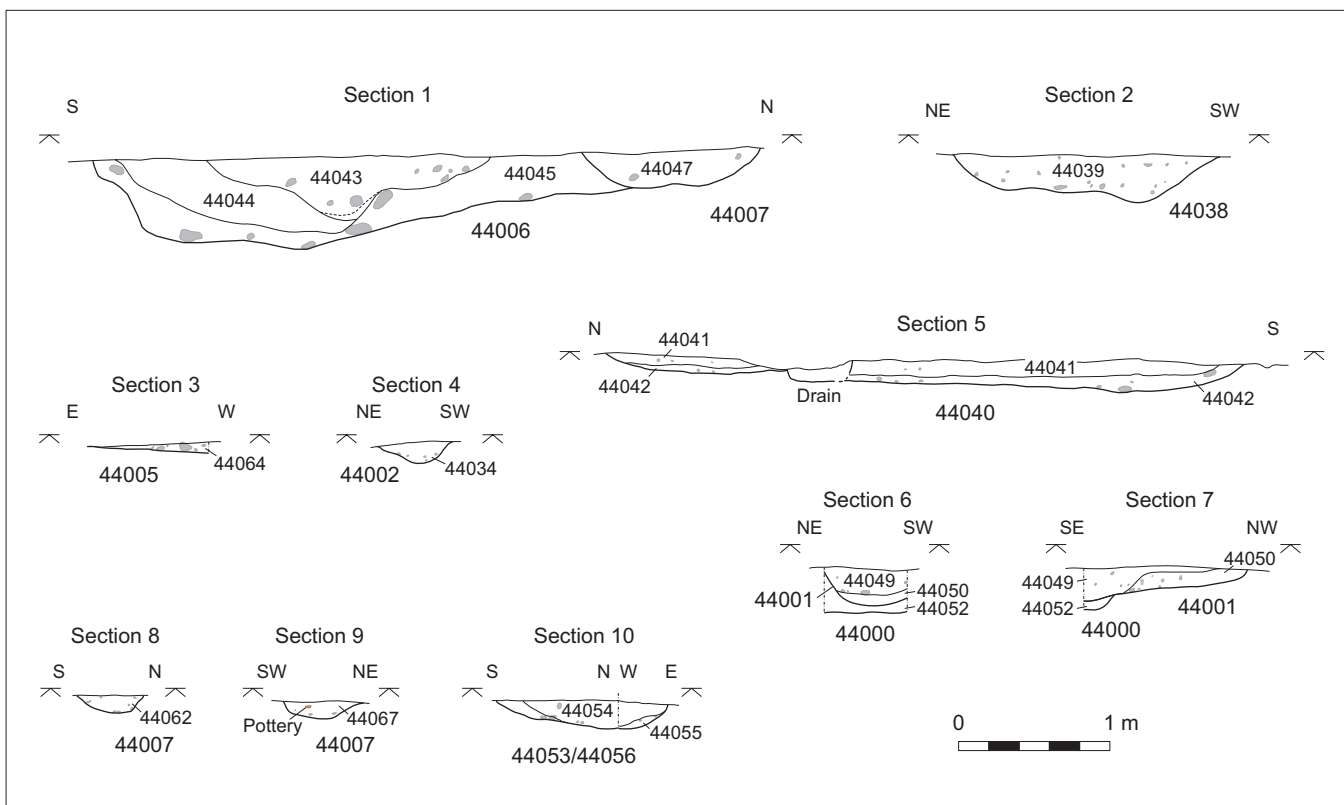


Fig. 3.23 West of Panners Roundabout (Site 54): sections

decoration is likely to have arrived before AD 40. The chronology of this site is in contrast to the Rayne Bypass site, excavated in 1987. The excavation there revealed no late Iron Age occupation, with the first phase of settlement activity commencing in the late 1st century AD (Smoothy 1989, 25–6).

These chronological trends appear to be consistent with those witnessed at Braintree and Great Dunmow. At the former, much of the late Iron and Roman period occupation was centred within the same general area between London Road/High Street and Rayne Road (Stane Street). However, this area can be divided into two zones, north and south, with little chronological overlap between the two. The southern part, centred at the junction of Pierrefitte Way, London Road and Grenville Road, comprises a group of sites that belong largely to the late Iron Age and early Roman period. The evidence includes structures and enclosure ditches, and it seems, therefore, that in the decades following the Roman conquest, occupation continued at the site of a late Iron Age settlement (Havis 1993, 61; Martin 2000, 107; Garwood and Lavender 2000, 103; Pearson 2002; Hickling 2002). The 2nd century saw a shift in settlement northwards; thus the 2nd to 4th-century settlement fronted Rayne Road and the High Street, with more occupation further east, for example at Tofts Garage and Mount House (Milton 1986). Activity appears to have resumed at the site of the late Iron Age/early Roman settlement, though this seems to be of an industrial nature, chiefly metalworking (Pearson 2002, 78). The sequence at Great Dunmow is perhaps more clear-cut. Late Iron Age occupation is unknown from the Roman town itself, which was established after AD 60 (T J Wickenden 1988). Features of probable late Iron Age date were uncovered at Buildings Farm (Wallace 1997, 71), but the field systems that define occupation at the site commenced in the mid 1st century AD (Lavender 1997, 88–9). At Stansted, ten sites yielded evidence for late Iron Age or Roman occupation, but only one (Bury Lodge) saw activity continuing from the late Iron Age into the Roman period. The Duckend Car Park site experienced a hiatus between the late Iron Age and late Roman occupations, although the cemetery remained in use during the later 1st and 2nd centuries (Havis and Brooks 2004).

Though somewhat unfocused, few sites between Stansted and Braintree offer direct evidence for continuity of late Iron Age/earliest Roman settlements into the later Roman period. Braintree, Rayne Roundabout and Bury Lodge, Stansted, are perhaps exceptional in showing a level of continuity. However, even at Braintree, a degree of settlement shift is evident. The early decades after the Roman conquest appear to have been a period of population movement and re-organisation. Sites such as East of Little Dunmow Road and Valentine Cottage did not survive long, if at all, after AD 43. Despite its cemetery link, Strood Hall was newly established after this date. The cause of settlement shift,

whether on a large or small scale, is not easily determined. But it is possible that the changing settlement patterns reflect a major re-organisation of the landscape following the Roman conquest or, even, the events of AD 60. Either event would provide impetus for centralisation of the population into centres such as Great Dunmow. The initial period of Roman occupation could have demanded tighter controls over agricultural production in order to maximise yield and supply—not least to feed the Roman army. A hint of this can be found at Buildings Farm, Great Dunmow (Lavender 1997, 89), where the mid/late 1st century field system was apparently laid out according to Roman units of measurement (*iugera*). The evidence is unclear, certainly when compared with the field system of Great Holts Farm, Boreham, which suggests more convincingly that that site formed part of an imperial estate or tenanted property, at least from the mid 2nd century onwards (Germany 2003, 217). The shift in settlement focus at Braintree was comparatively late—2nd century AD, rather than late 1st—and this may in any case relate to an unconnected phase of landscape re-organisation (cf Humphrey 2002, 121). These are so far untested ideas, but it seems inconceivable that the Roman conquest, motivated in part by economic concerns, did not leave its legacy on the landscape beyond forts and towns.

Structures

The roundhouse remained an important structure type after the Roman conquest. The remains of four roundhouses, all of probable Roman date, were recorded at Strood Hall (structures 2237, 2263, 2286 and 2295). All structures were observed as arcs of gullies. The earliest was Structure 2263. It comprised a curvilinear gully that measured up to 0.25 m wide and 0.13 m deep. It had terminals at both ends. An internal posthole immediately north of the gully was probably associated. Pottery dated the posthole to the mid 1st century AD, and it is possible that the structure was first occupied before the Roman conquest. Structure 2295 similarly comprised a short arc of a gully, but the feature remained unexcavated, and little else is known, except that it is likely to be associated with an adjacent early Roman enclosure. The gully of structure 2286 was relatively wide (1.84 m) and 0.38 m deep. It terminated at one end, and was truncated at the other. It was also unusual for its sequence of fills, which included episodes of profile erosion and natural silting. Other deposits yielded pottery and animal bone. A possible hearth (1920) lay within the centre of the roundhouse, if projected full circle. Structure 2237 was defined by a 10 m long gully that measured 0.34 m wide and 0.2 m deep. It had terminals at both ends. A second short gully stretch, separated from the main gully by some 5 m, may have formed part of the same structure.

Interpretation of complete gully circuits is itself often problematic (see Iron Age discussion, Chapter 2), and so

the treatment of short arcs is particularly onerous. With the exception of unexcavated structure 2295, all gullies were deliberately dug, and cannot have formed naturally. Dug into heavy clay soil, sumps may have been necessary to avoid puddles. The properties of the gullies of structure 2263 and 2237—short lengths, complete with terminals—make this explanation credible; for structure 2286, with its sequence of natural soil accumulation, it seems certain. None of the gullies share orientation exactly, which adds weight to the view that the gullies were dug in a location best suited for drainage around individual structures. Structure 2237, comprising poorly-aligned gullies, would provide a somewhat odd-looking and irregular outline of a roundhouse if the gullies functioned as wall-trenches. As drainage-gullies, the features need not follow the shape of a roundhouse too closely. Gully 2212 (see Fig. 3.6 section 17, above) orientated downslope towards the southwest took water away from the house. It is possible that the gullies never contributed to a completely circular roundhouse, but rather formed the foundations for windbreaks or shelters for craft areas. The paucity of material to support such activities perhaps makes this the least likely explanation, but without good structural and artefactual evidence, no interpretation can be considered a certainty.

The roundhouses at East of Little Dunmow Road and Highwood Farm conform to the traditional pattern of housing in the late Iron Age, as typified at Stansted (Havis and Brooks 2004), Little Waltham (Drury 1978), and Orsett ‘Cock’ (Carter 1998). The structures at Strood Hall confirm that the tradition continued into the Roman period. Pottery dates the abandonment of structure 2263 to the mid 1st century AD, probably between *c* 43 and 70. Occupation may conceivably have commenced before the conquest. The abandonment of Structure 2286 was later: within *c* AD 120 to 200. Again, the date of occupation cannot be known with certainty, though an early Roman date is possible. Structure 2237 overlay enclosure ditch 2249, which was infilled during the early Roman period. Pottery from the structure gully dates the end of its use to between the late 2nd and mid 3rd century AD, potentially placing the period of occupation from *c* AD 120 to 250. This is somewhat later than the latest roundhouses at Orsett ‘Cock’, which belongs to the second half of the 1st century AD (Carter 1998, 33). A 3rd or 4th-century curvilinear gully at Parsonage Lane might represent the traces of another circular structure, though it could be an oval enclosure as the gully extended beyond the limit of excavation. Other post-conquest circular structures, mainly 1st century AD, are known in Essex, for example at, Harlow (C. Lydamore, pers. comm.), Chelmsford, Heybridge (Black 1996), and the Thremhall Avenue site, Stansted (Havis and Brooks 2004, 273). Traces of a late 1st or early 2nd century AD roundhouse were also uncovered at Rayne By-Pass (Smoothy 1989, 26). Nevertheless, structure 2237 still

represents a rare survival of the roundhouse beyond the early Roman period. Roman-period circular structures are well known outside the immediate region. Such structures—usually stone-built, with some dating after the mid 3rd century AD—are evident, for example, at the Stanwick and Redlands Farm villas in Northamptonshire (Keevill and Booth 1997). At least one structure at Redlands Farm saw domestic occupation (roundhouse 369), but this, along with a stone structure at the same site and another at Stanwick, additionally served an agricultural function (*ibid.*). The same link between a domestic and working function may also have been present with regard to Structure 2237 at Strood Hall, since it was immediately adjacent to a stockade or byre (2296).

Rectangular structures were poorly represented. At Strood Hall, midden 1206 accumulated within a hollow that almost certainly defined the outline of a substantial, and possibly well-appointed, rectangular building. A NW-SE aligned rectangular spread of dark, silty clay soil (1206) that sat within a hollow measuring 14 m long, up to 8 m wide and 0.3 m deep was located immediately east of the centre of the site. The deposit contained a rich assemblage of domestic finds, including pottery, bone pins, and animal bone. Window glass fragments and structural brick, roof, floor and hypocaust tile were also concentrated in this feature. Craft and industrial activity was evidenced by bone pin roughouts, iron tools, and a possible millstone. Underlying 1206, and extending beyond the southern end of the hollow, was deposit 1301, also comprising dark silty clay. A mixed fill/natural soil (1300) represented the earliest episode of deposition. The soil throughout the feature appeared to be largely homogeneous; distinct episodes of deposition could not be discerned. The dating evidence suggests that the soil had accumulated during the late 3rd, or possibly the early 4th century AD. A coin from deposit 1301 is dated AD 270–284; the pottery is consistent with this. Similarly, the uppermost levels of 1206 produced pottery dating largely to Phase 13.1 (late 3rd to early 4th century); little or none of this necessarily extended beyond the 3rd century. Earlier, but residual, 3rd-century pottery contributed significantly to the entire ceramic assemblage. Smaller features were located around the edge of the spread. Posthole or post pit 1371 was situated to immediately beyond its NW edge. It was 0.72 m across its widest extent and 0.22 m deep. Excavation revealed the shadow of a timber post that had appeared to decay *in situ*. Another, possibly related, posthole or pit (1678) was situated *c* 2.5 m north-east of 1371. The feature was almost vertical-sided and measured 0.69 m wide and 0.26 m deep. Posthole 1368 was located midway along the spread’s north-eastern boundary. It was similarly large, measuring up to 0.68 m across its surface and 0.22 m deep. The cut was V-shaped, possibly allowing a timber post to be inserted at an angle. A third posthole (1681) was located opposite 1368 along the south-west edge of the spread, but no further details are known.

The regular shape of the depression and well-positioned postholes denote the remains of a large, mainly timber, building, which probably functioned as a barn, or even served a domestic role. The evidence reveals little of the method of wall construction. The absence of posthole-rows along the sides—whose presence might otherwise be expected given the survival of the other postholes—hints at sill-beam footings. Such methods are known from buildings at Kelvedon, where gravel floors define the size and shape of some structures (Rodwell 1988, 7–9). Early 1st-century buildings at Skeleton Green, Hertfordshire, were postulated from internal surfaces, or rather the foundations for such surfaces, and only slight traces of sill-beam trenches (Partridge 1981, 49). If the walls of midden/structure 1206 stood on sill-beams resting on the top of the hollow, then the floor was suspended, leaving a gap of at least *c* 0.3 m between it and the base. ‘Sunken-floored buildings’ are by no means unknown from Roman Britain, and have been encountered in Essex. One such structure, 6 m by 3 m and early Roman in date, was recorded at Little Oakley in eastern Essex (Barfield 2002, 16). Further afield, a sunken-floored building (structure 227), again dated to the early Roman period, was uncovered at Slough, Berkshire (Ford *et al.* 2003, 53). Measuring, 15 m by 8 m, it was almost identical in size to 1206. Structural features were similarly few, limited to a row of stakeholes along the southern side, but no features, save two postholes for possible wall-supporting posts, on the northern side.

The walls of 1206 were probably of timber-plank construction. The midden yielded hundreds of iron nails, which may well have held the planks together. Small amounts of fired clay from the feature hints at daub-filled spaces between timbers. Postholes 1371 and 1678 appear to mark the position of a doorway. A relatively large quantity of ceramic building material was recovered from the midden, including roof tile, flue tile and floor or hypocaust tiles. As a further element of grandeur, glass fragments hint at the provision of glazed windows. While it is not unreasonable to suggest that this material was integral to the structure represented by 1206, it could instead have derived from a building located nearby, perhaps on the site of cobbled surface 1207, or even outside the area of excavation. In any case, it reveals the existence of a relatively well-appointed, ‘Romanised’ building (*see Seager Smith, CD/Chapter 4*). The chronology of the structure, while hardly firm, potentially links it with roundhouse 2237, and possibly 2286. The 3rd century, then, may have witnessed the settlement at its most extensive.

Midden 1329 was set within an amorphous hollow; iron nails from the western end of the spread may identify the area as the site of another structure. The shape of the deposit limits the length of the building—perhaps a barn, given the concentration of crop-processing waste recovered from the feature—to under 20 m. Pottery belongs to the late Roman period, but was

abandoned, later than 1206, by the mid 4th century.

No certain buildings were encountered at Rayne Roundabout, but brick and tile recovered from the site provided evidence for at least one building in the vicinity. The material included box-tiles and pavement tiles that once formed part of a floor or the surface below hypocaust pillars. Like similar material from Strood Hall, this suggests the presence of a relatively high-status, ‘Romanised’ structure. The Rayne Roundabout site is adjacent to the Rayne By-Pass site, where a concentration of rubble and tile was located (Smoothy 1989). The tile from that site and Rayne Roundabout was generally recovered from late Roman contexts (though much of the material from the 1987 site was of later 2nd-century date). It is conceivable that all derived from the same building, which Smoothy (1989, 27) suggested was substantial and probably a villa. This is possible, although structure 1206 from Strood Hall reminds us that basic rectangular, timber-built structures could include the amenities of a villa. Percival (1976, 15) notes that the term ‘villa’ is necessarily fluid in its application. The modern view equates the term with palatial size and luxury; in the Roman world, a *villa* was simply a building of Roman appearance or function within a country estate. Luxury was not a qualification (*ibid.* 14). The building at Rayne may well have been of similar type to structure 1206, being rectangular with a basic layout. Building A at Church Langley, Harlow provides a useful model. This was a rectangular building almost 27 m long and 10 m wide. It was divided into two rooms only, with the largest probably serving a domestic function, while the smaller room, open at one end, served as a byre or similar (Medlycott 1998, 47). These buildings never developed beyond their basic shape, and could never rival Rivenhall, Chignall St James and other grand villas. However, located immediately beyond the boundaries of towns (Great Dunmow, Braintree and Harlow in the case of Strood Hall, Rayne and Church Langley respectively), they had a vital part to play in the countryside. Percival (1976, 150) considers the essential role of villa as providers of an agricultural surplus to towns. How far sites like Strood Hall and Rayne Roundabout fulfilled this role is a key question, and is addressed below with reference to economic data.

Land use and the economy

Agricultural regimes

Considerable quantities of environmental data were retrieved from two principal Roman sites. This has permitted an unparalleled opportunity to identify agricultural regimes along Stane Street, and assess differences between sites and changes through time. Data came from Rayne Roundabout (Sites 33/34) and Strood Hall (Sites 9/44), and consequently, in conjunction with the evidence from East of Little Dunmow

Road (Site 50), can be placed into an almost complete chronological sequence from the late Iron Age to the late Roman period (see *Carruthers Chapter 6 and CD/Chapter 7*).

Charred seeds from Rayne Roundabout perhaps provide the first evidence for the dominance of spelt wheat in the heavy clay soils of Roman north-west Essex. The ratio between emmer and spelt was finely balanced at East of Little Dunmow Road, but at early Roman Rayne, emmer is poorly-represented, and spelt processing waste conspicuous in an organic-rich layer (context 165). Bread-type wheat was also cultivated, but in lesser quantity (though being free-threshing and less likely to be burnt, the crop may well be under-represented). Strood Hall produced a limited early Roman assemblage. It nevertheless indicates that emmer and spelt crops were processed, and bread-type wheat grown. The chronological sequence continues at Rayne. Middle to late Roman features produced chaff fragments and concentrations of crop-processing waste were recovered from palaeochannel deposits and ditch 265. Emmer was present, but the vast majority was spelt chaff. Like the material from East of Little Dunmow Road, the crop had been semi-cleaned allowing weed-free spikelets to be stored. The considerable quantities of spelt chaff and spikelets at Rayne suggests that the crop continued to be grown as a surplus, and the fully processed grain subsequently traded (*Carruthers CD/Chapter 7*). At Strood Hall, stinking mayweed was present for the first time in mid to late Roman contexts, and could indicate increased cultivation of the heavy clay soils; weeds favouring wetland or damp environments were scarce during this time, perhaps as a result of better drainage. As at Rayne, spelt was predominant. Crop-processing waste from late Roman midden 1329 at Strood Hall incorporated chaff in the form of glume bases and spikelet forks. Stinking mayweed seeds were poorly-represented in this deposit, suggesting that crops were stored fully processed, perhaps in a nearby building, prior to export or consumption on site. Barley was grown during the later Roman period, but this was limited perhaps for use as animal fodder.

There are clear trends to emerge from this evidence. Emmer wheat—a product of a less agriculturally intensive age in the region before AD 43—was superseded by spelt wheat during the early stages of Roman occupation, hinting at the introduction of new regimes and organisation, motivated perhaps by the requirement to produce surpluses. Second, arable cultivation played an increasingly important role in the later Roman countryside, by which time the heavy clay soils were better worked and drained. This fits a pattern established elsewhere in the region. At Stansted, later Roman contexts at Duckend Farm and others produced abundant spelt chaff relating to large-scale crop processing before export. Compared with earlier periods, this represented an intensification of arable farming (Murphy 2004, 338). East of Little Dunmow

Road, Rayne and Strood Hall show a high degree of agricultural specialisation. Growing and processing crops was carried out in stages; the evidence from these sites relates to an intermediary stage after the crop had been cleaned of weeds, perhaps closer to the fields, and before piecemeal processing and consumption of grain, or export of grain to other locations. Rayne Roundabout offered evidence for production of a surplus intended for consumption away from the site. Similarly at Strood Hall, the sheer volume of wheat chaff in the late Roman midden deposits, allied to the scarcity of grain, suggests that this site, too, produced a surplus bound ultimately for market and use outside the settlement. Neither site provided firm evidence for granaries, but millstone fragments from both (and the stinking mayweed from Strood Hall) imply that granaries existed. Excavations at Great Holts Farm, Boreham, near Chelmsford provided some idea of the evidence expected in the wider environs at Rayne and Strood Hall. The site revealed an aisled granary that yielded grain, mainly spelt, with very little semi-processed material and chaff present. Spikelets were stored and processed elsewhere (Germany 2003, 222). Chelmsford was probably a chief recipient of grain from Great Holts; Braintree may well have received the grain from Rayne, while Strood Hall exported to Great Dunmow.

Animal husbandry

Animal bone assemblages were invariably small, and for most sites it was impossible to gain a full understanding of the relative proportions of species present or the uses to which they were put. Nevertheless, the animal remains have revealed much useful information (see *Evans CD/Chapter 6*). Bone from late Iron Age deposits at Highwood Farm, East of Little Dunmow Road, and Rayne Roundabout show that cattle and sheep/goat were the principal species during this time. Butchery marks on the bone indicate that the animals were exploited for meat. The evidence from Rayne related to primary butchery processes; meat-bearing bones had been consumed and discarded away from the site. Pig and horse were present at Rayne and East of Little Dunmow Road. There appears to have been little change after the conquest. The main species (cattle and sheep/goat) are represented in early Roman deposits at Rayne, Strood Hall, and Parsonage Lane. A number of bones also exhibited butchery marks. Horse and pig were present also. Evidence from Strood Hall suggests that cattle were slaughtered young, with three of five aged individuals dying before 30 months. Some smaller bones from Strood Hall derived from domestic fowl, probably chickens, exploited for meat and eggs. It is worth noting, too, that chickens and pigs were used as funerary offerings and deposited in graves (see below). Cattle and sheep/goat were, as expected, the principal species in mid Roman Strood Hall. These were again

consumed for meat, but the assemblage included older sheep, showing that this species was exploited for its wool. Horse and pig were present in this phase. A change in animal use during the late Roman period can be detected at Strood Hall. Cattle and sheep/goat were predominant, but cattle apparently died older compared particularly with the cattle from the early Roman period. Three out of four aged individuals were older than 30 months. Pathology on cattle phalanges showed wear consistent with the use of cattle as traction. Structure 2296, open at one end and with internal drainage or partitions, may have sheltered the animals over winter. Horse and pig were present at the site; foetal pig suggests that pig breeding was undertaken. Rayne Roundabout produced the only other significant late Roman assemblage. The range of species was similar to that from Strood Hall, although the presence of foetal or neonatal horse bones provides evidence for horse breeding in the vicinity of the site. Throughout the Roman period, wild species, particularly red and roe deer, played a role in the social life of the inhabitants of Strood Hall in the form of hunting, and no doubt supplemented the diet also.

The importance of cattle and sheep/goat in the late Iron Age and Roman period is obvious, and this is reflected in the morphology of the settlements. At Strood Hall the parallel ditches on the eastern side created a droveway that guided large herds towards the northern enclosure and away from domestic zones. Paddocks in the central and southern parts of the site held smaller herds, whose use (for milk and wool) was probably more closely linked with individual households. The settlement had changed radically from the 3rd century AD, not least in the rise of arable farming, but the waterhole in the north-western enclosure confirms the continued pastoral use of the field. Use of space is less easy to discern at Rayne Roundabout, but the sequences of ditches and recuts were long-lived and enclosed large areas: fields suitable, naturally, for farming. A droveway took cattle from the fields to the

River Ter, where the animals drank. The early Roman ditches at Parsonage Lane were dug with animals in mind. The site comprised enclosures or paddocks flanked by a droveway on one side at least. Cattle, sheep/goat and pig were accommodated here.

Rayne Roundabout, Strood Hall and others can be allied with most rural settlements in the region, where these species nearly always dominate the faunal remains. At some sites, such as Church Langley, Harlow (Medlycott 1998, 86) and Great Holts Farm, Boreham (Alberella 2003, 194), cattle is predominant. The presence of primary butchery waste at Rayne brings to mind conclusions drawn by Smoothy (1989, 25) in relation to the earlier-excavated site nearby. Prime beef cattle were considered to have been exported from the site. However, as shown by the A120 material, the nature of the bones and archaeological recovery strategies makes it difficult to assess which species was actually more dominant at a given time. At Strood Hall, cattle often have a higher fragment count, but were equal to sheep or not so well represented in terms of the minimum number of individuals. The changes at Strood Hall in the cattle population over time are more conclusive, however, with the animals living longer towards the later Roman period and being put to heavy work. Though meat remained an important resource, these factors suggest the additional function of traction. The change corresponds with the intensification of arable farming (it is surely no coincidence that an iron rake and reaping hook were recovered from late Roman deposits). Indeed, the two aspects are almost certainly connected, since cattle would have been required to pull the plough or the grain wagon to market. This is illustrated by an iron ox-goad, recovered in a late Roman ditch (*see Walton and Scott CD/Chapter 4*). At Wendens Ambo, Essex, Halstead (1982, 62) similarly sees a connection between the increasing importance of cattle through the Roman period and more intensive agricultural regimes. Cattle were available for ploughing, while the population of sheep declined as a result of reduced grazing.

Animal bone

by Emma-Jayne Evans

The largest animal bone assemblages from the A120 sites came from the Roman sites of Strood Hall and Rayne Roundabout. In the late Iron Age and Roman phases, a larger variety of animals is noted compared to earlier periods, with domestic fowl, cat, roe deer and hare present along with the usual domesticates. Cattle continue to dominate the assemblage, with sheep/goat and pig present in fewer numbers. The hunting of wild animals continues, as implied by the presence of red and roe deer, although it cannot be ascertained to what extent these animals were exploited for food.

Crafts and technologies

The Roman settlements produced limited evidence for craft and industrial activities outside farming. Offcuts from Rayne Roundabout reveal antler-working at this settlement. Bone-pin roughouts were recovered from late Roman midden 1206 at Strood Hall (Fig. 3.24). Associated with roof, floor and hypocaust tiles (cf Fig. 3.25) these may have been produced in the high-status building from which the tile derived. A metal needle from Strood Hall provides tentative evidence for textile-working. Early and late Roman iron chisels, also from Strood Hall may relate to woodworking, though the scale of the activity is unclear.

Rotary quernstone fragments were collected from Strood Hall and Rayne Roundabout, representing flour-production at the household level (Fig. 3.26). Grain was ground at a more industrial scale, too, as evidenced by fragments of possible millstones. These were recovered from late Roman contexts, notably midden 1206 at Strood Hall. As with the bone pins, the millstone and the high-status building could be associated, which raises the possibility of the building serving dual domestic and working functions. In addition, the millstones suggest that flour, not only the raw grain, was exported.

There was little evidence to associate any settlement with pottery production; the ceramic assemblage contained few wasters or kiln-damaged vessels. The best evidence, though tentative, came from Valentine

Cottage, where three early Roman features were recorded. Dumbbell-shaped, lined with burnt clay and containing charcoal-rich base deposits, the features were located away from any domestic evidence, and it is likely that they represented industrial activity. No kiln furniture or dumps of kiln-fired products were found, prompting the excavators to interpret the features as ovens. However, though they are perhaps a little small, compared with kilns at, for example, Orsett 'Cock' (Carter 1998, 62–70), their shape takes the form of a kiln structure. One end of each feature could have served as the kiln chamber, while the opposing end—probably that which was charcoal-rich—could have been the stoke pit. The connecting portion was the flue. The absence of supports and raised floors within the oven is not problematical; certain early Roman single-chambered, single-flued kilns characteristically lack such furniture, being a development of late Iron Age clamp or bonfire kilns (Swan 1984, 113–4). Interestingly, the distribution of this kiln type is concentrated in Suffolk and Essex, though it is becoming more widespread as more examples are recognised (*ibid.*). If permitted as kilns, and despite the lack of products, pottery may have been fired at Valentine Cottage; the features were adjacent to quarry hollows, from which clay was removed possibly for pottery production. If so, then the kilns are likely to have supplied only the local area, with products possibly reaching Rayne.

Objects of bone and antler

by Lorraine Mephram

A total of 19 objects of worked bone or antler were recovered from two Romano-British sites (Strood Hall and Rayne Roundabout), indicating evidence for bone- or antler working at a household craft level. Antler-working, on a very small scale, is attested in the Roman period at Rayne Roundabout in the form of a single antler beam/tine offcut or blank—an antler handle (Fig. 3.24, no. 5) from the same site represents the kind of object that could have been produced from this craft activity, and may indeed have been made on the site. Evidence for bone working in the Roman period comes from Strood Hall, where a small group of unfinished pins were found; once again, the three finished objects from the site (two pins and one needle) could have been produced on site (Fig. 3.24, nos 1–4).

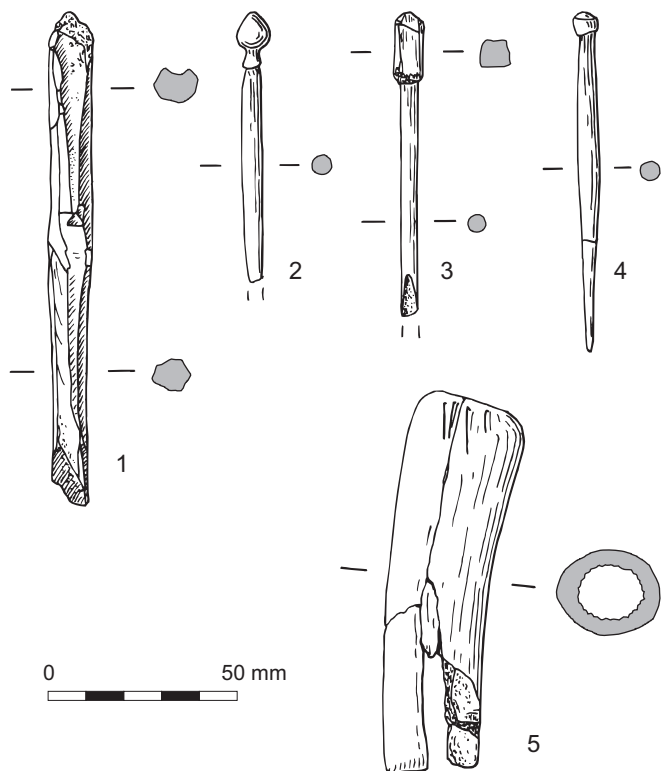


Fig. 3.24 Bone pins from Strood Hall (Sites 9/44) and an antler handle from Rayne Roundabout (Sites 33/34)

The landscape around the settlements

A range of non-cultivated charred remains was found among the cereals, which helps to place the settlements within their landscape. Those from early Roman contexts at Strood Hall revealed that, in addition to the arable fields, damp grassland and heaths—characterised by sedges, spike-rush, bristle club-rush and yellow

rattle—lay immediately beyond the settlement. Burnt onion couch tubers were also present. Retrieved from cremation burials, these may derive from turves added to the funeral pyre as tinder, or were burnt underneath it. Material from other samples from Strood Hall included cleavers seeds, ground ivy nutlets and lesser celandine (pilewort) that confirm the damp grassland

Ceramic building material

by Rachel Seager-Smith

Only two large groups of ceramic building material were found, from the sites at Rayne Roundabout and Strood Hall. Both assemblages consisted of a little over 200 pieces and were almost exclusively of Romano-British date.

The assemblage was very fragmentary and most pieces showed moderate to severe surface and edge abrasion. The mean fragment weight of the Roman material was 95 g at Rayne Roundabout and only 53 g at Strood Hall.

The Roman fabrics were characterised by variable quantities of quartz sand, with the addition of a single featureless fragment in grog-tempered fabric from Rayne Roundabout; full details are contained in the archive. The proportions varied, however, with the coarser and medium sandy fabrics occurring in equal quantities at Rayne Roundabout while the medium sandy fabric was overwhelmingly dominant at Strood Hall. At both sites, the finest fabrics were used almost exclusively for flue tiles. Other differences were apparent in the degree of oxidisation, the material from Rayne Roundabout being fully oxidised and bright reddish-orange while the assemblage from Strood Hall was much duller in colour (orange-brown) and only partially oxidised. A similar reliance on variably sandy fabrics from local sources was noted at Chelmsford (Wickenden and Drury 1988, 79). In almost all cases, sand had been used to prevent the bricks and tiles sticking to their moulds and formers.

Recognisable roof tiles (*tegulae* and *imbrices*) were poorly represented (Table 3.1). Where measurable, the *tegulae* varied between 17–26 mm thick, with the majority between 20–24 mm. Only one *tegula* fragment, from spread 1275 at Strood Hall, preserved part of a curvilinear ‘signature’ made with a single finger but no other markings, signatures or stamps were recorded.

Fragments of hollow box-tile were noted at both sites. Slight differences in thickness were apparent, 9 mm and 20 mm thick at Rayne Roundabout and 17–24 mm at Strood Hall. Pieces from three roller-stamped tiles were recovered from Rayne Roundabout. Two, from alluvial deposit 161 and the fill of land drain 217, were stamped with a ‘florid’ design (Fig. 3.25, no. 1; Lowther 1948, die 9). This was the most commonly used of all roller stamped dies (Betts *et al.* 1997, 31, fig.16) and probably of 2nd century AD date. Locally, examples are known from Broadfields Farm, Rayne and the Colchester *colonia* (*ibid.*, 78, corpus cat. nos. 19 and 23). The third piece, from dump layer 156, was stamped with a diamond and lattice design (Fig. 3.25, no. 2; Lowther 1948, group 5). Pieces from at least three other flue tiles had combed keying while an additional three had knife-cut lattice designs. No roller stamped tiles were found at Strood Hall, and only one knife-cut example. However, pieces from at least six flue tiles carried combed wavy line keying, perhaps suggesting a more restricted range of sources at this site.

Overall, the bricks varied from 30–59 mm thick. Those from Rayne Roundabout varied from 30–59 mm thick while those from Strood Hall were considerably thinner (32–41 mm). This suggests that only the smaller, thinner types (*bessalis*, *lydion* and possibly *pedalis*), used for hypocaust pillars, in floors, arches and bonding courses, were represented here. In contrast, the Rayne Roundabout assemblage probably included some of the larger, thicker types (*sesquipedalis* and *bipedalis*), used as flooring, the pavement beneath hypocaust pillars and/or to bridge the gaps over them (Brodrigg 1987, 34–62). None of the bricks carried signatures, tally-marks, paw-prints or other markings.

Although none of the rather fragmentary ceramic building material from these two sites could be directly related to specific structures, its presence serves to indicate the likelihood of substantial Romanised buildings in their near vicinity. These would have had tiled roofs and hypocaust heating systems and may have had bricks incorporated into their walls and floors. Such buildings may have provided the focus for the rural farming settlements typified by the excavated features at both these sites.

Table 3.1 Quantification (number and weight in grammes) of the ceramic building material by site

Tile types:	Rayne Roundabout		Strood Hall	
	No	Wt	No	Wt
Tegula	8	2058	37	2179
Imbrex	2	406	2	63
Flue tiles	14	1213	10	1190
Brick	38	9239	27	2575
Flat fragments	30	2771	35	2460
Featureless frags	117	4182	101	2783
Post-med and later fragments	3	85	34	463
Totals:	212	19954	246	11713

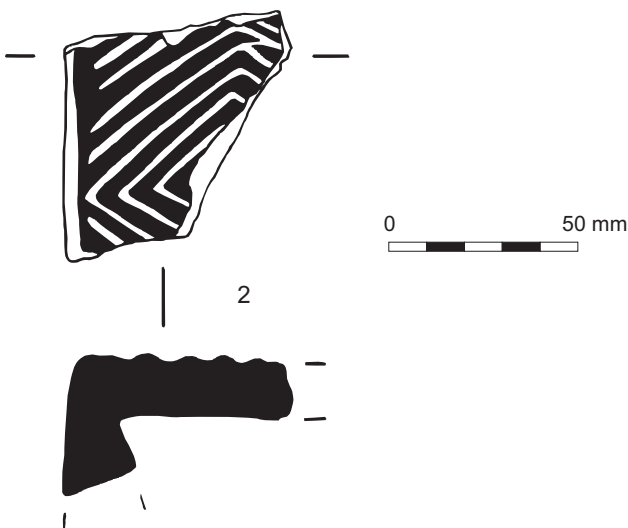


Fig. 3.25 Rayne Roundabout (Sites 33/34): roller stamped flue tile

environment bounded by hedgerow or woodland. Charcoal from the burials indicate that the woodland included oak and ash. A similar environment was recorded at Rayne Roundabout. Bramble and elderberry are characteristic of hedgerows or scrub; other remains suggest that these adjoined grassland areas. Some of the ditches at the site must have held stagnant water. Species such as spike-rush and aquatic buttercups, present here, colonised such environments. Molluscs from layer 223 confirm the high water table in areas of the site. Some wild plants are likely to have contributed to the diet of the inhabitants.

Plants from Strood Hall (cleavers, ground ivy and pilewort) had medicinal as well as culinary properties. Pollen data from a 1st or 2nd century AD ditch (265) at Rayne Roundabout, dominated by herbaceous taxa, confirm the existence of an open landscape (see *Druce CD/Chapter 7, pollen*). They also add peas and carrot-type vegetables to the list of foodstuffs consumed at the site. Cereal pollen in the upper levels of the ditch correspond to an intensification of arable farming, but overall the pollen indicates a mixed regime. However, this was not to last; the end of the pollen sequence suggests regeneration of woodland presumably as settlement activity declined.

Aspects of society

Funerary and burial practices

Burial evidence was encountered at Strood Hall only. The main cemetery was located at the extreme western part of the area of excavation (see Fig. 3.3 above). It comprised a total of 28 burials (see *CD/Chapter 3 for grave catalogue*). All but one were cremation burials; a single inhumation burial was represented. A group of 21 graves was situated within a ditched enclosure (Fig. 3.27). This comprised two long, NE-SW aligned ditches (2220 and 2201), and a shorter NW-SE ditch (2239). The ditches averaged 0.63 m wide and 0.24 m deep. The enclosure was open on its eastern side. Pottery recovered from the ditch was largely undiagnostic, though is consistent with an early Roman date. The earliest burials within the enclosure belonged to the mid 1st

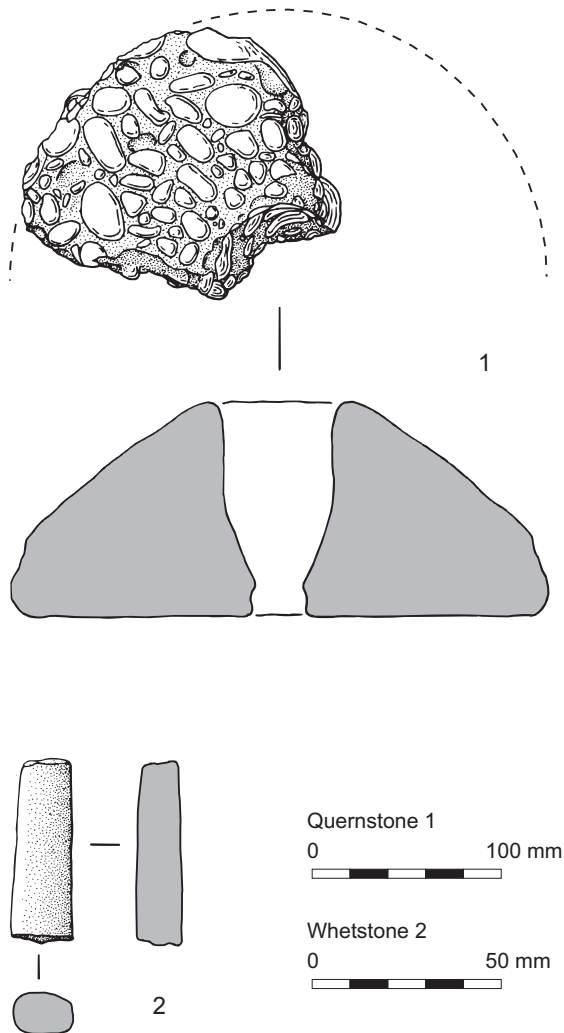


Fig. 3.26 Stood Hall (Sites 9/44): worked stone

century AD (Phase 11.1). No further burials were made here after the mid 2nd century, though space remained for further interments. The burials within it appeared to be evenly, but densely, spaced and were aligned with the ditches along the prevailing NE-SW axis seen across the settlement (Plate 3.12). By contrast, graves outside the enclosure did not obviously conform to a regular pattern. Most of the graves contained unburnt grave goods, with pottery occurring most frequently. Burnt pyre goods were also retrieved from some of the graves (Figs 3.28–41 for illustrated grave plans and Plates 3.14–5; 3.17, 3.19–21). No certain pyre-related evidence, save for these relocated objects, was uncovered. The grave backfills were invariably of identical composition to the subsoil, being redeposited natural, which made the boundaries of the graves almost impossible to see. In some cases, the presence of pottery breaking through the newly machined surface offered the only indication of an underlying feature (see Plate 3.13). A further three cremation burials, dated to Phase 12, were uncovered away from the main cemetery during the watching brief stage of fieldwork. Table 3.2 provides summary information for all burials.

Romano-British worked stone

by Ruth Shaffrey

Worked stone of Roman date was recovered from Stood Hall and Rayne Roundabout. It includes rotary quern fragments of Hertfordshire Puddingstone (2) (Fig. 3.26, no.1), Millstone Grit (3) and Lava (many small fragments from 10 contexts). The querns of Essex are well documented (eg Buckley and Major 1983; 1999), and an inter-site comparison reveals that Millstone Grit and Lava to occur on almost all excavated Roman sites in Essex which have produced rotary querns. Their presence along the A120 therefore, fits well in the regional context. Hertfordshire Puddingstone also occurs on most sites and although this is generally suggested to have been used only in the early Roman period (Rudge 1965; Buckley and Major 1999), there is a late example (late 3rd - early 4th century) here, which may suggest a longer period of use.

Although the number of querns recovered is small, typical of small rural settlements, two fragments may be from larger mechanically operated mills. One fragment from a late Roman context at Rayne Roundabout (alluvial layer 197) has only a small portion of surviving circumference but this suggests a diameter in excess of 600 mm. A lava fragment from a late 3rd-century midden context (1274) at Stood Hall may also be from a millstone and is estimated to have a diameter in excess of 550 mm. Although millstones are most frequently found at villa sites, they do occur on all types of sites (Saunders 1998).

The remaining items of worked stone are all of a general domestic nature and are not indicative of any type of industry or craft on the site. They include six rubbers, five whetstones (Fig. 3.26, no.2), three potboilers, one possible pot lid, one scraper and two chunks of building stone. Most of these are made from stone, which was locally available with the exception of a Kentish Rag whetstone; these were widely distributed in Roman Britain and its existence here is not out of the ordinary.

The cemetery was established during the first half of the 1st century AD. On the basis of their grave-goods, one grave (1759) (Fig. 3.39) has an almost certain late Iron Age date, while a further six (1314, 1448, 1538, 1596, 1757 and 1855) probably belong to the same period. This implies that the cemetery was established before the excavated settlement was occupied, and that



Plate 3.12 Strood Hall (Sites 9/44): row of graves before excavation, with view towards east; grave 1585 in foreground, followed by 1733, 1410 and 1755

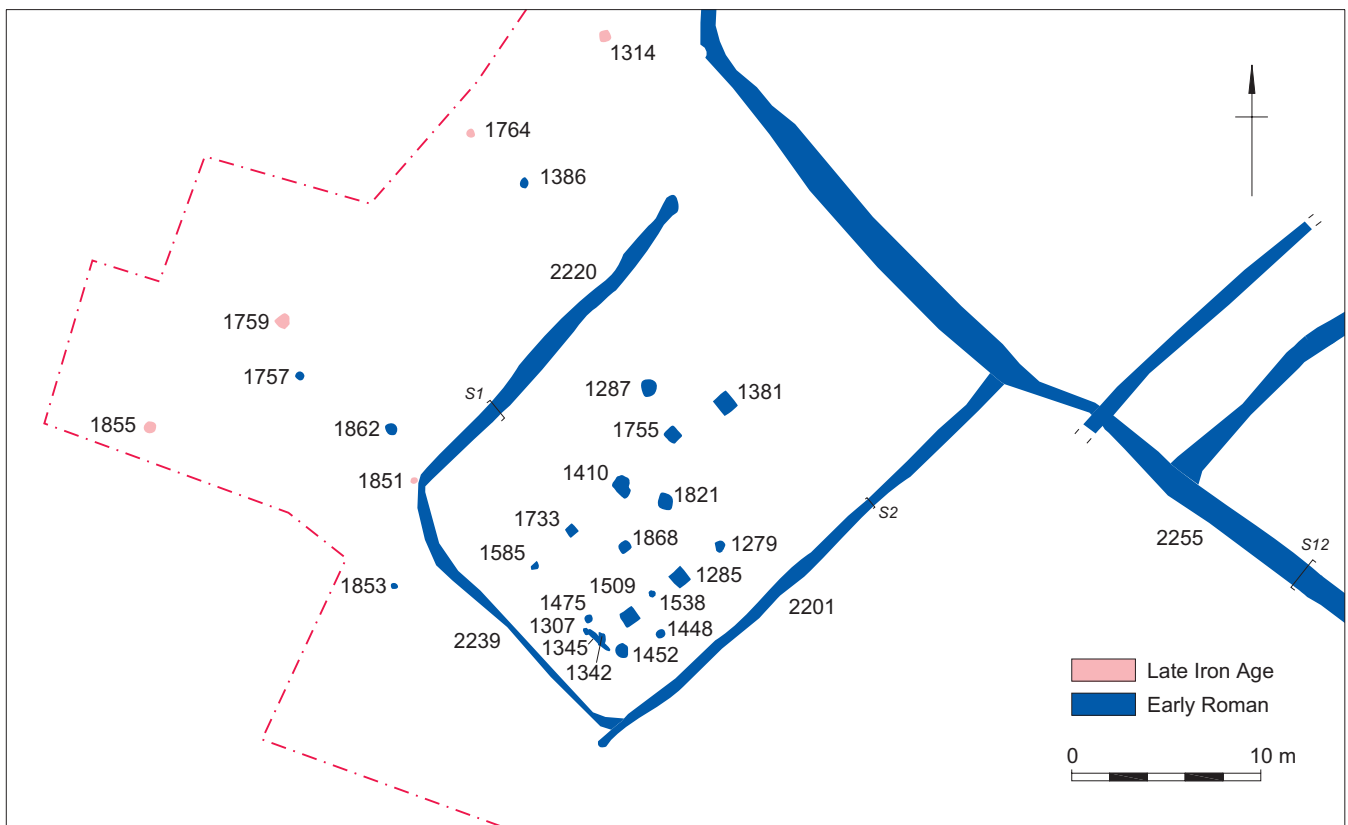


Fig. 3.27 Strood Hall (Sites 9/44): detail of cemetery

Table 3.2 Summary of late Iron Age and Roman-period burials at Strood Hall

<i>Grave</i>	<i>Grave type</i>	<i>Urn</i>	<i>Human Bone</i>	<i>Pyre goods</i>
1279	Urned cremation burial	Jar (GRS)	4g subadult-adult	Redeposited pyre-debris
1285	Urned cremation burial; box burial	Jar G19 (GRS)	431g adult female	Redeposited pyre-debris Bird bone 1 glass vessel Pig bone
1287	Urned cremation burial (Plate 3.20)	Jar (BSW)	974g adult male	Pig bone
1307	?Cenotaph		11g adult and infant	
1314	Unurned cremation burial		6g immature	
1342	Urned cremation burial	Jar (HAR)	397g adult ?female	Redeposited pyre-debris Animal bone
1345	Inhumation burial (Plate 3.22)		Young adult female	
1381	Urned cremation burial (Plate 3.25)	Flagon (BUF)	289g adult ?male	Redeposited pyre-debris Bird bone
1386	Urned cremation burial (Plate 3.28)	Beaker <i>Cam</i> 117 (BSW)	120g adult ?female	
1410	Unurned cremation burial		388g adult ?female	Redeposited pyre-debris Animal bone
1448	Urned cremation burial	Jar (BSW)	582g adult	
1452	Urned cremation burial	Beaker H7 (RED) Jar (GRS)	745 g adult male(s) placed into two vessels	
1475	Urned cremation burial (Plate 3.26)	Jar (GRS)	804g adult female and juvenile	
1509	Urned cremation burial; box burial	Jar G17 (BSW)	209g adult male	Redeposited pyre-debris Bird bone Glass
1538	Urned cremation burial	Jar (BSW)	457g adult ?female	
1585	Urned cremation burial	Beaker H7 (BSW)	172g adult female	6 glass beads
1593	Unurned cremation burial		903g adult female	Redeposited pyre-debris Animal bone Glass Iron objects
1596	Urned cremation burial	Jar (GROG)	488g adult	Animal bone
1733	Unurned cremation burial		149g juvenile	Redeposited pyre-debris Bird bone Cu alloy objects
1755	Urned cremation burial	Flagon (VRW)	738g adult ?male	
1757	Urned cremation burial	Jar (GROGC)	85g adult	Animal bone
1759	Urned cremation burial	Jar <i>Cam</i> 204 (GROG)	1041g adult male	Animal bone
1764	Urned cremation burial (Plate 3.27)	Jar (GROG)	116g adult ?female	
1821	?Unurned cremation burial		90g adult	
1851	Cenotaph or pyre-related feature			Redeposited pyre-debris
1855	Urned cremation burial (Plate 3.21)	Flagon <i>Cam</i> 166 or J3 (NGWF)	1796g adult female	Redeposited pyre-debris Bird bone
1862	Urned cremation burial	Jar (BSW)	708g adult	Redeposited pyre-debris
1868	Unurned cremation burial (Plate 3.23-4)		659g adult female	Redeposited pyre-debris
16002	Unurned cremation burial		Juvenile or adult	
16004	Unurned cremation burial		Human bone	Redeposited pyre-debris
16007	Unurned cremation burial		Human bone	

<i>Grave goods: pottery</i>	<i>Grave-goods: metalwork</i>	<i>Phase</i>
Cup f27 (SGSW) Jar (GRS) Flagon (HAWO)	2 iron nails	11.2
Dish f18/31 (SGSW)	137 iron nails	11.2
Flagon (HAWO)		
Platter A4 (BSW) Platter f18 (SGSW) Cup f27 (CGSW)		11.2
Flagon (BUF)		
Jar (GRS)		21
Jar (BSW)	8 iron objects	10
Dish f18/31 or f18/31R (SGSW)	7 iron nails	11.2
Flagon or flask (RED)		
		Up to 11.2
Platter (HAB)	Cu alloy Colchester-type brooch	11
Flagon (BUF)		
	Cu alloy toilet implements (nail-cleaner, tweezers, scoop)	11.1
Jar Cam 254 (ESH) Flagon J3 (BUF)	2 cu alloy toilet implements (nail-cleaners)	11.1
Flagon Cam 161 (NGWF)	Cu alloy ring/loop	
		10
Indeterminate form (HAR)		11.1
Cup f27 (CGSW) Beaker H1 (GRF)		12.1
Flagon J3 (VRW)		
Platter f15/17 (SGSW) Platter f18 (SGSW) Jar (GRF)	82 iron nails	11.2
?Flagon (MWSRS)		
		10
	Cu alloy Hod Hill-type brooch	11
	Cu alloy armlet	
Bowl f36 (SGSW) Beaker (GRS)	Cu alloy ring	11
Flagon J3 (VRW)	Iron objects	
		9.2/10.1
Beaker H6 (GRF) Flask G40 (RED)	Cu alloy spherical vessel	11.2
Platter A1 (GRS) Beaker H2 (BSW)	Iron object, flat with hooked end	11.1
	Animal bone	
		9.2/11.1
Bowl Cam 211 (GROG)		9.2/10.1
Jar G19 (BSW)		10
Platter f18 (SGSW) Beaker (RED)		11.1
Beaker (GRF) Beaker (HAR)		
	Cu alloy ring	9/11
Platter <i>Cam</i> 21 (GROG) Platter <i>Cam</i> 22 (GROG)		10.1
Beaker <i>Cam</i> 109 (GROG) Beaker <i>Cam</i> 118 (GROG)		
Flagon (BUF)		
	4 iron nails	11
Platter <i>Cam</i> 30 (GROG) Cup f35 (SGSW)	Cu alloy brooch	11.1
Beaker H1 (BSW) Flagon J3 (BUF)	Iron nail	
Lamp (LYN)		12
		12
		12

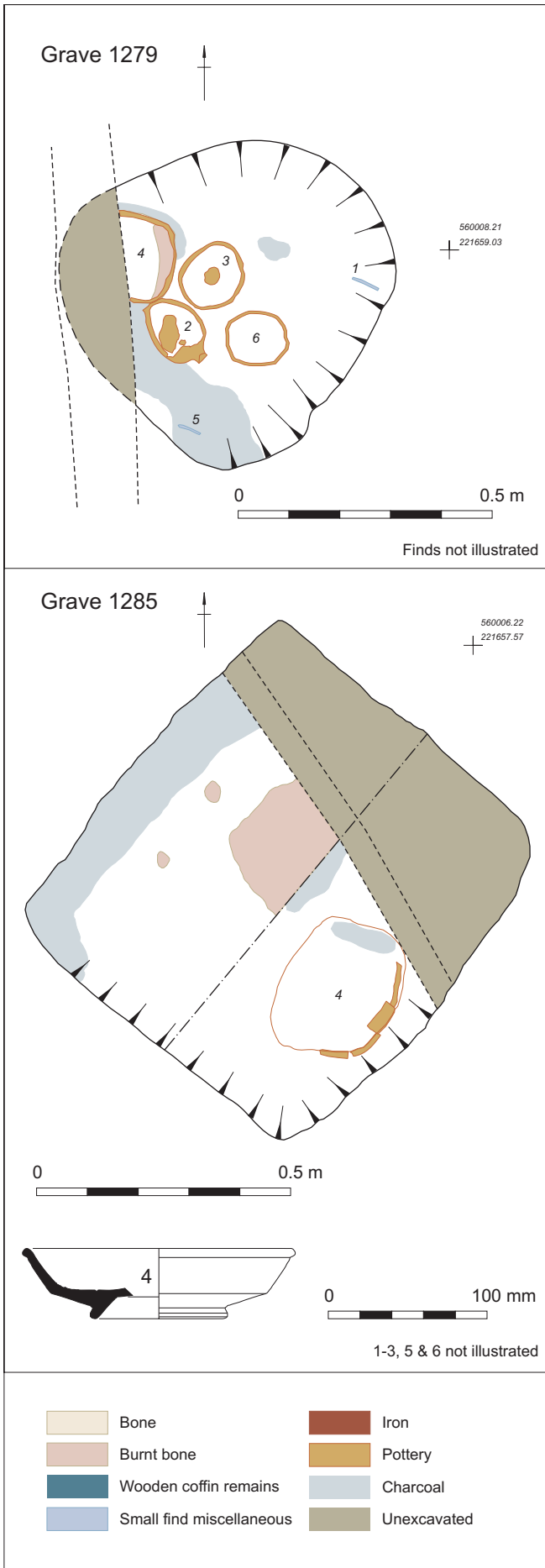


Fig. 3.28 Strood Hall (Sites 9/44): graves 1279 and 1285

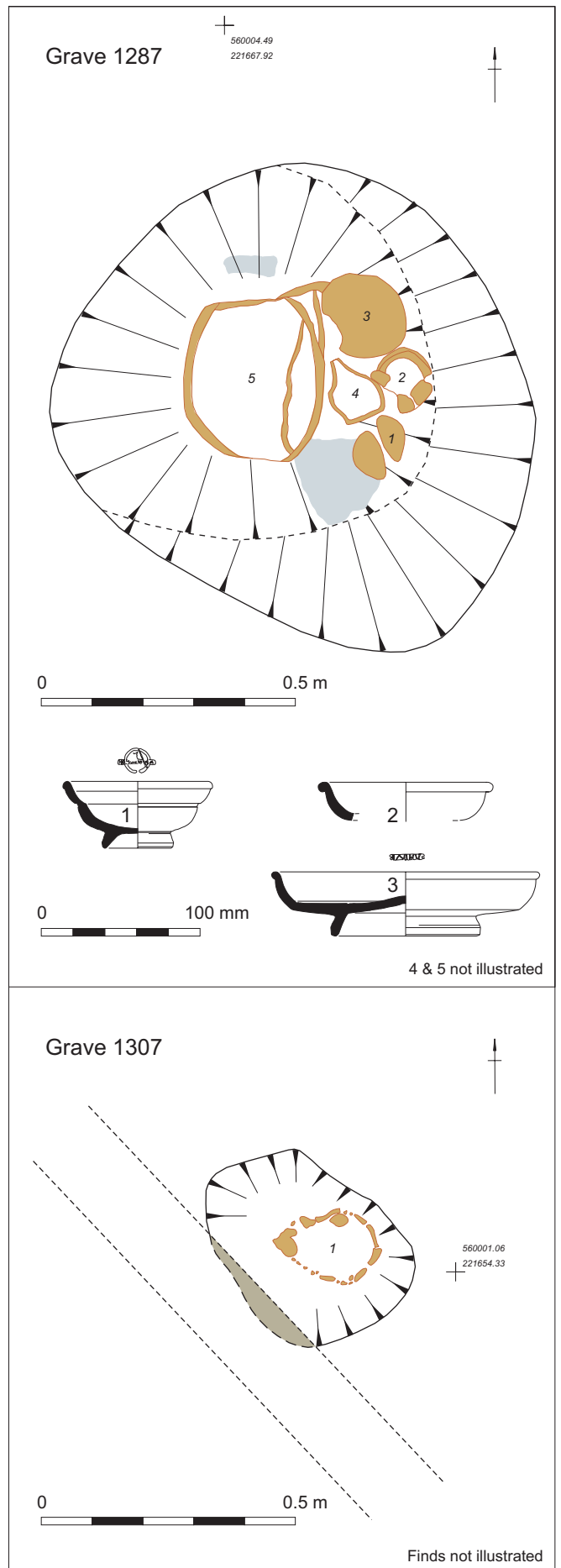


Fig. 3.29 Strood Hall (Sites 9/44): graves 1287 and 1307

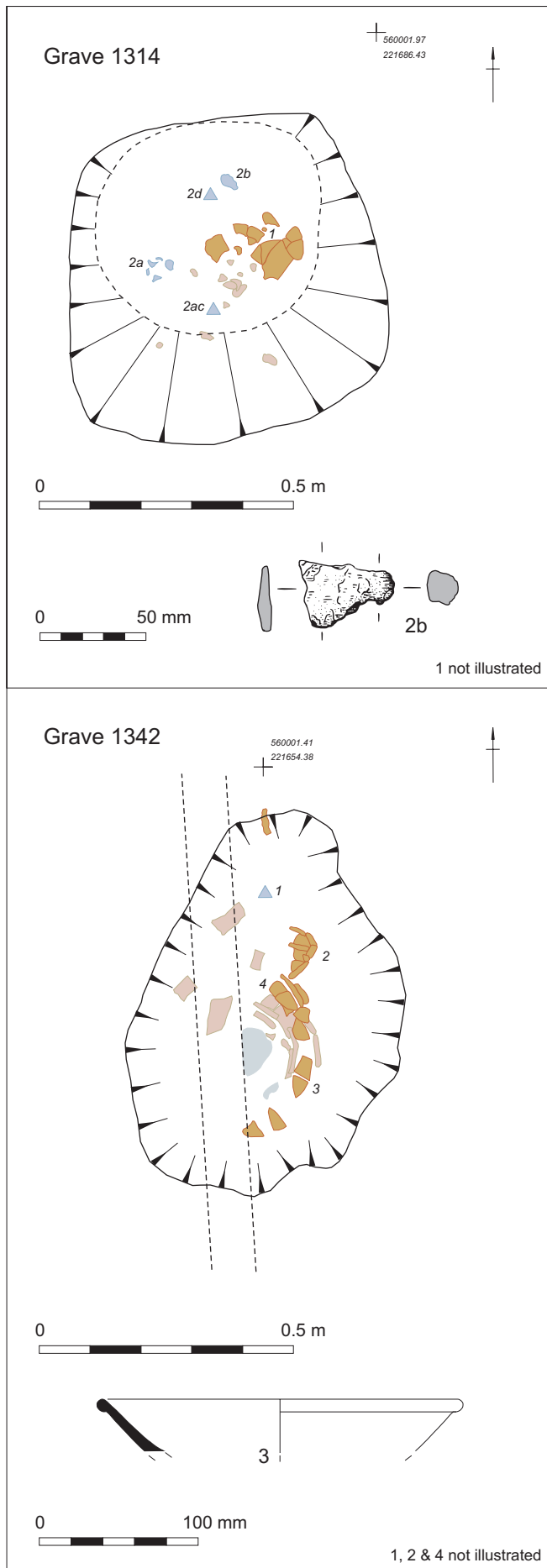


Fig. 3.30 Strood Hall (Sites 9/44): graves 1314 and 1342

the late Iron Age settlement was located away from the excavated area. The use of the area after the shift of settlement shows a remarkable continuity of a cemetery, suggesting strong links between both populations. The interments made in the north-western part of the cemetery outside the enclosure ditch were among the earliest. Burials continued to be made here into the 2nd century, but the area north-west of the ditch was never popular; most burials made during the second half of the 1st century or beyond were placed within the enclosure. The cemetery received no more burials after the mid 2nd century, giving the cemetery a life-span of *c* 150 years. The single inhumation burial, truncated by early Roman graves, must be early Roman in date or earlier. A group of three burials, radiocarbon dated to the 2nd century, was located to the south-west of the main cemetery. They represent a clear separation from the earlier traditions, as is reflected by the comparatively simple nature of the burials—round, shallow, cuts yielding no grave-goods.

Most graves displayed a relatively simple sequence of deposition, where grave-goods and cremated bone were deposited and backfilled with the soil originally removed during grave digging. Some graves, however, showed a more complex sequence. In Grave 1287, (Fig. 3.29; Plate 3.14) the cinerary vessel, containing the remains of an adult male and an animal also burnt on the pyre, was placed inside the empty grave. The grave

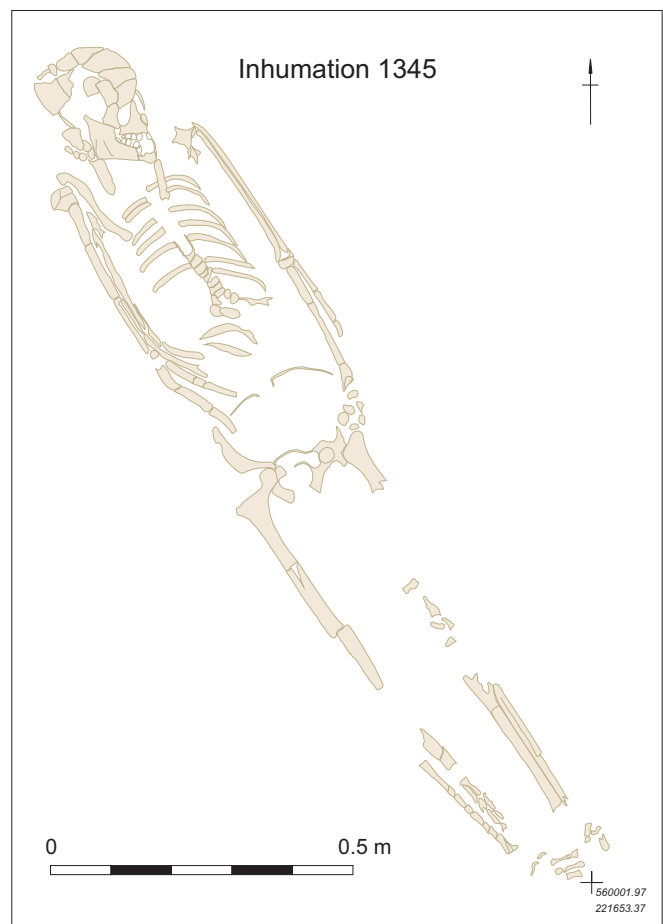


Fig. 3.31 Strood Hall (Sites 9/44): inhumation 1345



Plate 3.13 Strood Hall (Sites 9/44): excavation of graves in progress

was then backfilled with the clay that had been removed previously. A further four ceramic vessels were placed on top of the returned soil. These were clustered in the centre of the grave. Another episode of backfilling followed. Other graves provided evidence for the careful deposition of grave-goods. For example, a group of four vessels was inserted first into Grave 1855 (Fig. 3.41; Plate 3.15). A flagon, which contained the cremated remains of a bird and adult female, was then placed above them. Another vessel, located on the edge of the cluster, appeared to be free standing. Pyre-debris was deposited on the base of the grave. The grave was then backfilled with grey brown silty clay. The purpose of such careful deposition is far from clear. The function of the vessels placed in physical contact with others may be significant, but more work is certainly required on a much larger dataset before a firm judgement can be made. The cinerary vessel in Grave 1287 (Fig. 3.29) was tall. The grave may have been partially backfilled in order to stabilise the vessel or to create a better platform on which to place the other vessels.

A single inhumation burial was uncovered. Grave 1345, orientated NW-SE, contained a skeleton of a young adult female (Fig. 3.31; Plate 3.16). The skeleton lay supine, with the head towards the NW, the hands resting together over the pelvis, and the feet meeting, suggesting that the body had been shrouded. No grave goods were present. The grave had been truncated by cremation grave 1342 (Fig. 3.30), suggesting that the inhumation burial dated up to the



Plate 3.14 Strood Hall (Sites 9/44): cremation burials 1287

end of the early Roman period. It could have been considerably earlier, but it was located within the cemetery enclosure and respected its alignment, suggesting contemporaneity.

The majority of burials (64% of graves) were urned, the cremated remains being contained in ceramic vessels. These were usually jars; grave 1855, where a flagon was deposited as the cinerary vessel (Fig. 3.41), is among the few exceptions. This contrasts with burials from Stansted, a contemporaneous cemetery, where only eight out of 43 graves (19%) included cinerary vessels. The cremated bone from unurned burials may have been held in an organic container, such as leather or fabric bag. The bone from grave 1868, for example, was deposited neatly in the centre of the cut and showed little sign of subsequent dispersion (Fig. 3.41; [Plates 3.17–8](#)). What appears to link Stansted and Strood Hall more readily is the provision of boxed burials. Four graves at Stansted contained evidence for wooden boxes, namely iron fittings and the remains of wood preserved in the corrosion of the metal (Havis and Brooks 2004, table 55). Havis and Brooks note a concentration of boxed burials in Hertfordshire and north-west Essex. Strood Hall had at least two boxed burials and seems to conform to this tradition. Graves 1285 and 1509 yielded abundant iron nails; a soil stain and a square cut preserved the shape of the box ([Figs 3.28, 3.35](#)). More boxed burials may have been present, including all square-cut graves (eg 1381; [Plate 3.19](#)). That the square-cut graves were carefully located in rows—in contrast to the less well-ordered circular



Plate 3.16 Strood Hall (Sites 9/44): inhumation burial 1345, with view towards NW



Plate 3.15 Strood Hall (Sites 9/44): cremation burial 1855

graves—suggests that grave location was to some extent determined by burial type. This, along with the relatively high numbers of grave-goods recovered from them, hints that boxed or square-cut graves accompanied a certain portion of the population linked, perhaps, by family or status.

Analysis of the cremated human remains revealed a predominance of females among the population, although the unsexed remains could all be male, which would balance the ratio between the sexes. While the proportion of juveniles was small, this is not necessarily unusual for the period. Other notable aspects among the population were also noted. Skull fragments were excluded, probably deliberately, from two burials. The significance of this practice is uncertain, but it may share some cultural or ritual meaning with decapitation evident at many later Roman inhumation cemeteries. A single dual burial was uncovered (grave 1475), repre-

senting the cremated remains of a juvenile and an adult female (Fig. 3.34; Plate 3.20). McKinley (*CD/Chapter 5*) suggests that the individuals were unlikely to have been cremated together, and it is feasible that the individuals recovered represent mother and child.

No direct evidence for pyre-sites was encountered. Cremation appears to have taken place away from the immediate area of burial. However, charred plant remains from redeposited pyre-debris derive from turves either used as pyre fuel or burnt under the structure, and reveal the existence of grassland in the vicinity of the cemetery. Indirect evidence came from seventeen burials which yielded material from the pyre site. This included the redeposited charcoal remains of the fuel or the pyre structure itself (*see Challinor, CD/Chapter 7*). Ash and oak were favoured as fuelwoods. Other taxa such as hawthorn-type, blackthorn/cherry, and pine, were used as kindling. Thirteen graves yielded evidence of burnt

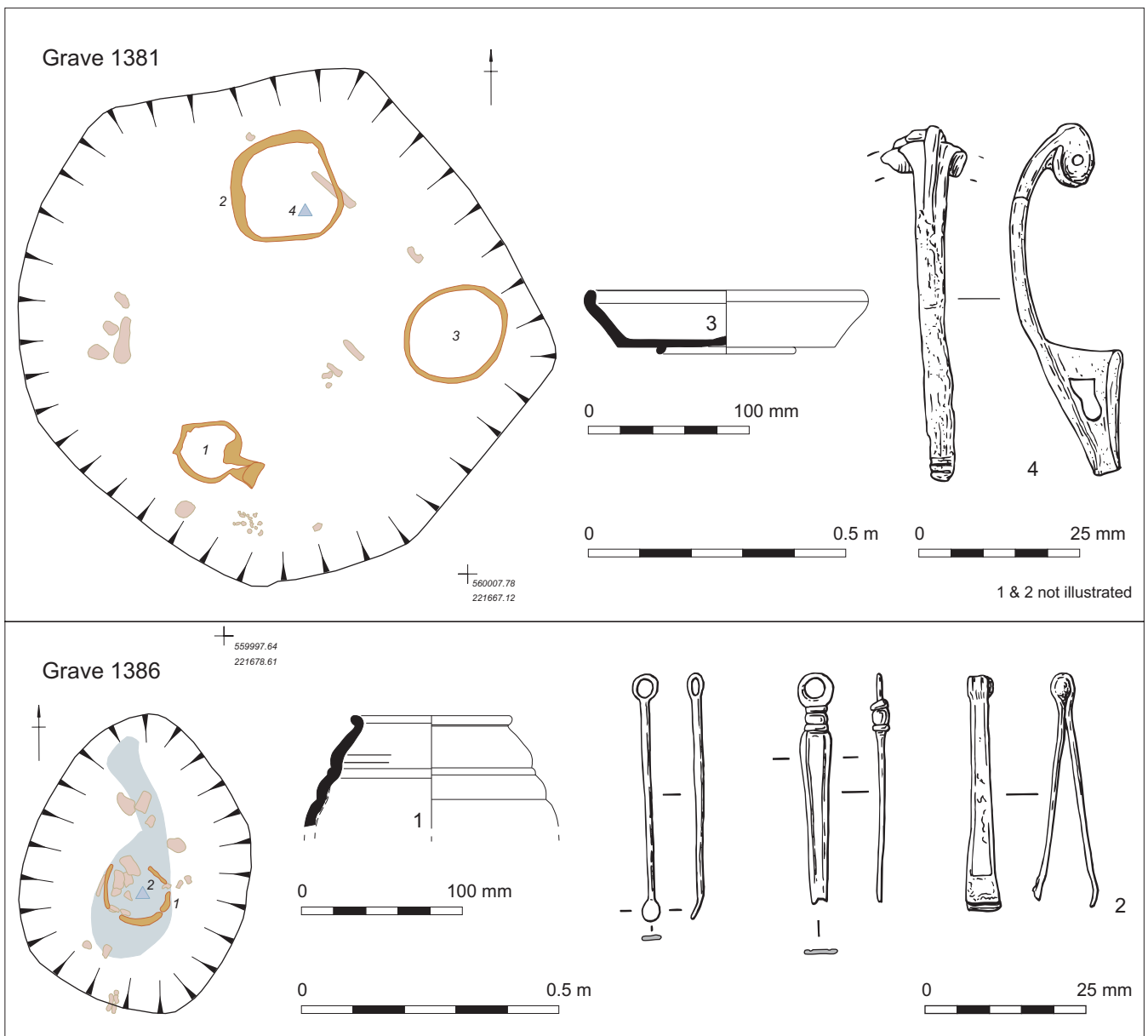


Fig. 3.32 Strood Hall (Sites 9/44): graves 1381 and 1386

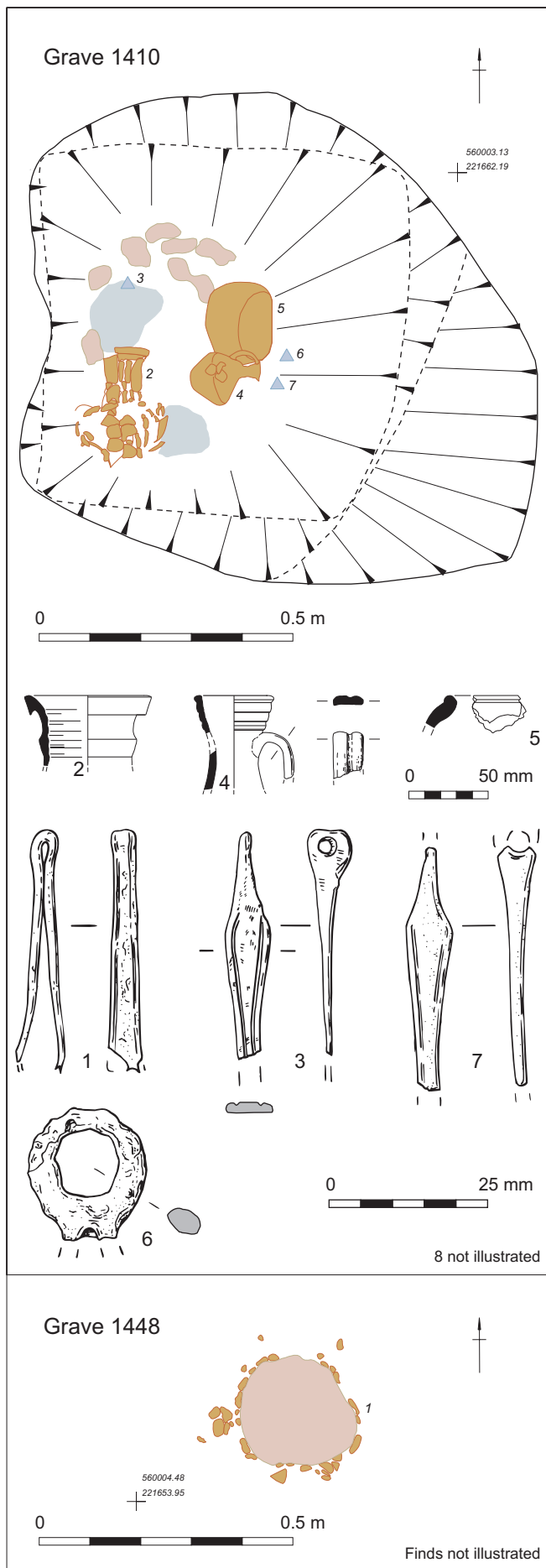


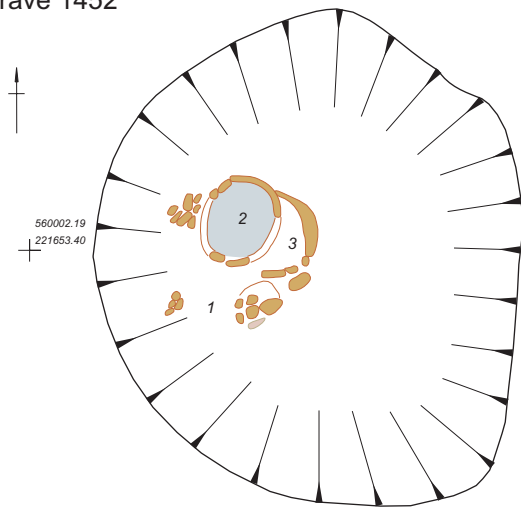
Fig. 3.33 Strood Hall (Sites 9/44): graves 1410 and 1448

pyre-goods. Animals, probably fowl and pigs, were the commonest pyre-offerings at Strood Hall. Toynbee (1996, 50) states that in Roman law, a pit was not legally a grave until a pig had been sacrificed. To what extent this applied in Britain is unclear, but in any case, it is perhaps unlikely that in the general context of Roman Britain pigs were placed on the pyre for this reason alone. Joints of meat, suggesting food, were offered at sites including London's eastern cemetery (Barber and Bowsler 2000, 76). The remains of animals, inevitably pigs and chickens, were recovered from Stansted (Havis and Brooks 2004, table 55), though in some cases not all remains were deposited as food offerings. Two graves yielded the cleaved skulls of young pigs, which are more likely to pertain to a sacrificial rite unrelated to sustenance specifically. Most animal remains from Strood Hall were burnt, and the motivation for their deposition in the grave may differ from any that were unburnt. Gräslund (1994, 20) suggests that the pyre was the means by which the dead, and accompanying objects like the animals at Strood Hall, were transported to the afterlife. Unburnt goods were, by implication, not directly intended for the dead, but were either consumed by the mourners, or offered to the spirits of the dead. The few other pyre-goods from Strood Hall included glass beads from a necklace from grave 1585 (Fig. 3.36). These were probably worn by the deceased, an adult female, at the time of cremation.

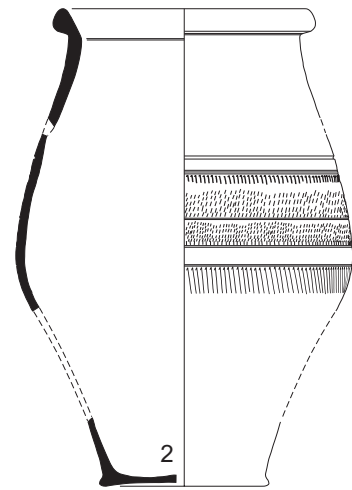
The most frequent class of grave-good was pottery. Drinking-related vessels (beakers, cups, and liquid-servers) were predominant, with eating vessels (platters, dishes and bowls) secondary in importance. Cooking or storage vessels were also represented (eg jars in grave 1764; Plate 3.21). Black (1986, 225) notes the importance of the representation of the dining-set in Romano-British burials, and superficially most graves at Strood Hall, Great Dunmow and Stansted, among others conform to this pattern. However, it is clear that much variation existed. Indeed, few graves at Strood Hall contained the prerequisite flagon or flask, beaker or cup, plate or dish. Grave 1868 unusually contained a full set—beaker and cup, flagon and platter (Fig. 3.41). Grave 1410 is more typical, yielding a jar and two flagons (Fig. 3.33). Ignorance of good Roman form can be discounted, since the grave also contained toilet implements and animal bone burnt on the pyre. Motivations for vessel deposition other than those connecting with formal dining should be expected, and this is evident when comparing funerary assemblages. The pottery from Strood Hall, Kelvedon (Rodwell 1988) and Great Dunmow (Wickenden 1988) encompasses a fairly narrow suite of vessel types, with drinking-related vessels well represented. However, jars account for a much higher proportion at Great Dunmow and Kelvedon compared with Strood Hall. These differences appear to be significant. The assemblages of Great Dunmow and Kelvedon can be allied to the burial groups of late Iron Age cemeteries in Essex, such as those at



Grave 1452



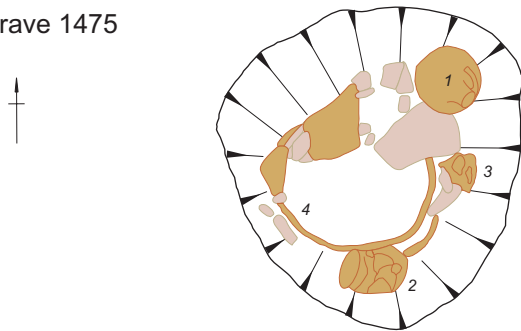
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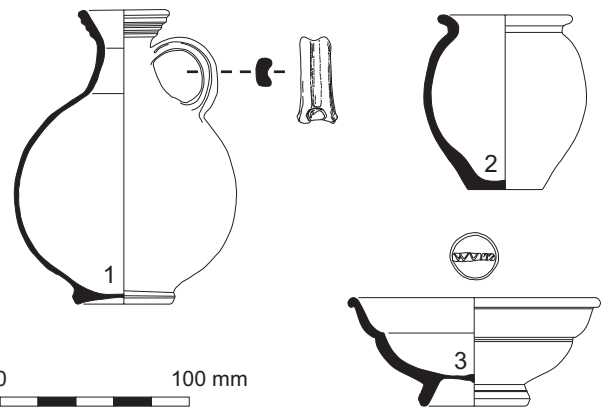
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1 & 3 not illustrated

Grave 1475



0 0.5 m



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Plate 3.17 (left) Strood Hall (Sites 9/44): cremation burial 1868



Plate 3.18 Strood Hall (Sites 9/44): detail of brooch from cremation burial 1868

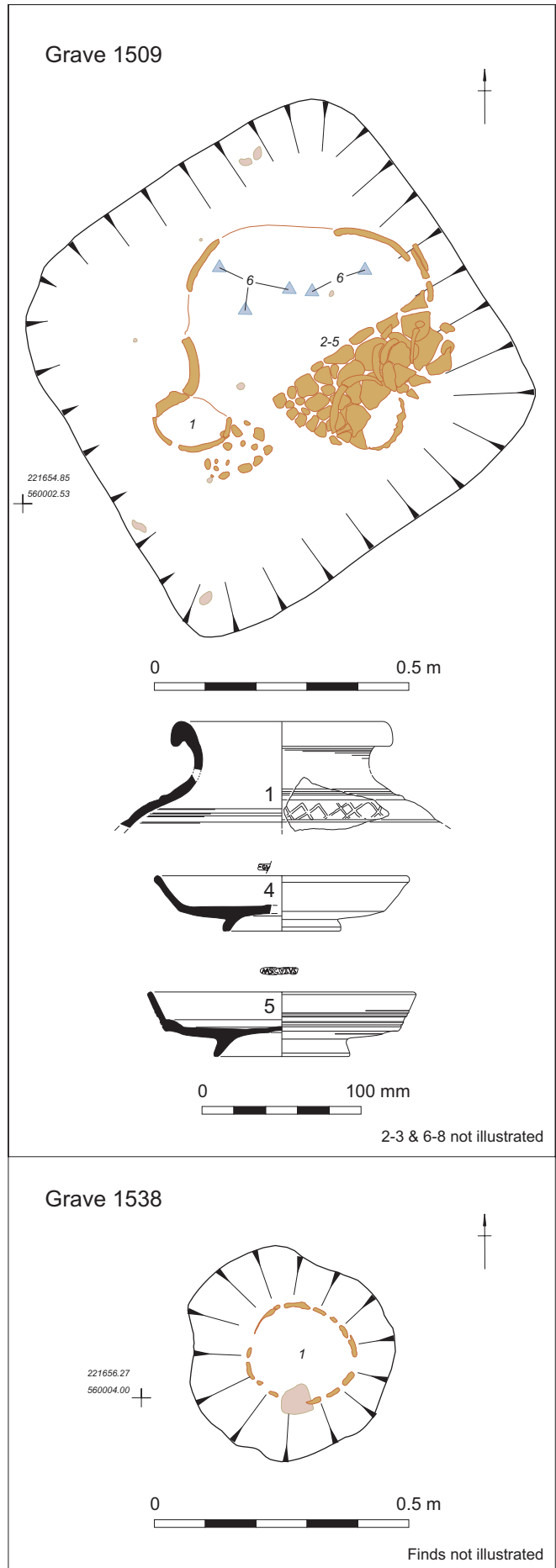


Fig. 3.34 (left) Strood Hall (Sites 9/44): graves 1452 and 1475

Fig. 3.35 Strood Hall (Sites 9/44): graves 1509 and 1538



Plate 3.19 Strood Hall (Sites 9/44): cremation burial 1381



Plate 3.20 Strood Hall (Sites 9/44): cremation burial 1475

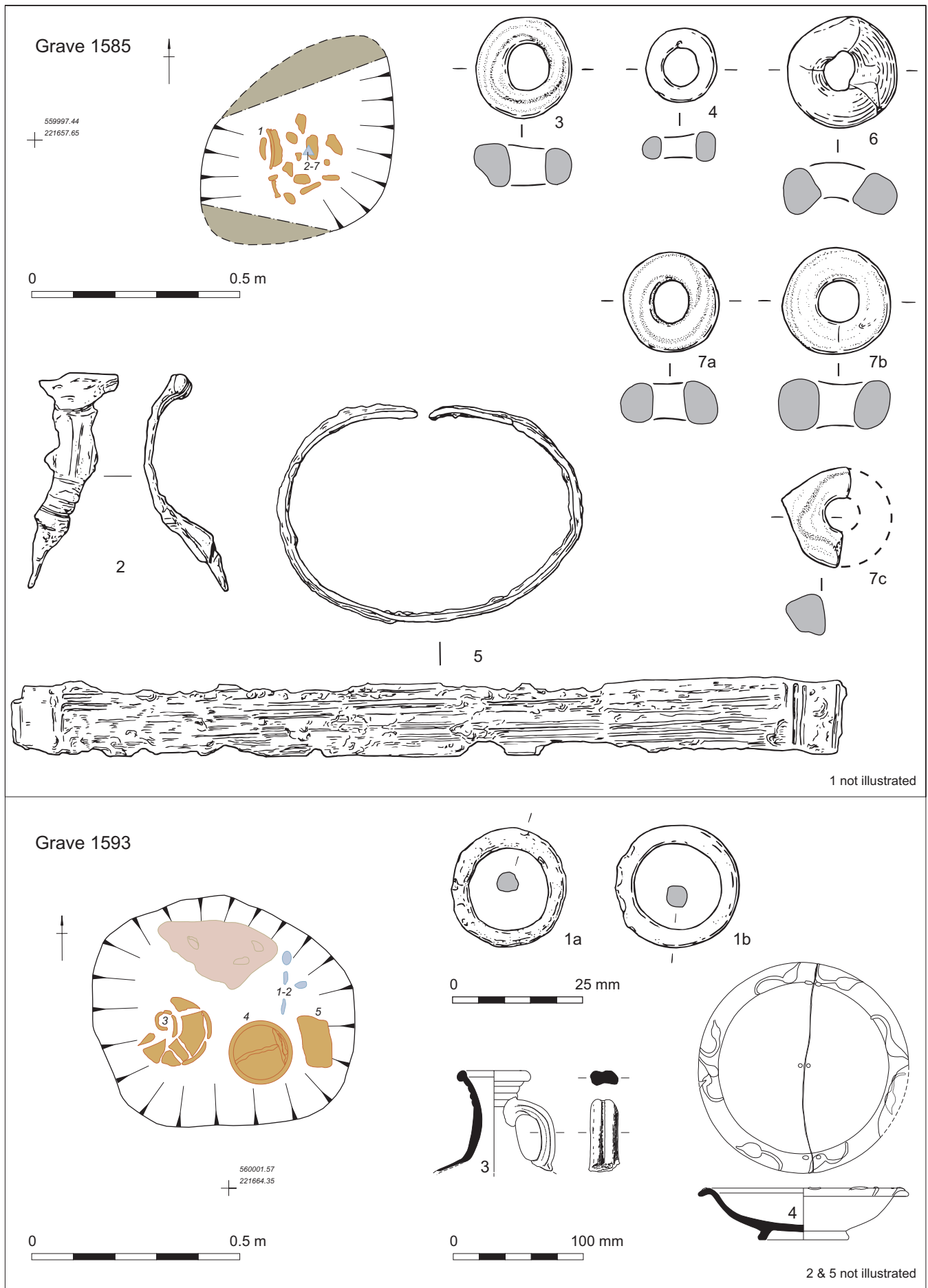


Fig. 3.36 Strood Hall (Sites 9/44): graves 1585 and 1593

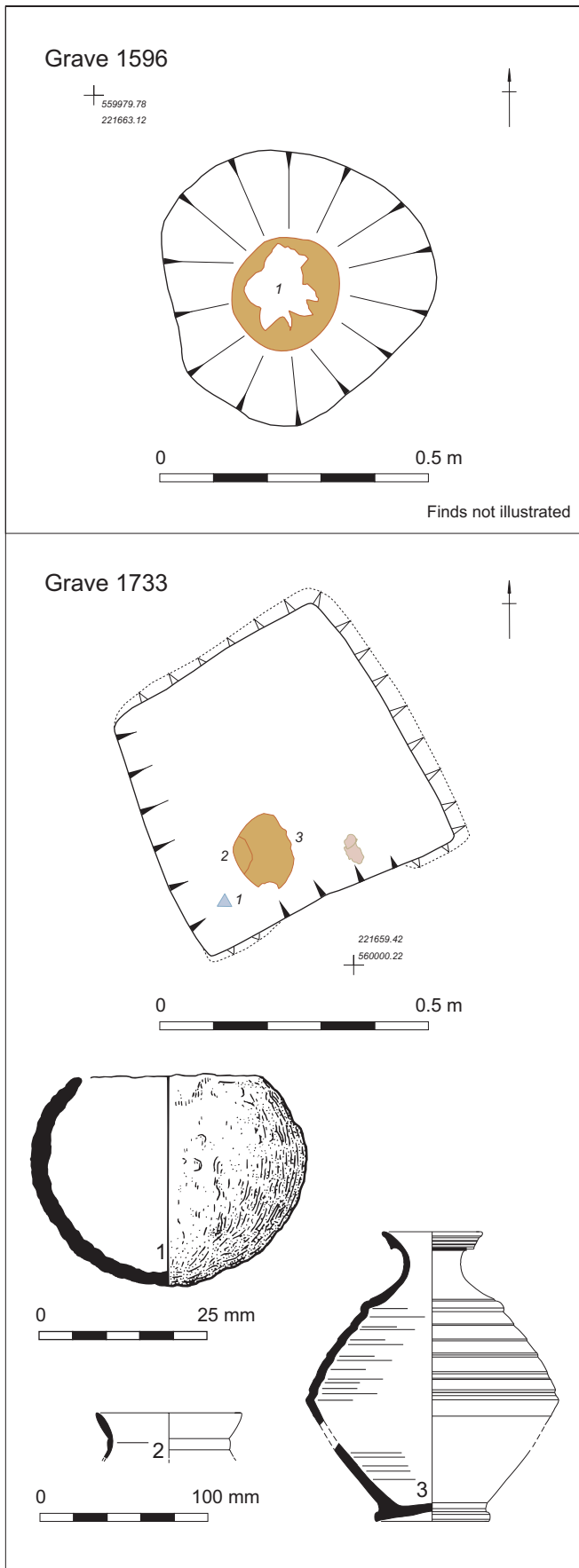


Fig. 3.37 Strood Hall (Sites 9/44): graves 1596 and 1733

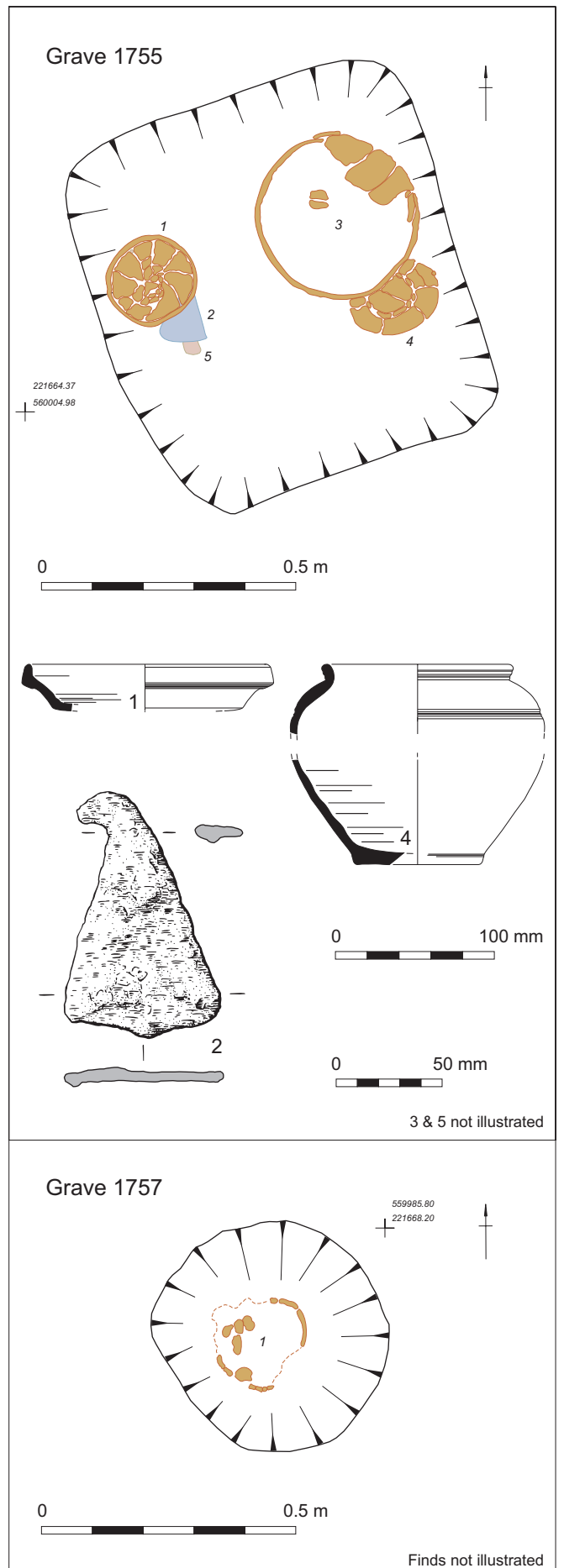


Fig. 3.38 Strood Hall (Sites 9/44): graves 1755 and 1757

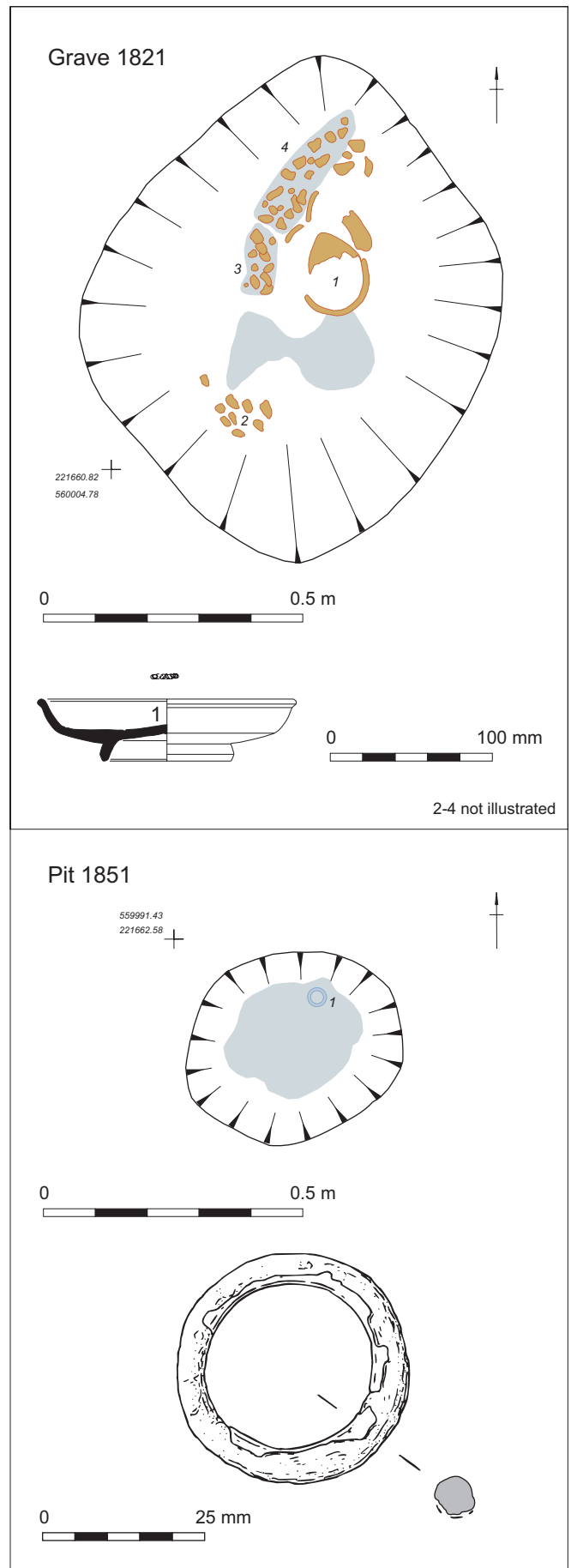
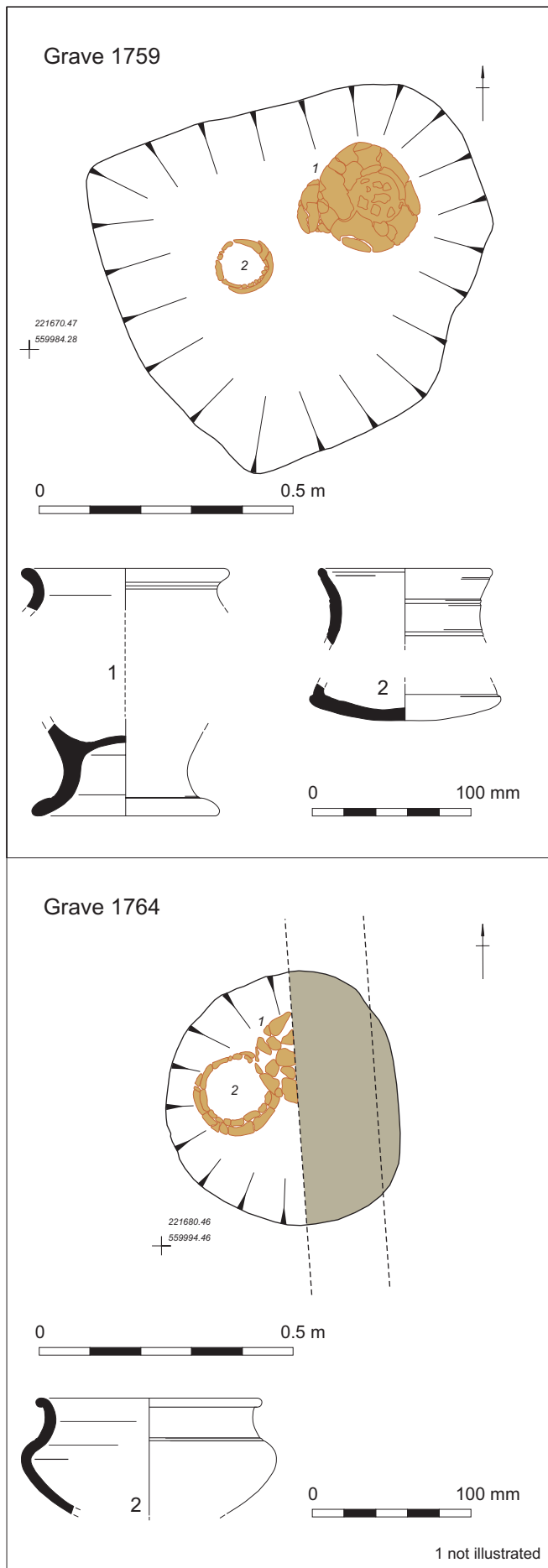


Fig. 3.40 Strood Hall (Sites 9/44): graves 1821 and 1851

Fig. 3.39 Strood Hall (Sites 9/44): graves 1759 and 1764

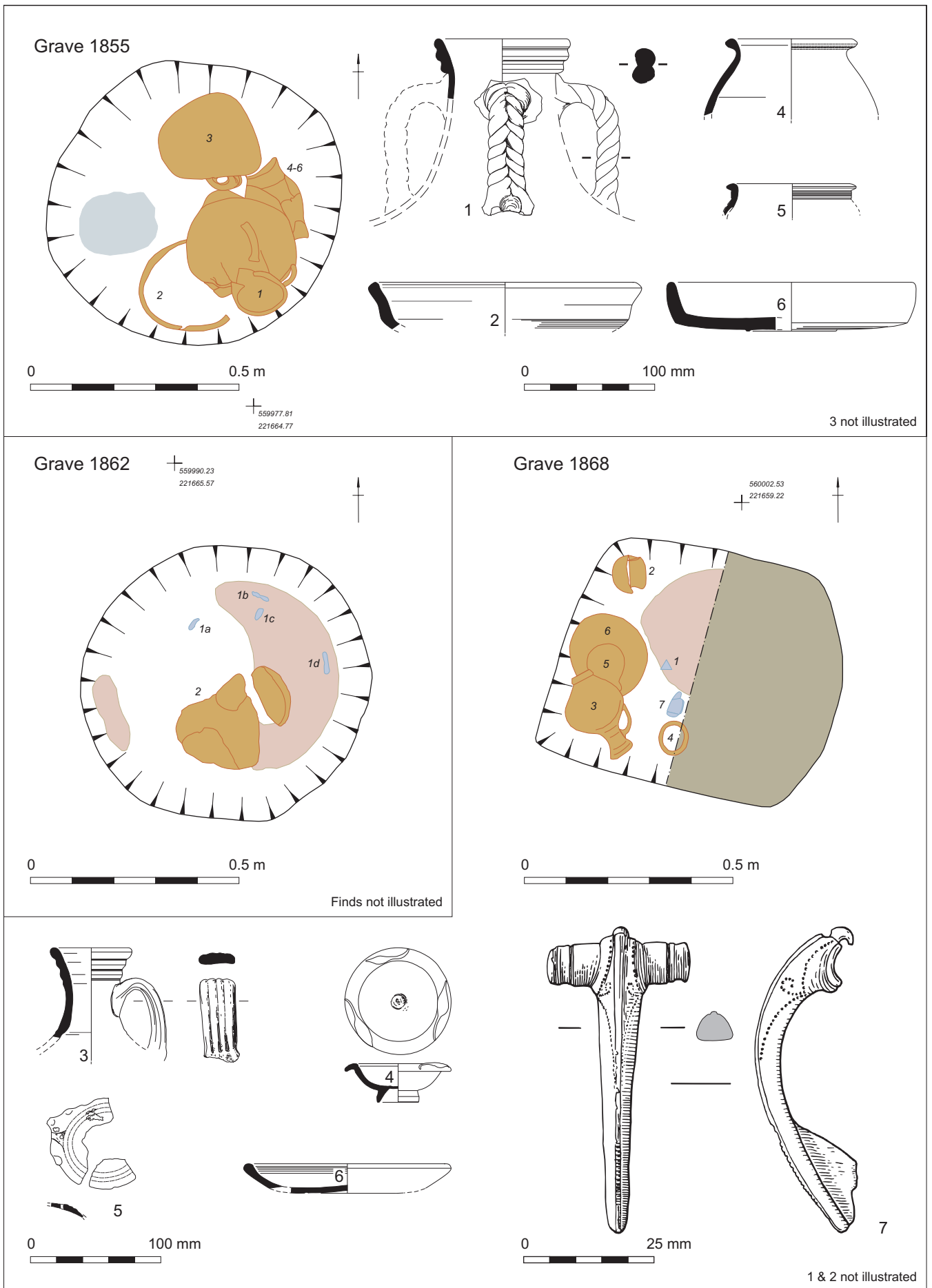


Fig. 3.41 Strood Hall (Sites 9/44): graves 1855, 1862 and 1868



Plate 3.21 Strood Hall (Sites 9/44): cremation burial 1764

Great Chesterford (Wallace 1990, 13–16), situated in the extreme north-west of the county, and North Shoebury (Thompson 1995, 88–91), on the Thames Estuary. These share an emphasis in robust cooking or storage vessels, and all are comparatively weak in tablewares, particularly flagons (Biddulph 2005). Strood Hall stands in contrast to these. Predominant first in drinking-related forms, then other tablewares, its funerary assemblage derives its origins from the traditions governing the selection of vessels—metal and glass, as well as pottery—seen in the elite burials at the Bartlow Hills (VCH 1963, 39–43), continuing into the 2nd century at Stansted (Havis and Brooks 2004, 216–31). These traditions find their origins in Gallo-Roman funerary practices, which were first adopted by the late Iron Age elite and the remaining population across south-eastern Britain. The connection is apparent in a comparison between Strood Hall and the 1st to early 2nd-century cemetery at Solresur-Sambre, Hainaut, Belgium (Brulet 1972), where tablewares, with the emphasis on drinking-related forms, are predominant at both. For these sites, assemblages are set within long-established regional and cultural traditions (cf Williams 2004). The functional aspects of the pottery are secondary, and it is perhaps unlikely that vessels were deposited simply as a crude representation of Roman dining habits.

Metalwork was largely restricted to iron nails or personal objects. All of the latter, which included copper

alloy brooches, bracelets and rings, appear to be unburnt, suggesting that none was worn by the deceased at the time of cremation (see *Walton and Scott CD/Chapter 4*). Toilet sets, also unburnt and comprising tweezers, nail cleaners and scoops, were recovered from two graves (1386 and 1410) (Plate 3.22). Such items were relatively uncommon from cemeteries; there have been few even at the urban cemeteries of London, Chichester and Colchester. Sets were recovered from burials at Duckend Farm, Stansted, and, like those from Strood Hall, dated to the second half of the 1st century AD. Grave 1755 contained a triangular iron knife (Fig. 3.38). Objects such as this have been found in graves at King Harry Lane, Verulamium, Welwyn Garden City and on the continent and carry a late Iron Age and early Roman date (Stead and Rigby 1989, 105). They have variously been interpreted as saddlers', furriers' or cooks' knives, but their apparent association with male burials, as is the case with 1755, lends weight to their alternative interpretation as razor-knives (*ibid.*).

The ceramic lamp from grave 1868 (Fig. 3.41) is also of significance. Lamps tend to be associated with urban or high-status cemeteries. They were found at the Watling Street cemetery, London (Mackinder 2000, 33–7), Beverley Road, Colchester (May 1930) and St Pancras site, Chichester (Down 1971), but were absent from the cemeteries at the 'small towns' at Great Dunmow and Kelvedon, while just two were recovered

Human Bone

by Jacqueline I. McKinley

Cremated human bone was recovered from 12 late Iron Age/early Romano-British and 62 early Romano-British contexts (Site 9)—all disturbed to some degree as a result of ploughing and some further disrupted by the insertion of later features—including 19 urned and five unurned burials. Other contexts represent the remains of discrete deposits of pyre debris within grave fills, bone fragments within accessory vessel fills and one possible cenotaph. The remains of an inhumation burial were also recovered. Most of the cremated bone is in relatively good condition. It is to be expected, however, that the acidic nature of the boulder clay geology in the area will have affected the survival of trabecular bone (McKinley 1997c, 245; Nielsen-Marsh *et al.* 2000), and whilst almost all the cremation graves contained some fragments of trabecular bone, the quantities are highly variable, the late Iron Age/Romano-British burials tending to contain more trabecular bone than their predecessors. The additional protection afforded by an urn was clearly a significant factor and the common presence of fuel ash in many of the grave fills will have had a moderating effect on the natural soil acidity, but the level to which this occurred is difficult to measure.

The remains of six late Iron Age/early Romano-British and 20 early Romano-British individuals were identified from the cremated bone assemblage. Although the Strood Hall cemetery spans the late Iron Age-early Romano-British period, demographically it should be viewed as a whole; there is little to suggest the population utilising the cemetery changed, only the timing of their deaths and the trappings which accompanied them. Since only one individual could conclusively be dated to the late Iron Age, with six of late Iron Age-early Romano-British date and the rest early Romano-British (eight 1st century AD and the rest 1st–2nd century AD), little can be deduced with regard to changes in population structure over time. Of the 28 individuals identified, 14% were immature and 83% adult, the latter including 57% females and 26% males. The significance that may be attached to the apparent disparity between the sexes is tempered by the fact that the unsexed adults could all be male. The proportion of immature individuals is small but similar to that observed from contemporaneous cemeteries (Collis 1977; Wells 1981; Stirland 1989; McKinley 1991; 1997b); it is, however, unlikely that over c 120–250 years the small domestic community, which appears to have used the cemetery, were fortunate enough to lose only one infant and one child. The absence of neonatal remains usually observed within Romano-British cemeteries is generally viewed as a ‘cultural norm’ (though other factors may be significant within cremation cemeteries; McKinley 1997b, 64); there are, however—as here—some exceptions (Stirland 1989; McKinley 1992), possibly indicative of cultural variation, and there may be some significance in the observation that these recorded instances are from a relatively restricted geographic area.

None of the Site 9 adults showed strong masculine traits and all, both male and female, were generally fairly gracile. A few minor pathological lesions were observed in the remains of 11 individuals but they are insufficient to offer any general comment on health and lifestyle.

The majority of the cremated bone was well oxidised (Holden *et al.* 1995a and b) but with some variation in the degree of oxidation evident in variable quantities of bone fragments, often only one or two, from most graves. Although a relatively common trait within the mortuary rite, the percentage of burials with variable oxidation is high in comparison with contemporaneous cemeteries; this may be reflective of a deliberate variation in mortuary practice (?local/regional) or technical inefficiency. High levels of poor oxidation were seen in two burials, the overall shortfall suggesting a general problem such as insufficient fuel for cremation, curtailing of the process, or a cut-off in oxygen supply. Both burials also have some slightly odd patterns of dehydration fissuring (McKinley 2000a, 405; McKinley and Bond 2001, 281–82) suggesting that although the bodies were initially burnt fleshed/green they may have been subject to secondary burning once already partly dehydrated, perhaps as a result of the first attempt at cremation being curtailed (?adverse weather or insufficient fuel).

Two burials contained very little or no skull; given the ease with which such fragments can be distinguished such an observation is very rare in any period of the rite; though similar distributions have occasionally been seen in other Romano-British assemblages (Wells 1981, 291; McKinley 2000c, 271). Its significance is unclear—that most of these deposits, here and elsewhere, were apparently of males may be of additional relevance—but the suggested deliberate exclusion of skull fragments may be linked to its symbolic significance rendering it most suitable for some other ritual purpose. Differences in the frequency of recovery of small skeletal elements (tooth roots and the small hand/foot bones) may reflect temporal variations in mortuary practice. Their comparative rarity in the late Iron Age and Romano-British burials—by comparison with the prehistoric burials—suggests hand collection of individual bone fragments from the pyre site with a tendency to picking-up the larger, more easily accessible fragments.

A single Romano-British dual burial was recovered; the percentage frequency is within the range commonly identified from all periods in which the rite was used (McKinley 1994a, 100–102; 1997c; 2000c, 272).

A very small quantity of bone (9.8g; including neonatal and adult skull vault) was recovered from one feature, which, although truncated, did not appear to have been subject to the substantial disturbance, which would have been required to remove all but this small quantity of bone. While not an unusual amount for a neonatal burial, the quantity of adult bone is grossly insufficient to represent the remains of a formal burial. Two possible interpretations suggest themselves: the deposit may represent a cenotaph (McKinley 1997b, 71–72; 2000b, 42–31; 2004b, 306–7) with the majority of the bone remaining after cremation having been taken for burial outside the confines of the cemetery; alternatively, the few fragments of adult bone may have formed a ‘token’ included in the neonatal burial and may have derived from an individual buried elsewhere within the cemetery.

Small quantities of cremated animal bone—the remains of pyre goods included in the primary part of the mortuary rite as opposed to grave goods added only at the time of burial—were recovered from 13 (54%) burials. The inclusion of cremated animal remains in burials of this date is relatively common, and there are close similarities between the late Iron Age and Romano-British periods in terms of frequency of occurrence and the species recovered.

from 59 burials at Skeleton Green, Puckeridge (Partridge 1981, 273). Eckardt (2002, 115) notes that lamps in funerary contexts are strongly associated with box- or casket-burials and relatively well-furnished graves, with a strong concentration occurring in Hertfordshire and north-west Essex. Lamps have been recovered from boxed burials at Skeleton Green and Baldock (Eckardt 2002, 101), while an iron hanging lamp was recovered from the well furnished box-burial (grave 25) at Stansted (Havis and Brooks 2004, 216). Returning to Strood Hall, the form and fabric of the piece—more usually

associated with the Roman army (Willis 2003, 130–3)—seems anomalous in the context of a rural settlement. However its context, a ‘rich’ probable box-burial within a west Essex site, places it within the contextual and distribution patterns observed by Eckardt. The lamp arrived outside the normal channels of supply, possibly as the personal item of a retired Roman army officer (cf Black 1994, 107). But it reveals, along with the metal and ceramic grave-goods, the early Roman inhabitants of Strood Hall to be as conversant with Roman funerary habits and traditions as those of the urban centres.



Plate 3.22 Strood Hall (Sites 9/44): toilet set from Grave 1386

The three graves (16002, 16004 and 16007) south-west of the main cemetery are different (Fig. 3.5 inset). These are simple graves containing unurned cremated remains and no grave-goods. Calibrated radiocarbon dates suggested a mid Roman date for all three—early 2nd to early 3rd century AD. The pyre-derived charcoal from Grave 16004 was identified as maple (*Challinor CD/Chapter 7*), unlike oak and ash favoured for early Roman cremation. The reason for the difference is far from clear, but it further underlines the contrast in burial practices between the early and mid Roman graves. How representative these are in terms of typical local practices at this time cannot be determined with certainty. However, their burial demonstrates a lack of ostentation and a parting with Roman-style norms. The location of the graves away from the main cemetery recalls the pattern of dispersed burial seen at Stansted (Havis and Brooks 2004, fig. 129). This distribution is to some extent artificial and a product of the conditions of investigation. Archaeologists engaged in the Watching Brief revealed that the area of land between the cemetery and the three outlying graves was machine-stripped before any investigation could take place. The archaeologists contend that burials were known to exist there, implying that the cemetery was considerably more extensive.

Status

Pottery has tended to provide an access-point into the issue of status. The presence or absence of particular types, such as prestigious continental imports, has been seen as a means of assessing relative economic or social positions. Samian ware has long been considered a useful indicator. The ware was more likely to be repaired or be marked with a personal name compared with coarsewares, suggesting that samian had especial value in Roman Britain (Evans 1987). Samian was preferentially chosen for funerary deposition. The pottery that accompanied metal and glass vessels from evidently high-status burials, such as those at the Bartlow Hills (VCH Essex 3 1963, 39–43) or Stansted (Havis and Brooks 2004, 216–31), was almost exclusively samian. Even at lower-order settlement cemeteries, including Strood Hall, samian tended to be over-represented compared with its proportions in domestic assemblages (Biddulph 2005). The presence of samian alone is insufficient as a means to deduce status; the ware is generally ubiquitous on sites of varied type across south-eastern England (cf Woolf 1998, 201–2). However, the ratio between plain samian vessels and decorated forms does appear to be significant. Farmsteads tend to have lower proportions of decorated samian compared with villas, towns and military sites (Willis 1998, 105). Within the A120 sites, 4% of samian vessels (excluding grave-goods) at Strood Hall and 20% at Rayne Roundabout (measured by estimated vessel equivalence (EVE)) were decorated. This compares with

8% at Great Holts Farm, a villa (Dickinson 2003, 157), and 22% at Colchester, a major town (Willis 1998, table 3). The samian from Rayne By-Pass also included a 20% decorated element. This further supports the view that the material from both sites derives from the same settlement.

Amphorae, usually imported from Gaul, Italy or Spain, share the distribution pattern of samian, with higher-status sites generally receiving more vessels than lower-status sites. Measured by sherd count, amphorae take a 0.3% share of the entire ceramic assemblage at Strood Hall, but account for 1.2% at Rayne Roundabout. This compares with 5% at Colchester, 0.7% at Chignall villa, and up to 2.2% in individual ceramic groups at Great Holts Farm (Martin 2003). The figures allow Rayne and Strood Hall to be separated. Although both sites served a similar range of functions—production and supply of a surplus—Strood Hall appears to be of lower status in social or economic terms. Rayne's samian and amphorae assemblages are close to those from urban and villa sites; in this light, Smoothy's interpretation of the settlement as a villa (Smoothy 1989, 27) gains some ground. Crucially, though, the peak periods of samian and amphorae importation occurred at a time before the Romanised building at or in the vicinity of Strood Hall was probably built. Samian supply declined dramatically during the early 3rd century, and it is only after that date that the building was occupied. In contrast, Smoothy dates most of the building material at Rayne By-Pass, from which he extrapolates the presence of the substantial building, to the Antonine period (AD 138–92), when samian arrived in quantity. Imported pottery is consequently an inappropriate tool with which to compare the status of the Romanised structures at Rayne and Strood Hall.

There are, of course, other means. The villa at Great Holts Farm, Boreham (Germany 2003), yielded a remarkable range of faunal and plant remains that reflected an upper-class lifestyle. Hawking was conducted, presumably chiefly for social reasons, and Mediterranean food, including grapes, walnuts and olives, was consumed (Albarella 2003; Murphy 2003). Such material is absent from Rayne Roundabout, Strood Hall and others; these sites would appear to lie below Great Holts Farm in social status. However, deer was hunted at these sites, suggesting that the social experiences enjoyed at Great Holts Farm were shared to some extent at settlements between Braintree and Stansted. It is worth noting that no building has yet been uncovered at Rayne, and, given the better representation of decorated samian ware at Rayne compared with Great Holts Farm, more exotic items might be recovered there should a villa-type structure be located. A fragment of a polychrome mosaic glass vessel provides an intriguing footnote concerning status from Parsonage Lane (Fig. 3.42). The glass type, dated to the late 1st century BC or early 1st century AD, is a rare find in

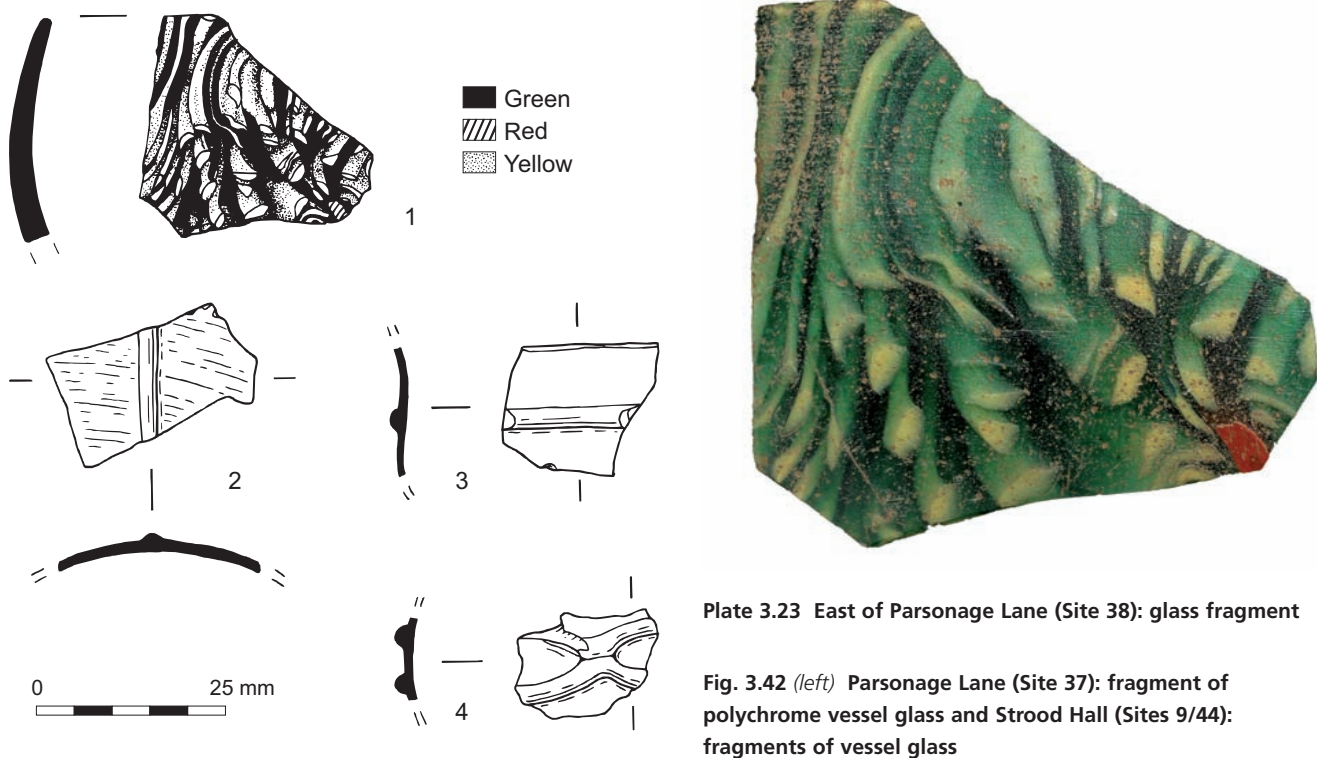


Plate 3.23 East of Parsonage Lane (Site 38): glass fragment

Fig. 3.42 (left) Parsonage Lane (Site 37): fragment of polychrome vessel glass and Strood Hall (Sites 9/44): fragments of vessel glass

Romano-British glass

by Lorraine Mepham

Glass of Romano-British date was recovered from two sites. The largest group came from Strood Hall (Site 9: 10 objects, 25 vessel and 2 window fragments), with a single piece from Parsonage Lane (Site 37).

At Strood Hall six of the beads, all annular types, derived from a single early Roman cremation burial, and showed signs of having been burnt on the pyre. One other, a melon bead, came from an early Roman pit, while the remaining three, one tiny annular and two segmented beads, came from late Roman deposits.

Very little of the vessel glass from Strood Hall is at all diagnostic to vessel form. There are two identifiable bases from square bottles, with typical relief decoration in the form of concentric rings. These bottles were common forms with a long currency in the Roman period (Fig. 3.42, nos 2–4).

Fragments probably from a single vessel were recovered from another early Roman cremation burial—this had been burnt on the pyre and is heavily distorted.

Three other fragments are decorated; two probably derive from drinking vessels and the third, with applied trails in a pinched lattice, could be from a jug of 2nd-century AD date or later. The remaining fragments are all small and featureless and cannot be dated, but all came from late Roman contexts (late 3rd century AD onwards).

Two probably window glass fragments were identified on the basis of their characteristic ‘matt/glossy’ surface appearance; both came from late Roman contexts.

The single piece from Parsonage Lane is a fragment of a polychrome mosaic glass vessel (Plate 3.23; Fig. 3.42 no.1) a luxury item not commonly found in this country but which is known from some pre- and early post-conquest sites in southern Britain, such as Colchester.

Britain and usually confined to large centres in the south, such as Colchester (see *Mephram, CD/Chapter 4*). Its presence at Parsonage Lane, though unstratified, hints at high-status occupation or more probably a grave in the area.

The evidence therefore suggests that Strood Hall enjoyed a low level of social status; Rayne seems to be higher-status, but still relatively modest. The settlements were certainly no backwater, but still they never rose to the level of the ‘classic’ villas at Chignall St James or Rivenhall, or even Great Holts Farm, timber-built but complete with a bathhouse. The outlook of inhabitants at Strood Hall and Rayne was localised, affording them only occasional access to the fruits of the Roman world beyond the region. It would be quite wrong, though, to maintain that the settlements were less Roman than others, even if, for Strood Hall in respect of its roundhouses, this would seem to be indisputable. Sealey (1996, 60) notes that roundhouses dating beyond the conquest in Essex are rare. Citing Paul Drury, he continues, ‘the few roundhouses erected in the early Roman period have every appearance of marginal buildings that represented a quaint backward tradition kept alive by the more conservative elements in society’. The survival of roundhouses at Strood Hall into the 2nd century would appear to be a sign of resistance against Roman structural form and, by extension, social habits. The inhabitants embraced the concept of *humanitas*, the acquisition of Roman ‘social competencies’ (Woolf 1998, 56; Creighton 2006, 150), reluctantly; Agricola could not win them all. However, while the first Romanised structure was a 3rd-century construction, the persistence of roundhouses in the 1st and 2nd centuries AD paints a false picture of the settlement’s interaction with the Roman world. One clue is the pottery in daily use at Strood Hall throughout its occupation, which included locally produced, but continentally-inspired dining forms, chiefly platters, dishes and flagons (see Figs 3.10–12 above). The proportion of such forms in the ceramic assemblage, especially set against that of jars of more ‘native’ origin, matches proportions at Great Dunmow and Chelmsford, indicating that the settlement was locked into regional supply patterns and that its inhabitants cooked and dined in the Roman style (cf Evans 2001), though not necessarily at a particularly sophisticated level. But no more clearly is this falsity exposed than in the cemetery, where continentally-inspired burial practices—cremation, offerings of chicken and pigs, burial in boxes—point to a society with an appreciation of Roman funerary rites. Ceramic analysis revealed that the pottery assemblage was similar to those of cemeteries deriving from more obviously Romanised settlements, including Colchester (May 1930) and Verulamium (Stead and Rigby 1986). Other material from the cemetery, particularly the toilet sets and ceramic lamp, could only have been recovered from a settlement with outward-looking inhabitants.

Strood Hall exposes the fault-lines that lie beneath the popular, vaguely-articulated, notions of Romanisation, seen as the process by which an ‘unchanging, unified, monolithic’ Roman entity was imposed on the conquered territory, or the measure of the extent to which the native population acquired Roman material culture and became ‘Roman’ (cf Taylor 2001, 46–7). The obvious flaw is that elite, or high-status, settlements include highly archaeologically visible and artefact-rich forts, towns and villas, while non-elite—or low-status ‘native’—settlements are artefact-poor and less visible (Esmonde Cleary 2001, 90). Status therefore cannot be equated with the level of Romanisation; the inhabitants of Colchester or Chignall St James were probably no more Roman than those of Strood Hall and Rayne. If material remains accurately reflect the ‘social discourses’ of the people in Roman Britain (Taylor 2001, 46–8), then a stark dichotomy becomes evident, with some settlements conversing fully with Roman culture and values, while others hesitantly respond to the Roman world or reject it altogether. This offers a linear scale with high-status Roman at one end and low-status Briton at the other. Yet being Roman is not a term that can be applied on the basis of a checklist of Roman attributes, with the level of Romanisation increasing with every tick gained. Strood Hall would surely score poorly in terms of its 1st and 2nd-century structures, but highly in burial practices. The Romanised appearance of the hypocaust at or in the vicinity of Strood Hall and Rayne is at once negated by the lack of mosaics and wall-plaster. This is clearly nonsense, and recent studies have demonstrated the simplicity of the approach. Woolf (1998, 242) concludes that the persistence of ‘older ways’ showed a lack of sophistication, but not un-Roman behaviour. Life in even basic settlements, though continuing some traditions of the pre-conquest world, had changed since then. MacMullen (2000) argues that the process of acculturation in the Roman provinces was not so much imposed from the ‘top down’ by Rome, as actively pursued through imitation by the native populations. The inhabitants along Stane Street were content to engage with the Roman world, but retained traditional means of disposing wealth and displaying status. This might include burial of prestige items in graves or the acquisition of larger herds of livestock. Viewed in these terms, Strood Hall and Rayne may have been comfortable with different identities, or uncivilised and rustic, but anti-Roman, or even simply un-Roman, they were not.

The role of the settlements

Some settlements along the Braintree-Stansted road served a function that extended beyond their immediate boundaries. The early Roman settlement in the vicinity of Valentine Cottage may have been connected to the suspected pottery kilns nearby, and it has been argued that Strood Hall and Rayne Roundabout produced at least a crop surplus for wider

distribution. The assumption that Strood Hall supplied Great Dunmow is obviously made, but this presents some difficulties, since the earliest Roman-period phase at Strood Hall apparently pre-dates the foundation of the town. Although late Iron Age farms were able to produce surpluses without towns, as Strabo's famous list of exported goods clearly indicates, many farms had a much more modest and localised role. Strood Hall, even in the first decade or so after the Roman conquest, may not have been producing much more than was required on a subsistence level. The evidence converges to suggest quite convincingly that, in the 3rd and 4th centuries, the settlement had substantially increased its scale of production, surely destined for export. It is perhaps no coincidence that a 'Romanised' structure at the site or nearby was built during this time; greater profitability allowed the inhabitants to spend on amenities, such as a hypocaust, which had otherwise been denied to them. The farmers at Rayne were growing wheat and processing meat in the early Roman period for consumption outside the settlement, but it is the increase of arable production in the mid or late Roman period that may have enabled the inhabitants to construct its 'Romanised' building.

Rayne apparently lay above Strood Hall in terms of status, but both sites, at least during the phases characterised by the 'Romanised' buildings, form part of a larger group of similar, relatively low-status, farmsteads with villa-like amenities. This includes farmsteads at Castle Hedingham (Lavender 1996), Radwinter (Havis 2001) and Great Sampford (Garwood 1998) north of Stane Street, Church Langley in Harlow (Medlycott 1998), and Billericay (Rudling 1990) in south Essex. The structural evidence at these sites is never substantial; the buildings were timber and daub constructions with tiled roofs, floors and occasional hypocausts. The Romano-British countryside evokes the image of productive villas within extensive estates, but Strood Hall, Rayne, and others belong to a category of site below grand villas where much of the local demand for food must have been satisfied.

Stane Street

The origins of some of the settlements along Stane Street have been discussed above. If the conquest heralded a re-organisation of the countryside, then Stane Street—providing access to markets, swift communication, and a visual reminder of the closeness of the Roman army—would be the obvious channel through which the elements of the new regime could be connected. The road connects Colchester in the east and Braughing in the west. Both were important pre-conquest elite centres. The connection between the road and the re-orientation of the landscape seems certain when considering the start dates of the settlements along the route. Evidence for over fifteen settlements situated along Stane Street now exists. Most were established, or re-established, after the

conquest. Travelling west after Colchester, one reaches Coggeshall, where pottery suggests a later 1st century AD foundation date (Martin 1995, 95). Braintree beyond that has late Iron Age origins, but the relationship between that and the Roman settlement is unclear. However, the town offers the best example of continuity through the conquest (Garwood and Lavender 2000; Havis 1993). West of Panners Roundabout was established after *c* AD 43. Further west at Rayne Roundabout, the earliest features date somewhat inconclusively to the first half of the 1st century, though probably before AD 40. Interestingly, the Rayne By-Pass site yielded material commencing from *c* AD 60 (Going 1989, 18), suggesting expansion of the settlement. Valentine Cottage is unlikely to date before AD 43, while East of Little Dunmow Road was a late Iron Age settlement terminating only a short time after the conquest. Great Dunmow was established around AD 60, although late Iron Age material has been recovered from a nearby farmstead (Lavender 1997). Highwood Farm, producing no Roman material, is almost certainly late Iron Age in date. Strood Hall dates after *c* AD 43, though the cemetery evidence hints at a nearby late Iron Age settlement. Parsonage Lane is dated by its pottery to after AD 43, while Stansted settlements (Havis and Brooks 2004, 255–70) and Bishops Stortford (Medlycott 1994) are less conclusively assigned to the first half of the 1st century AD. If the chronology of these sites—predominantly Roman establishments—is accepted, then this suggests that Stane Street was first laid out along a reasonably straight route during the conquest period. Although the road may well have followed much of the route of a presumed late Iron Age track, it does provide a context for the relocation of some settlements; Stane Street acted as the spine that connected settlements and directed the path of agricultural surpluses. It represented a potent symbol of the imposition of the Roman system of landscape organisation.

In addition, Stane Street served as conduit of trade and communication. Major settlements along its length exerted a market pull on goods moving along it. This can be witnessed through the examination of the distribution of traded pottery. Hadham oxidised ware, which was distributed across the East Anglian region, provides a useful indicator of trade patterns. The pottery is distinctive and reliably identified in ceramic analysis. It has a reasonably well-understood chronology (mainly 4th century AD), and crucially is sourced at the western end of Stane Street around Much Hadham. Assuming that the road acted as a trade route, the pottery took a predictable, straight-forward, path towards Colchester and beyond. How sites along Stane Street affected the trade, depending on status, can be seen by the differing proportions of the ware in pottery assemblages. Moving towards the east, Stansted, some 12 km from Much Hadham, yielded the highest quantity along the route—averaging almost 35% by weight in late Roman groups. Strood Hall, 21 km from source, yielded just 5%. The

proportion rises at Great Dunmow, 23 km from Much Hadham, but drops again further east at Rayne and West of Pannars Roundabout. The proportion increases at Braintree, 36 km from source, and then falls at Coggeshall. Colchester, 60 km from source, has a proportion of 12%. Little Oakley villa, a final destination for the trade and 86 km from source, yielded 2% in its late Roman groups. The pairs of values (distance against quantity) were plotted on a scattergram (Fig. 3.43) and a correlation coefficient (r) of 0.5 (where +1 and -1 represent strong positive and negative correlation respectively, and 0 equals no correlation (Shennan 1997, 141)) was established. However, the square of r (r^2), which provides the coefficient of determination and a more realistic measure of the relationship (ibid., 144), equals 0.25, which suggests that just 25% of the variation is explained by distance alone. Some observations can be made on the basis of this distribution and statistical results. Hadham ware, like all traded pottery, enjoyed its best markets close to its source of production. Stansted was not so much the potters' first stop, as their principal market. Beyond Stansted, moving east, there was a progressive fall-off of Hadham ware. It remained in demand along the length of Stane Street, but sites received proportionately less with distance from source. This is clearest among the 'upper tier' of higher-status sites. Basic rural settlements were less differentiated, though even among that group distance appears to be a factor, so that Coggeshall, further away from source, received less Hadham ware than Strood Hall. However, given this separation between higher

and lower status sites, distance alone cannot be responsible for this distribution. The stronger showing of Hadham ware in higher status sites suggests that those settlements acted as market centres, where the pottery, and by extension other material goods, arrived first. From there the goods were redistributed to the smaller settlements in between centres. The results appear to confirm the validity of basic settlement categories, such as major and minor (or small) towns, villages and farmsteads. They also reveal something of the interdependence between the settlements. Strood Hall, for example, provided Great Dunmow with meat and grain; in return Great Dunmow supplied goods in kind, or that Strood Hall's produce was itself acceptable as payment towards the inhabitants' contribution of tax or rent. It is unlikely that coins, of which a meagre number was recovered from any site, were regularly exchanged for goods. This and similar relationships were permitted by Stane Street, which connected the settlements.

Stane Street continued to facilitate the movement of goods and services well into the 4th century AD. But in the second half of the century, the region appears to have lost its production pre-eminence. Wickenden (1996, 93) suggests that the economic axis had moved north to Great Chesterford and its environs, where major construction work continued on the eve of the 5th century. Stane Street had ceased to function as a viable route through the centre of Essex. In any case, traders would have found few settlements to trade with. The evidence is not conclusive, but pottery and coins suggest that new products were reaching fewer settlements after

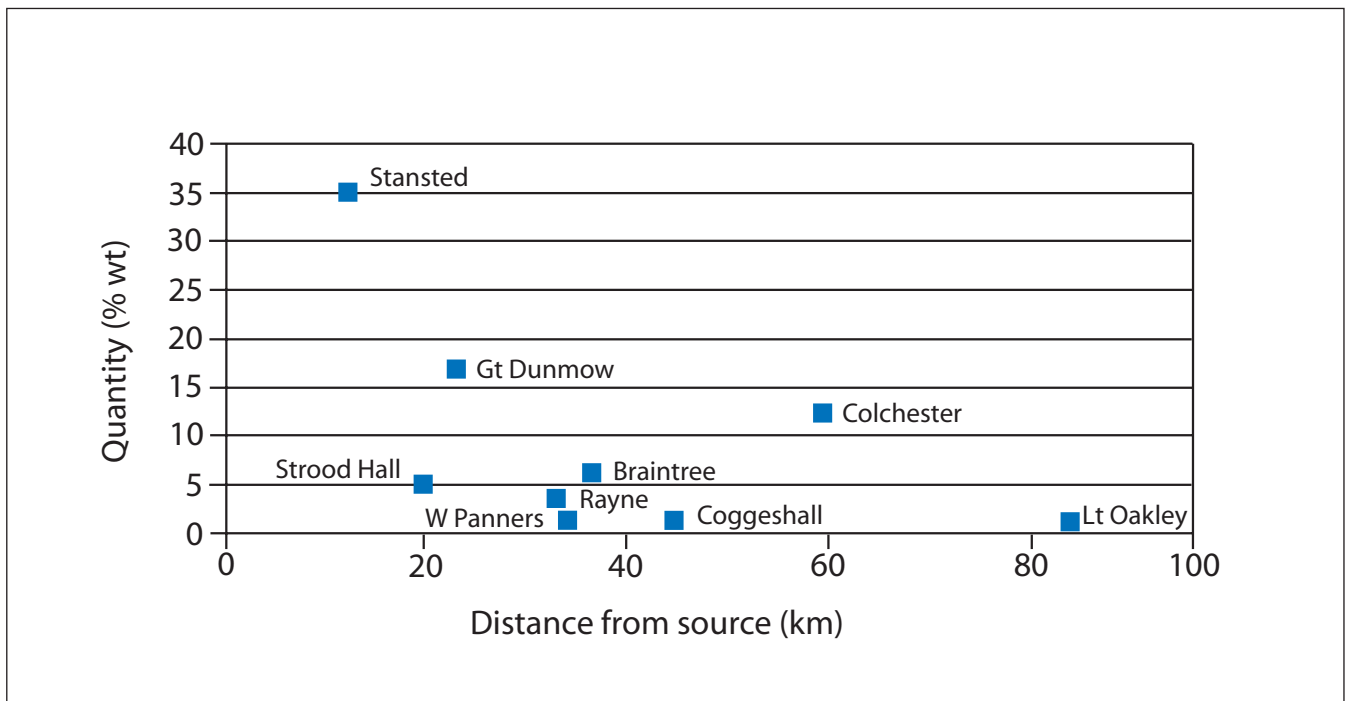


Fig. 3.43 Distribution of Hadham oxidised ware (HAX) along Stane Street in the 4th century AD. (Sources: Wallace 2004, tables 72-4 (Stansted), Wickenden 1988, table 2 (Great Dunmow), Horsley 1993, table 3 (Braintree), Gurney 1988, table 1 (Coggeshall), Bidwell 1999, table 8.2 (Colchester), Barfield 2002, 151 (Little Oakley).



Plate 3.24 Reconstruction drawing showing Strood Hall in the early Roman period. As the sun sets on a summers day, the relatives watch the flames of the pyre reach their peak. Tomorrow morning the cooled ashes will be collected and deposited in the cemetery.

c AD 370/380. At Stansted (Duckend Car Park and Duckend Farm sites), the latest coins do not extend beyond AD 370. The pottery from the same deposits included late shell-tempered ware and Oxfordshire red colour-coated ware, usually two good indicators of later 4th century activity (Wallace and Horsley 2004, 310–2). Strood Hall yielded shell-tempered ware in some quantity, but virtually no Oxfordshire ware. Coins were scarce, with the latest dating up to AD 337. The settlement is unlikely have been occupied much after AD 360/70, if at all. Great Dunmow experienced coin loss possibly into the 5th century, and both pottery types are well represented (Wickenden 1988, 90; Going and Ford 1988, 66). However, this material was associated with a shrine, which might have continued to function as a place of pilgrimage and worship after the town had fallen into disrepair. Rayne By-Pass yielded no shell-tempered ware or Oxfordshire ware, and Going (1989, 18) suggests that the site ceased around AD 350 at the latest. However, both wares were present at Rayne Roundabout, which may push occupation in the area a little later. Braintree and Coggeshall both offer little by

way of latest pottery types, and it seems unlikely that pottery supply continued far into the second half of the 4th century. The picture of settlement is mixed along Stane Street. Some sites were abandoned by or very soon after c 350, while others continued, mainly in a limited capacity perhaps as far as the 5th century. Stane Street was hardly a busy trade route towards the end of the Roman period, but it was not defunct either.

Conclusions

The excavations along the route of the Braintree-Stansted A120 trunk road have contributed greatly to our understanding of the Roman countryside in north-west Essex. Fieldwork at Strood Hall revealed almost the complete layout of a Roman farmstead; the associated cemetery provides vital information about rural burial practices in the 1st century AD, helping to plug a gap exposed for far too long. Rayne Roundabout comprised sequences of enclosure and field boundary ditches associated with, at least during the mid or late Roman periods, a Romanised building, possibly a

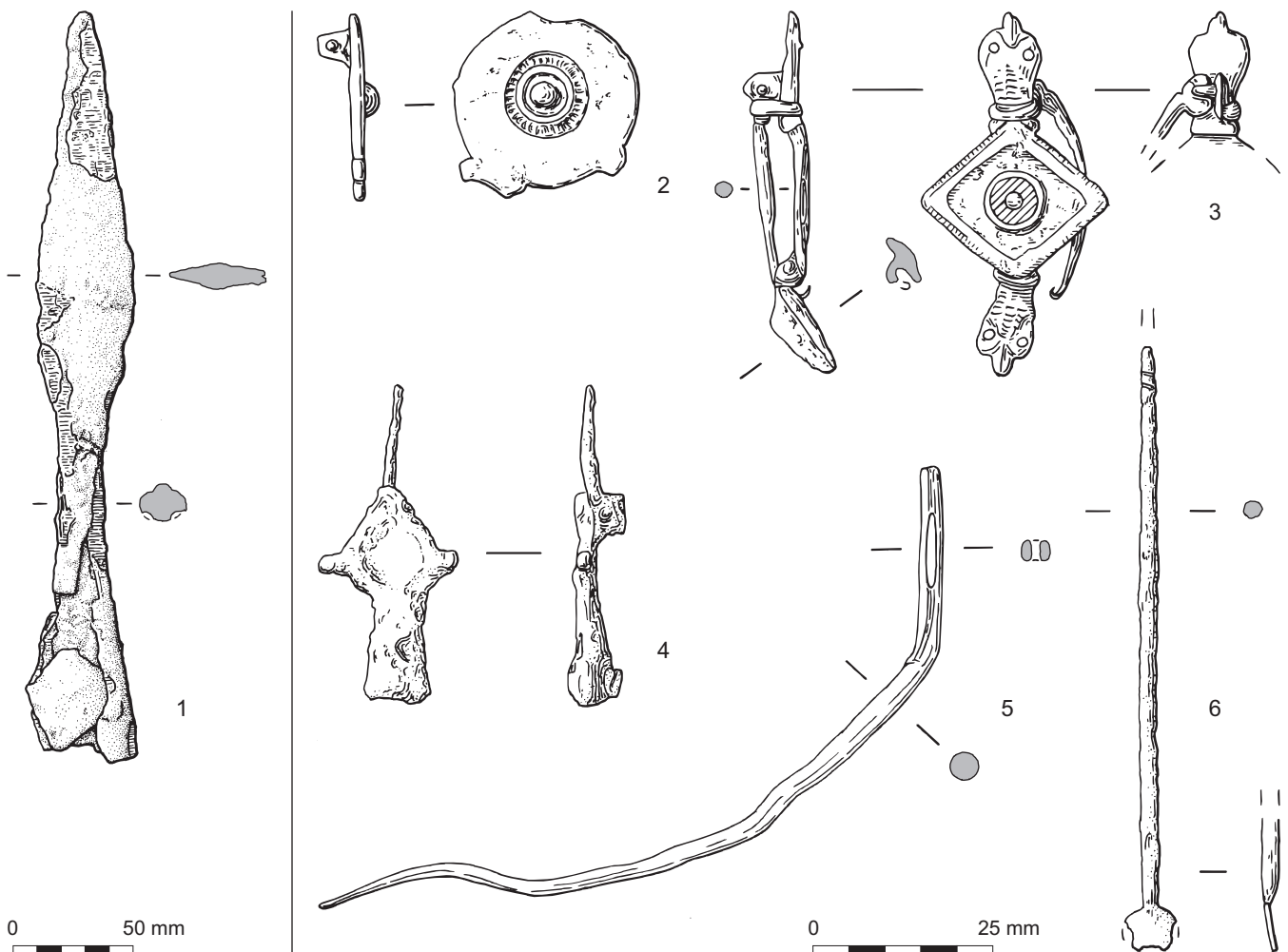


Fig. 3.44 Strood Hall (Sites 9/44): selection of metalwork

Late Iron Age and Romano-British metalwork

by Philippa Walton and Ian Scott

The main sites with Romano-British occupation evidence are Strood Hall, Rayne Roundabout, Parsonage Lane and East of Dunmow Road, all of which have produced some contemporary metalwork. In addition there is archaeological evidence from Valentine Cottage and West of Panners Roundabout for Romano-British or late Iron Age occupation, but almost no metalwork. Valentine Cottage has one nail fragment, and there is small quantity of recorded metal finds from West of Panners Roundabout.

From the vicinity of Takeley Church, there are metal detector finds, which include metalwork and coins ranging in date from the late Pre-Roman Iron Age to the early post-medieval period. The late Iron Age and Roman material includes a gold stater, 75 Roman coins, two brooches and a strap tag. The quantity of Romano-British material suggests activity in the area. The comparatively large number of coins, compared with other finds, suggests that some at least may have come from a hoard, rather than from losses on a settlement site.

The metalwork assemblage from Strood Hall is quite sizeable, and comprises 1134 objects or fragments. There are 1082 pieces of iron, 30 copper alloy objects and 21 pieces of lead. Wood nails and hobnails dominate the ironwork. There are also 140 miscellaneous pieces and 120 unidentifiable fragments. By contrast the main category of copper alloy finds comprises personal items made up of toilet items and brooches and other ornaments. The lead is mainly miscellaneous pieces.

Much of the copper alloy from the early Roman phase was recovered as grave goods from cremation burials. By contrast finds from mid/late and late Romano-British contexts are largely from midden deposits.

The finds of brooches and toilet instruments in cremations fit a late pre-Roman and early Roman pattern in south-east England. A triangular iron knife, perhaps a razor-knife, was found in grave 1755. The other metalwork from the early phases of the settlement is very limited in its range and is typical of a rural settlement. The material from the later phases lacks the brooches and toilet implements found in the early cremations, but has a range of utilitarian objects, including tools and household items. The assemblage is typical of a later Romano-British rural settlement. There are two finds of note from the later settlement. The first is the symmetrical enamel-inlaid plate brooch (Fig. 3.44, no. 3; Plate 3.25), which is probably of continental origin and 2nd-century AD date. The second is the spearhead (Fig. 3.44, no. 1; Plate 3.26), which has the appearance of an Anglo-Saxon, rather than Roman weapon, but which cannot be conclusively dated to the post-Roman period.

A small assemblage of metalwork—comprising 57 iron objects or fragments, 5 copper alloy objects and a single piece of lead—was recovered from the excavations at Rayne Roundabout. Most of the finds can be dated broadly to the Roman period although very few diagnostic items were found. There are eight small unidentifiable fragments and six miscellaneous fragments of iron (strip, rod, wire or sheet). Of the remaining 43 objects or fragments, 32 are nails or nail stem fragments.

Most of the finds were located in a broad linear hollow, identified as a stream valley, which ran NE-SW across the eastern area of the excavation. This hollow was flanked by two sets of trackway ditches. The feature appears to have been used as a dumping ground for refuse generated by the nearby Romano-British settlement. Identifiable pieces of metalwork are mainly utilitarian, deriving from either agricultural or minor structural use. These include a possible ploughshare, a knife, a swivel and 16 nails or nail fragments. They also include an item of personal ornament, namely a fragment of a possible cable finger ring. One further item of personal adornment found on the site was a small hairpin dating to the 2nd century AD.

The assemblage probably represents low level activity and refuse from the small rural settlement, or villa site excavated to the north of the current site in 1987 (Smoothy 1989, 12–13; see also Going 1996, 98).

The metalwork from Parsonage Lane comprises eight objects, only one of which was stratified. The stratified metal find is a fragmentary La Tène III-type brooch dating to the late Iron Age or early Roman period. A number of other metal finds were recovered through metal detecting and these include two further brooches and a silver pin head, which is probably Romano-British.

Material recovered from West of Panners Roundabout comprised five fragments of iron plate, two fragments of encrusted bar and part of a chisel. It is possible, but not certain, that the bar fragments were part of the blade of the chisel.



Plate 3.25a, b Strood Hall (Sites 9/44): enamelled plate brooch SF 244, front and back views



Plate 3.26 Strood Hall (Sites 9/44): iron spearhead SF 52

modest villa. The evidence from this site and the earlier excavated Rayne By-Pass site probably belong to the same Roman-period estate. Quarries and kilns tentatively point to Valentine Cottage as a site of early Roman pottery production. Roman settlement evidence was found at other sites along the scheme route; all sites contribute to a dispersed string of occupation linked by Stane Street.

Few sites along Stane Street have shown direct evidence for continuity between the late Iron Age and Roman period. Highwood Farm and East of Dunmow Road did not survive long after the Roman conquest. The settlement at Strood Hall was newly established after the mid 1st century. A late Iron Age settlement existed at Rayne Roundabout, and possibly near to Strood Hall also. This hints at a period of major landscape re-organisation in the decades following the Roman conquest. Stane Street, the fingerprint of imperial policy, bound the settlements together. Occupation at a number of sites continued to lesser, rather than greater, extents through to the second half of the 4th century AD; none matched Great Dunmow,

though, which was exceptional for its evidence for early 5th-century activity. Despite the Roman origin of the settlements, Strood Hall retained a late Iron Age character well into the 2nd century, with roundhouses continuing as the dominant structural form (Plate 3.24). This eventually gave way to a rectangular structure in the 3rd century. Building material recovered from dump deposits suggest that it was reasonably high-status, complete with a tiled roof, hypocaust and glass windows. Rayne was the site of a similarly built structure, although artefactual evidence suggests that this was of higher status. The settlements of Strood Hall and Rayne Roundabout practised mixed farming. However, arable farming grew in importance towards the later Roman period, fitting trends within the region, and it is clear that both sites were farming to produce a surplus. Just one site, Strood Hall, produced evidence relating to the treatment of the dead. The cemetery, largely confined to the late Iron Age and early Roman period, was relatively modest in terms of grave-goods buried, although the burial practices conform to Roman norms.

Chapter 4

What happened to the Saxons?

by Alan Hardy

Introduction

Along the whole of the 19 km road corridor of the A120 project, a single building dating to the beginning of the 8th century gives, at face value, a somewhat stark indicator of the intensity of settlement during the early and middle Saxon period in north-west Essex (Fig. 4.1). While the evidence does not explicitly contradict the accepted wisdom concerning the settlement pattern of the times, it is worth examining that evidence, both negative and positive, in more detail. It does not suffice to glibly state that the case—namely that north-west Essex was sparsely populated for the best part of 500 years—is proven by the results from this project. While the situation may effectively be as is understood, the reasons are complex, and involve both what actually happened in this period, and the character of the archaeological record itself.

The post-Roman environment

The geology of the area is basically Boulder Clay, forming a large plateau, cut by numerous small river valleys—mostly oriented north-south—where the clay is overlain by sands and silts (Fig. 1.2).

Traditionally it was assumed that in the early Saxon period large areas of productive agricultural land reverted to ‘forest’. However, the degree to which the highly developed agricultural landscape of Roman society, even in north-west Essex, reverted to woodland in the early Saxon period has long been a topic of debate.

The detailed investigation by Rackham (1989) of Hatfield Forest, which lies immediately to the south of Takeley at the west end of the A120 corridor, has clarified many of the traditional inferences drawn from Domesday records and other charter evidence. Most pertinently, Rackham clarified that the word ‘forest’ did not mean then what it has come to mean now. Examination of Domesday records by Rackham and others indicates that among eastern and southern counties of England, Essex was more heavily wooded than most (1986, 76–7, fig 5.3 and 5.4). However, this should not be taken to mean that northern Essex comprised increasingly impenetrable woodland during

the centuries after the collapse of Roman rule. The term ‘forest’ originally meant areas of mixed woodland and open ground. The earliest attempt to quantify the amount of woodland in individual estates can be found in Domesday, where the amount of woodland is defined by the number of pigs it will support. However, this was clearly a very approximate figure then, and should be seen as such now.

The archaeological perspective on Saxon settlement in north-west Essex

Early Saxon

One of the first modern attempts to test the accepted wisdom concerning the presence of early and middle Saxon settlement in north-west Essex was the systematic examination by field survey of a large area *c* 28 km², centred to the north of Stansted (Williamson 1986, 120–32). Broadly speaking the findings suggested that there was depopulation and abandonment of small-scale Romano-British settlements, and that the early Saxons tended to favour the lighter soils of the valleys and mostly avoided the clay plateaux. However, Williamson’s suggestion is that this landscape preference was no great departure from what was happening in the Romano-British period, and that, in both cases, the plateaux were settled, if at all, in an opportunistic way—by those ‘driven by poverty and mobility’ and a lack of social or demographic ties to established settlement foci (ibid. 127).

If the motivation for settlement on the boulder clay plateau was similar in both periods, there seems to have been a more distinct contrast in the style of landscape exploitation. Possibly two-thirds of the landscape was cleared in the Roman period and even if there were relatively few people living there, a characteristically orderly network of field boundaries was established. It would seem that there was little organised attempt to maintain this network from the 5th to the 7th centuries, and the archaeological evidence is therefore confused, with some landscape divisions maintained, others disregarded. Various reasons have been proposed for this—that early Saxon society was ancestrally antipathetic to

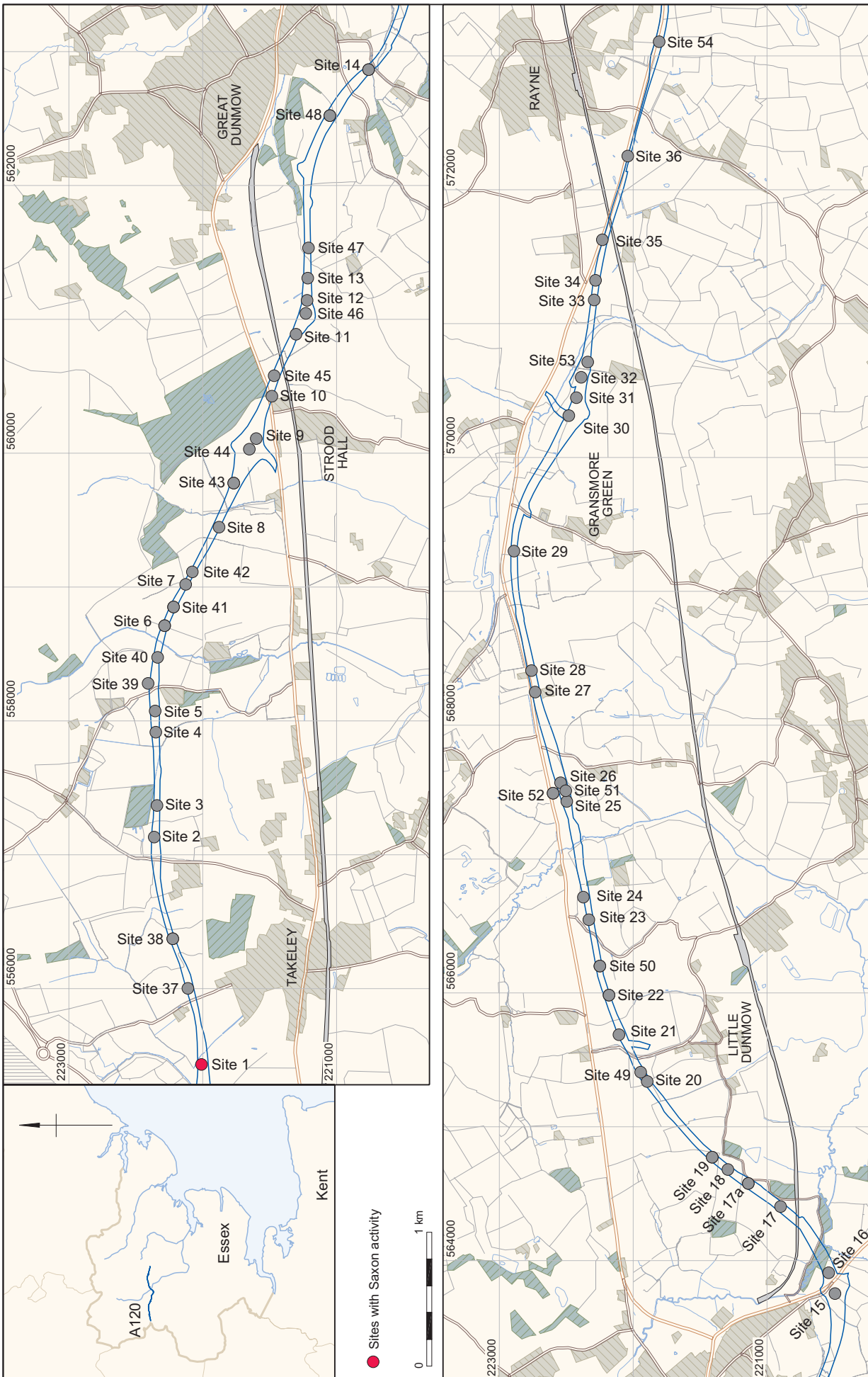


Fig. 4.1 Location map showing Saxon site

closely demarcated landscapes; or that the population was so sparse that there was no need to expend energy methodically defining who owned what; or, for the first few generations at least, that the population was essentially semi-nomadic, moving slowly inland generation by generation. The prospect of better land would surely provide a disincentive to reach the relatively unrewarding lands of north-west Essex and then stop.

The most recent attempt to draw together what was known about the archaeology of Essex and to signal areas of future research was the Writtle Conference in 1993. In the published proceedings, Tyler (1996, 108) stressed the apparent *ad hoc* nature of settlement in the 5th century, with most occupation favouring already cleared land along river valleys, and an apparent avoidance of the boulder clay uplands. There was some evidence of settlement and continued exploitation of villa sites or even co-existence with surviving British populations, for instance at Rivenhall (Rodwell and Rodwell 1985, 68–77) or Heybridge (Clarke 1994), but no sense of this being a general pattern, rather individual responses to individual opportunities.

The apparent pattern of finds, settlements and cemeteries over all Essex (Tyler 1996, fig. 1) reinforces the impression of a dearth of settlement and activity in the north-west area of the county. However, as with any survey of this type, such an impression must be set against the fact that, up to the 1990s, opportunities to investigate significant areas of north-west Essex had been relatively few, in comparison to the south and east of the county. Given the relative invisibility of Saxon material evidence in the archaeological record (as opposed to, say, Romano-British material), the reluctance to come to definitive conclusions on the issue was no surprise.

Middle Saxon

If there is hardly an abundance of 5th- to 6th-century evidence of rural settlement in north-west Essex, then, from an archaeological point of view, the situation gets much worse in the 7th and 8th centuries.

From the meagre evidence gleaned from small-scale finds and investigations, it appears that settlement in this period began to coalesce into fewer, but larger settlements. Rippon (1996, 123) proposed that this was in keeping with the demographic and political trends of the time as the development of estates gathered pace, with their increasing control of populations and resources.

In a resource assessment written in 1997, Wade concluded that a major hindrance to greater understanding of the period was the lack of new data, and the shortage of opportunities to archaeologically investigate large sites or areas of land, in part the result of developer-led funding, so that the corpus of sites available to add evidence to research agendas was essentially unchanged since the mid 1980s (Wade 1997, 55).

Syntheses and reviews of the then-current knowledge were starved of new information, and forced to resort to speculation and inference drawn from other areas.

Recent archaeological work

The opportunities to archaeologically investigate large areas of land in north-west Essex duly arrived with the progressive expansion of Stansted Airport in the last two decades. With the problems of material invisibility, first highlighted by Williamson (see above) in mind, a substantial programme of fieldwalking was undertaken before an equally substantial evaluation exercise was begun. Both these programmes were designed to maximise the identification of possible settlement foci (of all periods), and achieve, within the constraints of resources available, the landscape coverage never before achieved. The fieldwalking produced what seemed to be unequivocal evidence of the lack of Saxon activity and occupation, with only a relative handful of sherds being recovered from the entire area of study. It was calculated that there was one Saxon site for every 165 ha walked (Medlycott and Germany 1994), a 75% decline from the frequency of identified Roman sites. The targeted sites were then thoroughly excavated.

The principal work was undertaken between 1986 and 1991 (Havis and Brooks 2004) and focussed on approximately 600 ha of land around the existing airport, situated to the north of the west end of the A120 corridor.

The project produced only a single feature—a small pit—that was confirmed, by artefactual dating, as being Saxon in date. Although occasional sherds of grass-tempered Saxon pottery were recovered in intrusive (Romano-British) contexts, the overall picture remained that of very limited occupation (Havis and Brooks 2004, 537). Yet the palynological evidence suggested that the percentage of open land remained approximately unchanged, at least until the end of the 7th century, supporting the contention that some level of agricultural activity was being maintained.

Further fieldwork in 2000 (on the south side of the airport and within the original Stansted Project area, but on areas not previously excavated) appeared to confirm the absence of any post-Roman presence until the late Saxon period, in the form of an 11th-century farmstead. However, an environmental sample from a palaeochannel, radiocarbon dated to between AD 530–680 produced evidence of reedswamp and a varied woodland, along with charcoal and cereal pollen. There was human activity near, if only at a low intensity (see Carruthers, Chapter 6).

The A120 Project results

The A120 Project offered the opportunity to compare the results of the recent large scale, intensive, but largely unproductive (for the Saxon period) archaeological

investigations against a long (albeit narrow) corridor extending to the east, at least partly along a known late prehistoric and Roman route. Given that the road corridor would not just pass along the plateau, but would dip into the valleys, would the resulting picture show any variation?

The initial fieldwalking programme gave little cause for surprise; not a single sherd of recovered pottery could be termed Saxon in date from anywhere along the corridor (see *Medlycott CD/Chapter 2*). An inspection was also undertaken of a collection of recent (and known) metal detector finds recovered from the area immediately north of Takeley, where fieldwalking had not been possible. A single late Saxon coin (from the reign of King Cnut) was the only definite Saxon find, amid a scatter of Roman and medieval material. One more possible Saxon find, an iron spearhead (Fig. 3.44, no.1; Plate 3.26), was recovered from the Roman site at Strood Hall (Site 9) during this project (see Walton and Scott this volume Chapter 3).

The meagre results for a Saxon presence in north-west Essex appear to confirm what had been suspected for some time. However, the nature of the investigation may have had the effect of exaggerating the impression of an empty landscape.

The nature of the investigations

The road corridor subject to investigation was, unsurprisingly, long and narrow (40–65 m), representing a land take of *c* 115 ha. A total of 47 sites along the corridor were subject to excavation of various sizes, generally around two or more hectares. The well-worn axiom (or excuse!) among archaeologists that ‘the best remains are always just outside the trench’, may be facile but should not be dismissed out of hand in the circumstances in the light of the general characteristics of early Saxon rural occupation.

One of the most striking characteristics of early Saxon rural settlement is their dispersed nature. It has long been accepted that the growth of nucleated settlements—what we understand as villages—is a middle or late Saxon phenomenon at the earliest. Before then settlement is typically characterised as loose clusters of sunken featured buildings and/or post-built ‘halls’, often with few, if any, ancillary features or associated ditches. In this context a narrow road corridor is arguably not the best window through which to identify an early Saxon settlement—hypothetically, a 60 m wide corridor could pass through a dispersed early Saxon settlement without revealing any diagnostic features. Indeed, it could be said that the largest and clearest ‘footprint’ of any element of early Saxon rural occupation is the cemetery, and this may in part explain why early Saxon study has in the past focussed so heavily on cemeteries—because it is the easiest part of their material culture to locate. There is, however, considerable evidence that early Saxon cemeteries were not usually situated close to

settlement sites. Spong Hill in Norfolk, for example, appears to have served a whole neighbourhood (Hills 1979, 310), and the cemetery at Springfield Lyons appears to date from significantly earlier than the settlement found on the same site (Tyler 1996, 111).

Recent work by (among others) Andrew Reynolds has shifted the focus of study onto the impact (or lack of it) of these formative tribes or ‘peoples’ on the landscape (Reynolds 1999). The consensus is that the archaeological evidence suggests there was significant depopulation in north-west Essex in the late Roman period, and as Biddulph discusses in Chapter 3, the results from the Romano-British sites along the route tend to support this view. Therefore the incoming settlers, insofar as they wanted to settle on what they considered to be marginal land at all, would not have been short of room. If there was no competition for space, and (at least at first) no serious competition for land title, there was no need for the precise division of land by ditches.

Takeley Church (Site 1)

It is generally agreed that by the 7th century AD a unified East Saxon kingdom was evolving out of a coalescence of smaller groups and ‘micro-kingdoms’



Plate 4.1 Takeley Church (Site 1): the mid-Saxon earthfast posthole building at Takeley, looking north-east

(Rippon 1996, 117). The elements of one such grouping can still be identified as the Roding parishes, south east of Takeley. Bassett (1989) suggests that the parishes, forming a compact group either side of the river, may have originated in the 5th or 6th century as a single estate or territory of the ‘people of Hrotha’ (the Old English meaning of ‘Roding’), and over time became distinct but still unified sub-units.

The Takeley structure

The single Saxon building found on the A120 at Takely Church was represented by an arrangement of 31 postholes defining a roughly rectangular structure measuring approximately 12 m long by 5.9 m wide, oriented NE-SW (Figs 4.2 and 4.3; Plate 4.1). (The accepted terminology for this type of building in the Saxon period is a ‘hall’, although it should not be construed as implying any elevated status). No clear evidence was found of an entrance along either long side, although two postholes situated close together along the south-west end of the building footprint may represent one side of a doorway. An ‘end’ doorway is less typical than one centrally situated along one side, although examples have been identified, for example at Sutton Courtenay, in Oxfordshire (Hamerow *et al.*

forthcoming). The postholes outside both long sides could suggest bracing posts, assuming all postholes are contemporary. However, it should be noted that none of the postholes that held possible ‘bracing posts’ displayed a raking angle in profile, nor were there any comments to such effect in the excavators’ notes. It is perhaps more likely that these postholes supported a lean-to extension to the roof, or ‘cat-slide’.

There was some variation in the depth of postholes, as shown in Figure 4.3, although this variation should be treated with caution, given the effects of later truncation by both medieval and modern ploughing, and the archaeological stripping of the topsoil. None of the postholes contained packing stones, and all except those disturbed by root or animal action showed a similar profile, with vertical sides and a rounded base.

Dating the structure

Apart from single fragment of residual Romano-British tile in the fill of posthole 1014 (see Plate 4.2), no artefactual dating material was recovered from the fill of any of the postholes, or within the vicinity of the building footprint. However, charcoal in fill 1079 of posthole 1078 gave a radiocarbon date of cal AD 670–880 (NZA-19589 1245±35 BP).

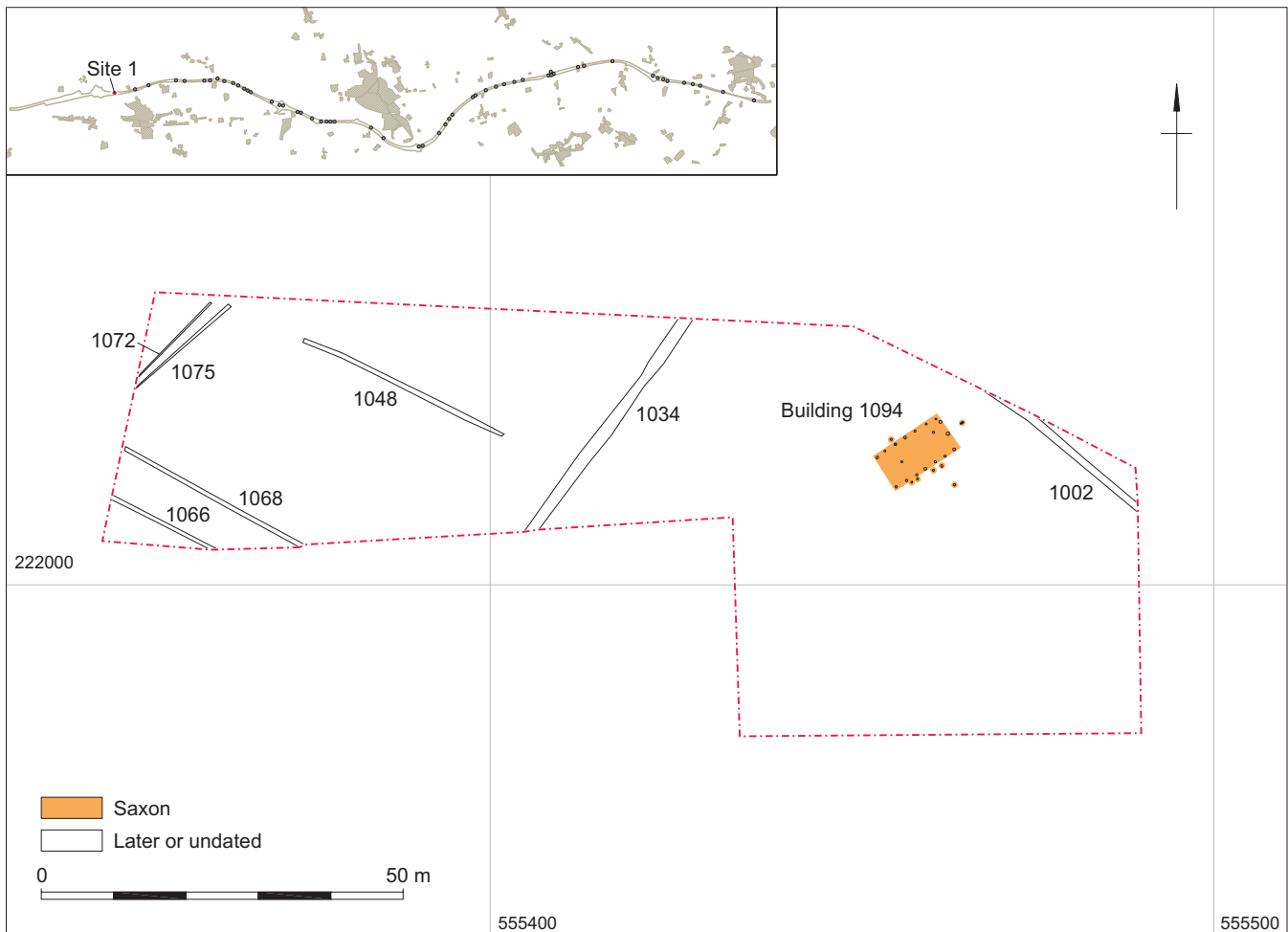


Fig. 4.2 Takeley (Site 1): overall site plan showing excavated features

In terms of its form the structure fits reasonably well into the known building styles of the beginning of the 7th to the 9th centuries (Plate 4.3). That none of the posts contained packing stones might suggest that rigidity in the frame was achieved by tying the uprights together by means of a cill beam resting on the ground surface, to supplement a similar wall plate and cross

beams at the base of the roof ridge. The timber frame would then be infilled with wattle and daub. There is little doubt that such a wall covering would require fairly frequent patching, and equally that the daub would be made ready for use close to where it was needed. The two postholes (1018 and 1080) would appear to have held aisle posts, although the presence of

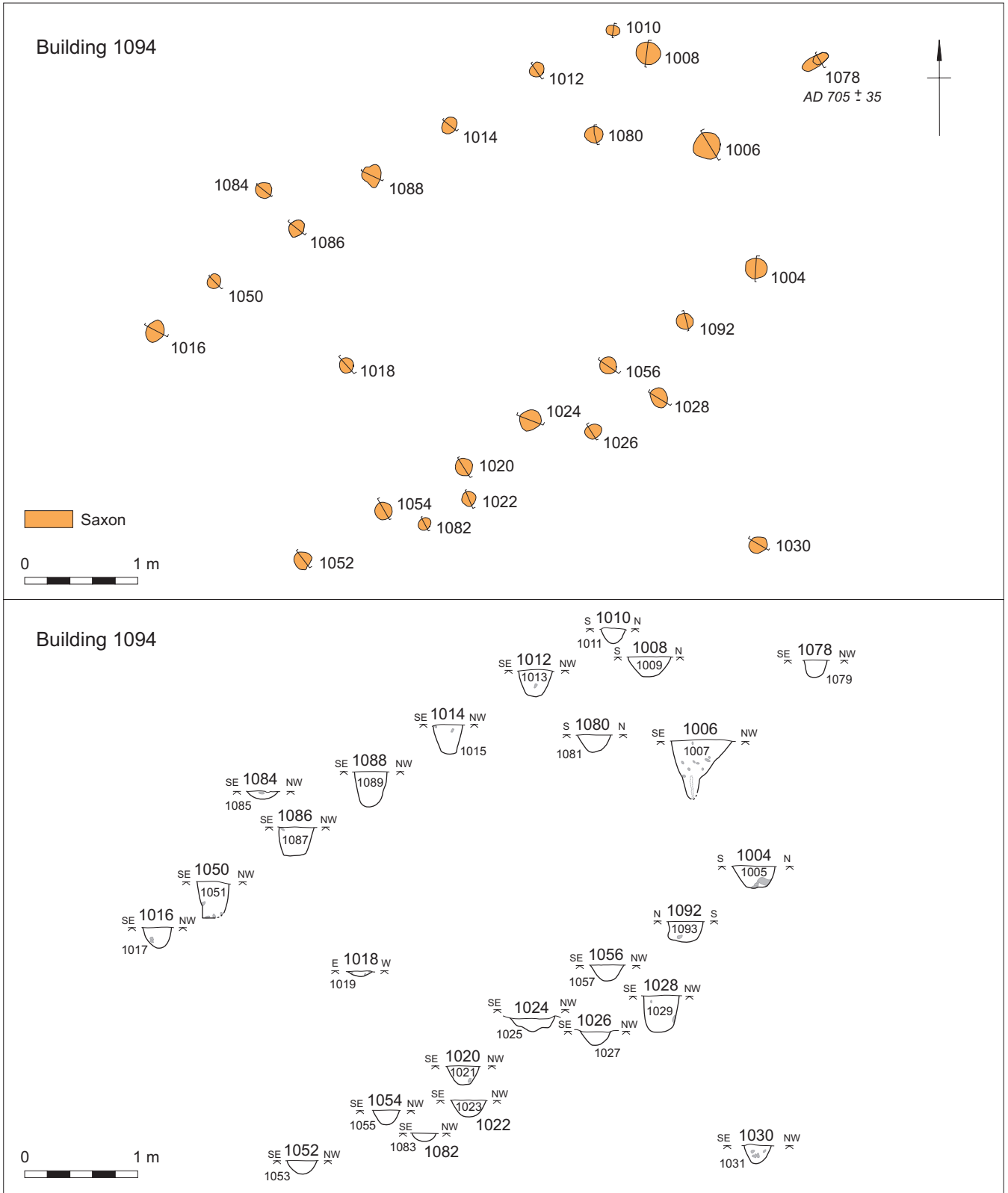


Fig. 4.3 Takeley (Site 1): detail of building 1094



Plate 4.2 Takeley Church (Site 1): detail of posthole 1014, showing residual Roman tile fragment in the fill

only two would suggest that the building was not designed to have a substantial load-bearing ceiling. The building's possible function is difficult to infer from the meagre structural evidence recovered, or the complete absence of associated artefactual material. There is nothing to suggest that animal bone or pottery would have degraded to the point of invisibility in the soil conditions prevalent on the site, nor is the degree of later disturbance (by ploughing) such as to suggest that all artefactual evidence could have been mechanically removed or destroyed. It follows then, that the building is unlikely to have been a focus of domestic occupation or activity, and most probably represents a barn or storehouse.

The Takeley settlement

If the area immediately to the north of Takeley Church can be seen (on the basis of the church fabric and the metal detected finds) as a possible location of a Romano-British settlement (see *Medlycott CD/Chapter 2*), then it is conceivable that this represents an example of re-occupation of an existing settlement in the early Saxon period, which later coalesced into a more formal middle Saxon settlement, of which the discovered building is a part.

As with building types, so with settlement types; the increasing body of evidence, gathered in the last decade or so, is suggesting that efforts to categorise types of Saxon settlement form, and types of elements within those settlements—arguably after the similar process adopted for Roman archaeology—are coming up against so many variants and exceptions to the

suggested typological framework that the exercise is beginning to lose its point. Two recent sites (Lake End Road West, Foreman *et al*, 2002; Higham Ferrers, Hardy and Charles forthcoming) have demonstrated that the archaeological manifestation of Saxon society may take unexpected forms. This of course is not to say that it will *always* take unexpected forms.

At Takeley we are left with an empty hall, probably a barn, and no sign of associated activity, at least within the immediate vicinity. It is difficult to accept that the building would have stood completely alone in an early 8th-century landscape—it must have been part of a settlement. So where could that settlement have been? The ditches in the northern part of the site are clearly not contemporary with the building, and there are no other buildings, or other features such as pits in the vicinity of the building on the north, west or south-west sides. The one feature that we could suggest is contemporary is the small watercourse, immediately to the east of the building. The use of natural landscape features as boundaries in a middle Saxon context is not at all unusual, and one could envisage further buildings to the south, towards the site of Takeley church and beyond the limits of excavation.

Approximately 100 m to the south of the site lies Holy Trinity Church, Takeley. The present building is of 12th-century origin, but clearly made use of Roman tile in its construction. This is a strong indicator that there must have been one or more Roman buildings of some sophistication in the area.

Three distinct landholdings or manors within the parish of Takeley (*Tacheleia*) are cited in Domesday,



Plate 4.3 Reconstruction drawing of Takeley Church posthole building

the largest of 3 hides. It is possible that these originated as a single landholding, and equally possible that the location of the central focus of such a holding may not correspond to the site of a later (medieval) focus.

Conclusion

Archaeology has, until recently, only been able to contribute with negative evidence gleaned from small

pockets of investigation. Any conclusions drawn were necessarily heavily qualified by the small scale of the investigations. The succession of extensive programmes of fieldwork undertaken in the last two decades—mostly prompted by the expansion of Stansted Airport—have added a large amount of data to the equation, and at last allows the accepted wisdom to be critically examined with confidence. That the conclusions reached are not necessarily at variance to accepted wisdom is not a cause for concern.

Chapter 5

Lords or peasants? The medieval and post-medieval evidence

by Alan Hardy

Introduction

If the generally accepted understanding of the Saxon period in north-west Essex is one of the slow expansion and coalescence of initially sparse and dispersed settlement, then the period from the 11th to the 14th century is one of development at an increasingly rapid pace, followed by a relatively abrupt collapse. The archaeology uncovered appears to reflect this, with a single short-lived farmstead and three other small examples of sites reflecting equally transient agricultural and industrial foci.

North-west Essex—an overview

As with studies of the Saxon period, investigations into the four centuries after the Norman Conquest have been hampered by a lack of archaeological evidence to set beside the documentary and historical interpretations. That there was a great expansion of population and settlement in this period is not in doubt, and medieval artefactual material is far more durable than its Saxon counterpart, yet once again the absence of opportunities to reveal archaeological evidence on a significant scale has meant that understanding of what is accepted as a dynamic period has still been overly reliant upon speculation and presumption.

In 1993 the Writtle Conference reviewed the situation, and Ward summarised the state of knowledge (Ward 1996, 129–35). The impact of the Conquest and the establishment of Norman control was, in places, visually dramatic, with castles such as Colchester and Pleshey, yet, in terms of landscape organisation and rural settlement, little seems to have changed (*ibid.*, 129). The documentary evidence indicates that, although the old Saxon aristocracy was removed, there was little incentive to tinker with the settlement organisation because the county was already agriculturally well-developed (*ibid.*).

Through the 12th and 13th centuries, rural settlement was clearly dynamic and fluid, with nucleated, polyfocal and dispersed communities growing and declining, responding to the fluctuating circumstances. In some cases the stimulus for change came from the landowners themselves, in the form of castle-building—as at Pleshey and Brook Walden—or the establishment of a

monastery, or the speculative promotion of a market, as at Ingatestone (*ibid.* 52). In the more heavily wooded area of north-west Essex, extensive assarting (clearing forested lands for agricultural use) took place in the 12th and 13th centuries, representing piecemeal and opportunistic expansion as a result of the burgeoning population (*ibid.* 130).

Estimates of the rural population suggest there were around 14,000 families in Essex at the time of Domesday (Powell 1990), and the proportion living in the north-west part of the county were for the most part accommodated in small hamlets and dispersed, isolated farmsteads, within a local landscape that, although still substantially wooded, was increasingly open.

It is clear that the 14th century saw a substantial decline in population in Essex (Poos 1991, 96–103), but most of the documentary evidence relates to towns and larger communities. Field surveys had identified what appeared to be smaller abandoned settlements and farmsteads, but in general the archaeological evidence was not there to clarify when, why and how they came to be abandoned (*ibid.* 131). Ward concluded that more fieldwork was needed, and on a significant scale, to clarify and add substance to the understanding based on the historical and documentary sources (*ibid.* 134).

Wade's 1997 review of the archaeology of the Eastern Counties also stressed the need for a closer and more detailed examination of the patterns of rural settlement (Wade 1997, 52). He pointed out that, while the overall pattern might be similar to that of the Iron Age or Roman period, the low population density is often a feature of dispersed, non-nucleated settlement, and thus is difficult to clarify and characterise.

Another area of concern was the environment (*ibid.* 55). What was the economic basis for the new settlement? Were they independent subsistence farmers, or were they small units within a greater economic whole?

Recent archaeological work

The progressive development of Stansted Airport has provided the long-awaited opportunity to study a large swathe of north-west Essex in detail (Havis and Brooks

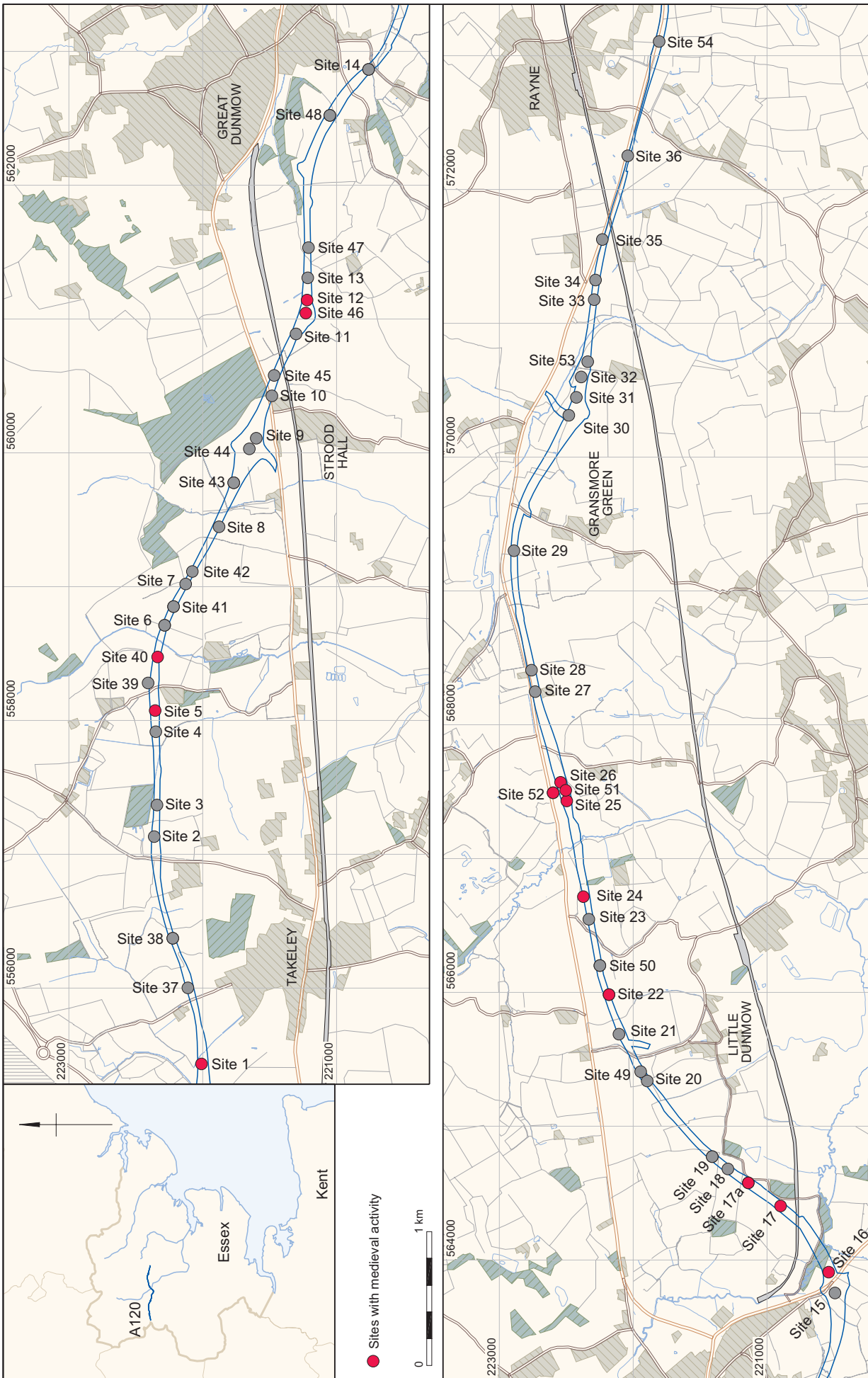


Fig. 5.1 Location map showing all A120 sites with medieval activity

2004). The large-scale programme of fieldwalking and survey, and subsequent archaeological evaluation and excavation, combined with an extensive review of the documentary evidence, enabled a very detailed picture of the area in the medieval period to be compiled. While it is not within the remit or scope of this report to reiterate the detailed results of the Stansted Project in full, a brief resumé of its findings will help set the A120 Project work in its context.

The review of the documentary evidence provided an historical context within which the fieldwork results could be set. The study area included ten Domesday manors, including some religious estates, or parts thereof; these derived from the large Saxon estates, confiscated at the time of the Norman Conquest (Havis and Brooks 2004, 540). The classic Midlands system of villages and open fields was not typical of most of Essex, generally only occurring in the extreme north-west of the county, north of Saffron Walden (Rackham 1986), although some evidence of this system was found in the study area. Generally the agriculture in the area has been biased towards arable, but with a sizeable element of pastoral farming.

There has been little in the way of industry in the area, except where it was directly related to the agricultural process. Many of the Domesday manors had a watermill or share of one. Windmills, where river access was not available, augmented these in later centuries.

In 1086 ‘...around and on the site of Stansted Airport, therefore, we must imagine the equivalent of more than four Hatfield Forests’ (Rackham 1989, 33). It has been argued that there was a considerable reduction in woodland in the decades immediately following the Norman Conquest. This is based upon the contemporary way of defining the size of a piece of woodland by the number of pigs it could feed (pannage). So for instance, in 1066 Takeley had three manors, two of which each had woodland for 1000 swine (ibid. 33); by 1086 this had been reduced to 600 swine. However, Rackham also suggests that the reduction in swine could have been because the woodland was being coppiced, rather than cleared altogether, so the pannage of a wood may not be a reliable guide to its size. Only by the later medieval period were the great woods north of Hatfield Forest reduced to small pockets of managed woodland within large areas of arable land (ibid. 33).

The settlement evidence gleaned from the fieldwalking suggested a steady rise in the number of settlement sites, to an average density of one for every 30 ha walked (Medlycott and Germany, 1994), although, given the shifting and, in some cases, transient nature of medieval settlement in the area, this figure should be taken with caution. A wide range of building types were represented at the excavated sites, the authors suggesting that the evidence supports Dyer’s viewpoint (1986), that this shows the often unrecognised complexity and sophistication of English peasant building, with structures specifically designed and

constructed to fulfil specific functions. The principal settlement site identified (and excavated) was at Roundwood, and is interpreted as part of a farmstead, comprising partial or complete footprints of four buildings, with associated enclosure ditches. The buildings were interpreted as a dwelling, an associated kitchen, and two storage structures. The whole complex was occupied for a short period, from the late 13th to the mid 14th century, and the site was not reoccupied. The reason for its abandonment was not clear, but the authors suggest the deteriorating climate in the early 14th century may have had a large part to play, given that the site is low lying and prone to seasonal water-logging. Other, more generic factors, principally the Black Death, may also have contributed to its abandonment (Havis and Brooks 2004, 545).

Further (as yet unpublished) excavation work within the Stansted study area (Framework Archaeology forthcoming) has revealed more evidence of medieval occupation, in the form of an 11th-century farmstead and a 13th-century windmill (see below).

The A120 Project

Fieldwalking

Full details of the fieldwalking programme are outlined by Medlycott (*CD/Chapter 2*). The following is a summary of those results pertaining to medieval occupation and activity along the proposed A120 route corridor (Fig. 5.1).

A total of 14 possible medieval sites were identified along the route, although some were thought to be no more than manuring spreads, and others were in close proximity to standing medieval buildings. It was noted that 21% of the identified sites were on sand and gravel, 65% on clay, 7% on sandy clay and 7% on alluvium.

Settlement sites

Stebbingford Farm (Sites 25–6 and 51–2)

An early element in the A120 programme was the excavation of the site at Stebbingford, in 1993 (Medlycott 1996) (Fig. 5.1). The site lies on the south-west facing slope of the Stebbing Brook valley, encompassing a varied surface geology including gravelly clay, gravels, boulder clay and silty hillwash. First identified from aerial photographs in 1976, fieldwalking and evaluation trenches confirmed its significance in 1991, and full excavation of an area of 1.2 ha took place in 1993. The results represented a complex of four buildings, associated yards, trackways, field systems and a horticultural area (ibid. 102).

Medieval occupation of the site began in the mid 12th century and continued until the mid 14th century, and was broken down into four stratigraphic phases of development. The style of the buildings varied, and there were similarities in some cases between the build-

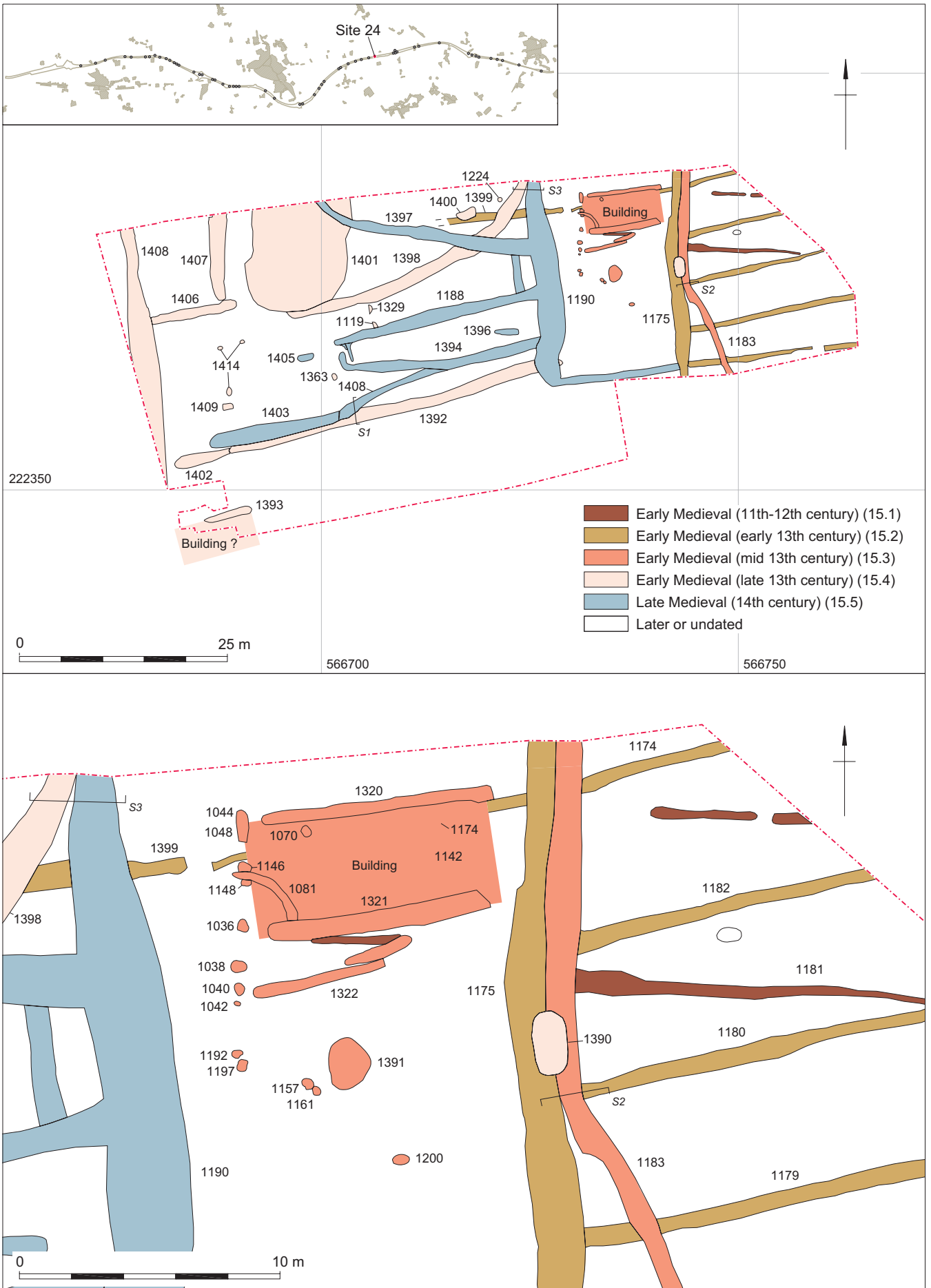


Fig. 5.2 Blatches (Site 24): overall site plan

ings at Stebbingford and those found at Roundwood and the other sites at Stansted. However, at Stebbingford the use of beamslots, rather than earthfast posts, arguably points towards a more sophisticated building practice, and the construction of a cellar in the final building phase (unique in a rural building in Essex) may also be an indicator of more sophistication and therefore higher status.

From the archaeological results, the farm economy centred on a mixed regime of cereal and other crops (vegetables, fruit and nuts), and animal husbandry, with all the principal domestic species being present. While most of the artefactual evidence was, unsurprisingly, related to domestic activity, there were sufficient fine-ware fragments in the pottery assemblage to suggest a reasonable level of affluence for the inhabitants. The author considered that the inhabitants would have been able to produce sufficient surplus to trade for 'the finer things of life' (*ibid.* 173–4). No definitive reason for the abandonment of the farm in the mid 14th century was evident in the archaeological record, although the authors speculated that the Black Death, climate change, or the repercussions of the Peasants Revolt could have been contributory factors.

During the main programme of fieldwork on the A120 corridor, three medieval sites were identified and subjected to investigation. One represents rural settlement in the form of a short-lived farmstead of modest status, and two represent the presence of medieval industry in the area. Further isolated and essentially undiagnostic features were found on one other site.

Blatches (Site 24)

The site is situated on the shoulder of the north-east facing slope of the Stebbing Valley, almost directly opposite the site of the farm at Stebbingford (Figs 5.2–3). The underlying geology of the area is chalky boulder clay, overlaid by silty clay subsoil, possibly a relict ploughsoil, but more probably colluvial in origin. Archaeological features were cut into this deposit, and sealed by a modern ploughsoil/topsoil.

The phasing

A sequence of five phases of site development was defined (see Fig. 5.2). The phasing is based upon stratigraphic relationships (where present), artefactual dating and spatial relationships. The definition of features, and the clarity of layers in comparison with the natural subsoil was in some areas poor, inevitably reducing the confidence in the interpreted stratigraphic relationships. Therefore the distinction between phases 15.3 to 15.5 in particular is open to question.

Phase 15.1 (11–12th century)

It is clear that the first phase of activity, comprising two shallow gullies, is quite distinct in its orientation from later activity, and it is therefore reasonable to suggest

that it represents unrelated activity, at a time before the settlement was formed.

The chronological dating of this phase is difficult to define with any confidence. Two sherds of 11th- to 12th-century pottery were recovered from the gully fills, along with two sherds of 1st- to 2nd-century Roman pottery. The latter appeared quite abraded, and, as other Roman sherds were recovered from other feature fills on site, it is considered to be residual, either the detritus from a nearby (but undiscovered) Romano-British settlement, or the result of manuring. Thus it is suggested that Phase 15.1 features could date from the late 11th–12th century.

The function of the gullies is by no means clear, although one possibility is that they could represent drainage ditches bordering a trackway; the distance between them is similar (*c.* 6 m) to the distance between the trackway ditches at Stebbingford Farm (Medlycott 1996, fig. 4). There was no trace of metalling in the space between the gullies at Blatches, but it's worth noting that there was no trace of metalling on the Stebbingford trackway either. An alternative explanation for these two gullies is that they represent an early version of the Phase 15.2 drainage channels (see below).

If a medieval date is accepted, then whatever the function of the gullies, it would seem to indicate an early medieval presence on this side of the Stebbing Brook Valley.

Phase 15.2 (Early 13th century)

The phase is represented by an orderly arrangement of five parallel shallow gullies, oriented east-west, four of which terminate at a slightly deeper north-south ditch, one continuing to the west for approximately 20 m. All the gullies extend beyond the east end of the site. The gullies could represent drainage channels alongside slightly raised cultivation beds, apparently situated away from any domestic focus. The artefactual evidence supports this contention; only three sherds of 13th-century pottery were recovered from the ditch and gully fills. Given the absence of features of this phase on the western part of the site, it is suggested that the domestic focus is to the east of the site.

Phase 15.3 (Mid 13th century)

This phase sees the first clear domestic focus on the site, in the form of a small building and associated yard, bounded by a ditched enclosure (1183; Fig. 5.3, section 2). The eastern side of the enclosure was formed by the north-south ditch from Phase 15.2. No clear evidence of a ditch boundary to the western side of the enclosure was identified. However, the Phase 15.5 ditch 1190 appears to define a boundary line from earlier phases, and so it may represent an original enclosure boundary periodically re-dug.

The footprint of a rectangular building measuring approximately 10 m west-east by 5 m north-south was defined by two shallow flat-bottomed gullies, repre-

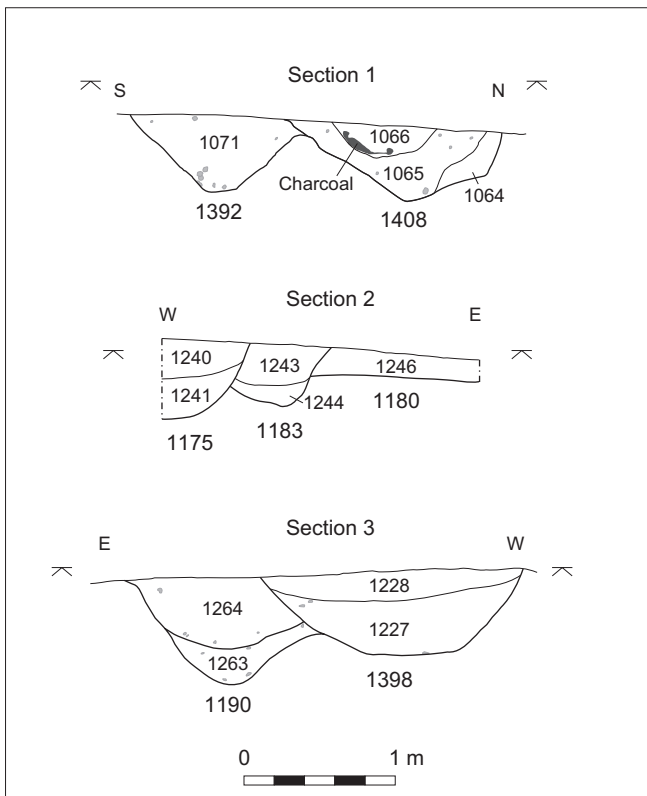


Fig. 5.3 Blatches (Site 24): selected sections

senting slots for the cill-beams of the long walls. The fills of both gullies contained—along with pottery and animal bone—fragments of fired clay, probably derived from the daub walls of the building. The west and east end walls of the building were defined by postholes, and a very shallow gully, respectively. There was no evidence of a doorway in either long wall, and no evidence of any internal partition. However, a curving flat-bottomed gully (1081) extended from the mid-point of the western end wall to the southern wall. This may have had a structural function, or may indicate some internal feature, although no similar feature in buildings of this date and type has been identified.

The line of postholes representing the western wall extended to the south, possibly defining a small paddock or wind-break. In this (sheltered?) area were a sizeable rubbish pit (1391) and the remains of a rough cobbled yard surface.

The structural evidence, along with the modest finds assemblage suggests a small farmstead of low status.

Phase 15.4 (Late 13th century)

There is some evidence that this phase sees the movement of the settlement to the west. Certainly the eastern side of the Phase 15.3 enclosure goes out of use and is backfilled, as a large pit (1390) is dug into the line

Medieval and post-medieval metalwork

by Philippa Walton and Ian Scott

The medieval and post-medieval occupation is concentrated on the sites at Blatches and Clobbs Wood. Medieval and post-medieval finds were also recovered from Rayne Roundabout and Parsonage Lane, and from adjacent to Takeley Church by a metal detectorist.

Blatches produced a limited assemblage comprising 30 pieces of metalwork, including 24 pieces of iron, 4 pieces of copper alloy and 2 lead objects. The iron includes 21 nail fragments, 2 horseshoe nails and an unidentified iron lump. The lead comprises a pistol or musket ball, and an irregular oval piece of thick lead sheet dished in the centre. The copper alloy comprises a small plate or armour fragment, two buckles and a fragment of rod bent into a U-shape.

Nine recorded metal finds were recovered from Clobbs Wood. All iron, they comprise eight nail fragments, and a fragment of strip.

From the vicinity of Takeley Church, there are various metal detector finds of medieval and post-medieval date. These include coins, tokens, an arrowhead, a brooch, a pendant, a button, nine buckles, thimbles, crotal or rumbler bells, clasps, a seal, intaglio, keys, a whistle and a lid.

The medieval and post-medieval finds from Rayne Roundabout were found on site with Romano-British occupation. The finds include a scythe blade fragment which is short, but has the distinctive reinforcing rib along the back edge of the blade. The fragment is unstratified and could be medieval or later in date. Other finds include a horseshoe and horseshoe nails dated to the medieval or post-medieval periods on typological grounds, a probable table fork and a patten ring.

of the ditch. A large quantity of pottery, bone and fired clay was recovered from this feature, which, when taken into consideration with similar material from the early phase of the western ditch, suggests the building was demolished and the site cleared.

That ditch 1190 remained as a principal boundary ditch is indicated by the fact that the two main east-west ditches (1392, 1398) of this phase ran up to the line of 1190, but not beyond it (Fig. 5.2 and 5.3, section 3). The two east-west ditches, some 15 m apart, linked to another north-south ditch (1408) at the western edge of the site, approximately 35 m from ditch 1190. Within the area defined by these ditches was a scatter of small pits and postholes, but no evidence of a structure. However, significant quantities of domestic rubbish in the form of pottery (see Fig. 5.4 for a selection of pottery from the site), fired clay, animal bone and oyster shell were recovered from this area.

To the south of the enclosure, in the south-west corner of the site, was possible evidence of a building, in the form of a east-west gully (1393), which being flat-bottomed and steep sided, could represent a beamslot for the north wall of a structure extending under the

southern baulk. Significant quantities of fired clay and pottery were recovered from the gully fill.

To the north of the large east-west ditches was a small rectangular enclosure and a large area of pitting. Those pits that were excavated appeared to average approximately 1.2 m deep, and contained relatively sterile backfill, untypical of domestic rubbish disposal. Though this area was not fully excavated, gravel quarrying seems the most likely reason for these pits.

Phase 15.5 (14th century)

Again, at least part of the north-south boundary ditch 1190 appears to have been retained. No features of this phase were identified to the east. To the west, the Phase 15.4 ditches extending from 1190 were backfilled and a new arrangement of ditches established (Fig. 5.3, section 1). It is not clear if any or all of the ditches, or the possible building in the south-west corner, survived in this phase. However, the presence of pottery, animal bone and fired clay within the fills of the Phase 15.5 ditches is a strong indicator that domestic activity, even if situated beyond the excavation area, was still present in this period.

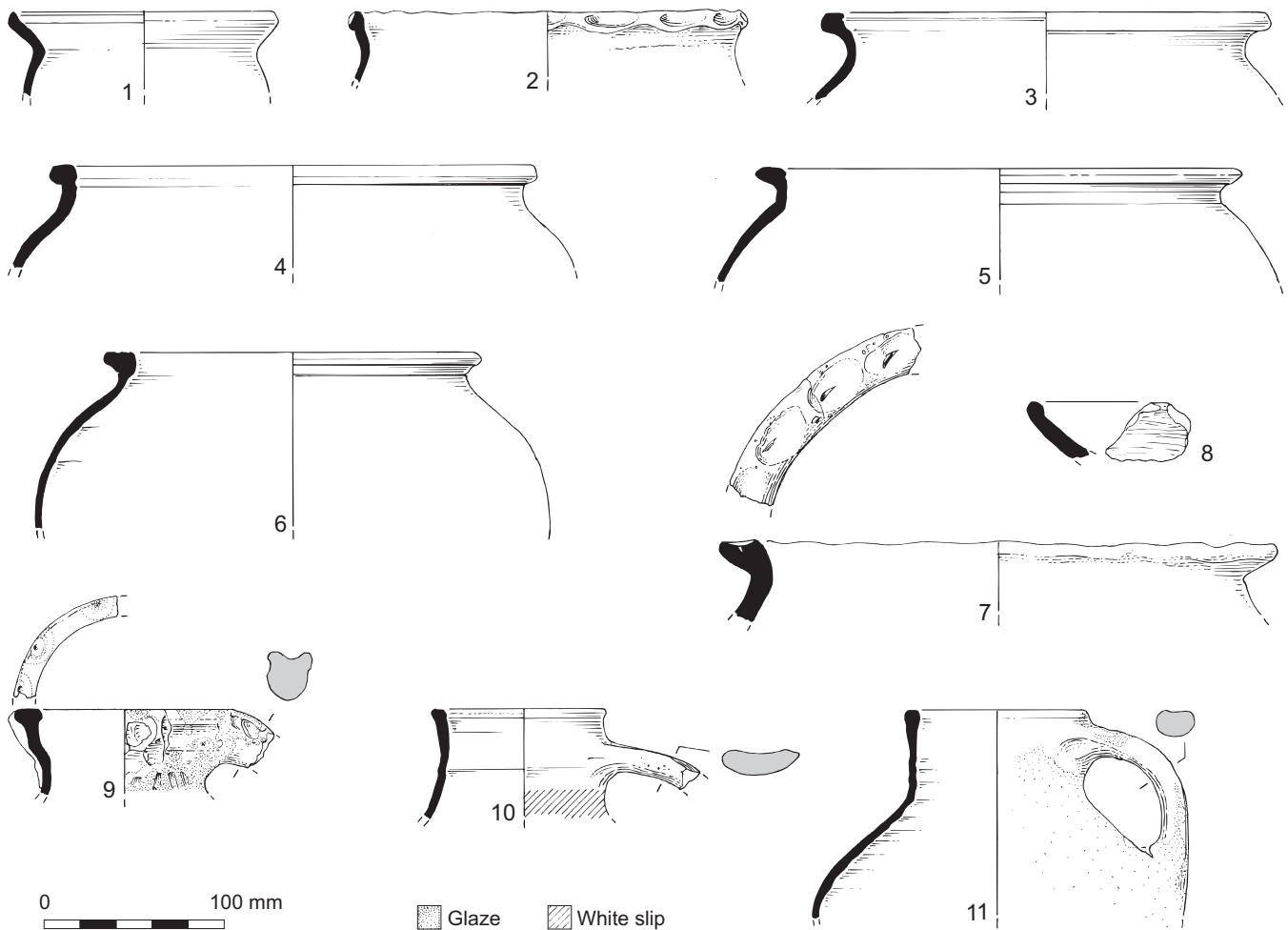


Fig. 5.4 Blatches (Site 24): medieval pottery

Discussion

In the possible spectrum of rural settlement, the sum of the evidence would suggest that Blatches lies at the more modest end of the scale, compared to, for instance, the contemporary settlement across the Stebbing Valley at Stebbingford (Medlycott 1996). However, before examining what the evidence can say, it is worth restating that we are not looking at the complete settlement.

There is nothing in the archaeological record that suggests that the settlement uncovered at Blatches evolved from any early medieval or late Saxon predecessor. However, there are signs that some form of

Roman settlement existed nearby; a scatter of 2nd-century pottery, and a quern fragment hint at occupation, although no features were found (see Biddulph Chapter 3 and *Shaffrey CD/Chapter 4 stone report*). This discontinuity of occupation is consistent with that seen across north and west Essex. The marked depopulation of the area in the early Saxon period, and the subsequent slow revival has been commented on by various researchers (ie Wade 1997 and most recently, Havis and Brooks 2004; see Chapter 4).

Various factors for this demographic trend have been suggested, but the most likely are the preference of the early Saxons for the lighter soils of the river

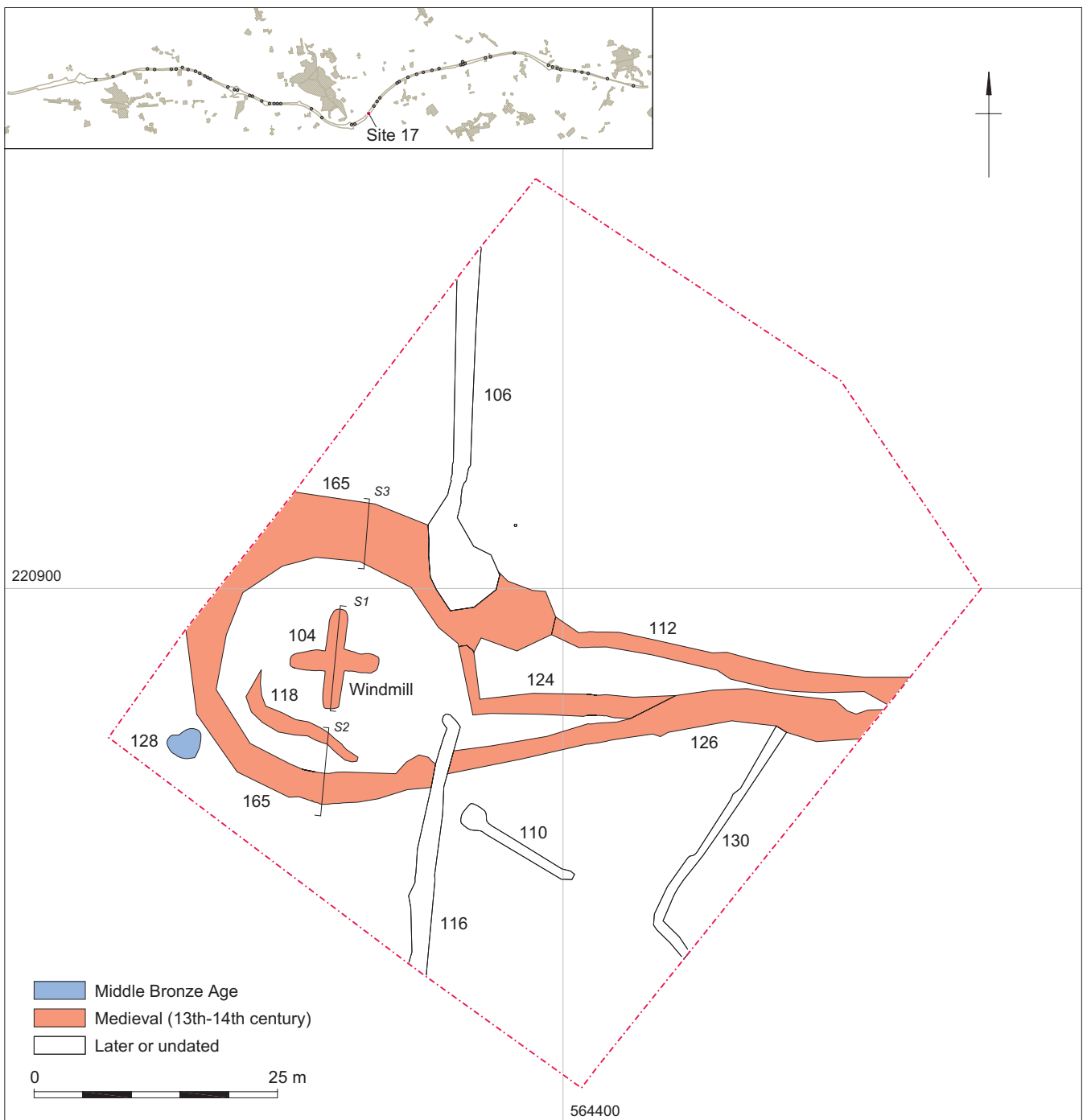


Fig. 5.5 Clobbs Wood (Site 17): overall site plan

valleys, perhaps coupled with the migration from the boulder clay uplands by the relict Romano-British population.

In the later Saxon period, the establishment of manorial estates, along with population increase and improved farming methods, meant that the once unattractive uplands became viable options for new settlement.

The abandonment of the settlement

Rural settlements, and by this we must mean all size and status of settlement from manors down to single farmsteads, were, as Lewis *et al.* assert (2001, 188) not only objects, they were ideas as well. We should not look only to economic reasons for their decline – or indeed their establishment. A multitude of factors affected their fate, from demography and population pressure to politics and environmental changes. In the whole scale of settlement size, the single farmstead is typically the most sensitive to any of these factors, and arguably the most likely to succumb to adverse circumstances. Given the paucity of the archaeological record of their existence, it is not surprising that an individual farmstead will not necessarily tell us why or how it either came into being or ceased to be. Generally speaking, informed speculation plays a larger than desired role in the interpretative process.

Industrial Sites

The A120 Project produced two sites displaying evidence showing that, where rural settlement

expanded, there—in response—would go related industry, to service both the people and their livelihoods. However, just as the embryonic settlements were sensitive to circumstances and prone to abrupt collapse, so too were the related industries. Once demand for their product vanished, so did they.

Clobbs Wood Windmill (Site 17)

The site revealed the location and surviving structural elements of a timber-built post-mill (Figs 5.5–5.6; Plates 5.1–2). Despite the poor state of preservation of the surviving timbers, a reasonably clear interpretation of the likely structure can be suggested.

Design and development of the post-mill

The post-mill is the earliest form of windmill in England. The use of wind power to drive millstones originates in the eastern Mediterranean and it seems likely that the idea was brought back by returning Crusaders (see Lewis 1993, 141–89). The earliest references to windmills in England (*‘molendinum ad ventrum’*) date to the last two decades of the 12th century. By the beginning of the 15th century it has been estimated that there were over 4000 windmills in England (Watts 2002, 103).

The principal characteristic of a post-mill is that the entire mill structure is supported on a massive vertical shaft, and can be rotated around it (in medieval times by human or animal power, later by wind driven sails) so that the mill sails always face into the wind. The archaeological signature of a medieval post-mill, quite literally

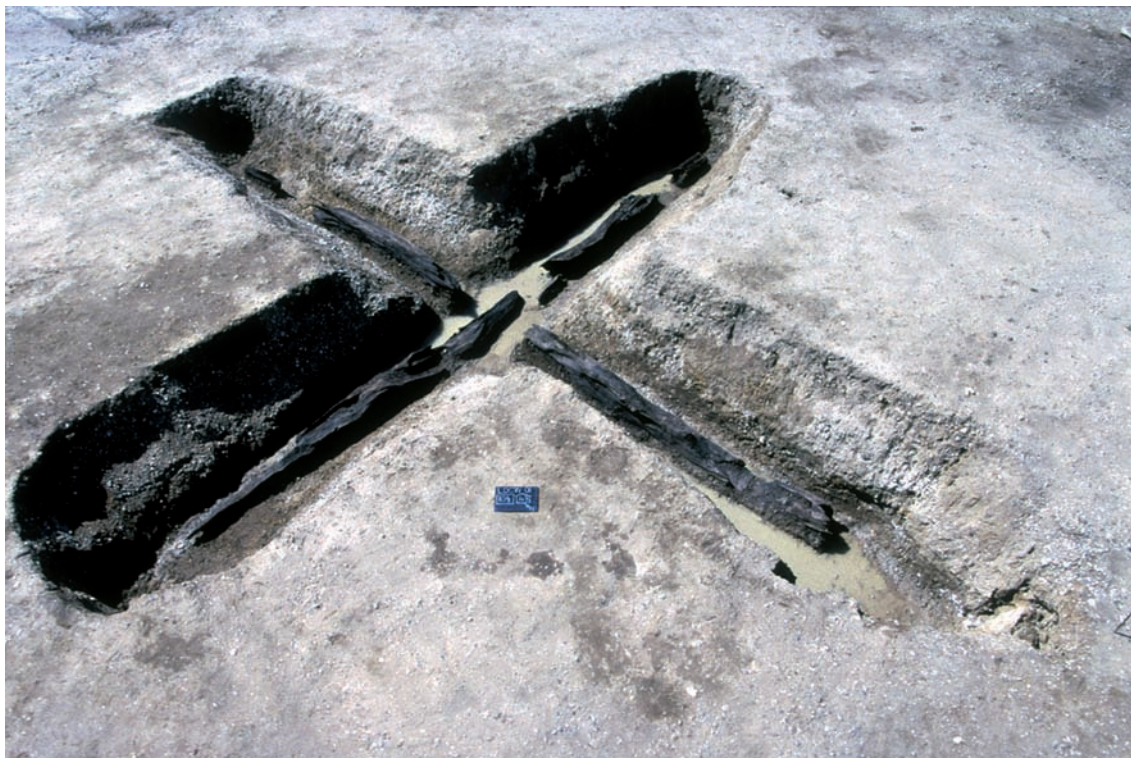


Plate 5.1 Clobbs Wood (Site 17a): cross trees of the mill, looking north-west

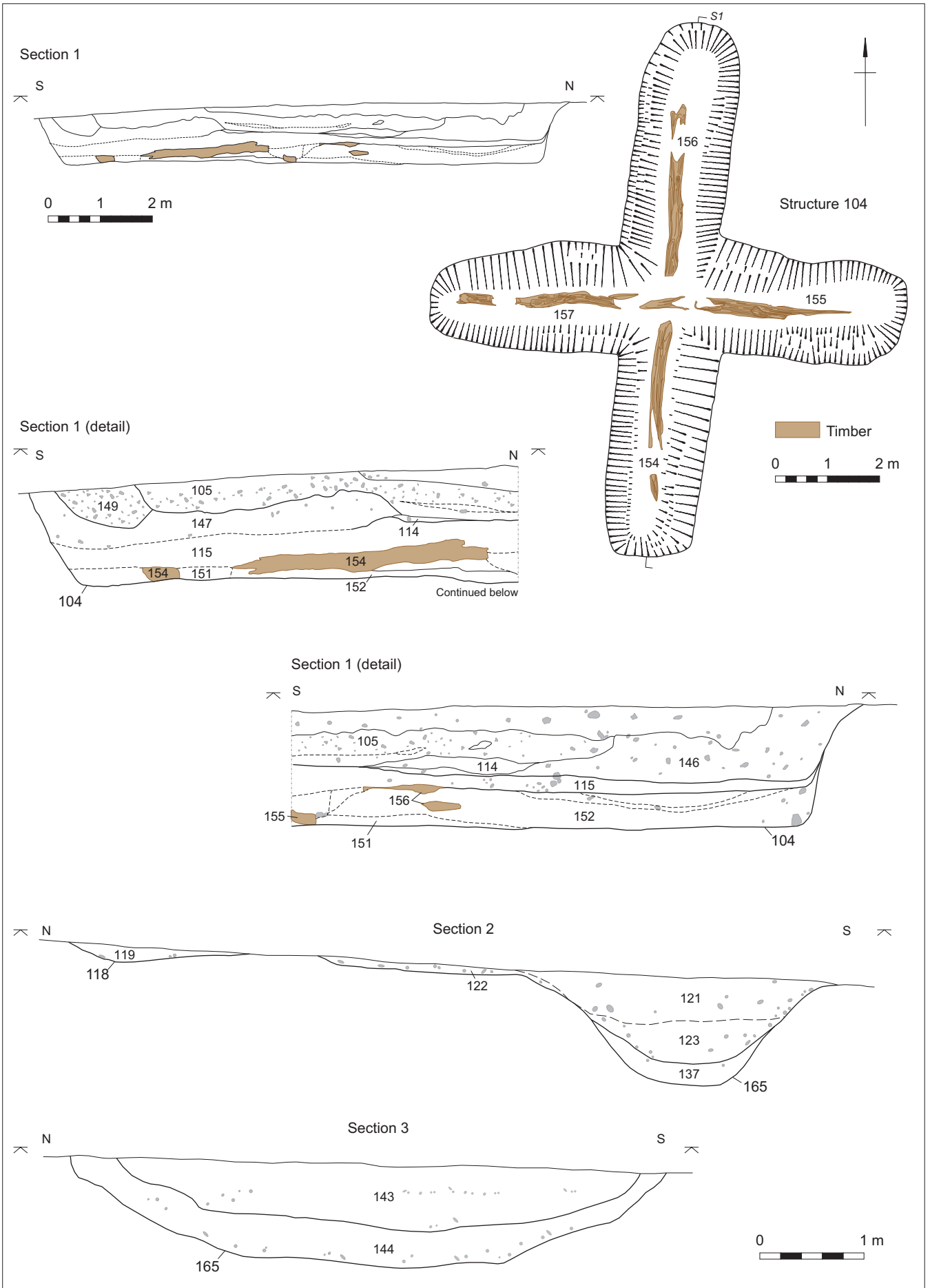


Fig. 5.6 Clobbs Wood (Site 17): detail of windmill structure

its 'footprint', is the mill mound with the impression (or crop mark) of the typical cross-shaped foundation of the structure (Fig. 5.6, Plate 5.1). While this frame ('the cross trees') located the base of the central shaft, the weight of the superstructure was transmitted straight down the shaft and out to each arm of the cross trees by a brace, or 'quarter bar'. To judge by manuscript illustrations the cross trees and quarter bars of early post-mills were exposed, possibly implying that the mills were constructed on the ground surface, not on mounds. A photographic portfolio by Reinhard Krause (1999) of derelict and working windmills in eastern Germany depicts several examples of the wooden mills constructed in this way, and standing on flat ground. Plate 5.2 depicts an artist's reconstruction of a medieval post-mill, displaying the lower part of the mill including the central shaft, the cross trees and the quarter bars.

The later development of the mound enclosing the base of the windmill is seen as a means of providing support for the mill structure. It has also been suggested by Watts (2002, 106) that the shape of the mound would have provided an improved airflow for the sails.

At Clobbs Wood the mill earthwork appeared to be specifically constructed for the mill, at the most suitable topographical point of the landscape. This is in contrast to the recently discovered post-mill on the south-east

side of Stansted Airport (Framework Archaeology, forthcoming). There a similarly designed post-mill, with the trademark footprint of the cross-trees surrounded by a deep circular ditch was revealed. The cross-trees trench was slightly smaller (approximately 7.9 m across as opposed to between 9 and 10 m at Clobbs Wood). No remains of the cross-trees themselves were revealed in the trenches. The dating from the ditch and cross-tree trenches suggests a similar date to Clobbs Wood, namely between the 12th and 13th centuries.

In some cases the mounds were constructed by digging a circular ditch around the site of the mill, and piling the material around the already erected mill structure. However, at Clobbs Wood the cross trees' trench (104) appeared to have been dug from the existing ground surface down as far as the water table (which was evident during the archaeological excavation). Presumably then the material dug from the surrounding ditch was dumped around the mill structure, improving its stability. As is mentioned above, the third variation was to exploit an existing earthwork, such as a surviving prehistoric barrow. One such example is the mill revealed in the excavations at Stansted Airport (see below).

The location of windmills in the region

In each of these construction methods, on the downwind side of the mill (that is, away from the turning sails), a causeway across the ditch would be sited to allow access to the mill. In the case of the Clobbs Wood the causeway was sited on the east side of the mound. The aspect of windmills in this part of Essex deserves wider consideration, and raises some interesting facts. A total of 13 windmill sites (including Clobbs Wood) are either depicted on Chapman and Andre's map (1777) or recorded on the SMR in the study area of the road corridor. While it is accepted that the prevailing wind was (as it is today) from the south-west, it is evidently not the case that windmills were always situated on south-west facing slopes. More than a third (39%) were built on slopes facing north, east or south-east. Furthermore the visibility of the 13 mills—that is, the area of the landscape that could be seen from the site of the mill—varied considerably. It's reasonable to suggest that in a broadly flat landscape, such wind variation as might be encountered could be easily accommodated by the facility of turning the entire mill on its axis. The results also suggest that other factors, such as proximity to roads, or landownership probably played a large part in the process.

The rotating superstructure of the mill had to be strong enough to support the massive sail assembly and contain the milling equipment, yet also light enough to be turned, and flexible enough to withstand the vibrations of its operation and the stresses incurred while being rotated, without breaking up. It was therefore likely that the heavy framework of the superstructure



Plate 5.2 Reconstruction of the windmill at Clobbs Wood

was clad in light wooden boards, which would offer protection from the weather but unlike wattle and daub would be flexible enough to absorb the torsional stresses (see Plate 5.2).

The mill was designed to rotate so that the sails were always facing into the wind. To provide the leverage to rotate the mill structure when necessary, a long tail pole extended from the back of the mill down towards the ground. This could be pushed, either by human or animal effort, to turn the mill about the central shaft. In some cases a shallow ditch, or even a paved path marks the track worn by the feet of the pushers. Such a feature (ditch 118) was found at Clobbs Wood, although interestingly, only on the southern side of the mill. Its absence on the north and east sides is almost certainly due to truncation by modern ploughing, although its presence does indicate that, at least on occasion, the mill was turned to face the north/north-east.

The chronology of the mill

Artefactual dating was restricted to residual Romano-British material and two sherds of pottery dating to the 13th–14th century, all recovered from the deposits excavated from the cut features containing the mill remains.

The surviving oak timber of the cross trees was too badly decayed to attempt dendrochronological dating, so establishing a date for the structure is reliant on artefactual evidence and map regression. The construction of the mill is likely to have taken place on a green site, so the scarcity of finds from the backfill of the cross tree trenches and the mound ditch is not surprising. Such pottery as was found suggests a 13th- or 14th-century date, which would therefore at least offer an approximate *terminus post quem* for the mill.

A later development of post-mills saw the base of the central post and the top of the mound enclosed under a roofed timber or brick structure, and many surviving 18th-century examples of these exist at, for instance, Brags Mill at Ashdon, and Aythorpe Roding. The fact that the Clobbs Wood mill mound revealed no trace of any enclosing structure built on top of the mound is further support for a medieval date.

The construction of a mill represented a substantial investment and would be unlikely to be undertaken in the medieval period by other than a manor or a religious house. However, speculation as to the ownership of Clobbs Mill is disappointingly inconclusive. The nearest (medieval) manor would appear to be that of the Priory, Little Dunmow to the north-east of Clobbs Wood. However, the estate map of 1631 clearly indicates that the land boundaries of the manor, at least by this time, did not extend as far as the area of Clobbs Wood. A closer property (Langleys) lies to the west of the mill. In surviving deeds of 1647 (Essex Record Office D/DHf/T51) Langley is listed as part of the manor of Leaden Roding, implying that manorial resources could have been available to construct a post-mill on Langley

property—property which may have included the Clobbs Wood site.

The milling operation

The operation of a mill would require, in addition to the mill itself, nearby storage facilities such as a granary or storage barn, not to mention the dwelling of the miller. No evidence of associated buildings or structures was found in the investigated area. While modern truncation may have accounted for lightly founded storage buildings, the absence of any significant domestic remains in the form of pottery or animal bone scatters suggest a domestic/storage site was situated outside the area of investigation. A possible candidate may be the area of Clobbs Wood itself. The wood is not shown on the earliest map of the area, that of Chapman and Andre of 1777, which suggests that it was not established in antiquity. If the area had contained the miller's house and storage facilities, it is reasonable to suggest that, once the mill had gone out of use, and the site was deserted, the area of derelict buildings would have evolved into a patch of natural waste ground and ultimately into woodland. Clearly this hypothesis can only be tested by further investigation of the wood itself.

The location of the mill

The Chapman and Andre map of 1777 shows no indication of a mill or earthwork on the site or in the immediate area. This is evidently not the result of an oversight, as, where mills exist elsewhere they are clearly depicted as such. Similarly, the 1st edition OS map of 1881 shows no sign of a mill, although interestingly it does show what appears to be a faint track or path leading west from the road past Clobbs Woods, precisely along the line of the mill causeway, towards Langley.

The end of the mill

The timber used in the foundations and main structure of a windmill would have been massive in proportions and extremely valuable. Hence the salvage of all useable parts of the timber structure would have been a priority. The only part that would be too rotten to be useful (or too much effort to excavate) would be the cross trees. If it is assumed that the quarter bars were originally jointed to the ends of the cross trees, then their removal might well entail damage to the ends of the cross trees, which may explain the gaps in the cross trees at Clobbs Wood.

Conclusion

In conclusion, the mill at Clobbs Wood appears to have been constructed in the 13th or 14th century, and probably operated for no more than a century or so, and possibly a good deal less. Windmills could be destroyed by fire, or catastrophic structural collapse, perhaps occasioned by gales. In the case of the mill at Clobbs Wood, there was no ash layer or any obvious signs of

catastrophic collapse. Perhaps its demise was simply due to lack of demand in the depopulated later 14th century.

The incidence of abandoned medieval windmills in the north-west part of Essex could suggest that they were a more transitory element of rural industry than we may assume. Vulnerable to the ravages of the elements and time in a way that watermills were not, they can be seen as sensitive barometers of fluctuations of prosperity and agricultural demand.

The significance of the Clobbs Wood mill is enhanced when considered in conjunction with the more recent discovery of the site of a post-mill found south-east of Stansted Airport (Framework Archaeology forthcoming). This was situated on the western edge of the medieval settlement originally identified by fieldwalking and excavation at Roundwood, during the Stansted Project (Havis and Brooks 2004). While Clobbs Wood Mill was clearly a planned enterprise, with its own purpose-built earthwork, the Roundwood example, situated on a re-used prehistoric barrow, could suggest a more opportunistic enterprise. In any event, neither mill appeared to survive beyond the 14th century. Were they victims of the depopulation and social disruption of the times? In the case of the latter, the entire settlement of Roundwood appears to have been abandoned in the 14th century, although whether through disease, flooding or social unrest is uncertain (Havis and Brooks 2004, 545).

The pottery kilns west of the River Roding (Site 40)

Further evidence of the medieval expansion in the area, is shown by two pottery kilns and two associated pits on the west bank of the River Roding (Fig. 5.7; Plates 5.3–4).

Both kilns appear to be of a similar design (Figs 5.8–9), and together with the pottery recovered suggests they were part of the same short-lived industrial episode. The kiln design equates most closely to Type 1a of Musty's typology of medieval pottery kilns (McCarthy and Brooks 1988, fig. 16). This type of kiln typically comprised one chamber, one flue, and no internal dais or fixed platform for the pots. This kiln type originated in eastern England, and first appeared in the late Saxon period, although later medieval examples are known.

Although the kilns discovered revealed no *in situ* kiln furniture, some informed speculation can be undertaken, based on the elements of the structure that did survive. The fired clay 'shelves' that were evident on either side of the firing chamber some 0.5 m below ground level seem most likely to have supported the platform for the pots (Plate 5.4). The platform itself, of which no trace was found, presumably consisted of removable bars made of fired clay. These would have provided support for the pots while preserving the airflow from the flue, up through the pots and out of the roof of the kiln.

It is tempting to suggest that the two pits located just to the west (Fig. 5.10) may relate to the construction of

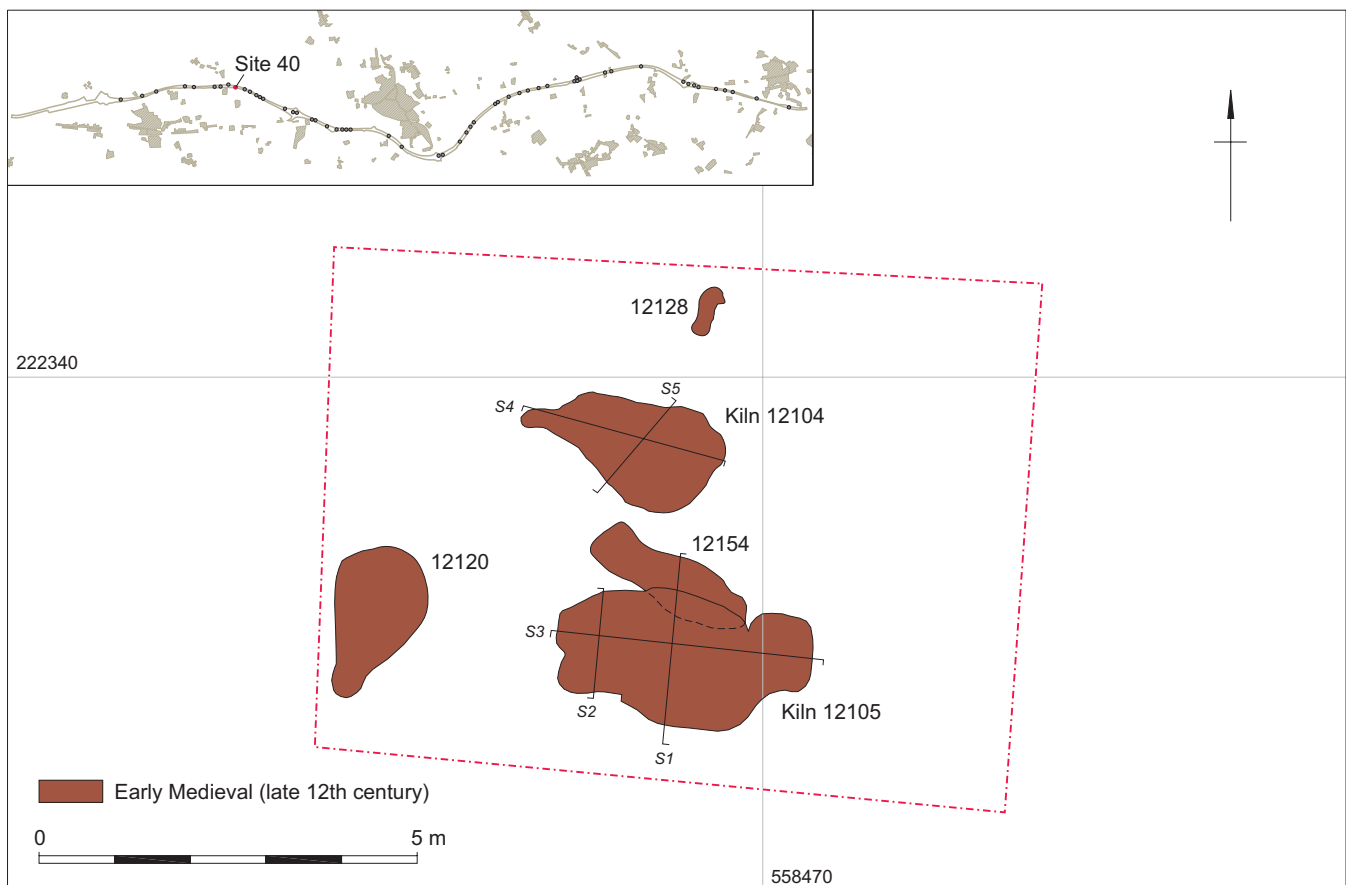


Fig. 5.7 West of River Roding (Site 40): overall site plan



Plate 5.3 West of River Roding (Site 40): kiln pits 12105 (foreground) and 12104 (background), looking north

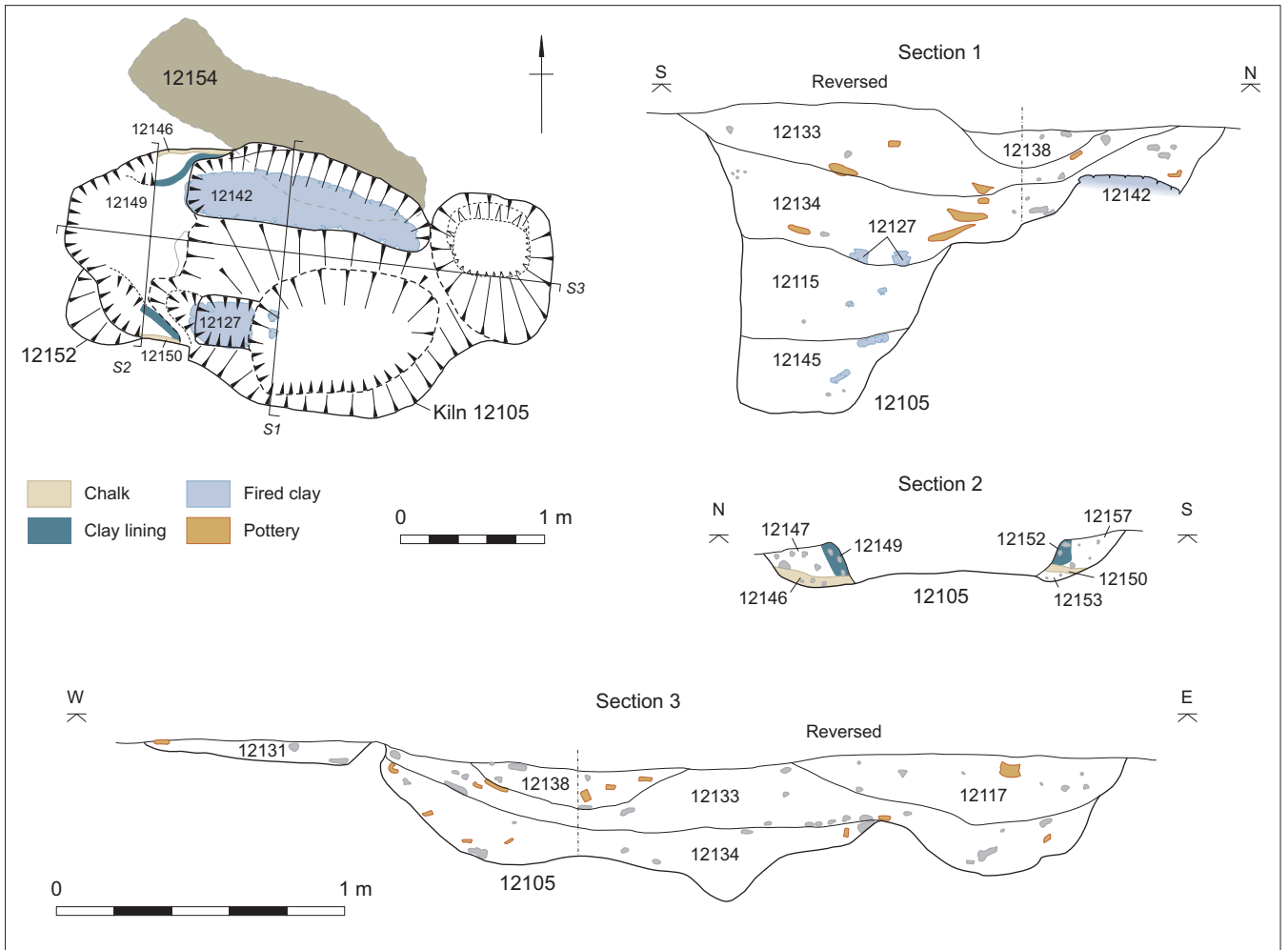


Fig. 5.8 West of River Roding (Site 40): plan and section of kiln 12105



Plate 5.4 West of River Roding (Site 40): detail of kiln pit 12105, showing clay shoulders 12127 and 12142, looking west

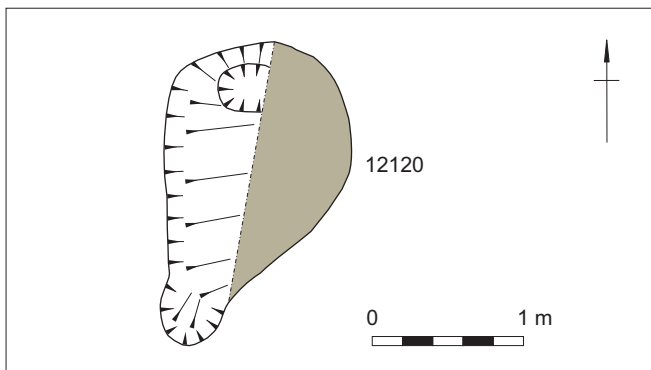
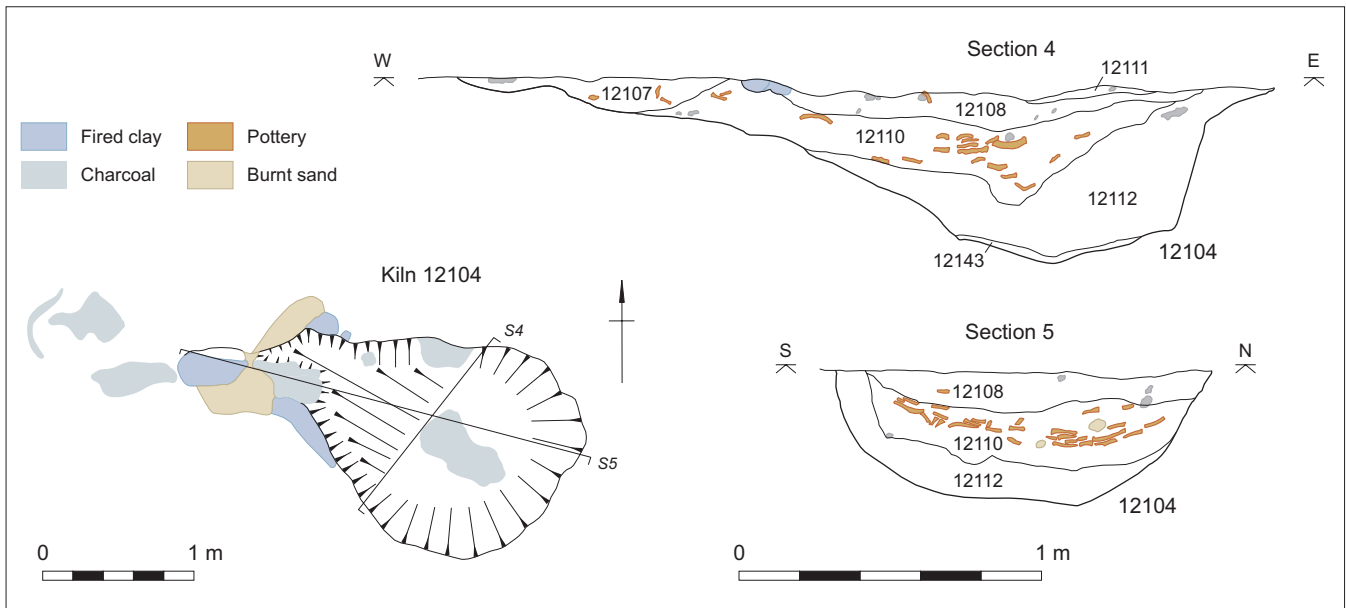


Fig. 5.10 West of River Roding (Site 40): plan of pit 12120

Fig. 5.9 West of River Roding (Site 40): plan and section of kiln 12104

the kilns, each representing excavation for sand to mix with clay, the result being used to construct a clay dome over the firing chamber. Analysis of the fragments of wasters from the site shows no appreciable variation in either fabric composition or vessel type produced. The most likely scenario is that the two kilns represent consecutive examples of a small-scale pottery industry. Typologically the pottery dates to late in the 12th century (see Fig. 5.11), and the kiln characteristics are not inconsistent with that date.

Medieval Pottery

by Lorraine Mephram

Blatches

The site at Blatches (Site 24) produced a relatively small medieval assemblage of about 9.5 kg. This ranges in date from late 12th to early 14th century, and comprises a range of sandy coarsewares, with a smaller proportion of finewares (Fig. 5.4). There remains the possibility of some earlier (11th/early 12th century) residual material in the form of a few sherds of shelly and sandy/shelly wares (Cunningham 1985: Fabric 12).

Jars predominate amongst the identifiable vessel forms, largely in early medieval sandy ware (Fabric 13 and the transitional variant 13t) and medieval coarseware (Fabric 20). The jar rims show a chronological development from relatively simple forms of the later 12th century to the squared, necked forms of the 13th century, with one or two examples of the late 13th/early 14th-century neckless forms. Alongside these coarsewares the finewares, of which Hedingham ware (Fabric 22) is the most commonly occurring, also show a sequence, with examples of late 12th century high-relief plastic decoration and early 13th-century Rouen-style decoration in Hedingham ware, and a squat jug of late 13th or early 14th-century type in sandy orange ware (Fabric 21).

The pottery derived from a number of features across the site, although the distribution is rather sparse with few features producing more than 20 sherds. Many of the feature groups cannot be more closely dated within the overall suggested date range for the site but, using more closely diagnostic vessel forms, the pottery appears to indicate a shift in the focus of activity on the site from east to west through time, with the initial ditch system (and structures?) of the late 12th century extended westwards in the early 13th century. The latest deposits (late 13th or early 14th century) occurred in two pits at the western end of the site. By this time the ditches had been entirely filled in (or, at least, pottery was no longer being deposited in them), and abandonment of the site can be placed perhaps at the end of the 13th century, but certainly no later than c 1350.

Parallels for the range of fabrics and forms seen at Blatches can be found at a number of sites in central and north Essex, including Felsted to the south (Walker 1996), Rivenhall to the south-east (Drury 1993), and a group of sites to the west at Stansted Airport (Walker forthcoming; Framework Archaeology 1993).

West of River Roding

A substantial quantity of pottery (almost 43 kg) was recovered from two pottery kilns and associated features at Site 40 (West of River Roding). All of the pottery is of a very similar character, in a coarse sandy ware (Fig. 5.11). There are 'wasters' present, and this assemblage is assumed to derive from on-site production. The kilns were apparently producing a restricted range of handmade jars, bowls/dishes and spouted pitchers. The jars and pitchers are decorated with distinctive horizontal scoring as well as occasional applied strips. These kiln products are directly comparable to material excavated from further kiln structures nearby by the Essex County Council Field Archaeology Unit.

The coarse sandy fabric falls within the regional tradition of 'Early Medieval ware' (Cunningham 1985, fabric 13; Drury 1993, 80). This is a general category of sandy coarse wares, probably manufactured at several production centres within Essex between the early 11th century and the early 13th century. Parallels for the jars and dishes can be found within 12th- and 13th-century assemblages from Stansted Airport, Saffron Walden and Colchester, including the products of the Middleborough kilns (Walker forthcoming; Cunningham 1982; Cotter 2000). Apart from one jar from Saffron Walden, none of the vessels from these comparable assemblages have the horizontal scoring of the kiln products, and this technique appears to be rare in Essex. Spouted pitchers, a 12th century form, are also uncommon in Essex, and none are recorded from sites in the area, although tripod pitchers occurred at Stansted Airport (Walker forthcoming). Spouted pitchers from Colchester, including examples from the Middleborough kilns, are of similar but not identical form (Cotter 2000).

The dating of the kilns rests solely on typological evidence, and the vessel forms show an interesting mix of chronological traits. The spouted pitchers with undeveloped rims are certainly characteristic of the 12th century, but there are a small number of more developed rims on jars and pitchers, suggesting a transitional stage which could place this assemblage somewhere around the turn of the 12th century. There is no evidence for sequential use of the two excavated kilns, since both appear to have been backfilled at the same time, but this may well have been the case. The life span of each kiln is likely to have been no more than five years.

The kilns at Site 40 (together with those excavated by the ECC Archaeological Field Unit) formed a small production centre, which was probably one of many such rural-based industries, each supplying a largely local market with coarsewares. What dating evidence there is suggests that it was relatively short-lived, perhaps operating for no more than one generation. The absence of these distinctive scored vessels from local sites suggests that the kilns may have been supplying an even more localised market, and may have been associated with a known moated manor site very close to Site 40.

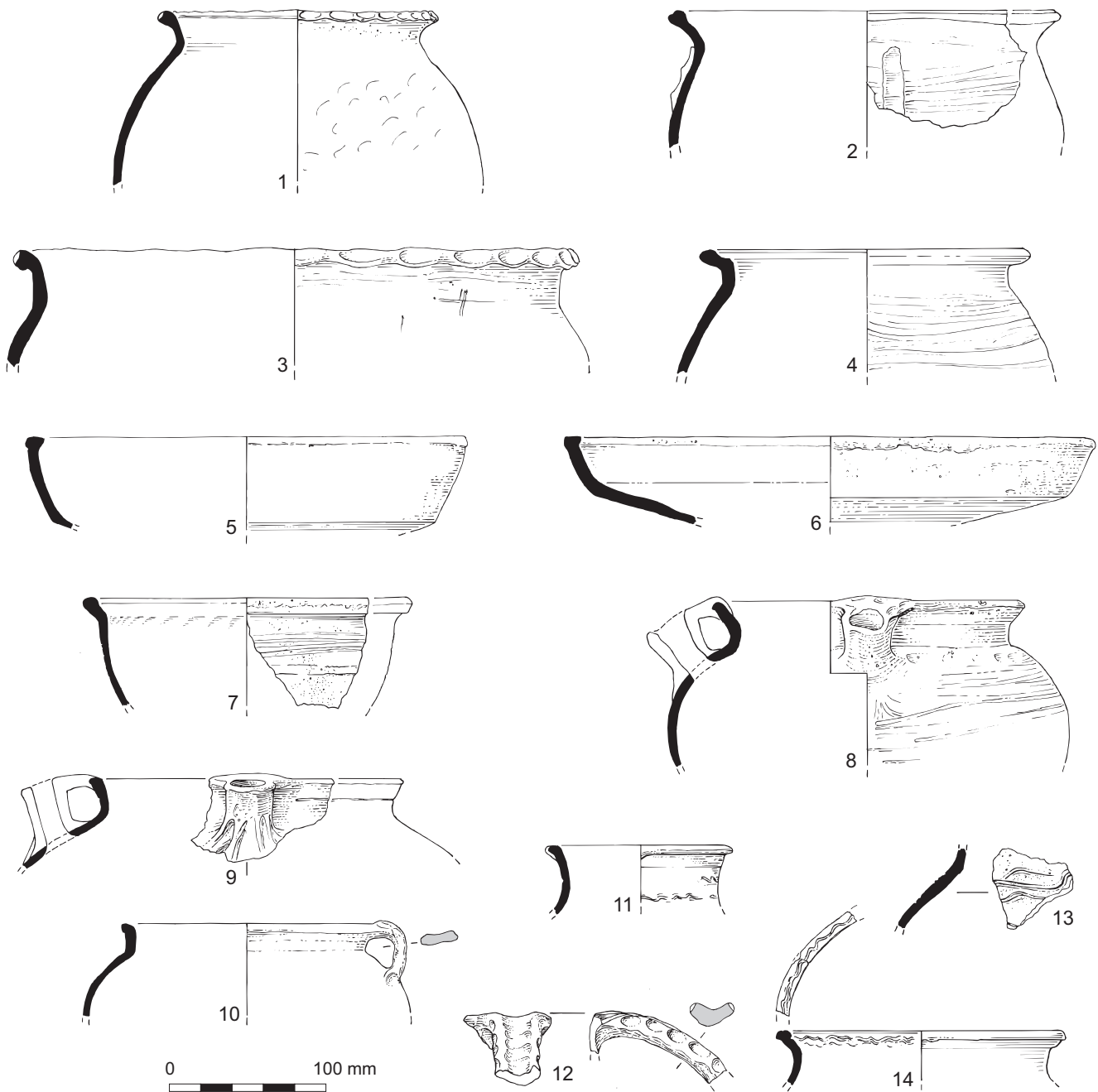


Fig. 5.11 West of River Roding (Site 40): selection of pottery from the kilns and associated features

Excavation to the immediate south-west of the site by Essex County Council Field Archaeology Unit revealed remains of seven further kilns (ECC forthcoming). Pottery associated with these structures dated to around the late 12th century, and it appears most probable that these kilns formed part of the same industrial episode.

How long that episode lasted is a difficult question; the pottery itself shows no clear difference in fabric or vessel form from kiln to kiln, but while this could suggest that at least some of the kilns were in simulta-

neous use, the pottery type is known to vary little throughout its possible production span.

The stratigraphy of features associated with those found in the A120 project would suggest that the two kilns found there were not contemporary, leading to the conclusion that at least some of the total of nine kilns are likely to represent replacements for others. Could there have been just one kiln in operation at any one time? In theory yes; the lifespan of a pottery kiln of this type is difficult to determine, but McCarthy and Brooks have

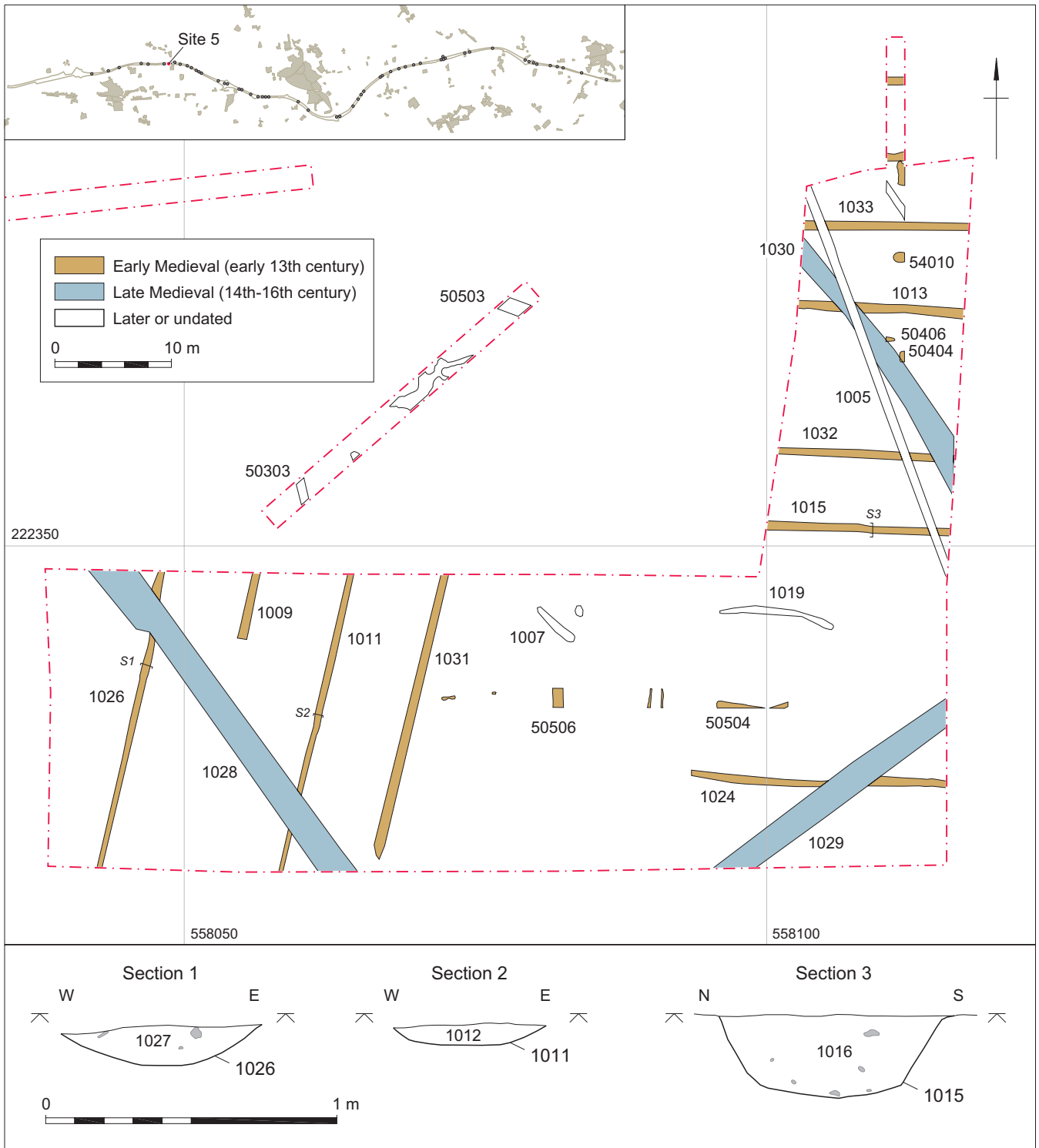


Fig. 5.12 Frogs Hall East (Site 5): overall site plan

suggested a figure of five years for a medieval kiln site at Laverstock (1988, 46), and a similar figure is proposed by Cotter for the Middleborough kilns at Colchester (2000, 67). Therefore it could be suggested that, if only one kiln on the site by the River Roding was in operation at a time, the entire industry may have come and gone in less than 50 years. Clearly that figure could be a lot less if some of the kilns were contemporary.

Other sites

Frogs Hall East (Site 5)

One further site, Frogs Hall East, revealed evidence of medieval activity—and the implication of nearby settlement. A scatter of medieval pottery recovered from the fieldwalking prompted the strip-and-record of an area of approximately 240 sq m, to the south-east of Frogs Hall. Two significant phases of activity were revealed—the first phase represented by two arrangements of parallel shallow gullies, one group oriented NE-SW and spaced at intervals of *c* 8 m—the other oriented west-east and spaced at intervals of *c* 6.5 m or multiples thereof (Fig. 5.12). A single sherd of very abraded Roman greyware was recovered from one of the ditch fills.

The evidence is characteristic of the remnants of medieval ridge-and-furrow cultivation, where the undulations have been flattened, leaving just the base of the furrows surviving. Parts of two fields are represented, although any physical boundary between them has left no trace.

Three ditches forming part of a rectangular enclosure, oriented NW-SE, defined the second phase of activity. No artefactual material was recovered from these

features, and so their date is unknown, apart from being later than the ridge-and-furrow. The abrupt change of orientation between the phases suggests a fundamental rearrangement of the land boundaries. It could be speculated that the ridge-and-furrow belongs to the early medieval period, and was abandoned during the depopulation of the 14th century. A late- or post-medieval revival of the area's fortunes may be indicated by the later enclosure. In addition, either or both of the phases of activity may relate to Frogs Hall farm (or a predecessor) to the east.

Animal Bone

by Emma-Jayne Evans

The medieval period sees further variation in the animal species recovered, with herring, eel and frog/toad bones being recovered from sieving, and crow representing the birds. As in earlier periods cattle continue to dominate the assemblage, with sheep/goat, pig and horse present in fewer number. Carnivore gnawing marks on several bones also implies the presence of dog. Very few bones were recovered from the post-medieval period, and only pig, horse and frog/toad were identifiable to species.

Chapter 6

Continuity and discontinuity

by Jane Timby and Wendy Carruthers

Introduction

The recent work along the A120 between Stansted and Braintree has achieved the stated objectives (cf aims and research frameworks Chapter 1): it has defined the chronological parameters of each identified site from the archaeology and associated artefacts, and it has determined the nature of the archaeology and what it may represent in terms of economy, ritual or social activity, resource exploitation, and habitation. It has highlighted a moderately high density of occupation and activity on the clay plateau dating back to Neolithic times and has greatly contributed to our understanding of the Roman countryside in north-west Essex. It has also revealed the unexpected presence of a probable Saxon building where generally such evidence is absent, highlighting how easily such remains might be overlooked in the absence of cultural material. Finally, the excavations have demonstrated a modest scale of rural industry,

presumably linked with renewed clearance of woodland and scrub, in the medieval period with evidence of pottery production, farming (two farmsteads) and crop processing (windmill).

This final chapter summarises the way the archaeological evidence has contributed to our understanding of the spatial organisation of the landscape at different points in time. In particular, it considers evidence of continuity of use and investigates the dynamics of the landscape at different times revealed by continuity of boundaries and alignments. The evidence for ritual and burial is also briefly reviewed. The level to which the area articulated with the local region and beyond from the limited range of artefacts and other goods is also considered through time. A review the environmental data (Wendy Carruthers) has also been undertaken to consider changes in the environment, land use and economy through time and their relationship with landscape organisation and reorganisation.



Plate 6.1 Strood Hall (Sites 9/44): general view during watching brief

Although the constraints of the type of archaeological work that can be carried out on a road scheme are obvious, where investigations are limited to prescribed linear confines, the work along the A120 has produced some useful data. It has provided some valuable new evidence for this area of Essex, as well as revealing some unexpected discoveries about early occupation on the Boulder Clay plateau (Plate 6.1). Although intensive exploitation of heavy clay soils was traditionally not considered to have taken place until Roman and later periods, the evidence from several locations within Essex, including that of the A120 and the various Stansted Airport projects, has now demonstrated not

only sporadic earlier prehistoric presence, but a more systematic settlement and use of the landscape from middle Bronze Age times onwards. This is somewhat earlier than ongoing comparable work on the boulder clay landscape in the Bedfordshire/ Cambridgeshire region where the first real impact on the landscape does not appear to manifest itself until the middle Iron Age, although there is sporadic earlier evidence of activity dating back to the earlier prehistoric period (OA 2005).

Table 6.1 summarises the archaeological presence by period for each site along the A120. With the exception of pottery and flint, finds from the excavations were generally poor (see Table 6.2). The pottery however has

Table 6.1 Summary of archaeological finds by period for each site (brackets indicate the presence of dated finds but no dated features)

Site No.	Site Name	Neo	MBA-MIA	LIA-ERO	Roman	Med	Pmed	Undated
1	Takeley Church							
2	Warish Hall		X	X	X			X
3	Fanns Wood				(X)			X
5	Frogs Hall East		(X)	X	X	X		
6	Little Canfield Hall		X					X
7/8	Stone Hall		X			?X		
9/44	Strood Hall	(X)	X	X	X		X	
10	A120 Stane Street		X	X				
11/46	Highwood Farm		X				X	
12	Dunmow Roundhouse		X			(X)		
14	Hoblong's Brook						X	
16	Chelmer River						X	
17/17a	Clobbs Wood/ N of Clobbs Wood		(X)	X	(X)	X		
18/19	Clobbs Cottage/Grange Farm	(X)	X		(X)	(X)	X	
20	Grange Lane		X					
21	Clay Lane						X	
22	Throes Farm		X		(X)	X		X
23	Bramble Lane							X
24	Blatches	(X)			(X)	X		
25/26	Stebbingford							
27/28	Greenfields		X	X	(X)			
29	Straits Farm							
30-2	Graunts Court							
33/34	Rayne Roundabout		(X)	X	X			
<i>Watching brief sites</i>								
37	Parsonage Lane				X			
38	East of Parsonage Lane	(X)	X					
39	North of Frogs Hall stables		X					
40	West of River Roding		(X)			X		
41	West of Stone Hall		X					
42	Stone Hall		X					
43	W of B33Strood Hall		X					
45	Stane Street South							X
47	South of Great Dunmow		X					
48	West of Ongar Road	(X)	X					
49	Grange Lane		X					
50	East of Little Dunmow Road		X					
51	Stebbingford Farm					X		
52	Stebbingford Farm Borrow Pit		X	X		X		
53	Valentine Cottage	(X)	X	X	X			
54	West of Panners Roundabout					X		

MTCP site, Stansted Airport (Framework Archaeology 2004). In addition to the plant pollen and molluscs, abundant micro-charcoal was recorded throughout the sequence at Stebbingford. Also noted in contemporary sediments predating 5000 BP, the presence of charcoal has variously been attributed to domestic fires or limited woodland clearance (Bennett *et al.* 1990).

Although an increased number of Neolithic flints were recovered, there is not enough to allow any detailed interpretation of activity. However, it would seem likely that some *in situ* flint knapping was taking place at Strood Hall and West of Ongar Road. An assemblage of 143 struck flints associated with early Neolithic pottery was recovered from a pit at Strood Hall. The flint assemblage was in fresh condition and composed entirely of unretouched types dominated by flakes, most of which are small, thin and regular in form. There is a high degree of burning within the assemblage as a whole, a characteristic commonly seen in Neolithic pit assemblages.

Of slightly later date is a mid or late Neolithic flint assemblage comprising some 53 struck flints recovered from a subsoil layer at West of Ongar Road. The flintwork from the layer is in a fresh, uncorticated condition and is unlikely to have been significantly disturbed.

Although no other dated features of this period were identified at either of these sites it might seem a strong possibility that some form of transitory, or more permanent, settlement existed. A single axe fragment and sparse flintwork represent the only finds from the ECC work at Stansted Airport (Havis and Brooks 2004, 13) although again the joining of flakes suggests that knapping took place in the area. More recent work at Stansted Airport by Framework Archaeology has revealed pits and other indications of Neolithic occupation in the valley of the Pincey Brook and one of its tributaries with the recovery of pottery, stone tools and other finds (Framework Archaeology forthcoming).

Early Neolithic sites have been identified at Braintree and slightly further afield at Chelmsford, at Little Waltham and Woodham Walter (Priddy and Buckley 1987, 42). Although no recognisable monuments are known from Stansted, or in the immediate environs of the A120, a concentration of causewayed enclosures, barrows and long mortuary enclosures in the Chelmer-Blackwater Valley and the Springfield cursus (Hedges and Buckley 1981) suggest a moderately well populated area at this time, which is likely to have been relatively sedentary. The woodland bisected by stream courses would have provided many valuable resources including shelter, protection, wood, water, plants (edible, medicinal, prophylactic, dyes, binding, weaving and other multiple uses), and other wild food resources (animal, bird and fish).

It appears that the settlement concentration hardly increased for much of the early-middle Bronze Age, with no specific finds or features datable to the early Bronze Age being recovered from the A120 and only a small

amount of flintwork from Stansted Airport. An early Bronze Age Beaker from Stebbing (Kemble 2001, 191) is among the few signs that the landscape along the A120 route was not totally devoid of activity during this time. It has been suggested that some of the burnt flint concentrations identified in fieldwalking could indicate early-middle Bronze Age occupation and some undated pits containing burnt flint were found at Stansted (Havis and Brooks 2004, 519). It should be observed, however, that concentrations of burnt stone were noted on a number of the excavated later Bronze Age sites on the A120. Pollen evidence at Stansted Airport suggests that there was no large-scale clearance of woodland on the boulder clay plateau until the middle Bronze Age.

By the middle Bronze Age there appears to be a dramatic change, spectacularly marked by the discovery of a substantial settlement comprising nine roundhouses and a cemetery complex in the valley of the Pincey Brook at the Stansted MTCP excavations (Framework Archaeology 2004). Single structures were also excavated at the Long Stay Car Park (LSCP) and Forward Logistics Base (FLB) (*ibid.*). The A120 also sees its first tangible evidence of manipulation and organisation of the landscape at this time. The discovery of features, pits and ditches suggest the establishment of prehistoric farming communities, developing a pattern of settlement that continued through to the Iron Age. The main focus of activity was the combined watersheds of the River Roding and its tributary to the east, with middle Bronze Age features, including pits and possibly ditches, being recorded at three sites, North of Frogs Hall Stables (Site 39), Stone Hall (Site 7/42), and Strood Hall (Site 9; [Plate 6.2](#)). Residual middle Bronze Age pottery was identified at a further four sites.

The area to the east of the River Chelmer displayed evidence for far less extensive middle Bronze Age activity, with three sites producing features, Clobbs Cottage (Site 18), Grange Lane (Site 49) and Greenfields (Site 28), and one, Clobbs Wood (Site 17) with only finds. Sites 28 and 49 were both sited on watersheds—Grange Lane between the River Chelmer and the Stebbing Brook, and Greenfields between the Stebbing Brook and the River Tey.

From the point at which the occupation of the landscape became more archaeologically visible in the middle Bronze Age, linear features also appear, indicating not only an opening up and management of the landscape, but the specific demarcation of areas. This might have been territorial; to divide up designated areas for different activities or access; for drainage, the clay soils being particularly impermeable and liable to surface water; to control resources or to create routeways for driving cattle or directing people from one location to another. The watersheds between various watercourses also appear to form boundaries from later prehistoric times perhaps defining different zones of use. The stream courses themselves would have provided natural routeways.

The middle Bronze Age in southern England is often characterised by small settlements comprising round-houses with associated pits and four-post structures. Sometimes set within an enclosure, and often with an associated field system, it has been suggested that many settlements of this date were single generational sites occupied by a single nuclear or extended family group (Brück 1999). Unfortunately no structural features were recovered from the A120 sites, the evidence conforming to that already documented from Essex, in that most middle Bronze Age settlements are only known from pits. It is probable that any ephemeral structural evidence has been lost. It is suggested that the finds from the features in the vicinity of the River Roding indicate domestic activities. These include moderately substantial quantities of pottery, some with burning or residues indicating use, fired clay, sarsen whetstone, animal bone and charcoal. Some very fragmentary copper alloy fragments associated with middle Bronze Age pottery from Strood Hall and a single piece of scrap copper alloy plate from a middle Bronze Age pit at Greenfields hint at potentially higher status sites.

Of all the sites in this locality producing middle Bronze Age finds or features, six also produced evidence of later Bronze Age/early Iron Age activity, with middle Bronze Age finds frequently coming from these later features. This might suggest continuity of use of the locations with perhaps the reuse or requarrying of some features, curation of vessels or parts of vessels; or perhaps a lack of understanding of the ceramic sequence. A similar situation was observed at Stansted Airport MTCP where features dated ceramically to the

later Bronze Age also appear to contain middle Bronze Age pottery. It should also be noted that the early Neolithic pottery from Strood Hall was misidentified initially; all these periods share a superficially very similar range of flint-tempered fabrics.

In addition to potentially domestic occupation some of the middle Bronze Age activity along the A120 appears to be non-domestic in character (see below). It is generally accepted that natural features, in particular watery places, played a significant role in the lives of prehistoric people and this can perhaps be seen in the deposition of material in the periglacial depression at Greenfields and the waterhole at Stansted. Such locations are often regarded as liminal zones representing the boundary between the living world and the spiritual world.

In contrast to the small number of linear features tentatively identified along the A120, no evidence of middle Bronze Age fields or land boundaries was identified at Stansted. While the evidence from Stansted suggests a predominantly pastoral farming economy with nearby woodland, the presence of cereal pollen points also to arable cultivation (Framework Archaeology 2004). It seems likely that both elements of such a mixed economy might require the establishment of either fields or other explicit forms of land division to keep stock away from crops. Other methods could have also been deployed leaving little archaeological trace such as fences, hurdles or hedges. Such land division is a more common feature on the gravel terraces of the River Thames at this time (op.cit.). The lack of visibility does not necessarily mean a lack of presence.



Plate 6.2 Strood Hall (Sites 9/44): environmental sampling

Activity in the later Bronze Age/early Iron Age shows an increased presence with features and finds documented at 17 sites, suggesting an intensification of settlement in areas of the clay plateau landscape already occupied, alongside the expansion of settlement into previously unoccupied areas. None of the sites appear to be enclosed in contrast to some of the other sites investigated in the Chelmer Valley such as Springfield Lyons (Buckley and Hedges 1987b) and Lofts Farm (Brown 1988a).

As in the preceding period most of the features comprised pits and ditches. However, by now more of the pits are found in more clearly defined clusters, and some of the ditches, particularly at Stone Hall (Site 7/42), can be seen to form a more recognisable layout of fields and droveways. Four late Bronze Age sites produced linear ditches: West of Ongar Road, Stone Hall, Dunmow Roundhouse and Clobbs Wood. At Stone Hall the two main foci of burial activity were found on either side of the droveway, suggesting that there may have been a relationship between the community's burial ground and the formalised division of the landscape, the features to the north-west actually straddling a field boundary. This increased dividing up of the landscape reflects a more widespread pattern of activity at this time when cattle formed an important component of the livelihood.

In addition, there is for the first time along the A120 an identifiable structure in the form of a four-post structure at Stone Hall with hints of possible rectangular structures at West of Ongar Road. Similarly the earliest structural evidence from the work by Havis and Brooks (2004) at Stansted dates to this period with two four-post structures. The middle Bronze Age settlement at Stansted MTCP continues with at least one later Bronze Age roundhouse. The rest of Stansted appears to show a pattern of dispersed settlement at this time with pits a possible ring ditch, possible further roundhouses, a palaeochannel and burnt mound deposits.

One observable feature of this period along the A120 route is a closer integration of domestic arrangements and the disposal of the dead. This is clearly demonstrated at Stone Hall where there are a number of features (pits and postholes) associated with the cemetery areas and at Greenfields, where again pits, postholes and a hearth, ostensibly of domestic nature, are adjacent to a cremation burial. Charred plant remains and animal bone were associated with these features (see Carruthers below).

While it might be expected that the increase in the number of sites during the later Bronze Age/early Iron Age would have continued through the middle and late Iron Age, in fact the opposite is the case, the number falling from 17 to 11 sites in the middle Iron Age (seven with features), then to five (just three with features) in the late Iron Age. However, this need not be interpreted as a contraction or reduction in activity during the Iron Age, but would seem rather to reflect a change in the

pattern and distribution of settlement, with a greater emphasis on the nucleation, and in some cases the enclosure, of settlement.

The middle and late Iron Age settlements occur at two main locations along the A120 route—on the higher ground between the Roding and Chelmer valleys at Highwood Farm, and between the Chelmer valley and the Stebbing Brook at Grange Lane and East of Little Dunmow Road. The area around the roundhouse and four-post structure at East of Parsonage Lane (probably components of a more extensive settlement) between the Pincey Brook and the River Roding, could represent a third. The three late Iron Age sites all produced evidence of activity stretching back to the late Bronze Age/early Iron Age, and at Grange Lane back to the middle Bronze Age, indicating that these were locations that clearly offered economic and possibly also strategic advantages to their occupants.

In the Iron Age boundaries are used more commonly to define settlements and burial areas, for example the Stansted LTCP sites (Framework Archaeology 2004). The A120 settlements appear to include both enclosed and unenclosed sites at this time. An increased incidence of field boundaries suggests an opening up of the landscape and a more formal rectilinear layout defining fields and paddocks with droveways between them. At Highfield Farm an unenclosed middle Iron Age settlement of at least three roundhouses is replaced with a late Iron Age enclosure. At East of Dunmow Road (Site 50) the dominant feature of the site in the late Iron Age is the rectilinear grid of straight ditches, the main axis of which is aligned NE-SW, with other elements running perpendicular (or close to perpendicular) to it. A small middle Iron Age settlement or stock enclosure was excavated at Grange Lane (Site 20) and an almost complete roundhouse was found at East of Parsonage Lane (Site 38). An associated four-post structure with more enigmatic curved ditches and postholes were located at Little Canfield (Site 6).

The regularity of the field system at East of Little Dunmow Road may be as much a pointer to the dynamics of the late Iron Age society as it is a reflection of the organisation of agricultural practices. As noted above, there are indications of boundaries, either agricultural or territorial, from the late Bronze Age (as at Stone Hall), although it is likely that many earlier field systems were marked by less archaeologically visible features. Although the full extent of the Dunmow Road field system is not known, there are suggestions that both the north-eastern and south-western limits of the site are defined by the exposed ditches. These did not extend the extra 200 m west to the adjacent site at Throes Farm, indicating that these features had limited extent; nor was a comparable array of features recorded at any other location along the route of the A120. The layout appears, therefore, to be a localised reconfiguration of a particular agricultural settlement, rather than a wholesale reorganisation of the landscape.

At some point during the later prehistoric or early Roman period, a series of linear boundary ditches running NE-SW and defining rectilinear enclosures were laid out at the western end of Site 5 (Frogs Hall East). A second set of probably contemporary ditches defining similar enclosures orientated east-west, were revealed at the eastern end of the excavated area. A similar system of parallel ditches was revealed on Site 24 (Blatches). These systems are very reminiscent of a field type appearing all over north-west Essex and similar patterns of ditches have been found at Stansted MTCP, in addition to the adjacent First site excavated by Framework Archaeology and at two recently excavated sites at Takeley (Archaeological Solutions; Essex County Council) (Richard Havis pers comm.).

Such diversity of evidence seems to be a feature of middle Iron Age settlement in the wider landscape of Essex, which included small farmsteads or hamlets such as Wendens Ambo (Hodder 1982) and the varied forms of open and enclosed settlement revealed by excavations at Stansted (Havis and Brooks 2004) and Great Dunmow (Lavender 1997). The work by Framework Archaeology at Stansted only produced two middle Iron Age sites, both small probably unenclosed settlements; one of three roundhouses, the other a single roundhouse.

Unfortunately the constraints of the road corridor in determining the areas opened up confound detailed discussion of how the settlement areas articulated with the wider landscape and how this space was used. As in the earlier periods the structures and finds assemblages from these sites seem to reflect relatively low-status settlements, predominantly agricultural in character.

At both Highwood Farm and East of Little Dunmow Road there is the possibility that there was continuity of occupation from the middle Iron Age into the late Iron Age, and although the character of both sites changed significantly over this period, they remained largely low status agricultural settlements. Occupation at East of Dunmow Road extends into the early Roman period but seems to have terminated around AD 70/80 at the latest. This seems to be later than the enclosed planned settlement fully excavated at the Airport Catering Site (Havis and Brooks 2004). Ceramic evidence suggests that this slightly unusual site was occupied for 50-70 years in the 1st century BC and abandoned by 25 BC on the basis that no Gallo-Belgic material was present but grog-tempered pottery was found. The much larger settlement, initially open and later enclosed, at Little Waltham was in use over a similar period (Drury 1978). The more recent Stansted work identified four major foci of settlement in the late Iron Age along with associated enclosure, mortuary enclosure and fields. Two of the sites developed out of earlier middle Iron Age settlements, two appear to be *de novo* sites. Two of the sites continued to be occupied into the Roman period.

The 1st century BC sees dramatic changes in the archaeological record across southern and eastern

Britain. New political centres, oppida, emerge as centres of commerce and power; burial rites and architectural styles change; tribal chiefs and other elite individuals become known by name from literary sources and from the coinage that appears at this time. Wheelmade pottery becomes widespread and contact with the continent becomes more overt highlighted by ceramic and other imports. There has, until recently, been a focus of attention on towns and urban development to the neglect of rural sites and the countryside. In Essex this imbalance is being redressed by recent projects in essentially rural areas at Stansted and along the A120. Traces of rural settlement and extensive field systems have been identified at Stansted Airport (Havis and Brooks 2004; Framework Archaeology 2004). Along the A120 some 13 sites yielded *in situ* evidence for late Iron Age/early Roman or Romano-British activity, with small collections of pottery and/or ceramic building material from a further four locations. The sites are all linked by Stane Street, broadly following the line of the A120, which is thought to have been first laid out along a reasonably straight route during the conquest period.

Of the locations identified with late Iron Age occupation, Highwood Farm with just two Roman sherds, seems to have been abandoned by the late 1st century BC; East of Little Dunmow persists into the 1st century AD and Strood Hall seems to see activity from the late 1st century BC/AD through to the end of the Roman period. Ditches dating to the late Iron Age/early Roman period were recorded at Warish Hall (Site 2) and Stebbingford Farm Borrow pit (Site 52). Artefactual scatters incorporating late Iron Age or Roman pottery were collected from Greenfields (Site 28), Blatches (Site 24) and Clobbs Cottage/Grange Farm (Site 18/19). Early Roman activity (1st-2nd century AD) is documented at Parsonage Lane (Site 37) and Valentine Cottage (Site 53) and Frogs Hall East (Site 5). Rayne Roundabout, as Strood Hall, was occupied throughout the Roman period with the earliest activity dating back to the immediate pre-conquest period. Some 3rd-century activity was documented at Parsonage Lane and only one apparently new site, West of Panners Roundabout, appears in the later Roman period.

The largest site to be investigated was that at Strood Hall (Site 9/44) where excavation revealed the near complete plan of a mid 1st to mid 4th-century farmstead, with roundhouses, at least one rectangular building, and a cemetery. Evidence from the cemetery predates that of the settlement suggesting a late Iron Age focus nearby with a shift in settlement location in the early Roman period but not of the designated burial ground, which continued to be used through to the 2nd century AD (see Chapter 3). The evidence of several of the A120 sites seems to demonstrate a significant landscape reorganisation around the end of the 1st century BC/early 1st century AD, with some settlements such as Highwood Farm and the Stansted Airport Catering site settlement (Havis and Brooks 2004) being

abandoned and other sites such as East of Dunmow Road seeing a complete change of layout. Another transformation appears to take place in around the last quarter of the 1st century AD, the point at which many sites either fail to survive, whilst others begin to show clear evidence of the new Roman regime in terms of cultural assemblages. The buildings at Strood Hall date from around this time, as did the earliest features from the 1987 excavations at Rayne (Smoothy 1989), somewhat later than the evidence recovered from the A120 excavations nearby suggesting a changing focus. A new Roman site was established at Stansted (Long Border Road site) (Framework Archaeology 2004).

The presence of Stane Street linking Colchester in the east with Braughing in the west possibly stimulated some of these changes (see Chapter 3). Both Braughing and Colchester (Sheepen) were important tribal centres in the pre-conquest period receiving many imported foreign goods, perhaps arguing for a predecessor to Stane Street which does not follow the rigid form of some Roman roads. Both locations developed into important settlements in the Roman period and it is quite likely that sites within their orbit would have been heavily exploited for agricultural produce and other goods and services. Evidence for over 15 settlements situated along Stane Street now exists, most of which were established, or re-established, after the conquest.

Occupation at Rayne Roundabout, Strood Hall and West of Panners Roundabout continued through to the second half of the 4th century AD although none matched the previously excavated site at Great Dunmow, which was exceptional for its evidence for early 5th-century activity (Lavender 1997). Only one of the early Roman Stansted Framework Archaeology sites continues in use into the late Roman period, the other sites phasing out in the 2nd or early 3rd centuries AD.

The immediate area is one already known to be fairly developed in the Roman period with a small settlement at Dunmow, a small town at Braintree, two known villas in Dunmow parish and others at Felstead, Great Canfield, Boxted Wood, and Porters Hall (Going 1997). Villas also exist somewhere near Takeley and a Roman building lies below Stansted Church (RCHME 1916, 275); both Stansted and Takeley churches contain much Roman building material in their fabric. Further Roman settlement, cemeteries or other forms of activity was found on many of the Stansted sites (Havis and Brooks 2004; Framework Archaeology 2004). The valley of the Chelmer and its tributary the Stebbing Brook have a villa situated every 2–3 km indicating a densely settled ordered landscape (*op. cit.*). Fieldwalking of the area around Saffron Walden to the north of Stansted has suggested a density of 1.3 Roman sites per square kilometre (Williamson 1986).

The end of the Roman period sees an apparent hiatus in the archaeological record for Stansted and the A120 although a small number of 6th–7th century sherds were recovered from ECC work (Havis and Brooks 2004,

537). Presumably Stane Street continued to form the main access into the area, although it is suggested by Wickenden (1996, 93) that the economic axis had moved northwards to Great Chesterford.

Although no post-Roman cultural material was recovered from the A120, work at Takeley uncovered a post-built hall or barn dated by a single radiocarbon sample to the 8th century. Interestingly the village of Takeley is thought to have its origins in the Saxon period. At Stansted the first definite post-Roman use of the landscape took the form of an 11th–12th century building (Framework Archaeology 2004).

In medieval times the settlement pattern seems to indicate a rural landscape containing a number of dispersed farmsteads and manorial complexes with agriculturally related buildings, such as windmills and low scale industrial activity. Medieval activity along the A120 comprised two mid 12th to mid 14th-century farmsteads at Stebbingford Farm (Sites 25/26) (Medlycott 1993) and Blatches (Site 24), a 13th or 14th-century windmill at Clobbs Wood and a 12th-century pottery kiln at West of River Roding (Site 40), where subsequently further kilns have been located and excavated (ECC). Several medieval sites were also excavated by ECC at Stansted, mainly of 12th–13th century date including a complete farmstead (Havis and Brooks 2004). A small medieval building and an associated windmill were excavated at the MTCP site, with another settlement at the FLB site (Framework Archaeology 2004). As along the A120 and across Essex in general there seems to have been widespread abandonment of sites during the 14th century.

Phillpotts (2005) suggests that field names and boundaries changed very little in rural Essex over several centuries and that the outline depicted on the Chapman and Andre map of 1777 is essentially as it would have been in 1300. At the time of the Domesday Book survey in 1086 the area of Stansted Airport was still one of the most densely wooded parts of Essex. In the late Saxon period large estates were fragmented into smaller manors. These gradually extended their areas of cultivation by clearing the woodland re-established since Roman times. The extension of arable and pastureland at the expense of woodland probably continued throughout the 11th–13th centuries concomitant with general population increase at this time. Manorial lords in the north-west part of the county established several parks in 12th–13th centuries. Excavations at Stansted located a 14th-century hunting lodge associated with one such park, which remained in use until the late medieval period (Framework Archaeology forthcoming).

The recent work along the A120 failed to shed any significant light on the use of the area in the post-medieval and modern periods although a number of linear features of this date were uncovered. A large filled depression at Throes Farm (Site 22) was left from a Second World War bomb.

Ritual and burial

There are no known ceremonial monuments or burials known from the study area for the earlier prehistoric period although concentrations of burial mounds and mortuary enclosures are known along the Chelmer-Blackwater Valley and the Springfield cursus (Hedges and Buckley 1981).

The earliest burials to be found are some essentially undated, but probably middle Bronze Age, burials from Stone Hall (Site 42), probably associated with a nearby settlement. The four middle Bronze Age sites discovered east of the River Chelmer are suggested by Powell (see Chapter 2) to display a more non-domestic character. Greenfields in particular stands out as unusual. Middle Bronze Age pottery was recovered from the lower silts of the depression left by the pingo, although mixing with later Bronze Age material appears to occur. If the depression was water-filled at this time it is more than likely that mixing of finds in the lower soft silts would occur. The use of this natural feature appears to have commenced in the middle Bronze Age and continued through to the Iron Age and possibly the Roman period suggesting it may have acted as a sacred place. The use of natural features as the focus of later prehistoric activity has been observed elsewhere particularly in areas with solution features as, for example, at Billown, Isle of Man (Darvill 1998). A similar continuity of ritual deposition in a waterlogged environment from middle Bronze Age times into the Iron Age has been documented from Flag Fen (Pryor 1992).

The pingo depression continued to have finds deposited in it during the later Bronze Age. In addition to pottery, animal bone, worked flint, burnt sandstone and burnt flint, some 500 fragments of clay mould in discrete deposits were recovered. The moulds from the manufacture of sword blades of Ewart Park type date to the 9th-8th centuries BC. Similar formalised deposits of metalworking debris have been found at Springfield Lyons, in the enclosure ditch terminals at the main east and west entrances (Buckley and Hedges 1987). The pingo appears to continue as a focus into the middle Iron Age with further finds, largely potsherds, from the next sequence of fills. Small amounts of late Iron Age pottery and Roman sherds spanning the 1st to 4th century AD were recovered from the upper fills suggesting it may still have been a venerated place.

Some possible parallel for the feature at Greenfields might be drawn with the waterhole excavated at Stansted MTCP. This feature, also dating back to the middle Bronze Age, was used as the repository for a large amount of artefactual material including the remains of food (carbonised remains and animal bone). Most prolific were finds of broken pot and Neolithic and Bronze Age flintwork including a fragment of Neolithic polished axe. Fragments of a metalworking crucible came from the upper fills (Framework Archaeology forthcoming).

This metalworking link between the two sites, the mould fragments from Greenfields and the Stansted crucible may be significant. The metal smith may have been a mystical and powerful person, perhaps operating outside society. Using pyrotechnical skills he could transform ore (and scrap metal) through stages of smelting and smithing into powerful cultural objects such as swords, which could maim and kill. Hingley (1997) has argued that iron in Iron Age Britain was associated with the idea of regeneration and agricultural production; the concept can perhaps be projected back to the early metal smiths. There might thus be a deep significance in depositing the spent debris from such craft activity.

A pit containing a complete middle Bronze Age vessel also reinforces the likelihood of Greenfields being an unusual site. At North Shoebury where a series of rectilinear enclosures contained clusters of pits but no structures, several of the pits also contained whole vessels (Wymer and Brown 1995). Such deposits cannot easily be explained and Brück (1999, 152) has suggested that rather than being dismissed as 'ritual' such deposits had a quite practical rationale to the occupants of the site.

In the later Bronze Age there is further evidence of burial practices and other types of symbolic and formalised activity along the A120. Cremations are fairly sparse across the area, as indeed elsewhere, but at least four, possibly five, sites produced such burials. As well as the clusters of cremation burials at Stone Lane, single cremation burials dated to this period were recorded at West of Ongar Road and Greenfields, and an adjacent pair at Grange Lane. A further unurned cremation burial at Chelmer River (Site 16) may also date to this period. These add significantly to the small number of late Bronze Age cremation burials from other sites on the clay plateau, which include Broads Green (Brown 1988b) and a small cemetery at one of the Stansted MTCP sites.

There were clear similarities between the burials at the different sites on the A120. Although no pyre sites were identified, all these burials contained pyre debris, suggesting that the pyre sites were probably close by. Moreover, in each case the burials were located close to groups of small pits and/or postholes, some of which contained a relatively wide range of cultural material associated with burnt deposits which may have been domestic, or connected with practices associated with the burials.

Radiocarbon dates provided by four of the Stone Hall burials may indicate the development of the burial ground over time, the earliest (1200–920 BC) being located at the south-east, and the latest (980–810 BC) at the north-west. However, further dates would be needed to establish this sequence with certainty, and it is also possible that rather than being part of a single extended burial ground, these features represent two separate and largely contemporaneous cemeteries, perhaps serving different communities.

Several of the sites produced large pits, the function of which cannot be ascertained. However the deliberate placing of a horse skull on a ledge on the edge of a pit at Stone Hall and the possibility of formal deposits at Warish Hall suggests some of these features could have had symbolic as well as practical functions. Such selective deposition is a widely recognised phenomenon for this period and has been observed on many sites across Essex.

No evidence of burial was recovered from any of the middle Iron Age sites. The next tangible evidence for burial, a cremation of later Iron Age date was found at Grange Lane, and was, curiously, located in the same general area as the later Bronze Age cremation burials. It is suggested that the rite of cremation in the Iron Age did not spread to Essex until after 50 BC (Sealey 1996, 57). The earliest burials at Strood Hall similarly date to the later Iron Age. Strood Hall was the only site to produce Roman burials; in addition to the three later Iron Age examples some 28 cremations and one inhumation were found within a defined cemetery area. Most of the graves contained unburnt gravegoods and many also contained burnt pyre goods including animal offerings. The principal fuel used was oak and ash wood. Some 64% of the burials were urned and a number were boxed burials.

Other suspected late Iron Age burials have been noted at Churchend, Dunmow where three square ditches enclosures have been identified (Going 1997); a Dressel 1 amphora from Great Canfield may come from a rich burial, and an enclosed cemetery has been noted at Golands Bridge, Stebbing (*op. cit.*). A cremation burial cemetery, defined by a rectangular enclosure, was also found at Stansted LTCP and at Great Dunmow (Lavender 1997) a total 17 cremation burials spanning the later 1st–2nd century AD and two earlier inhumations were found.

No burials dating to the later Roman or post-Roman period were encountered during the recent work, the latest interments being those from Strood Hall. Of particular note is the 19th-century discovery of a rich late 1st/early 2nd-century burial near Takeley church with two glass vessels, two South Gaulish samian dishes, two coins (Vespasian and Domitian) and four copper alloy rings (Hull 1963, 185).

Trade and status

The concentration of sites and finds along the river valleys and at the estuaries in the prehistoric period emphasises the importance of river routes as a means of contact between communities both within the region and potentially further afield across the North Sea.

The commonest surviving raw material for the earlier and later prehistoric periods is flint. Much of this was probably obtained from the boulder clay or perhaps from superficial deposits of chalk flint. A slightly smaller proportion of the raw material was provided by

gravel flint sources. The presence of several pieces with a particularly thick, clean, chalky cortex implies that some of the nodules were recovered from deeper deposits. Mined flint may have come from mines known in Norfolk such as Grimes Graves, or perhaps further afield from locations such as Angmering and Cissbury, Sussex (Kemble 2001, 49–50). It is probable that closer sources were more regularly exploited, however. The use of bullhead flint, which occurs at the base of the Reading beds (Dewey and Bromehead, 1915; Shepherd 1972, 114), is attested by two flakes, both from Valentine Cottage (Site 53).

Most of the prehistoric pottery was probably made using locally available clay and other materials to temper the clay such as flint, sand and shell. It is possible that some of the finer wares may be traded specialist items but the assemblages are generally too small and insufficient is known about early pottery production sources to be sure.

Most of the metalwork recovered from the A120 dates from the later Iron Age and Romano-British periods. Negligible quantities were found in earlier contexts but potential pieces include some copper alloy fragments from Strood Hall found in a middle Bronze pit cut by later features. The pin of a copper alloy brooch was recovered from a large late Bronze Age/early Iron Age pit at Stone Hall, whilst a small middle Bronze Age pit at Greenfields produced a fragment of copper alloy plate probably collected as scrap. The Ewart Park type sword mould fragments from the same site indicate clear evidence of metal working in the locality from the later Bronze Age. The raw materials required to manufacture such prestigious, status weapons would have been imported. The production, acquisition exchange and disposal of the finished objects were one way in which competing social groups could convert agricultural surpluses into prestige and power. Moreover, this material points to the integration of local settlements within a network of longer distance trade or exchange as Ewart Park metalwork is the dominant type during this period in the south-east.

There is little evidence for trade during the middle Iron Age where the main artefact type is pottery. However, a small number of shell-tempered wares from Greenfields are unusual for the region and are more commonly found towards the Thames estuary.

In the later Iron Age there is increased evidence for the trading of goods in the region and a group of imported Dressel 1 wine amphorae from the ACS site at Stansted, typologically as early as *c.* 75 BC, could be one of the earliest such groups of imports in Essex (Sealey 1996, 51). Further Mediterranean amphorae and Gallic and Italian tablewares were also penetrating inland from the coastal/estuary sites like Heybridge and Sheepen to settlements such as those in the Puckeridge-Braughing area, Herts (Partridge 1981) in the pre-conquest period, suggesting fairly well established trade routes. The A120 sites also seem to be benefiting from these coastal

contacts from presence of small quantities of continental finewares found (*see CD-Rom/Chapter 4*), pointing not only to wider trade links but perhaps the adoption of Roman-style kitchen and dining habits during the late Iron Age/ early Roman period. Early Roman continental imports include whiteware flagons and *terra nigra* from North Gaul, South Gaulish samian, at least one Lyon lamp and both Spanish olive oil and Gallic wine amphorae. The quantities of fineware are so small such vessels may have initially been seen as curiosities and acquisitions for display rather than use. Coincident with this increased level of contact is an apparent modest increase in metalwork from the same sites, which although still very sparse, is suggestive in relative terms of increased prosperity and perhaps status.

From the Roman period, if not earlier, Stane Street acted as the spine that connected the various settlements and directed the path of agricultural surpluses. Environmental and ecofactual data suggests that the settlements of Strood Hall and Rayne Roundabout both practised mixed farming. Both spelt, emmer, and to a lesser extent bread wheat and barley, were grown and processed. The weeds present suggest potentially better drainage and more intensively cultivated land towards the later Roman period, fitting trends within the region, and it is clear that both sites were farming to produce a surplus. The presence of millstone fragments suggests some of the grain may have been processed into flour, which, with surplus grain would have been taken to local or regional markets. Evidence of a flourishing local and regional trading network is also demonstrated by various types of pottery, in particular Hadham ware (*see CD-Rom/Chapter 4*). Regional imports at the A120 sites include colour-coated wares from Colchester, the Nene Valley and Oxfordshire industries and British glazed ware. Finds of possible briquetage from East of Dunmow Road point to a trade in salt probably coming from the Essex coast salterns (Red Hills) in the Maldon area (Rodwell 1979).

The material assemblages from both Strood Hall and Rayne Roundabout suggest that both were reasonably high-status, and that timber buildings existed with tiled roofs, hypocausts and glass windows. Artefactual evidence suggests Rayne was potentially of higher status. From the recovered finds neither site seems to have been as prosperous as the villa estate excavated at Great Holts Farm, Boreham or the high status villas at Rivenhall and Chignall St James. The A120 sites lack the exotic plant and food remains found at Great Holts Farm, which suggest the importation of varied foodstuffs along with probable imported livestock (Albarella 2003, 200).

The lack of any cultural material from the Saxon period prevents any comment about trade and contact at this point in time. For the medieval period the settlements appear very rural and fairly low status with little evidence of traded goods either in foodstuffs or durable items such as pottery, which seems to have been locally

procured. Blatches did produce some highly decorated jugs of London type along side the mostly kitchen-based assemblage suggesting some higher aspirations and it is likely these were obtained from a local market. Coastal contact is highlighted by the presence of herring at Blatches and Throes Farm, presumably traded inland either fresh or cured.

The significant quantity of metal detector finds at Takely dating to the medieval period suggests a significant focus in the immediate locality. The high number of coins in particular might suggest a rural marketing centre.

Environmental overview by Wendy Carruthers

Prehistoric

Very little is known about the development of the Boulder Clay landscape during the early prehistoric period. It has long been thought that the heavy clay soils deterred settlers from clearing woodland from this part of Essex until at least the Iron Age. However, scattered finds along the route (*see Chapter 2*) indicate that limited exploitation of the area was taking place during the later Mesolithic to early Bronze Age periods. In addition, microscopic charcoal was frequent in pollen samples from a palaeochannel at Stebbingford Farm (Murphy and Wiltshire 1996). No absolute dates were obtained from this pollen sequence but the assemblages were indicative of a vegetation succession dating back to the early post-glacial period. Although burning can occur without human intervention, this evidence suggests that limited clearance or waterside occupation may have been taking place during the Mesolithic period.

Most of the early evidence for arable agriculture in Essex during the Neolithic period has been recovered from submerged coastal sites such as the Stumble in the Blackwater Estuary (Murphy 1989). Few inland archaeological sites on the Essex clay plateau had been investigated prior to excavations associated with the expansion of Stansted Airport, 1986 to 1991 (Wiltshire and Murphy 2004a, 2004b). The early to middle Neolithic coastal settlement at the Stumble produced substantial evidence for the cultivation of emmer wheat, with some naked barley, bread wheat, einkorn and flax. However, wild fruits, nuts and tubers were still an important source of food. Brown and Murphy (1997) suggested that in eastern England a shifting pattern of seasonal occupation was taking place in low lying areas such as the fens, fen-edge, valley bottoms and coastal areas during the Neolithic period, with repeated visits probably being made to the same areas. No environmental evidence for this period has been recovered from the A120 or Stansted Airport sites (Murphy 2004b), but the few scattered artefacts of Neolithic, early and middle Bronze Age date recovered from the A120 sites suggest that people were at least passing through the area.

A palaeochannel at Stansted Brook radiocarbon dated to the early Bronze Age (2560–2030 cal BC) produced pollen and plant macrofossil evidence of alder and hazel growing in the relatively dry channel sediments, with oak, elm and lime probably occupying drier soils a short distance away (Wiltshire and Murphy 2004b). The pollen sequence revealed a major opening up of the vegetation, paludification of the channel and some cereal cultivation taking place nearby, but unfortunately these events could not be dated more closely than ‘between the early Bronze Age and middle Saxon period’. One indicator was that the fall in lime pollen, which usually occurs in the early to middle Bronze Age in eastern England, occurred at this level. The timing of the ‘*Tilia* decline’ does vary across the country to some extent, but the evidence as a whole suggested that arable and pastoral farming was taking place in the area during the Bronze Age.

The middle/late Bronze Age activity in and around the pond created by the pingo at Greenfields (Site 28) provided the earliest substantial evidence of occupation from the A120 sites, including evidence for metal-working and the deposition of significant quantities of pottery. Unfortunately, the environmental evidence either did not survive (pollen and molluscs) or was poorly preserved. Trampling from the long period of use of the pingo may have destroyed most of the evidence, and if any cereal remains were being burnt in the metal-working fires, they were unlikely to survive the high temperatures. Most of the bone was highly fragmented and so was not identifiable to species level. Cattle were the only species identified. A single chaff fragment (spikelet-fork) of emmer or spelt wheat was present. All that can be said is that limited, small-scale mixed farming may have taken place in the area, although it is possible that food was being brought onto the site. The hulled wheats, emmer and spelt, are likely to have been stored and transported in spikelet form (ie semi-processed, still enclosed in the husks) since this reduces spoilage by insect pests and damp (Hillman 1981). De-husking would have been carried out on a day-to-day basis as part of the preparations for cooking, so the presence of small amounts of chaff fragments such as spikelet forks and glume bases on a site does not necessarily indicate local cultivation.

It has been suggested that in the Stansted area animal husbandry was more important than arable cultivation up until the late Iron Age (Murphy 1996, 175). Although the arable/pastoral balance is a very difficult aspect to investigate, on the whole the evidence from the A120 sites supports Murphy’s suggestion. Evidence of settlement in the area increases for the late Bronze Age period but the scale of arable agriculture still appears to have been small. Charred plant remains were recovered in low concentrations from Stone Hall (Site 7), West of Ongar Road (Site 48) and Greenfields (Site 28). All three sites produced emmer/spelt wheat grains and chaff, hulled barley and a few hazelnut shell fragments. The

assemblages from Greenfields were better preserved, producing evidence for the cultivation of both emmer and spelt wheat, in addition to a few weeds, such as docks, that had probably been growing as arable contaminants. None of the weeds were specific enough in their habitat preferences to provide information about crop husbandry, but it is interesting to see that no weeds of wet ground or nutrient-depleted soils were present at this time, unlike the Iron Age and Roman assemblages. The narrow range of arable weeds were primarily of a similar size to the cereal grains, so had probably been removed at the same time as the husks during preparations for cooking.

Evidence for the livestock component of the late Bronze Age economy was mainly recovered from three sites: Grange Lane, Greenfields and West of Strood Hall. Although the last of these produced a reasonable number of well-preserved bones, none of the sites produced large enough assemblages to obtain information about animal husbandry practices. Cattle, sheep/goat, pig and horse were present on at least some of the sites, with cattle being the most commonly occurring species but sheep/goat being more abundant at West of Strood Hall. Some of the cattle bones retained evidence of butchery. The presence of gnawing marks on bones from two of the sites indicated dogs were present, and red deer bones at Grange Lane provided evidence for hunting.

An undated pollen sample from a ditch that was tentatively assigned to the middle Iron Age (F1108) produced a predominantly disturbed, open grassland flora (see *Druce CD/Chapter 7*), with some evidence of hazel scrub and arable cultivation nearby. During the period of silting up of the ditch, hazel scrub first increased and was then cleared. It was suggested that this may indicate site abandonment and then increased clearance and cultivation in the area, although there was no dating evidence to indicate precisely when these events occurred.

It is important to remember that, although the limited pollen and mollusc evidence from four sites spread along the route of the A120 indicated that the landscape was primarily open from around the middle Bronze Age onwards, this type of evidence does not necessarily reflect the situation in wider landscape. Molluscs were not abundant enough to provide detailed evidence of land use and were only analysed from a few samples on four sites of Iron Age and Romano-British date (see *Allen CD/Chapter 7*). The pollen examined from two cores taken was not particularly well preserved. Pollen from archaeological features can have a wide range of sources, including dumped material, eroding ditch sides and pollen arising from activities occurring nearby, such as crop processing—and these assemblages do not always provide an accurate picture of the surrounding landscape. Evidence from a wide range of environmental indicators, therefore, needs to be examined together.

Charcoal analysis of samples from domestic contexts and cremation burials from Greenfields (Site 28), Stone Hall (Site 42) and Grange Lane (Site 20) indicated that mixed oak/ash deciduous woodland was available as a resource throughout the late Bronze Age and Romano-British periods, with no evidence that the choice of fuel-wood was limited by its scarcity (*see Challinor CD/Chapter 7*). During the Bronze Age there appears to have been deliberate selection of particular species for each cremation, so that in some cases oak was the dominant taxon, whilst in others ash, Maloideae (apple, pear, rowan or hawthorn) or hazel were chosen. This suggests that there was a plentiful supply of each species if people could afford to be selective, as it takes a large quantity of wood to cremate a body. Evidence of woods, hedges or scrub also appears to be present in water-logged plant macrofossil assemblages from some late Bronze Age waterholes on the recently excavated Stansted Airport sites.

Further information about burial practices and the local environment was recovered from charred plant remains in a cremation burial pit (Greenfields, F1048). The surviving bone fragments indicated that the remains were from an adult male, aged *c* 25-40 years (*see McKinley CD/Chapter 5*). The charred plant assemblage appears to have represented turf burnt beneath the body and some fruit and nut remains that had been burnt as an offering, including hazel, rose hip and sloe. It is fairly certain that these fruits were deliberately added to the pyre, since the fuel wood consisted entirely of oak (*see Challinor CD/Chapter 7*). Habitat information from the burnt turf suggests that disturbed, probably grazed grassland had existed at the pyre site.

Three late Bronze Age-middle Iron Age sites examined by Murphy (2004a) during the earlier Stansted Airport excavations produced similar low concentrations of charred cereal remains. There was evidence for the cultivation of emmer, spelt and a little bread-type wheat (on two of the three sites). Hulled barley was present in small quantities and oat could have been a weed or minor crop at one site. Hazelnut shell was present at two sites. The constant recovery of small quantities of hazelnut shell from the Stansted and A120 sites through to the medieval period is of interest, since in the author's experience its occurrence is often much more sporadic. It suggests that hazel scrub, areas of woodland or possibly hedgerows persisted in the area through the centuries, providing a valuable source of protein that can easily be stored through winter. Other fruits such as blackberries, hawthorn berries, rosehips, elderberries and sloes were probably also being gathered, as indicated by the pyre assemblage described above, but these are much less likely to become charred amongst domestic waste.

The introduction of spelt wheat from the middle to late Bronze Age onwards may have been a significant factor that encouraged farmers to expand arable cultivation onto the heavier boulder clay soils of Essex. Spelt

is more hardy and higher yielding than emmer on this type of heavy soil, particularly where winters are cold. Evidence from other sites suggests that emmer and spelt were probably initially grown as a maslin (a mixed crop) (van der Veen and O'Connor 1998). The recovery of both emmer and spelt glume bases from the Greenfields samples in roughly equal numbers indicates that maslins may have been grown on this site. As van der Veen suggests (*op. cit.*), continued cultivation of maslins on soil more suitable for robust spelt could, over time, lead to a natural increase in the proportion of spelt at the expense of emmer. Alternatively, the change to spelt that occurred across the British Isles during the Iron Age and Roman periods could have been more deliberate. Either way, it would have meant that the cultivation of Essex clay soils became more worthwhile as spelt became the principal crop grown. The effects of this reached a peak in the Roman period, as discussed below.

Very little well-dated environmental evidence exists for the early to middle Iron Age, although the silting up of the ditch at Grange Lane may well have occurred during this period (*see Druce CD/Chapter 7*) and molluscs were examined from middle Iron Age ditches at Highwood Farm (Site 11) (*see Allen CD/Chapter 7*). The molluscs indicate that the area around the Iron Age farmstead at Highwood Farm had been cleared for some time. Short, dry grassland was the dominant habitat, and the ditch may have been subject to periodic river flooding. The small amount of bone recovered from this site showed that cattle, sheep/goat and horses were being reared at the farm. The settlements at East of Parsonage Lane (Site 38) and East of Little Dunmow (Site 50) also produced small quantities of bone from all of the major species including horse and dog. The majority of evidence for livestock rearing came from the settlement at Grange Lane (Site 20). Cattle were dominant at this site and some of the bones showed evidence of butchering. Red deer and roe deer were being hunted, and dogs and horses were present. The only charred plant remains examined from this phase were from East of Parsonage Lane and East of Little Dunmow. The eleven charred plant macrofossil samples examined from East of Parsonage Lane produced a few, poorly preserved cereal grains, of which only barley and the weed grass chess could be identified. No chaff fragments were preserved. This lack of evidence for both bones and seeds could be due to particularly poor conditions of preservation, or the settlement may have been short-lived. At East of Little Dunmow only one sample was assigned to this phase. It produced an unusual grain-rich assemblage of emmer and spelt wheat containing a high level of the weed chess. This appears to have been a charred maslin of emmer and spelt spikelets, perhaps the result of accidentally burning a stored crop. Occasional chance accidents of this nature are useful reminders that low intensity agriculture on soils providing poor preservation conditions are usually likely to be under-represented by the

environmental remains, ie small scale mixed farming was probably taking place in the area but is not easy to detect on these soils.

In the late Iron Age and late Iron Age/early Roman period the first signs of strain on the environment were visible and the farming system started to become more specialised. Larger quantities of domestic waste were being generated (bone and charred plant remains) and there were signs that soil fertility was declining. Reasonably large bone assemblages were recovered from Highwood Farm (Site 11) and East of Little Dunmow (Site 50) with all the major species of livestock represented. In the first case a large number of cattle bones were recovered from enclosure ditches, some of which was primary butchery waste. Charred cereal remains were more frequent and there was a definite reduction in the cultivation of emmer with a rise in spelt wheat. A few oat grains were present, and although these could have been wild oats, it is likely that oats and barley were being cultivated as fodder crops, hence their minor appearance in the charred plant record. The range of arable weeds was found to increase, perhaps due to more movement of seed corn between settlements or the ploughing up of a wider range of soils. In particular, small-seeded leguminous weeds such as clover, trefoil and vetches greatly increased. These taxa are efficient colonisers of poor, open soil because they possess root nodules, which can contain nitrogen-fixing bacteria. They are, therefore, at an advantage in being able to rapidly become established soon after nutrient-deficient soils have been ploughed. They are particularly characteristic of later Iron Age and Roman assemblages and have been linked to increases in the scale of production of arable crops, in particular spelt, and soil degradation (van der Veen and O'Connor 1998). A few hedgerow and damp soil taxa were also present amongst the cereal processing waste, perhaps originating from ditches and hedgerows bordering the fields.

Late Iron Age/early Roman samples from Stansted Airport examined by Murphy (2004b) produced very similar assemblages, with spelt wheat predominating and with small amounts, or sporadic occurrences, of emmer, barley, bread-type wheat, oats and possibly rye. Leguminous weeds were common and several weeds of wet/damp ground were present.

Roman

The early Roman evidence primarily came from Strood Hall (Site 9) and Rayne Roundabout (Site 33). Further increases in the quantities of bone and charred cereal remains generated by these sites reflect the expansion of production, and one cattle phalanx showed damage that may have been caused by long periods of ploughing the heavy clay soils. Small amounts of bread wheat were recovered from some of the samples, but being a free-threshing cereal the charred evidence probably does not

accurately reflect the importance of this crop. Free-threshing cereals are less likely to come into contact with fire, as they do not require parching to release them from the chaff. Like spelt, bread wheat grows well on heavy soils. It is more demanding of nutrients but produces a lighter loaf of bread and is easier to process. Its importance is difficult to gauge from the charred evidence, but it does occur in a greater number of the A120 samples (albeit in small quantities) as the Roman period progresses.

The first evidence for large scale spelt processing was recovered from both sites, with several deposits of concentrated spelt processing waste being recorded. In each of these deposits the remains of other cereals (perhaps relicts from a previous crop) such as emmer, barley or oats, amounted to less than 10% (in total) of the waste. The significance of this type of concentrated, pure waste is that it implies that a different type of agricultural system was in operation; one that had specialised in producing large quantities of spelt at a surplus. Earlier settlements had produced a range of products to meet a variety of needs, and perhaps also by way of 'insurance' in case one crop failed due to disease or adverse weather conditions. The crops appear to have been stored in a semi-processed state and processing was carried out piecemeal in order to avoid storage losses. These early Roman sites, however, were growing pure spelt and processing large quantities of grain at a time. Fully processed grain is less bulky to transport but is vulnerable to storage pests and sprouting. It is notable that detached sprouts from sprouted grains were first observed amongst the early Roman assemblages. The amount of germination was not high enough to indicate malting, but had more likely occurred due to damp storage conditions. Some of the later Roman samples produced larger numbers of detached sprouts, so it is possible that malting was taking place, as was suggested for one of the Stansted Airport Roman sites examined by Murphy (2004b, 338). However, no definite proof of malting was recovered from any of the A120 sites. A few large deposits of the end product—fully processed stored grain—have been recovered from sites such as the Roman granary at South Shields (van der Veen 1994) and from the forum and waterfront deposits in Roman London (Straker 1984). It is notable that evidence for storage pests increases at this time (although none was noted amongst the A120 processing waste), in addition to evidence for sprouting.

Large deposits of pure spelt chaff are fairly common on later Roman sites from southern and central England, but not often from the early Roman period. The assessment results from recent excavations at Stansted Airport indicate that the early Roman features also contain this type of waste, as do the assessment results from ongoing excavations at Terminal 5, Heathrow Airport (Framework Archaeology 2006). Excavations in the Arrow Valley, Warwickshire, revealed a number of sites dating from the late Iron Age

through to the late Roman period, many of which produced well-preserved charred cereal assemblages (Moffett and Ciaraldi 2000). Whilst there was some increase in the amount of chaff recovered from the late Iron Age to the 2nd century AD, the major change to abundant spelt processing waste was not seen until the 3rd/late 4th century. Moffett suggested that the chaff would have been a valuable resource in its own right and would have been stored for use as fuel for corndriers and ovens. Although no oven samples from the A120 sites produced this type of assemblage and only three possible ovens or corndriers were excavated (Valentine Cottage), it is likely that similar use would have been made of the large amounts of cereal processing waste being produced on these sites.

Charcoal analysis of samples from several Roman cremation burials showed that the principal source of fuel wood for the cremation pyres had been the larger tree species, oak and ash, indicating that the occupants could still afford to be selective and were not limited by scarcity of woodland resources. It is interesting to see that selection appears to have differed from the late Bronze Age preference for a variety of species including fruit-bearing trees (see *Challinor CD/Chapter 7*). The seed assemblages from the graves were quite different from the samples from domestic contexts. The only cereal remains recovered were fully processed emmer/spelt wheat grains, presumably representing burnt offerings. Several hazelnut shell fragments probably also fall into this category. The remaining taxa were disturbed, damp grassland taxa, including tubers and stem bases indicating the burning of turves or tinder beneath the cremations or fuel. The presence of gorse, sheep's sorrel and vetches indicate the poor acidic nature of the local soils.

One early to mid Roman ditch from Rayne Roundabout containing a 10 cm thick layer of charred spelt processing waste was sampled for pollen (F265). The predominant component of all of the ditch samples was pollen from the Poaceae family (grasses and cereals), with arboreal pollen amounting to less than 15% of the total land pollen (see *Druce CD/Chapter 7*). Trees and shrubs represented in the primary fill were alder, oak, willow, with some hazel, elm pine and birch. Immediately below the charred layer arboreal pollen levels fell and cereal pollen increased. Above the charred layer some regeneration of tree cover was indicated, together with the disappearance of cereal pollen, but poor preservation conditions make this evidence less reliable.

Further evidence of the local environment was recovered from a large linear ditch (F350) containing abundant domestic waste including pot, bone and plant remains. All of the major species of livestock were represented amongst the bones, but cattle were by far the most abundant. There was evidence that primary butchery waste had been discarded in the ditch and left undisturbed. Waterlogged plant remains representing a

range of types of waste and habitats were recovered from the primary ditch fill (dated to AD 43–80). A little waterlogged spelt-processing waste was present and there were seeds and capsule fragments of cultivated flax indicating flax retting had taken place. Some of the disturbed ground weed seeds could have been deposited amongst the crop waste but others, such as stinging nettles, are likely to have been growing on the nutrient-enriched soils nearby, since nettle-feeding insect remains were also present (see *Robinson CD/Chapter 7*). Grassland plants could have been growing nearby, or been deposited as waste hay or dung. The insect remains presented no evidence for habitation existing near to the ditch, but livestock was grazing in the area. Vegetation growing in the ditch was well represented, including aquatic buttercups and a range of plants that grow in slow flowing to still ponds and ditches. Alder and willow were probably growing in the vicinity of the ditch but not alongside it, as one or two seeds, bud scales and catkin fragments were present. Bramble seeds and bramble-feeding insects were recorded, indicating that scrub or hedgerows occurred nearby. It is interesting that no imported fruits, nuts or spices were recovered, since the conditions of preservation were good and domestic waste was clearly abundant in the ditch. Although no latrine pits were available to provide the most direct source of dietary evidence, information from this ditch fill suggests that the early Roman diet was fairly simple and 'rural' in character. This fits in with all of the evidence from Roman farmsteads examined by the author to date, although it has to be admitted that more evidence from waterlogged and faecal deposits needs to be examined in order to obtain an accurate picture. One possible luxury food available to the occupants, however, may have been honey, as a honey bee was recovered from the primary fill of the ditch.

The middle to late Roman evidence came from the same two sites, Strood Hall and Rayne Roundabout. Spelt processing waste was again abundant at both sites and large quantities of bones had been deposited in two middens at Strood Hall and an old stream channel at Rayne Roundabout. All the main species of livestock were represented with cattle and sheep/goat being present in similar quantities on both sites. Further evidence for the intensive use of cattle for traction was observed in the pathology of two bones from Strood Hall. Because the number of late Roman samples examined from Strood Hall was much greater than Rayne Roundabout it is difficult to make direct comparisons between the sites. However, the scarcity of leguminous weed seeds and weeds from damp ground taxa from Rayne Roundabout in comparison with Strood Hall is notable. Perhaps the location of Rayne Roundabout adjacent to the better-drained gravels and alluvial soils of the River Ter gave it an advantage over Strood Hall, sited on boulder clay. However, molluscs from a late Roman hollow at Rayne Roundabout indicated that some of the features must have become

waterlogged during the winter, so it is difficult to explain the lack of wet ground weeds from the cereal assemblages. Perhaps the damp valley soils were primarily used for grazing, and cereals were being grown on drier soils away from the river.

Both sites produced small quantities of bread-type wheat, with traces of barley, oat and possibly rye. As with bread wheat, fodder crops such as barley, oats and rye are likely to be under-represented in the charred plant record. The fact that fodder crops must still have been grown in the Roman period, but became more scarce in the archaeobotanical record as contaminants of spelt crops, suggests that greater separation of the spelt 'cash crop' from the fodder crops was taking place. It is interesting to note that the midden samples produced more evidence of bread wheat, barley, emmer and oats than the other samples, supporting the suggestion that these taxa were under-represented in the deposits of crop processing waste. Middens usually receive burnt waste from a wider range of sources than pits and ditches; so can provide more information about fodder crops, free-threshing wheat and non-cereal foods. Hazelnut shell was particularly frequent in one midden sample, and there was possible (poorly preserved) evidence for peas or beans, sloe/plum and hawthorn. Burnt hay from damp meadows also appears to have been deposited.

Saxon

Very little information has been recovered from any of the Stansted or A120 sites for the Anglo-Saxon period. Pollen evidence from a palaeochannel at BRS, Stansted Airport (Wiltshire and Murphy 2004a) that produced a radiocarbon date of AD 530-680 indicated that conditions were open with reedswamp in the channel and alder, birch, hazel, pine, lime, willow and oak growing in the catchment area. Microscopic charcoal and the presence of cereal pollen indicated that human activities were taking place in the vicinity. The channel area then became colonised by willow and a more diverse, drier grassland flora became established. Cereal cultivation and woodland clearance increased towards the top of the profile. The only other sources of evidence for this period were a few possible Saxon pit fills from a Stansted Airport site examined by Murphy (2004b), which produced a few oats. The author is currently examining a few charred and mineralised samples from recently excavated Stansted Airport sites. If the mineralised samples turn out to be faecal in origin, a much wider range of information about the Saxon diet might be recovered. During the Saxon period hulled wheats such as spelt disappear, and mixed assemblages of bread wheat, barley, oats, rye and leguminous crops are usually present. It will be interesting to see whether the Stansted samples produce much evidence for the cultivation of oats, since this cereal was dominant in late Saxon samples from Springfield Lyons, Chelmsford,

(Murphy 1987b). Oats will grow on infertile clay soils, and are a valuable high-energy fodder for draught animals.

Medieval

The only medieval A120 site to produce useful quantities of environmental evidence was Blatches (Site 24). This late 12th-13th century enclosed farmstead produced typical medieval assemblages of mixed cereals, legumes (horse bean, pea and possibly cultivated vetch) and all the main species of domesticated animals. There was a little evidence that the local rivers were being exploited for fish, and cured herring may have been purchased. A second variety of free-threshing wheat, rivet-type wheat, was being cultivated in addition to bread wheat. This cereal has been recovered from many sites of the period in southern and central England. Rivet wheat flour is suitable for biscuit making, and the tall straw from this crop was useful for thatching. Since the two types of wheat had slightly different culinary and growth properties, both types were probably grown as insurance against adverse weather and pests, and presumably to use for a range of different purposes. It seems unlikely, therefore, that they were grown as a maslin, but to the author's knowledge no pure rivet-type assemblages have yet been recovered.

A wider range of arable weeds was recovered including several typical medieval cornfield weeds such as cornflower and corn cockle. Stinking chamomile, a weed of damp clay soils, first appeared in the mid/late Roman A120 samples, but became much more common in the medieval samples. Weedy legumes (eg clover, medick, vetches) were less frequent than in the Iron Age and Roman samples and nitrophilous weeds, such as fat hen, became more common. This could indicate that manuring was taking place, although the introduction of crop rotations, which included leguminous crops, would also have helped to improve soil fertility. Hedgerow fruits and nuts including hazelnut, apple, elder and bramble were still being exploited.

A very similar range of crops were being grown on medieval sites around the Stansted Airport area (Murphy 2004b), the only differences being that a little more rye was present at Blatches and one of Murphy's sites did not produce evidence for rivet-type wheat. Murphy also found possible evidence of flax cultivation and malting on one site. All of these differences, however, could simply be due to the chance nature of preservation by charring. As in earlier periods, no definite evidence for the consumption of imported fruits, nuts and spices was recovered, although a single possible grain of grape pollen from a cess pit at Stebbingford (Wiltshire in Medlycott 1996) hints at information that may not have been preserved. Perhaps luxury foods such as grapes or raisins were purchased from time to time for special occasions.

Conclusion

Evidence concerning the landscape in which the A120 sites were set has primarily been pieced together from indirect sources such as bone, charcoal and charred plant remains. It is, therefore, important that the effects of human selection and preservation biases are taken into account. Information about arable cultivation and livestock rearing that these remains have provided needs to be translated into the effects that such activities had on the landscape as a whole. The small amounts of more direct evidence examined, such as pollen, waterlogged plant macrofossils, insects and molluscs, were very patchy and often poorly dated, and because they were from archaeological features the data needs to be examined with caution. It is, therefore, very difficult to establish with confidence important factors such as the arable/pastoral balance and the extent of woodland clearance on the boulder clay plateau through time.

Whilst pollen and mollusc evidence suggests that the environment was very open from around the mid to late Bronze Age onwards, woodland resources do not seem to have been a limiting factor in the late Bronze Age or Roman period, and hedgerow fruits and nuts were being consumed during all periods of settlement. A third proposition that is difficult to confirm from the limited evidence is that, throughout the periods of occupation the settlements investigated appear to have been very rural and low status in nature, since no evidence of imported foods was found. However, the recovery of waterlogged remains of walnut, stone-pine, olive and chestnut from a Roman well at Great Holts Farm, Boreham (Murphy 2003) serves as a reminder that charring is a very biased form of preservation. Further analyses of pollen bearing deposits, waterlogged plant macrofossils and charcoal assemblages are important for this area to help to fill many gaps in our understanding of the Essex landscape.

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