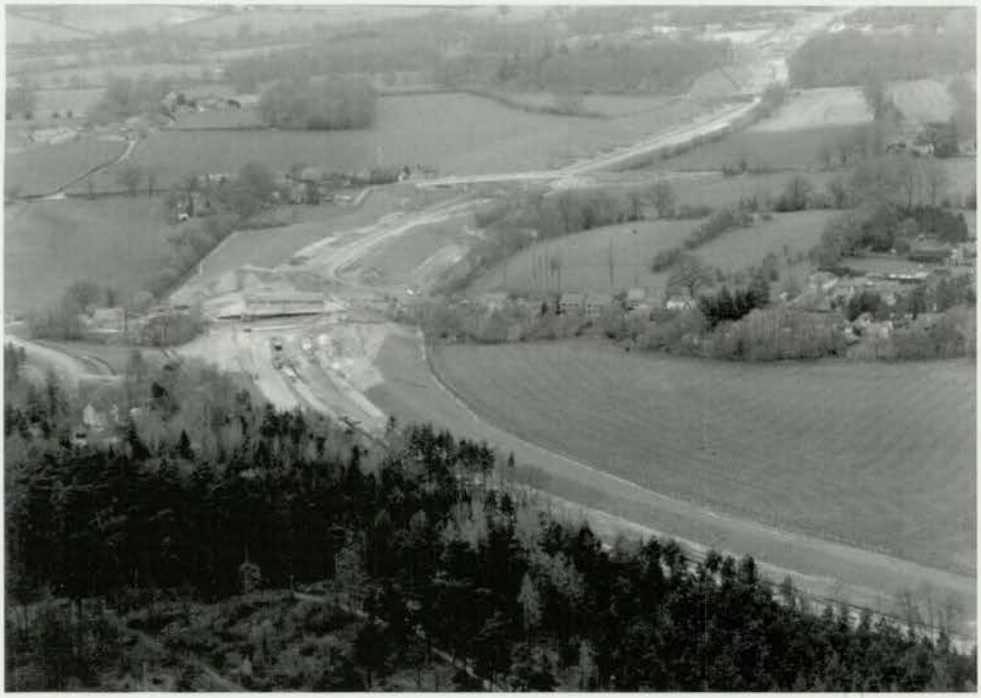
Archaeological Investigations on the A34 Newbury Bypass, Berkshire/Hampshire, 1991-7



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HIGHWAYS AGENCY

Wessex Archaeology

Wessex Archaeology 2000
on behalf of Highways Agency

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Archaeological Investigations on the A34 Newbury Bypass, Berkshire/Hampshire, 1991-7

by Vaughan Birbeck

supported by specialist contributions from

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Front cover photo: A view, looking north-west, of the Newbury Bypass under construction, from Great Pen Wood across Enborne Road to Enborne Street and Wheatlands Lane (photo courtesy of Mott MacDonald)

Back cover photos: left: Corn drier at Bagnor Road; right: dump of medieval pottery at Enborne Street

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Summary

Archaeological investigations along the route of the A34 Newbury Bypass employed a staged approach to assess the likely impact of the road on archaeological remains and allow appropriate mitigation strategies to be developed. All existing material was reviewed to provide baseline data. This was followed by field evaluation employing both intrusive and non-intrusive techniques to confirm the presence and significance of remains.

This process confirmed the existence of archaeological remains at ten sites: Great Pen Wood, Enborne Street, Wheatlands Lane, Enborne Road, Elmore Plantation, Bath Road, the Lambourn Valley, Hills Pightle, Swilly Copse and Curridge Road. Two of these sites, early Roman material at Enborne Road and in situ Mesolithic deposits in the Lambourn Valley, were thought to be of regional or national importance, and a medieval site at Enborne Street/Wheatlands Lane was thought to be of regional importance. All the other sites were considered to be of local importance.

Three different strategies were employed to mitigate the archaeological impact of the road. At Enborne Road and the Lambourn Valley, sites that were thought to be of regional or national importance, the design of the road construction requirements was amended so as to allow archaeological remains to be preserved in situ. At the other sites, where the new road would destroy all the remains, mitigation took the form of archaeological investigation and recording, prior to construction works. This entailed set-piece excavation in only one case, with the majority of sites being investigated by a 'strip and record' technique designed to ensure that the full extent of the archaeological remains within the road corridor was recorded. An archaeological watching brief was also maintained over all groundworks undertaken along the bypass route.

The results of these staged investigations are presented in a descriptive text intended to be intelligible to a wide readership, with more detailed and specialist reports presented separately as appendices.

Four sites of prehistoric date were investigated along the bypass route. Part of the Lambourn Valley Mesolithic site, which was thought to contain *in situ* deposits, was preserved through the relocation of a balancing pond. However, part of the site lay directly on the line of the road and could not be preserved; this was excavated by York Archaeological Trust. The excavation identified two concentrations of flintwork, interpreted as a 'home base' site of later Mesolithic date, in which a wide range of activities were carried out using a varied tool kit.

Evidence for Neolithic and Bronze Age activity along the Bypass route comprised a flint scatter at Curridge Road, Middle Bronze Age features at Swilly Copse, a group of Middle and Late Bronze Age features at Bath Road and colluvial deposits of Middle–Late Bronze Age date on the Lambourn Valley and Elmore Plantation sites. These were investigated using the 'strip and record' technique. No certain evidence for settlement dating to these periods was found. This may reflect the often ephemeral nature of such sites, particularly those of Neolithic date, or these isolated features may simply be peripheral to settlement sites that lie beyond the road corridor.

Prehistoric material, mostly worked flint of Mesolithic, Neolithic and Bronze Age date, was also recovered from features and deposits of later date along most of the route, indicating that prehistoric activity in the area was more widespread than the distribution of prehistoric sites along the route suggests.

Four sites of Romano-British date were investigated using the 'strip and record' technique. The Enborne Road site included material of early Roman (pre-Flavian) date; the design requirements of the road were amended to allow this site to be preserved beneath an embankment. The sites at Bagnor Road and Enborne Road appear to represent farmsteads of unknown size. The Bagnor Road site probably originated in the Late Iron Age and continued in use over most of the Romano-British period; the very early date of some of the features on the Enborne Road site suggest that this was also the case there. The nature of the activity represented by the Romano-British remains recorded at Elmore Plantation is less clear, however, it is probable that this too was a farmstead. At Great Pen Wood, on the low plateau to the south of the Kennet valley, the nature of the activities represented by the very disturbed features recorded, is uncertain: the heavy clay subsoil and waterlogged ground conditions would have made this an unpromising area for agriculture or settlement.

Three sites of medieval date were located within the Bypass corridor and investigated using the 'strip and record' technique. The remains excavated at Hill's Pightle probably represent a small croft or farmstead, situated in a chalkland dry valley. The Enborne Street and Wheatlands Lane sites were situated on a ridge of London Clay towards the southern end of the Bypass route. Large quantities of pottery and tile dating to the 13th–14th century were recovered, the fragile and poorly-fired condition of which suggested that it represented waste material from kilns. Given the close proximity of the two sites, their similar dating and nature, it is thought that they represent a dispersed ceramics industry, exploiting the London Clay.

Post-medieval evidence from the Bypass route was largely confined to field boundaries encountered during the watching brief and strip and record

operations and in some cases recorded on estate or other maps. No evidence associated with the two Civil War battles of Newbury was found.

Environmental evidence from along the route was generally limited. Although sufficient evidence was recovered to allow specific activities and in some cases localised land use to be identified, there was little evidence of the wider landscape through the archaeological periods represented along the route.

The discovery of only a single 'unexpected' site – part of the Romano-British farmstead at Bagnor Road, which was located in an area peripheral to the main line of the road and had therefore not been included in the evaluation trenching programme – demonstrates the success of the evaluation in locating archaeological sites. This success was supported by the employment of the 'strip and record technique' in mitigation, which ensured that sites located by the evaluation were recorded over their full extent within the road corridor. The general absence of archaeological discoveries during the watching brief, beyond a small number of isolated features, indicates that the level of archaeological activity across large parts of the route was relatively low, and further demonstrates the success of the evaluation and strip and record techniques in locating and defining the extent of sites.

The archaeological investigations along the line of the A34 Newbury Bypass have been viewed as an opportunity to consider the evolution of the landscape and the part that people have played in its management and inhabitation. The bypass corridor crosses a number of topographical/geological zones, the archaeological potential of some of which was already well established, while little was known of that of others owing to a lack of previous archaeological work. The road corridor transect has allowed the investigation of a sample of these landscapes, although the restricted width of the transect means that, in many cases, the extent or nature of the archaeological sites remains uncertain. Nevertheless, the data provides an invaluable tool with which to review perceptions of human activity across varying landscapes over a long period of time.

1. Introduction

Project Background

Newbury is situated in West Berkshire, approximately 3 km north of the border with Hampshire (Fig. 1). The town is sited on the floodplain of the River Kennet, close to the confluence with the River Lambourn, at a point where the Oxford to Southampton road, the A34, crosses the river and the London to Bath road, the A4, passes to the north. In response to increasing traffic congestion in the town during the 1980s, the Department of Transport put forward proposals to construct a north–south bypass to divert traffic travelling on the A34, designated a European trunk road by the European Union, away from the town centre. The relative merits of bypass routes to the east and west of the town were considered at a Public Inquiry in 1988.

The historical development of Newbury in part arises from its position at a natural crossroads. However, evidence for earlier settlement in the area has long been known. Roman remains have been found in Newbury and the surrounding area, and this part of the Lambourn/Kennet valley was extensively farmed at least 2000 years ago. Earlier still, all along the Kennet valley there is evidence that semi-nomadic people hunted in the river valleys and the surrounding woodlands. It was, therefore, likely that, whichever bypass route was selected, the construction of the new road would lead to the discovery of archaeological remains.

The Public Inquiry report indicated that the Department of Transport's preferred route for the bypass lay to the west of Newbury. In view of the likely presence of archaeological remains, Wessex Archaeology was appointed by the consultant engineers, Mott MacDonald, on behalf of the Department of Transport, to undertake an archaeological assessment of the preferred route. This first assessment involved both a review of existing information on the archaeology of the area and a limited field evaluation, carried out during 1991 and 1992. This confirmed the archaeological potential of parts of the route. This assessment was followed by a further stage of field evaluation during 1993–4 to determine the importance of these remains and to identify any need for remedial archaeological work ('mitigation').

The final stage of archaeological fieldwork was carried out in 1996–7, after government approval had been given for the construction of the bypass. This was concerned primarily with the mitigation of the archaeological impact of the road through the preservation of two of the most important sites, and a series of archaeological investigations to record other sites prior to construction of the road.

Following completion of the final stage of fieldwork and the assessment of the results, Wessex Archaeology was commissioned by Mott MacDonald, on behalf of the Highways Agency, to produce a single, integrated report presenting the results of all the archaeological investigations carried out along the route of the bypass. Rather than presenting a detailed description of each site and its finds, a summary of the results from each is provided here, arranged by period. The summary descriptions are followed by a narrative discussion of the overall findings in their wider local and regional contexts. More detailed specialist reports are available under separate cover in *Archaeological Investigations on the A34 Newbury Bypass, Berkshire/Hampshire, 1991–7: Technical Reports* (Allen *et al.* 2000), hereafter referred to as *NBTR* (see Appendix for contents of *NBTR*).

Chronology

The following periods are referred to in this report:

Palaeolithic	**500,000–8500 BC**
Mesolithic	**8500–4000 BC**
Early	8500–6500 BC
Late	6500–4000 BC
Neolithic	**4000–2400 BC**
Earlier	4000–3000 BC
Later	3000–2400 BC
Bronze Age	**2400–700 BC**
Early	2400–1500 BC
Middle	1500–1100 BC
Late	1100–700 BC
Iron Age	**700 BC–AD 43**
Early	700–400 BC
Middle	400–100 BC
Late	100 BC–AD 43
Romano-British	**AD 43–410**
Early	AD 43–150
Middle	AD 150–250
Late	AD 250–410
Saxon	**AD 410–1066**
Early	410–650
Middle	650–850
Late	850–1066
Medieval	**1066–1499**
Early	11th century
Earlier	12th–13th century
Later	14th century
Late	15th century
Post-medieval	**16th–18th century**
Modern	**19th–20th century**

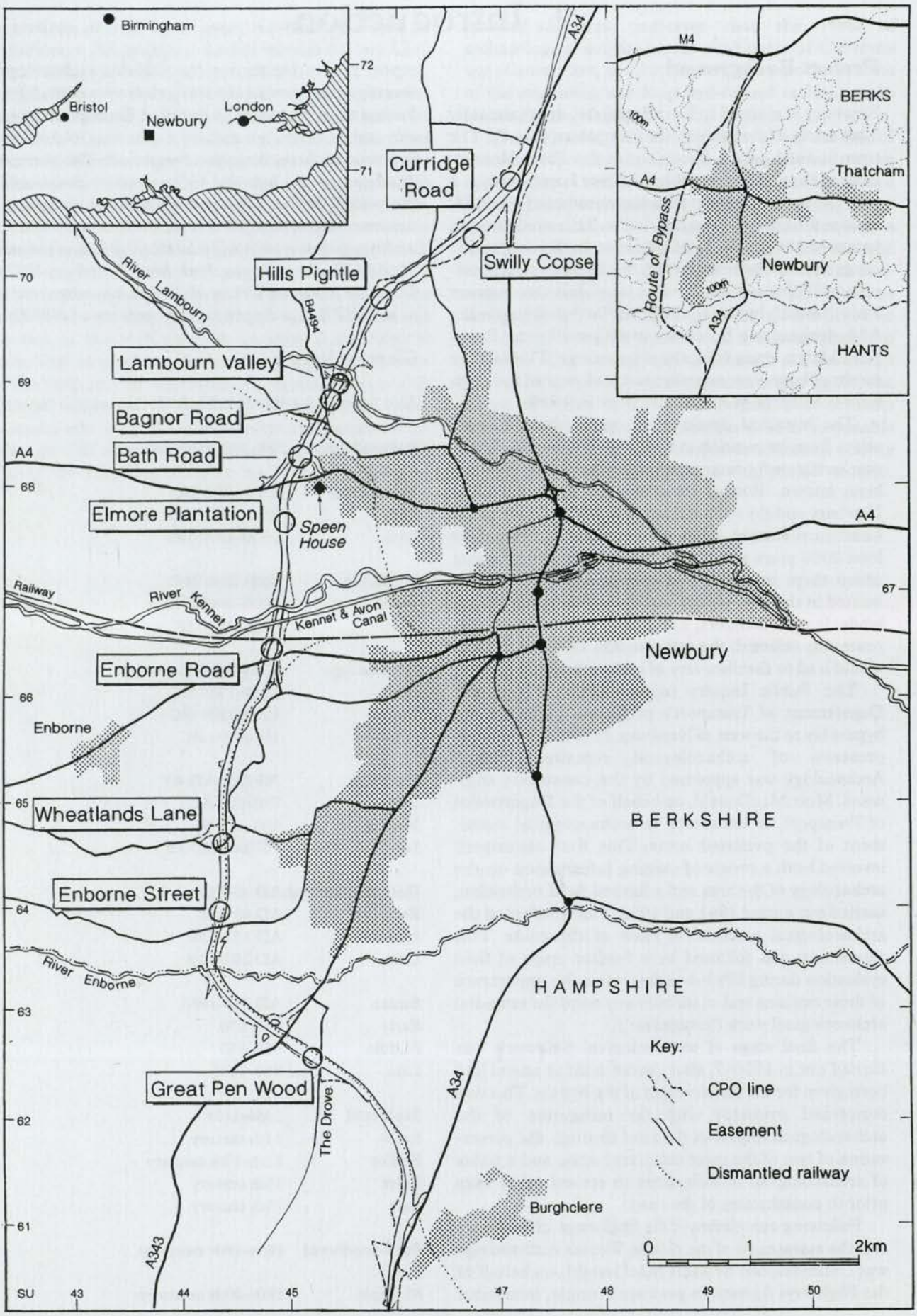

Figure 1 A34 Newbury Bypass: location map

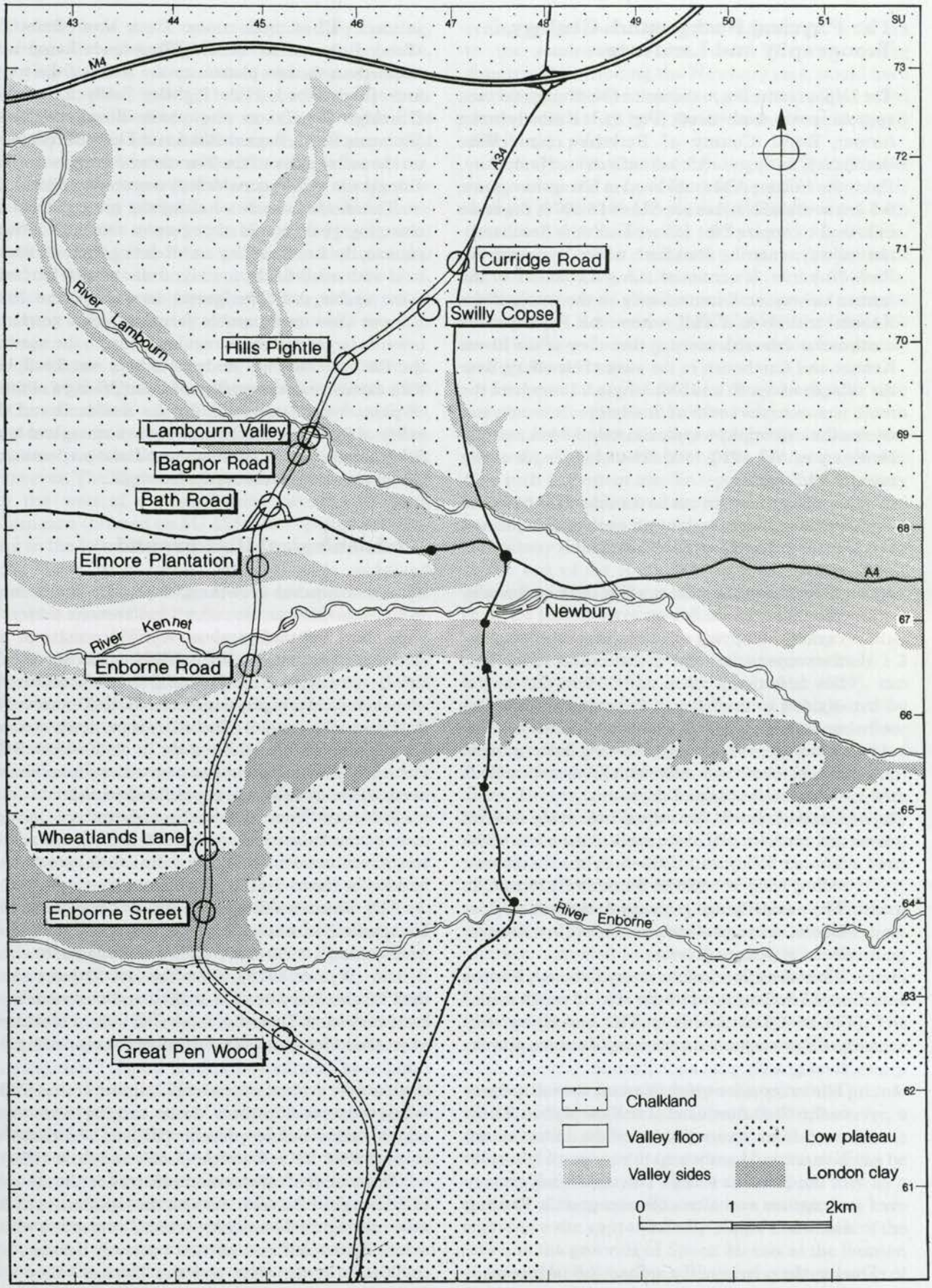

Figure 2 Topographical and geological zones

The Physical Background: Geology, Topography and Land-use

The Bypass route lies to the west of Newbury, and runs approximately south–north (Fig. 2). It is mostly in the former Royal County of Berkshire (now West Berkshire), with a *c.* 3.9 km stretch in Hampshire. From the existing A34 trunk road in Hampshire, some 6.5 km south of Newbury at SU 4615 6070, the route follows the course of the former Didcot to Southampton railway, entering Berkshire where it crosses the River Enborne. It continues along the course of the former railway until immediately to the south of the Kennet and Avon Canal, where the Bypass route continues northwards crossing the valleys of the Rivers Kennet and Lambourn to the west of Newbury, near the villages of Speen and Donnington. From here the route passes to the south of Snelsmore Common and rejoins the existing A34 approximately 3.5 km north of Newbury at SU 4720 7100. The total length of the route is 13.5 km.

Sites along the route can be considered to be in one of four distinct topographic and geological locations, which can be characterised as follows:

1. A low plateau, with a ridge of London clay running from south-west to north-east across its centre, occupying most of the southern half of the route to the south of the Kennet valley. This lies at between 96 m and 110 m OD and is divided by the valley of the river Enborne. The underlying geology comprises London Clay (blue–grey marine clay), Reading Beds (variable sands, clays and gravels) and Bagshot Beds (sands with seams of clay).
2. Chalkland with dry valleys occupying most of the northern half of the route to the north of the Kennet valley and divided by the Lambourn valley, lying at between 94 m and 125 m OD. The underlying geology comprises Upper Chalk, some of which is overlain by Reading Beds or plateau gravels.
3. The valley floors of the rivers Enborne, Kennet and Lambourn, which lie at *c.* 92 m, 76 m and 79 m OD respectively. The underlying drift geology comprises a mixture of terrace gravels, river gravels, peat and alluvium.
4. The valley sides which rise from the valley floors to the chalk downland or the low plateau. These vary from steep (the northern sides of the Kennet and Lambourn) to very gentle (the sides of the Enborne valley). The underlying geology comprises a mixture of terrace gravels, Reading Beds and Upper Chalk.

During the course of the archaeological investigations, sites were recognised and excavated or preserved *in situ* in all of these zones. Three sites (Great Pen Wood, Enborne Street and Wheatlands Lane) were situated on the low plateau to the south of the route, four (Bath Road, Hills Pightle, Swilly Copse and Curridge Road) on the chalk downland, three (Enborne Road, Bagnor Road and Elmore Plantation) on the valley sides of the Kennet and Lambourn, and a single site (Lambourn Valley) was on the valley floor.

The modern land-use along the route reflects the changing geology and topography. On the southern plateau, the London Clay and Reading Beds are woodland and small fields, mainly under pasture but with some arable use. The gravel terraces of the River Kennet allow more arable farming with a tendency towards larger and more regular fields. To the north of the River Kennet lies an area of very wet floodplain with extensive drainage systems, comprising a mixture of pasture and woodland. In the chalkland and the valley of the River Lambourn arable farming and large fields are dominant, although woodland predominates where plateau gravels overly the chalk.

Archaeological Background

The area around Newbury, especially the Kennet valley, lies within an area which has been the subject of a detailed archaeological survey. The results of the study have recently been published and serve as a timely statement of the potential for the discovery of archaeological remains within the lower Kennet valley (Lobb and Rose 1996). The valley is particularly noted for remains of Mesolithic date (*c.* 8500–4000 BC), although there is evidence of past activity from almost every other archaeologically defined period.

Evidence from the earliest period of human activity, the Palaeolithic (pre-8500 BC), in this area is restricted to isolated finds of flint tools, commonly hand-axes found during gravel extraction.

The Kennet valley between Woolhampton and Hungerford is one of the richest areas of known Mesolithic (*c.* 8500–4000 BC) occupation in lowland Britain (Wymer 1978). Over the last 30 years more than 50 sites have been identified and a number have been excavated. Typically, these sites consist of scatters of worked flint tools, sometimes accompanied by the remains of hearths and animal bones. Consequently, there is now evidence for a large number of sites in the valley, with radiocarbon dates ranging from over 10,000 years before present (BP) at Thatcham to around 5000 BP at Wawcott (Lobb and Rose 1996).

This wealth of information reflects not just the level of fieldwork in the area, but also the significance of the valley during the Mesolithic period. The area as a whole would have acted as a natural routeway between the chalklands in the west and the Thames valley and beyond to the east (Wymer 1978). At this time the

inhabitants of the Kennet valley lived by hunting, fishing and gathering. They were semi-nomadic, moving regularly over periods of a few days to possibly several months, making best use of the resources available in different places at different times. The density of sites around Newbury and the quantity of flintwork recovered shows that this was a favoured area.

Riverside camps, which were probably occupied for relatively long periods of time, would have been perfectly placed to exploit the diversity of resources of both the river and forest environments. Occasional finds of this date on higher ground away from the river, which was presumably heavily wooded, perhaps reflect hunting and gathering forays from the riverside camps.

Evidence in the Newbury area for Neolithic (*c.* 4000–2400 BC) and Early Bronze Age (*c.* 2400–1500 BC) settlement is scarce and restricted to isolated finds, almost invariably recovered from the excavation of sites of later periods. Some funerary monuments survive, however. The Bypass route passes approximately 1 km to the west of a small barrow cemetery at Wash Common (centred on SU 455648). A period of flooding in the lower Kennet and Lambourn valleys, which may have been caused by large scale woodland clearance on the Berkshire Downs and upstream in the upper Kennet valley, has been interpreted as evidence of agricultural activity and attributed to this period (Butterworth and Lobb 1992). However, there is little evidence for early agricultural settlement around Newbury itself. This may partly have been because the soils in the area were too heavy to have been worked by the simple form of plough used at that time. By the Middle to Late Bronze Age (*c.* 1500–800 BC) there is considerable evidence for an intensification of land-use and a large number of settlement and burial sites are known to the east of Newbury. Although no settlements are known in the immediate area around the Bypass route, there are many finds of this period recorded in the Berkshire County Sites and Monuments Record. The distribution of these finds, particularly around the area where the Bypass route crosses the Kennet Valley, suggests an extensive human presence.

Known archaeological sites and findspots of Iron Age date (*c.* 800 BC–AD 43) are rare in the Newbury area, perhaps reflecting soil exhaustion caused by over-exploitation of the land (Butterworth and Lobb 1992), to the east of Newbury at least. A 'Celtic' field system covering an area of at least 2 hectares has been identified at Highclere (Lobb and Rose 1996) to the south of the route. Evidence for the clearance of woodland on Snelsmore Common to the north of the route, to create pasture, may reflect the expansion of agriculture into areas of heavier soils during the Iron Age (*ibid.*). An important factor which may have influenced the pattern, nature and economy of Iron Age settlements in the area, is the rise in power of the tribal centre or *oppidum* at Silchester, approximately 18 km to the south-east of the route. The surrounding countryside, including the Newbury area, would have come under the domination and control of this tribal centre, which may have functioned as a market and distribution point.

Following the Claudian landings of AD 43, Roman conquest in the area of Berkshire and Hampshire is thought to have been rapid and straightforward, with the local Atrebates tribe offering no resistance. Silchester – *Calleva Atrebatum* – became the capital of the administrative district or *civitas* of the Atrebates, serving as the local administration centre and acting as an important Romanising influence over the tribal area as it developed into a planned, and subsequently walled, Roman town.

Large numbers of finds of Romano-British date have been recorded around the Newbury area. South of the Kennet, these finds probably indicate the presence of settlements along the floodplain terrace. One such settlement may be represented by a cemetery of 100 inhumation burials found with 1st and 2nd century AD pottery, discovered during construction of the railway sidings in Newbury, approximately 2.6 km to the east of the route (SU 475668) (Peake 1931). These burials must have been associated with a settlement of significant size and status, but none has yet been definitely identified in the close vicinity. Another site, at Salcombe Road, Newbury, approximately 1.2 km to the east of the route (SU 4610 6629), can probably be regarded as a villa; this is suggested by finds of walls, tiles, plaster and a hypocaust (underfloor heating system) covering an area of approximately 8 ha. A later Romano-British date is probable for this occupation. Twenty cremation burials were associated with this site (*ibid.*). At Hampstead Marshall, approximately 3 km to the west of the route (SU 4160 6620), several pottery kilns of 2nd–4th century AD date have been excavated (Rashbrook 1983).

The *Antonine Itinerary*, a list of Roman government stations and the distances along roads between them that was compiled to assist Roman officials travelling around the country, records the existence of a station called *Spinis* on the road between *Calleva Atrebatum* (Silchester) and *Cunetio* (Mildenhall, Wiltshire). The exact location of *Spinis* remains unknown. The distance from *Cunetio* recorded in the *Antonine Itinerary* suggests a location at Woodspeen, west of the present village of Speen (Rivet and Smith 1979); however, a concentration of finds further east, in and around the villages of Speen and Bagnor, suggests that this may be a more likely location. The name of Speen may be a survival of the name *Spinis*. Some antiquarians have regarded a site approximately 500 m to the west of the route, in the grounds of Speen House, as the location of *Spinis*, but this has been disputed on the grounds of the paucity of finds from the site.

Several coin hoards dating to the 4th century have been found around Newbury. Coin hoards may have been deposited as a means of disposal of devalued currency, or conversely for safekeeping in times of political uncertainty. Both a decline in the silver content of Roman coins and a series of army revolts are known to have occurred in the later Roman period. Finds of 4th century coins and other material indicate continued habitation in the area, but it is likely that the established Romano-British way of life underwent a slow decline (Lobb and Rose 1996, 92). Formal Roman administration ceased in AD 410, when the province of Britannia was officially abandoned.

Although there is some historical evidence for Saxon (AD 410–1066) settlement in and around Newbury (Astill 1978), the nature of this settlement is little understood. Saxon settlements are known from 9th and 10th century charters at Speen and Thatcham (Peake 1931), but only limited evidence has been discovered for a similarly dated settlement at Newbury. The manor of *Ulvritone*, noted in the Domesday survey of 1086, has not been found. It is possible that it formed the nucleus of the subsequent medieval town of Newbury, which is first recorded in documents dated to *c.* 1080 (Vince *et al.* 1997).

The Bypass route passes through several parishes which would have formed part of the rural hinterland of the medieval (AD 1066–1499) town of Newbury. The town developed steadily throughout the 12th and 13th centuries. After a short decline in its fortunes during the late 13th and 14th centuries, it reached its peak as a centre for the wool and cloth producing industries during the 15th and 16th centuries, possessing not only fulling mills but also a merchants' guild and weavers company (Astill 1978).

The Berkshire County Sites and Monuments Record details two scatters of medieval pottery close to the Bypass route at Wash Common. The route also passes close to the 14th century castle and probable manorial centre at Donnington.

The Bypass route crosses the western limits of the sites of two Civil War battlefields. Wash Common was the site of the First Battle of Newbury, which took place on 20 September 1643. Royalist troops were deployed along a line extending from the River Kennet to Wash Common in the south (Smurthwaite 1984). The most southerly of the Parliamentary forces were stationed on areas affected by the Bypass route, although most of the fighting was concentrated around Round Hill, to the east of the route. The Second Battle of Newbury took place around Speen on 27 October 1644. In an attempt to relieve besieged forces at Donnington Castle, the Royalists deployed an army to the north of Newbury, with strongholds at Shaw House and Speen (*ibid.*). Once again, the Parliamentarian forces may have been stationed in areas affected by the Bypass, but the fighting was concentrated to the east of the route. Historically the battles were of considerable local importance, although neither can be regarded as a turning point in the Civil War. From an archaeological viewpoint, little if any evidence relating to these battles is likely to survive on the battle sites themselves.

Major post-medieval developments in the area were centred on new transport systems. The town was a popular staging post on the London to Bath road (A4). The Newbury–Kintbury section of the Kennet and Avon Canal was opened in 1797 and the Great Western Railway in 1847. The Southampton to Didcot railway line was constructed in the mid–late 19th century. These are all crossed or, in the case of the latter, partly followed by, the Bypass route.

Stages of Archaeological Fieldwork and Recording

The three stages of archaeological fieldwork were focussed on the road corridor selected for construction following the public inquiry.

Stage 1 Evaluation

The first stage of archaeological evaluation was intended to identify areas of archaeological potential along the route and propose appropriate methods of further investigation. During the summer of 1991, Wessex Archaeology staff were present while 55 geotechnical pits were being dug to test the underlying geology and natural deposits beneath the road corridor. This 'watching brief' was intended to observe and record any archaeological remains revealed during the test pitting, in order to provide background information as to where such finds might later be encountered. This was followed in November 1991 by a desk-top study of documentary sources, aerial photographs and information held on the Hampshire and Berkshire County Sites and Monuments Records. This examined existing data relating to a corridor 1 km wide centred on the proposed Bypass route, in order to identify the archaeological potential of the area within or adjacent to the new road.

A programme of field evaluation was then carried out, between December 1991 and January 1992. This consisted of the excavation of 362 hand-dug test pits on land under pasture and woodland to recover artefacts from the topsoil, the field-walking of ploughed land to collect surface finds and an auger survey in the Kennet valley.

The latter was intended to establish the presence and nature of alluvium and peat which might conceal archaeological sites and identify any higher 'islands' in the underlying gravel where archaeological sites might be located. In addition, a walkover survey was under-

taken through areas of woodland to identify any possible archaeological sites which might survive as earthwork features.

The results of the field evaluation provided evidence of artefact scatters of varying densities which, when combined with the results of the desk-top study, allowed several areas of higher archaeological potential to be identified. These were: an area of medieval activity around Reddings Copse; the Kennet and Lambourn valleys; and the northern slope of the Lambourn valley above Bagnor.

Stage 2 Evaluation

Following the identification of these areas of higher archaeological potential, a second stage of evaluation was undertaken between August 1993 and April 1994. The objective of this Stage 2 evaluation was to identify, characterise and define the limits of archaeological sites along the route, in order to determine the likely impact of the construction of the Bypass and allow appropriate mitigation strategies to be developed to alleviate this impact.

The Stage 2 evaluation consisted of the mechanical excavation of 422 trial trenches along the Bypass route, together with additional hand test pitting and auger survey, and a geophysical survey to locate any buried remains at selected locations along the route. In the areas of higher archaeological potential identified by the Stage 1 evaluation, a 2% sample of the road corridor was investigated using machine trenches. In all other areas, a 1% sample was investigated. This work was undertaken prior to the issue of the compulsory purchase orders (CPOs) for the land and the clearance of woodland along the Bypass route and, consequently, access was not available to some parts of the route.

The machine trenching was supplemented in areas where the results were unclear by geophysical survey. This employed non-intrusive, remote-sensing techniques to identify possible buried archaeological features, which could then be targeted for further investigation by additional machine trenches.

In the Kennet valley floodplain, the results of the Stage 1 evaluation suggested that 'islands' in the underlying river gravels might exist, sealed below peat deposits, and that Mesolithic deposits could survive *in situ* on such 'islands'. A series of targeted hand-dug test pits was therefore excavated to investigate this possibility.

The Stage 2 evaluation confirmed the existence of archaeological remains at ten sites (Great Pen Wood, Enborne Street, Wheatlands Lane, Enborne Road, Elmore Plantation, Bath Road, the Lambourn Valley, Hills Pightle, Swilly Copse and Curridge Road). Two of these sites, early Roman material at Enborne Road and *in situ* Mesolithic deposits in the Lambourn Valley, were thought to be of regional or national importance, and a medieval site at Enborne Street/Wheatlands Lane was thought to be of regional importance. All the other sites were considered to be of local importance only.

Stage 3 Fieldwork

Following purchase and clearance of the land, the Stage 3 fieldwork sought to complete the field evaluation process in those parts of the route to which access had not been available during the previous stages of work and, subsequently, to mitigate the impact of the road construction on the archaeological sites identified during the evaluations.

Three different mitigation strategies were employed. At Enborne Road and the Lambourn Valley, sites which were thought to be of regional or national importance, it proved practicable for the design of the road construction requirements to be amended so as to allow archaeological remains to be preserved *in situ*. At the other sites, where the new road would destroy all the remains, mitigation took the form of archaeological investigation and recording prior to construction works. Finally, an archaeological watching brief was maintained over all groundworks undertaken along the Bypass route, in order to allow any features of archaeological interest not meriting more formal mitigation, or any sites not identified by the evaluations, to be recorded prior to their destruction.

At the outset of the Stage 3 fieldwork, a total of 37 further machine trenches was excavated to complete the evaluation of those areas to which access had not previously been available, and to investigate possible features identified by the trial trenching and geophysical survey at Enborne Street, Bath Road and Swilly Copse. At the same time, during May to June 1996, a programme of 'strip and record' investigations was undertaken by Wessex Archaeology. Full excavation of part of the Lambourn Valley Mesolithic site which could not be preserved was undertaken by York Archaeological Trust (YAT) between July and October 1996. Additional field-walking was also undertaken at Curridge Road.

The strip and record investigations entailed the removal of topsoil from large areas, in order to define the nature and limits of the previously identified archaeological sites and allow an appropriate level of recording to be undertaken, prior to the commencement of construction works in these areas. On the basis of the results of the evaluations it was originally proposed to employ this technique at Great Pen Wood, Wheatlands Lane, Bath Road and Swilly Copse. Following the completion of the machine trenching, however, it was decided that the same strategy would be employed at two further sites, those at Enborne Street and Elmore Plantation.

The final extent of the strip and record areas was dependent on the findings, and was determined on site. Stripping was continued until the full extent of a located archaeological site along and within the route corridor was defined. The stripping was conducted using a tracked mechanical excavator equipped with a toothless bucket, working under continuous archaeological supervision. The spoil was removed from site by dumper truck. Stripping continued to the surface of the drift geology or archaeological deposits, whichever was encountered first. Following the removal of the topsoil, the sites were cleaned by hand where necessary, and all features were investigated by hand excavation.

The excavation of that part of the Lambourn Valley Mesolithic site which lay on the line of the new road was undertaken by YAT, in accordance with a detailed brief prepared by Wessex Archaeology and approved by English Heritage. The methodology employed is described in Chapter 2.

A number of fields adjacent to the former course of the A34 at Curridge Road were field-walked for the surface recovery of artefacts. The fields were ploughed and left to 'weather', to allow the soil to settle and artefacts to become visible at the surface.

The watching brief on topsoil stripping in advance of construction started in July 1996 and continued until July 1997. During the watching brief, the areas to be preserved, at Enborne Road and at the Lambourn Valley, were closely monitored to ensure they were not damaged. An on-site archaeological presence was maintained to ensure communication with the various work crews and supply background information and advice where necessary.

Any archaeological remains encountered during the watching brief, which required more detailed investigation and recording, were dealt with under separate instruction. In this way a small site of Romano-British date, which was not found in the evaluation, was excavated and recorded at Bagnor Road. The watching brief also resulted in the recording of a small number of features of archaeological interest at Enborne Street, to the north of the A4 Bath Road, to the east of Swilly Copse and at Curridge Road, together with many features which proved to be of modern or natural origin.

Written, drawn and photographic records were made of all details of excavation and/or demolition likely to reveal material of archaeological significance, using Wessex Archaeology's standard recording system. Where possible features were revealed, these were investigated by hand excavation and fully recorded. Where more recent features, notably parts of the disused railway and agricultural drainage systems, were affected by the stripping, a full photographic record was made, augmented by plans and sections where necessary.

Establishing the Ancient Environment

A general policy of taking ten-litre samples of soil from a range of datable features at each site was employed for the recovery of charred plant remains and charcoal. This, it was hoped, would provide the basis for determining the local farming economy, the available natural resources, and the function of the sampled feature or deposit. This was particularly important in view of the lack of similar environmental investigation previously in the area beyond Newbury itself.

Where appropriate, the sediments and soils encountered were described *in situ* or as intact block samples in the laboratory. These descriptions provide specific interpretation of the processes which led to the formation of the sites, and the nature of the soil and sediment history of the excavated area. The combination of these analytical approaches allows us to attempt a limited interpretation of the wide landscape in which the prehistoric, Roman, and medieval sites operated, and the farming economy beyond the confines of the excavated areas. The only exception to this was the excavations in the Lambourn Valley, where a more site specific sampling policy was employed (YAT 1996).

In order to undertake this scientific programme it was important to be able to recover charred seeds and charcoal, often of microscopic scale, from the soils, and to select the appropriate samples for analysis. Following this identification analyses of the remains were performed by a series of specialists using standard techniques, which are described in *NBTR*.

Assessment and Reporting

Following completion of the Stage 3 fieldwork, a post-excavation assessment of the results was undertaken by Wessex Archaeology in order to determine the potential of the evidence recovered to contribute to further research. The results of the Lambourn Valley excavation were assessed separately by YAT (1996).

Following discussions with English Heritage and the Highways Agency, Wessex Archaeology prepared an assessment report (Wessex Archaeology Report No. 36494, 1997) which put forward proposals for analysis and publication of the evidence from all sites investigated along the route of the Bypass, including the Lambourn Valley excavation.

The full details of the observations recorded during fieldwork and reports of analyses and research undertaken on the objects found have been combined into an archive of the project. This record has been left in the care of Newbury Museum (accession numbers NEBYM 1996.51 (Lambourn Valley) and NEBYM 1998.61 (all other sites)) so that it can be examined by

anyone wishing to explore the evidence further. This report is based upon the reports contained in the archive and is written in a style as free as possible of excessive technical language, so as to make it understandable to a wide readership. Although some technical detail is necessary to support the interpretations presented in the main text, this has been displaced to the companion report (*NBTR*). In the following Chapters reference is made to the relevant sections of *NBTR* at the end of each site discussion.

In line with modern approaches to archaeology, the investigation of the line of the A34 Newbury Bypass has been viewed as an opportunity to consider the evolution of the landscape and the part that people have played in its management and inhabitation. The evidence recorded for a continuous human presence in the Newbury area is spread thinly through a wide time period and is concentrated spatially in a number of discrete 'sites'. These sites are described in chronological order, albeit that a number of sites contain evidence for different episodes of activity, sometimes widely separated in time.

The results of this study alone make it impossible to write a continuous history of land-use, but when they are combined with previous work in the region, a sound framework can be established which can be refined in the future as other opportunities for site investigation are taken.

2. The Prehistoric Period (*c.* 8500 BC–AD 43)

Introduction

Although finds of Palaeolithic date (*c.* 500,000–8500 BC), mostly flint hand-axes, have been recovered in the Newbury area, no finds of this date were recovered during any stage of this archaeological project, and this period is therefore not considered further here.

As discussed above, the Kennet valley around Newbury is particularly renowned for its finds of Mesolithic date (*c.* 8500–4000 BC), with concentrations of material found to the west of the road line at Wawcott near Kintbury (Froom 1972a; 1972b; 1976), and to the east at Greenham and Thatcham (eg, Wymer 1962, Healy *et al.* 1992). It is thought that the Kennet Valley, with an abundance of fish and wild fowl, represented a desirable location for hunter-gatherer communities during the Mesolithic period (Richards 1978).

Although the Berkshire County Sites and Monuments Record details many finds of Neolithic (*c.* 4000–2400 BC), Bronze Age (*c.* 2400–800 BC) and Iron Age (*c.* 800 BC–AD 43) date in the vicinity of the Bypass route, most of these are chance finds and are not associated with known settlement sites.

Four sites of prehistoric date were investigated along the Bypass route. These were an extensive flint scatter and deposits of Mesolithic and later date in the Lambourn valley, a dispersed scatter of Late Neolithic–Early Bronze Age flintwork at Curridge Road, a small number of features of Early–Middle Bronze Age date to the south of Swilly Copse close to the Curridge Road site, and a small number of scattered features of Bronze Age date at Bath Road. An ancient buried soil of possible Late Bronze Age date was found at the base of a series of deposits on the Romano-British site at Elmore Plantation; the site is described in Chapter 3.

In addition to the above sites an assemblage of prehistoric material, mostly worked flint of Mesolithic, Neolithic and Bronze Age date, was recovered from features and deposits of later date along most of the route. Although this material had been redeposited by later activities, such as ploughing, it does indicate more widespread prehistoric activity in the area than the distribution of prehistoric sites along the route suggests, particularly at the southern end of the route. These rather ephemeral traces are not described in detail in this report.

The following text describing the Lambourn Valley site is largely based on an original report prepared by Peter S. Bellamy. A detailed interpretation of the site, based on an analysis of the flint assemblage, is contained in NBTR, 11–25.

The Lambourn Valley: Mesolithic (*c.* 8500–4000 BC)

OS Grid Reference SU 4550 6905

This site (Figs 3–7) was located on the south side of the River Lambourn on a gentle north-east facing slope. It lay at a height of between 81 m and 84 m OD, approximately 30–60 m from the bank of the southern river channel, a small artificial mill stream. The underlying drift geology comprised river and valley gravels, overlain by alluvial 'brickearths'.

During the Stage 2 evaluation, a single machine trench (trench 297) identified possible *in situ* Mesolithic deposits. Other evaluation trenches (trenches 294, 296 and 500) nearby also found a dense scatter of Mesolithic flintwork, within a plough-disturbed subsoil. Although similar sites of Mesolithic date are known in the Newbury area, undisturbed Mesolithic deposits are rare nationally.

The deposits in trench 297 were situated off the main road line, in an area where a balancing pond was to be constructed. In view of the potential national importance of this material, it was decided, in consultation with Mott MacDonald, that the balancing pond should instead be constructed further to the south, allowing the *in situ* component of the site to be preserved. However, the plough-disturbed flint scatter lay directly on the road line and could not, therefore, be preserved. Accordingly, a strategy for the excavation of an area of 0.4 ha centred on evaluation trench 294 was drawn up by Wessex Archaeology and approved by English Heritage. In June 1996, York Archaeological Trust (YAT) was commissioned by Mott MacDonald, on behalf of the Highways Agency, to undertake the excavation of this area. The excavation was carried out between July and October of 1996 by YAT's nominated subcontractor, Southern Archaeology.

The in situ *Deposits*

The 25 m long evaluation trench 297 (Fig. 3) was excavated by machine to a depth of 0.60 m, at which level a concentration of worked and burnt flint was found on the surface of a silty clay loam deposit. The flint was concentrated at the west end of the trench, petering out after *c.* 12 m. Finds were collected from the surface of the deposit but no excavation was undertaken. A total of 411 worked flints was recovered, as well as quantities of burnt flint and a large piece of burnt sarsen, possibly a hearth stone. The fresh condition of the worked flint when compared to flint

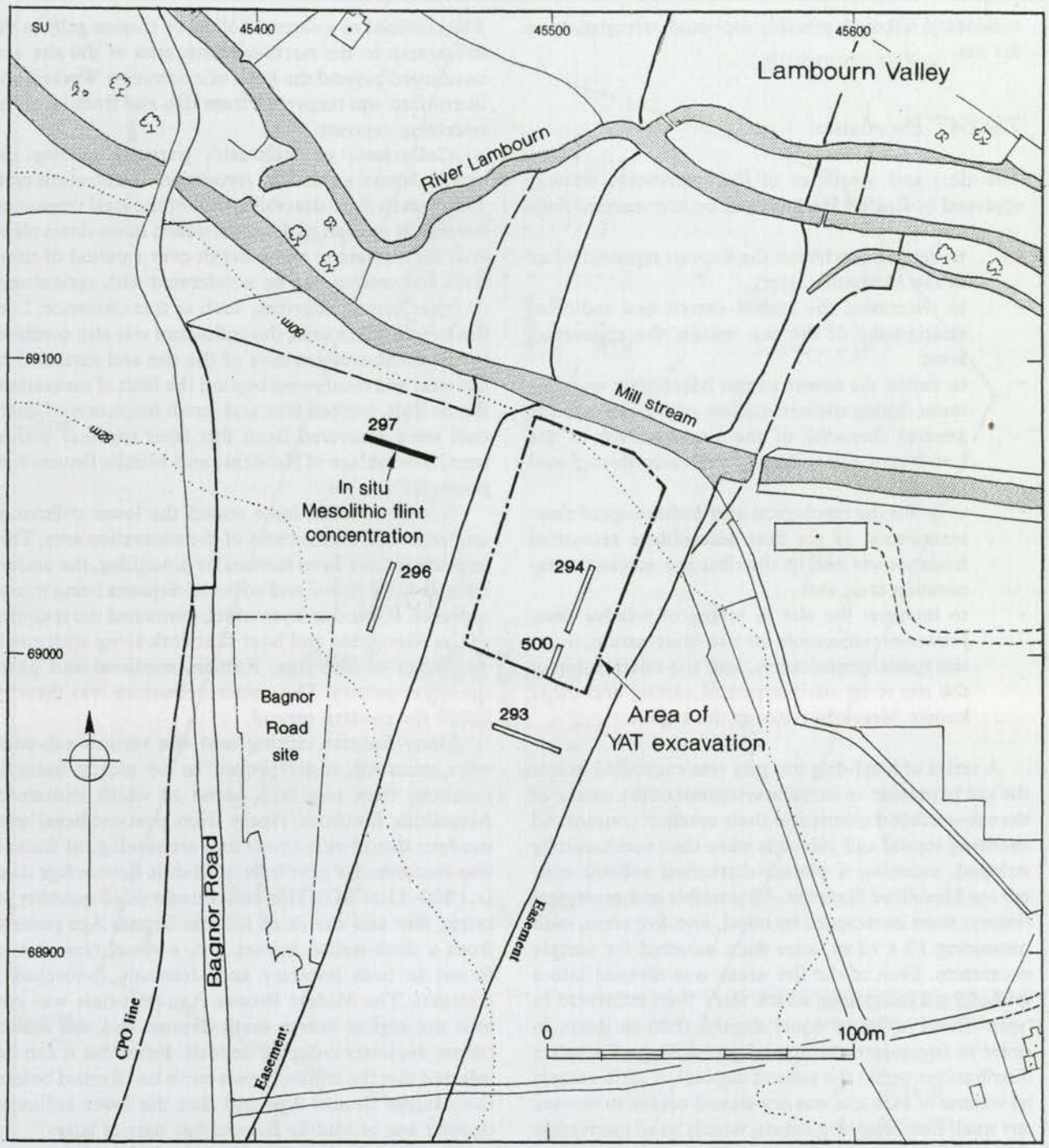

Figure 3 Lambourn Valley: location plan

recovered from the overlying deposit, together with the density of the concentration, indicated that this might have been an *in situ* deposit (ie, undisturbed by ploughing or other activity). The flint-bearing layer was overlain by a 0.30 m thick silty clay sub-soil, possibly a plough-disturbed natural brickearth.

Among the large flint assemblage were 15 identifiable tools, and possible debris from flint 'knapping'. The tools present are generally indicative of a Mesolithic date. On the basis of the flint assemblage alone little can be said about the nature of this site, other than that it appears to have been primarily a flint-working site. The high proportion of flint-knapping debris (ie, the waste left over from working down flint nodules to make implements) and few diagnostic tool types, suggests that the manufactured artefacts were taken away from the site for use elsewhere. Apart from the remains of a possible hearth, all the indications are of

temporary, although possibly repeated, occupation on the site.

The YAT Excavation

The aims and objectives of the excavation strategy approved by English Heritage can be summarised thus:

- to determine whether the deposit represented an *in situ* Mesolithic layer;
- to determine the spatial extent and sediment stratigraphy of the site within the excavation area;
- to define the nature of the Mesolithic environment during the occupation of the site and the general character of the environment in the Lambourn valley during the early Post-glacial period;
- to define the typological and technological characterisation of the flint assemblage recovered from the site and its distribution across the excavation area; and
- to interpret the site in terms of relative date, processes responsible for site information, intra-site spatial organisation, and the relationship of the site to its environmental setting and other known Mesolithic sites in the region.

A series of hand-dug test pits was excavated across the site to provide an initial assessment of the nature of the sub-surface deposits and their artefact content. All overlying topsoil and sub-soils were then mechanically stripped, exposing a plough-disturbed subsoil containing Mesolithic flintwork. All possible archaeological features were investigated by hand, and five areas, each measuring 12 x 12 m, were then selected for sample excavation. Each of the five areas was divided into a grid of 2 x 2 m squares, which were then excavated in 'spits' (level layers of equal depth) 0.20 m deep, in order to investigate the spatial patterning of artefact distributions within the subsoil deposit. A 20% sample by volume of each spit was dry-sieved on site to recover any small flint-knapping debris, which hand excavation alone might have missed.

Deposits beneath the plough-disturbed sub-soil were sample excavated in the same way. Finally, two machine trenches were excavated to establish the stratigraphic sequence of the site in relation to the underlying river terrace.

Overlying the terrace gravels was a silty clay alluvial brickearth, which extended across the whole of the excavation area and gently sloped south-west to north-east. Overlying this was a buried ancient sub-soil of argillic brown earth. Argillic brown earths, or forest soils, develop over hundreds if not thousands of years (Courty *et al.* 1989, 158); it is therefore possible that this deposit was an *in situ* Mesolithic soil. This deposit was confined to a natural hollow or erosion gully in the brickearth in the north-western area of the site and continued beyond the limit of excavation. Worked and burnt flint was recovered from this and from all of the overlying deposits.

Colluvium, or 'hillwash', partially overlay the argillic brown earth. The formation of colluvium typically results from destabilisation of the local vegetation leading to erosion of the soils, which move down slope and accumulate to some depth over a period of time. This soil erosion can be accelerated with agricultural or other human activities, such as tree clearance. Like the brown forest soils, the colluvium was also confined to the north-western area of the site and extended to the west and south-west beyond the limit of excavation. Burnt flint, worked flint and small fragments of charcoal were recovered from this layer together with a small assemblage of Neolithic and Middle Bronze Age pottery.

A later colluvial layer sealed the lower colluvium and extended across most of the excavation area. This appears to have been formed by ploughing, the underlying geological, soil and colluvial deposits being mixed together. It was this layer which contained the majority of the Mesolithic and later flintwork along with small quantities of Iron Age, Roman, medieval and post-medieval pottery. The upper colluvium was directly below the modern topsoil.

Many features cutting into the various sub-soils were recorded; these proved to be mostly natural, resulting from tree falls, some of which contained Mesolithic flintwork. Apart from post-medieval and modern disturbances only one archaeological feature was recognised, a post-hole of Middle Bronze Age date (*c.* 1500–1100 BC). This contained a small quantity of burnt flint and sherds of Middle Bronze Age pottery from a thick-walled bucket urn, a vessel type that is found in both funerary and domestic (household) contexts. The Middle Bronze Age post-hole was cut into the argillic brown earth deposit and was sealed below the lower colluvial deposit. From this it can be inferred that the argillic brown earth had formed before the Middle Bronze Age and that the lower colluvial deposit was of Middle Bronze Age date or later.

The spread of worked flint within these layers was all that survived of the Mesolithic activity in the main area of excavation. Most of the other excavated Mesolithic assemblages in the Newbury area appear to occur within alluvial deposits, often sealed below peat (eg, Wymer 1962; Healy *et al.* 1992). It appears that the Lambourn Valley Mesolithic material might have occurred in a similar alluvial context which has since been reworked by ploughing.

In addition to the worked flint of probable Mesolithic date, a small number of later pieces were recovered. The presence of a possible leaf-shaped arrowhead and a 'chisel' arrowhead, along with small quantities of Neolithic pottery, suggests some Neolithic

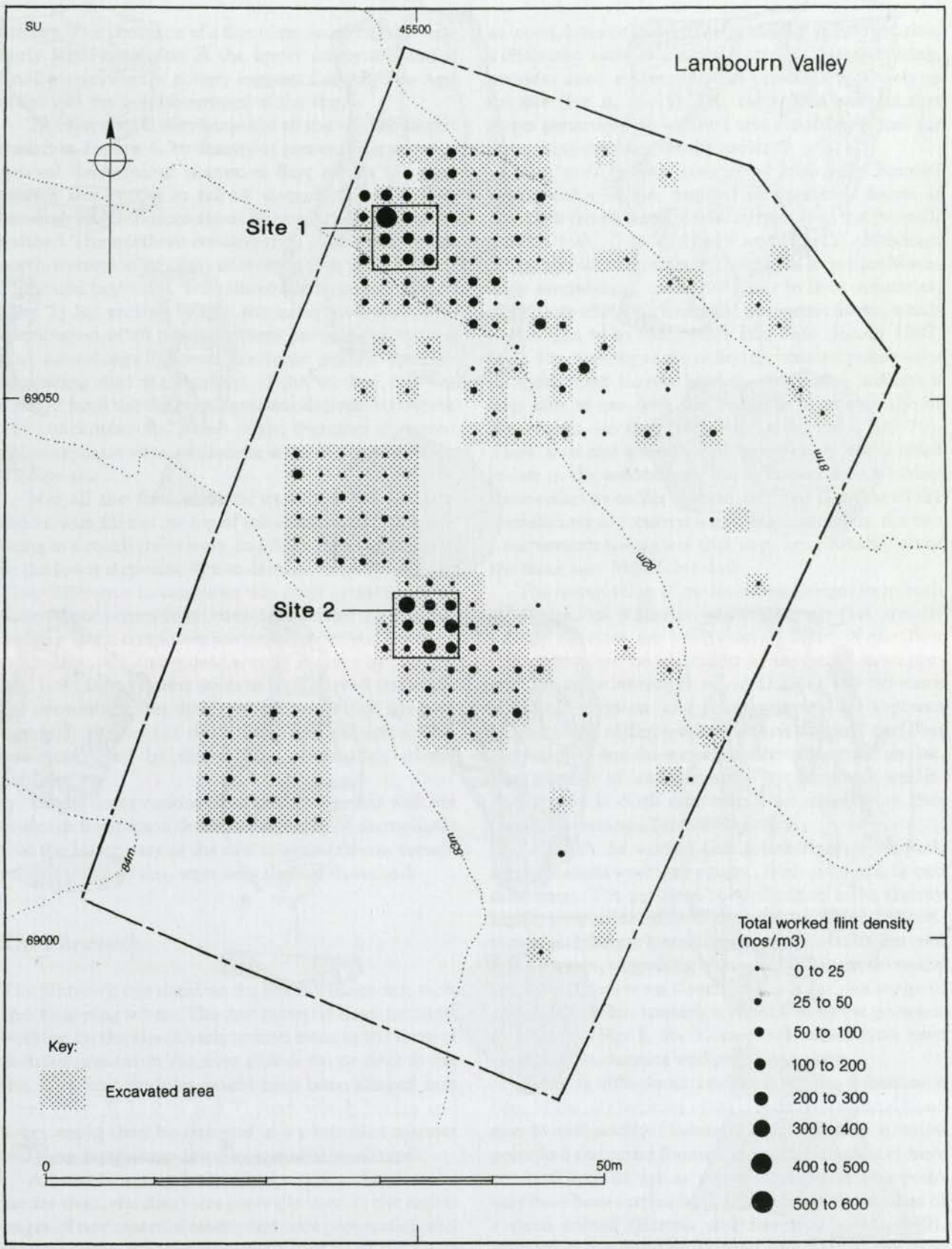

Figure 4 Lambourn Valley: density distribution of worked flint

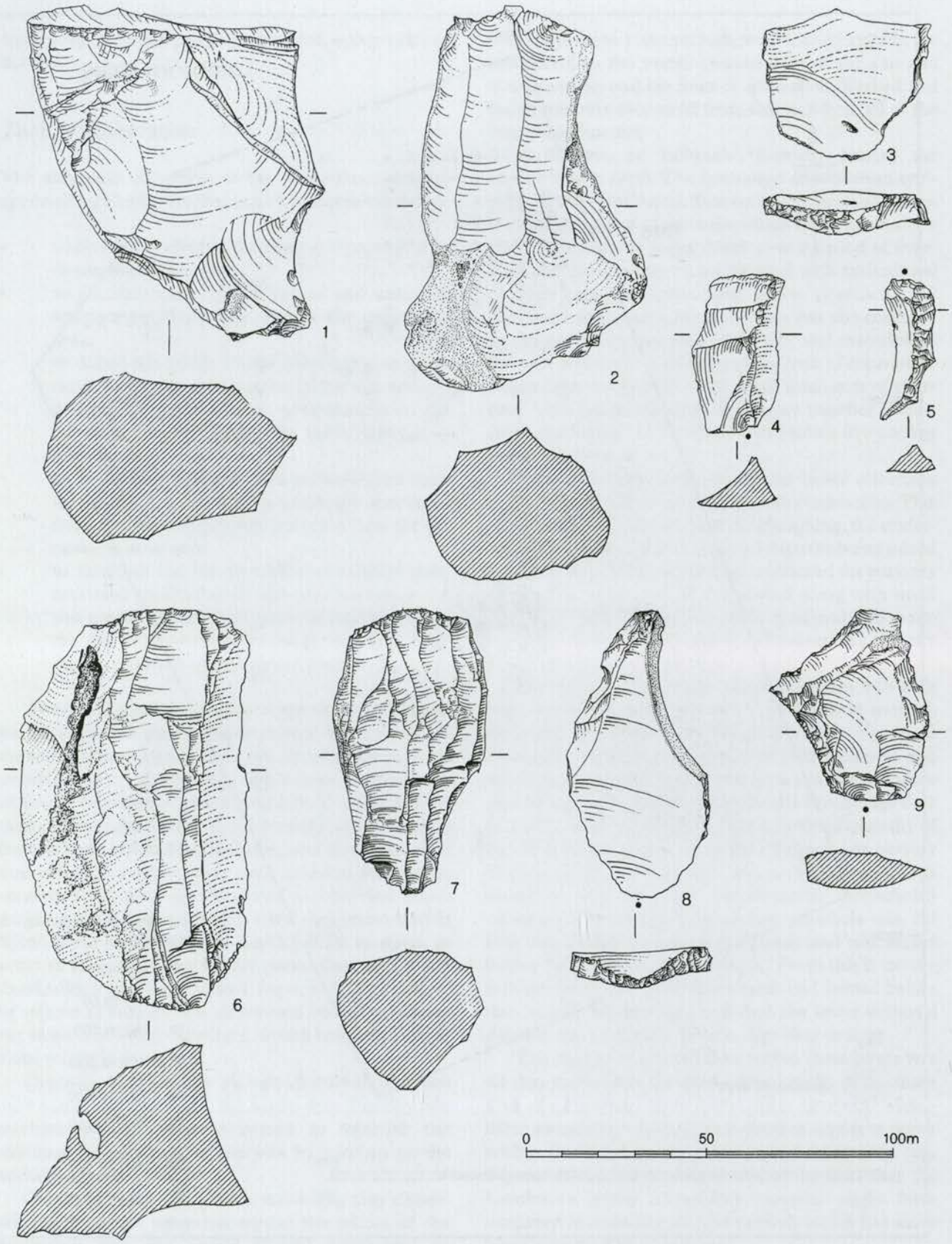

Figure 5 Lambourn Valley: Mesolithic flint cores and core trimming flakes

activity. The presence of a fine plano-convex knife in a fairly fresh condition in the upper colluvium and a small assemblage of pottery suggests Early Bronze Age activity in the neighbourhood of the site.

The horizontal distribution of all the worked flint is shown in Figure 4, by density of pieces. This shows a general background scatter of flint across the site, though this seems to tail off towards the east. Two distinct concentrations about 30 m apart can be distinguished. The northern concentration (Site 1) lay on the north-western edge of the excavation area and probably continued beyond it, while the southern concentration (Site 2) lay entirely within the excavation area. The distribution of all the constituent parts of the worked flint assemblage followed the same general pattern, suggesting that the majority of the worked flint recovered from the excavated area was derived from these two concentrations, which might therefore represent either separate sites, or discrete areas of activity within a single site.

Not all the flint artefacts were in a similar condition, with flint at the top of the stratigraphic sequence being in a much more worn condition than the material in the lower deposits, due to damage from ploughing. This difference in condition was most pronounced in the two concentrations: elsewhere almost all the flint was in a worn condition, having been derived from the concentrations and moved around the site by ploughing. Both flint scatters seem to have spread out along the contours rather than across them, which suggests that little movement down slope had occurred. This was confirmed by the vertical distribution of the material.

Taking these various observations together with the evidence from the soils and stratigraphy, it seems likely that the lower part of the two concentrations, though probably not *in situ*, were only slightly disturbed.

The Flintwork

The flintwork was dated on the basis of diagnostic tools and knapping waste. The raw material used for flint-working on the site is likely to have been in the form of nodules present in the river gravels on or near to the site. The flint nodules would have been shaped into cores (Fig. 5, 1, 2, 6 and 7) from which blades and flakes could then be removed in a controlled manner and then further modified into specific tool types.

A hard hammer (probably a stone as hard as, or harder than, the flint) was generally used in the earlier stages of raw material testing and core preparation and shaping, with a softer hammer being used for blade (long parallel-sided flakes) production once the core was satisfactorily prepared. No hammers were recovered from the site, so it is unclear whether the soft hammers were of soft stone or of organic material such as wood, bone or antler. The presence of microburins, a distinctive waste product of microlith manufacturing, provides direct evidence for the production of tools on the site (Fig. 6, 16–17). The microliths indicate that direct percussion on an anvil was sometimes used for retouching the edges of the tools.

The tools mostly comprised obliquely blunted points and a smaller number of geometric forms of microlith (small stone artefacts typical of the period), mainly 'rods' (Fig. 6, 10–15 and 18–25). Although obliquely blunted points are common in earlier Mesolithic assemblages, they also occur in later industries, dated post-6500 BC, alongside geometric forms, which only began to be made after this date (Jacobi 1987, 164). The majority of the obliquely blunted points were on quite small narrow blades, which may indicate a later date in line with the decrease in overall size of these forms over time (Pitts and Jacobi 1979, 169–70). There were also a number of larger obliquely blunted points in the assemblage, but it is not clear whether these reflect an earlier component. The fact that all the microlith types occurred together, clustered in the two concentrations, suggests that they are probably all of the same later Mesolithic date.

The composition of the flint assemblages from both concentrations is similar, which suggests that broadly similar activities are represented. Most of the flint recovered could be identified as discarded core preparation and trimming flakes and blades. The presence of small abrasion chips and other small pieces characteristic of flint-working debris suggests that flint was knapped and the waste products discarded on site. The number of 'end products' appear to be under-represented in both concentrations, suggesting that they were removed for use elsewhere.

Although the worked flint assemblages from both concentrations were very similar, there were one or two differences. The northern concentration has a slightly higher proportion of tools than the southern concentration and there is a much wider range of different tool types present, suggesting a range of different domestic activities. There is no direct evidence for this range of activities, but skin-working is suggested by the presence of scrapers (Fig. 7, 26, 27 and 31), which may have been used in cleaning and preparing skins.

There is little direct evidence for the subsistence base of the site because of the absence of animal bone due to soil acidity. However, one obliquely blunted point had an impact fracture at the tip which may have resulted from its use as a projectile point. The point may have been carried back to the site in the carcass of a dead animal (Barton and Bergman 1982, 242), suggesting that hunting formed one part of the food procurement activity.

In terms of its size and composition, the northern concentration can be regarded as a 'home base' from which a wide range of activities took place, including

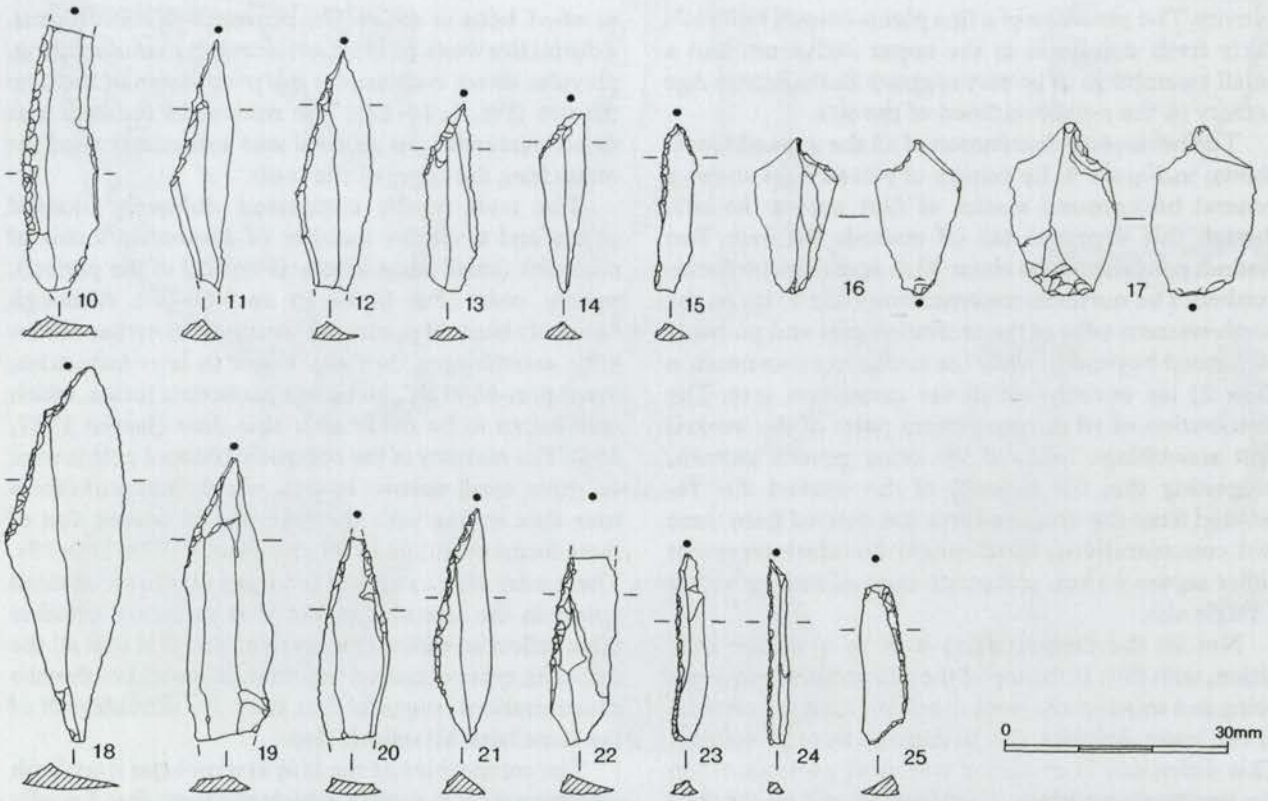

Figure 6 Lambourn Valley: microliths and microburins

hunting and domestic tasks (Mellars 1976). The presence of large quantities of burnt flint and a number of burnt flint artefacts points to the former existence of hearths, which probably formed the focus around which most tasks were undertaken. The site would probably not have been permanently occupied, but may have seen a number of occupation episodes, according to season, over an uncertain period of time.

A much more restricted range of tools was present in the southern concentration. There were no scrapers in the assemblage, which may be significant as scrapers were the second most numerous tool type present in the northern concentration. The southern concentration may, therefore, represent a much more restricted set of activities and may primarily have been an industrial site exploiting the river gravel flint. Nevertheless, the presence in the southern concentration of large quantities of burnt flint and a number of tools suggests that it is more than a purely industrial site, and some domestic activity is implied. It is possible that it is, in fact, similar to the northern concentration, but simply smaller in scale or just less frequently occupied.

Although the two concentrations both belong to the same period, it cannot be determined if they were in use at the same time, or whether one succeeded the other. There is nothing to indicate the duration of occupation, nor the frequency of that occupation. The location of the Lambourn Valley site was probably partly determined by the ready availability of raw material in the form of river gravel flint, and the exploitation of this flint forms the major part of the surviving evidence for activity on the site.

It is extremely difficult on the basis of the flint assemblage alone to determine the full range of activities on the site, particularly as microwear studies have shown that similar artefacts can have a multitude of different functions (Healy *et al.* 1992). Nonetheless, some insight into the broader use of the site has been gained from environmental evidence.

Technical Reports
Soils: Macphail and Allen, *NBTC* 8–10
Flint: Bellamy, *NBTC* 11–25
Pottery: Raymond, *NBTC* 26–7

Human Exploitation of Natural Resources in Prehistoric Times

Lambourn Valley was the only site to provide environmental information of this ancient period. Unfortunately, the general unsuitability of the soils encountered for sampling at this site has hindered our interpretation of both the physical landscape and the use of plants and animals in that riverside environment.

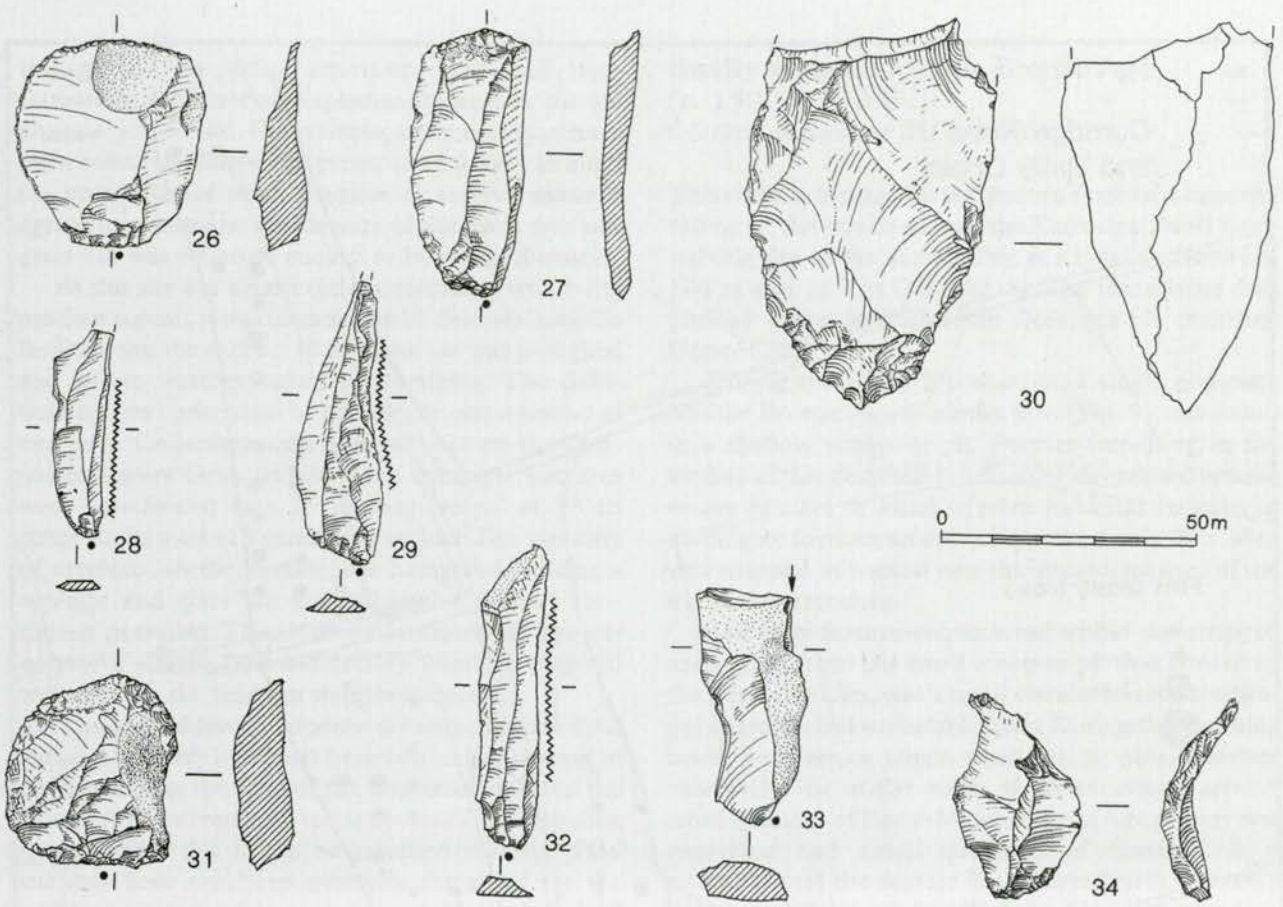

Figure 7 Lambourn Valley: miscellaneous flint tools

The limited palaeo-environmental information from this Mesolithic site relates specifically to the locality. The soils alone provide information of the local and site environmental conditions and history, and are discussed in detail in *NBTR*. Although no palaeo-environmental analyses were conducted here other than the soil and sediment descriptions, the environments of the Kennet valley at this time are well-analysed and understood (Churchill 1962; Scaife 1992; Healy and Allen 1992), and allow us to extrapolate to the Lambourn Valley.

In the Kennet Valley, open pine and hazel woodland covered most of the floodplain with sedges and marshes on the lower floodplain nearer braided fresh-water streams. Dense deciduous oak and elm woodlands cloaked the drier slopes overlooking the valley floor. There is no reason to suspect that the Lambourn valley was significantly different at this time.

It is significant that there is much clearer evidence of Middle Bronze Age or later soil erosion from the identification of a colluvial (hillwash) element in the soil profile. From this we can infer that this soil disturbance was probably associated with the removal of trees and other activities. This indirect indication of the clearance of vegetation and exposure of soil leading to localised erosion occurs some four thousand years later than the more extensive archaeological evidence for Mesolithic activity.

Curridge Road: Late Neolithic–Early Bronze Age (*c.* 3000–1500 BC)

OS Grid Reference (centre) SU 4725 7115

This site (Fig. 8) lay at the northern end of the Bypass route in a large north–south dry valley, at between 91 m and 107 m OD, in a mixture of arable and pasture fields on either side of the former A34, which ran along the base of the valley. The underlying natural sub-strata comprised Upper Chalk, overlain in the majority of the area by gravels of the Reading Beds, or Plateau Gravels.

The Stage 1 and Stage 2 evaluations identified a scatter of Late Neolithic or Bronze Age worked and burnt flint, covering an area of approximately 12.06 ha. However, machine trenching found only four features within this area, none of which was datable. It appears that evidence of any settlement has been badly disturbed by ploughing. This is not uncommon on sites of

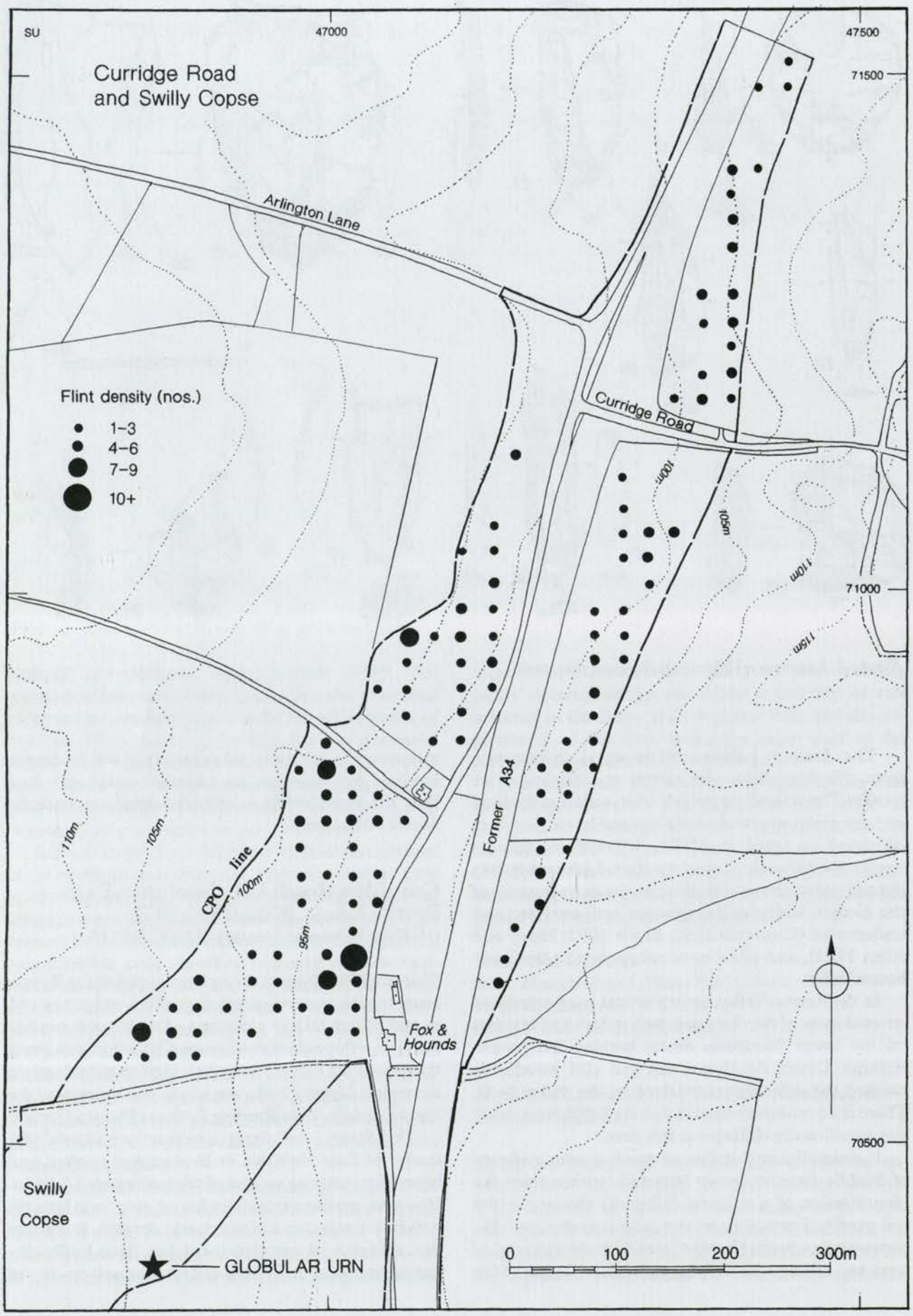

Figure 8 Curridge Road and Swilly Copse: site location plan and distribution of worked flint

this period, as many activities associated with settlement can leave only ephemeral traces in the archaeological record. For example, structures may have been relatively flimsy, not penetrating deeply enough for post-holes or other features to survive modern agricultural activity. The density of the finds was not great but was extensive enough to be of significance.

As this site was almost entirely contained within the modern topsoil, it was investigated by field-walking. To facilitate this the entire *c.* 12 ha of the site was ploughed and left to weather before field-walking. The field-walking was undertaken by two people over a period of two days. Collection units were laid out on the Ordnance Survey Grid, within which complete hectares were sub-divided into 25 m long 'stints' at 25 m intervals. In total 115 stints were walked. The visibility of artefacts on the surface was hampered by direct sunlight and glare but generally good ground conditions prevailed. The work concentrated on the recovery of worked flint and pottery. Modern material was noted in the field but was not collected.

The general level of modern debris across the field surfaces was very low, apart from two localised areas of disturbance at the foot of the embankments for the former A34 and opposite to the *Fox and Hounds* public house. From this it can be assumed that the field surfaces have not been generally disturbed by the addition of material in recent times. However, small quantities of medieval pottery were found over much of the area. This is probably the result of material 'imported' during manuring of the arable fields, and is of little importance save to indicate activity in the general area. The distribution of the worked flint (Fig. 8) shows a general background scatter with a slight concentration in the base of the dry valley.

Within the field-walking site, approximately 45 m to the west of the A34 Oxford Road and 20 m to the south of its junction with Arlington Lane, at SU 4710 7125, a small circular feature was recorded during the watching brief. The large quantity of charcoal noted in the basal fill of this feature and the slight reddening of the surrounding natural sub-strata indicate that this was probably a hearth. Other features identified during the Stage 2 evaluation were all badly damaged by ploughing and their functions remain uncertain.

The finds recovered from the field-walking indicate Late Neolithic–Early Bronze Age activity in the general area; however, ploughing over a period of many years appears to have destroyed any physical remains. It is possible that the few badly disturbed features represent domestic activity of this date, but the lack of dating evidence and clear functions means that this is uncertain.

Swilly Copse: Middle Bronze Age (*c.* 1500–1100 BC)

OS Grid Reference SU 4684 7040

This site was located on the western slope of a large dry valley, to the south-east of the Curridge Road field-walking site in the same valley, at a height of between 104 m and 105 m OD (Fig. 8). The underlying drift geology comprised Reading Beds gravels overlying Upper Chalk.

During the Stage 2 evaluation, a single complete Middle Bronze Age Globular Urn (Fig. 9) was found in a shallow scoop or pit. Further trenching in the vicinity of this find failed to discover any related vessels, or any features to which to relate its burial. In order to investigate further, an area of approximately 20 x 20 m was stripped of topsoil over the immediate area of the evaluation trenches.

The only feature encountered within the stripped area, apart from the small scoop or pit that contained the Globular Urn, was a small circular hearth containing charcoal, but no datable finds. During the watching brief, however, a single small pit or post-hole was recorded 6 m to the north of the excavated area. A small quantity of Early–Middle Bronze Age pottery was recovered and small quantities of charcoal. It is probable that the feature is associated with the small hearth and the complete Globular Urn.

The burial of a single Globular Urn is unusual, as these are usually found in association with small cremation cemeteries which tend to occur in discrete clusters of 10–50 burials, although more than 25 is rare (Ellison 1980). No traces of a cremation burial were found with the urn, so a funerary context appears unlikely. A domestic context is possible, although if a settlement had been in this area more features and

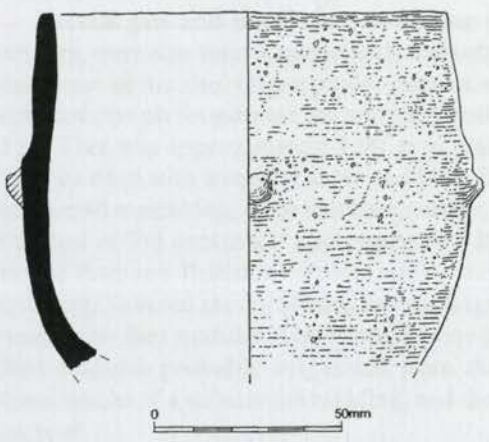

Figure 9 Swilly Copse: Globular Urn

finds might have been expected. It is possible that settlement remains may survive outside the road corridor and this small group of features represents limited activity on the settlement periphery. The site is close to the Curridge Road field-walking site, and may, therefore, be associated.

Technical Report
Pottery: Mepham, *NBTR* 27–8

Bath Road: later Bronze Age (*c.* 1100–700 BC)

OS Grid Reference SU 4498 6815

The area around the Bath Road site comprises the top and upper slopes of a ridge between the Lambourn and Kennet valleys, lying at between 108 m and 119 m OD. The underlying geology was Upper Chalk overlain by plateau gravels.

A shallow feature, of uncertain form and function, was found during the Stage 2 evaluation, containing a small assemblage of Late Bronze Age pottery. A limited strip and record excavation of approximately 20 x 20 m centred on the evaluation trench was undertaken in this area to clarify the form, extent and possible function of this feature and to investigate any others. This revealed a shallow irregular feature, probably a tree throw.

During the watching brief, a hearth and a single post-hole were recorded, a few metres beyond the area of the strip and record excavation. The base and sides of the sub-rectangular hearth were clearly heat affected, which had caused a distinct reddening of the natural gravels into which it was cut. A relatively large quantity of pottery (33 sherds) of Middle Bronze Age date was recovered from this. Four metres to the west was a shallow post-hole; although no datable material was recovered, it is likely that it was associated with the nearby hearth.

On the southern edge of Whittle Copse, *c.* 220 m to the north-east of the strip and record area, centred on SU 4510 6834, an extensive spread of burnt flint and charcoal some 20 m in diameter and up to 0.50 m thick was recorded. This overlay a thin layer of dark peat, possibly a buried turf line, and a layer of bluish-grey clay which directly overlay the natural sand and gravel sub-strata. No datable artefacts were recovered from any of these deposits, which are interpreted as the plough-damaged remains of a mound of burnt flint. Various explanations for the function of these 'burnt mounds' have been put forward on the basis of anthropological analogy. These include large hearths serving possible group feasting sites, or 'sauna'-type bathing sites where stones were heated in a fire and cold water poured on them to create steam. Burnt mounds are commonly attributed to the Bronze Age and it is possible that these deposits are also of that date.

Together the features recorded at Bath Road indicate the possible presence of a later Bronze Age settlement in the area; however, if this lay within the Bypass corridor, ploughing appears to have removed all but a few small traces of it.

Technical Report
Finds: Loader, *NBTR* 28

3. The Romano-British Period (AD 43–410)

During the Romano-British period the area around Newbury appears to have supported a fairly large agricultural community, probably occupying a series of small settlements, farmsteads and villas along the sides of the Kennet Valley. Industrial activity is represented by pottery kilns at Hampstead Marshall (Rashbrook 1983) to the west of the route and a possible tile production site at Shaw (Swan 1984), to the east of the route. The location of the Roman government station of *Spinis* has been tentatively identified with the modern village of Speen (Rivet and Smith 1979). The regional centre of government was at *Calleva Atrebatum* (Silchester), approximately 18 km to the south-east.

Four sites of Romano-British date were found along the route of the Bypass. These were: a small group of pits in an area of badly disturbed land at Great Pen Wood; ditches of very early Romano-British date (AD 43–70) and later settlement remains on the southern side of the Kennet valley at Enborne Road; a small group of features preserved within a colluvial (hill wash) deposit on the northern side of the Kennet valley at Elmore Plantation; and the remains of a small farmstead and field system on the southern bank of the river Lambourn at Bagnor Road.

Because of its early date and the possible importance of the Enborne Road site, a design solution was developed to preserve the site *in situ* beneath an embankment. The two small groups of features at Great Pen Wood and Elmore Plantation were subject to strip and record excavations prior to the commencement of road construction. The Bagnor Road site was found during the watching brief and was excavated alongside construction work.

Enborne Road: Early Roman (AD 43–150); Late Roman (AD 250–410)

OS Grid Reference SU 4490 6650

This site was located on the south side of the Kennet valley between Enborne Road and the London–Penzance railway line, at a height of between 79 m and 83 m OD, on the shallow east facing slope of a small valley running north-east towards the River Kennet (Fig. 10). The underlying natural drift geology comprised terrace gravels.

During the Stage 2 evaluation, a series of features and layers of 1st–4th century date was found in eight evaluation trenches, covering an area of approx-imately 1.8 ha within the road corridor. Pottery of early Roman date was recovered from a sub-soil in Trench 160 in the adjacent field to the south-east, and two ditches of possible Romano-British date were noted in Trench 175 in the same field.

Ditches up to 3 m wide were recorded in six of the trenches. Early Roman (1st century AD) and late Roman (3rd–4th century) pottery was found in discrete areas of the site, however, suggesting that the ditches were not all of the same date. Although no clear pattern could be detected from the position and orientation of the ditches, a number lay approximately at right-angles and may have formed enclosures. The majority of the ditches ran down the slope towards the stream at the bottom of the valley, and may therefore have acted as boundaries dividing the slope into fields.

In trench 165 the northern edge of a ditch, over 1.4 m wide running east–west, was recorded at the eastern end of the trench. It contained Romano-British pottery and glass fragments from a Hofheim type bowl, both dating from around the Conquest period in the mid-1st century (*c.* AD 40–70). The pottery consisted of bead rim jars in both flint-tempered, handmade, Silchester Ware and hard-fired, wheel thrown grog-tempered greywares, together with Black Burnished ware and fragments from a pale orange-buff coloured butt beaker. The presence of wheel thrown greywares in association with the handmade Silchester Ware vessel suggests that the assemblage is not likely to represent Late Iron Age occupation of the 1st century BC to early 1st century AD, but rather belongs to the latest pre-Roman Iron Age to early Roman Conquest period in the mid 1st century AD.

A further eight ditches, on various alignments, were found in Trenches 164, 166, 170, 172, 173 and 175, varying between 0.90 m and 3.0 m in width. Although not all of these produced datable finds, the majority could be dated to the 2nd–4th centuries, and the undated ditches are therefore assumed to be of a broadly similar date.

Several pits and post-holes, indicating settlement activity, were also found, particularly towards the north and west of the site. Of particular interest was a large sub-circular pit found near the southern end of Trench 174. This was approximately 1.90 m in diameter and 0.70 m deep with irregular sides and base. In addition to a small assemblage of coarseware pottery, datable to the 2nd or 3rd century, it also produced a large quantity of Romano-British roof tiles (*tegulae* and *imbrices*), two large dressed sarsen blocks, mortar fragments and numerous flint nodules. The dressed stone blocks and flint nodules probably originated from the walls or foundations of a substantial building, and the tiles from its roof.

An extensive dump layer, possibly a midden deposit, up to 0.45 m thick was found in Trenches 164 and 170–4. The two ditches in Trench 164 were sealed below this, but the features in Trenches 170, 172, 173 and 174 were cut through it. This indicates that the

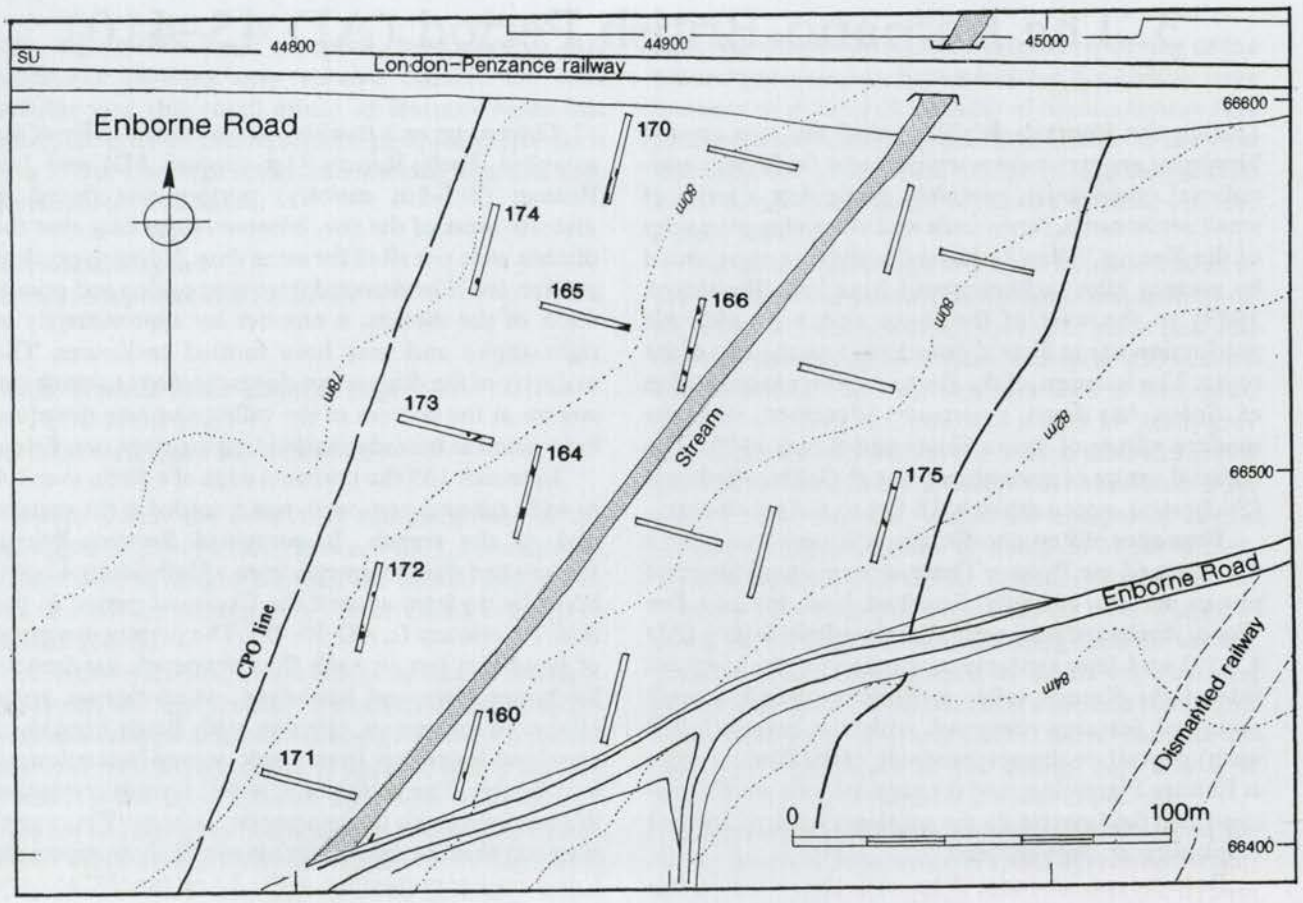

Figure 10 Enborne Road: site and trench location plan

ditches in Trench 164, although only broadly datable to the Romano-British period by pottery, are earlier than the 2nd–3rd century features which cut through the dump layer and may therefore be associated with the 1st century ditch in Trench 165.

Large quantities of ceramic building material (tile and brick) were recovered from the topsoil, dump layers and features, especially in the north-west of the site (Trenches 170, 173 and 175). The large quantities of building material and possible demolition debris appear to further indicate the presence of a substantial building or buildings either on or close to the site.

Two distinct phases of activity on the site can be identified from the excavated features. The majority of the dating evidence from the site suggests occupation during the later Romano-British period (3rd–4th century). However, there is also a small element of significantly early Romano-British activity dated to the pre-Flavian period (before AD 69). Evidence of this date is rare, and may be either associated with military activity as part of the campaigns and consolidation immediately post-Conquest, or be evidence of early settlement. No evidence of continuity between the two phases of activity was recovered.

In Trench 165, where only 1st century pottery was recovered, no Roman ceramic building materials were found, while large quantities were recovered from later features. It is likely that, as on other Romano-British sites, in the early phase of activity any buildings would have been of timber construction and used a roofing material other than tile, for example thatch. Although no traces of later buildings were found, the quantity of ceramic building material from the late Roman contexts, as well as the presence of dressed sarsen blocks, traces of mortar and numerous flint nodules, points to the presence on or close to the site of a substantial building.

A number of pits and post-holes, as well as an extensive layer of dumped material, possibly a midden containing domestic refuse, further points to the proximity of a settlement. The range of pottery wares included only one imported vessel, a Central Gaulish samian ware mortarium of late 2nd–mid 3rd century date, suggesting, however, that the settlement, while extensive, was not necessarily of high status.

It is likely that the settlement represented was an extensive Romano-British farmstead, one of a number of small settlements along the southern side of the Kennet Valley. A possible villa site is known approximately 1.2 km to the east (Peake 1931).

Because of the nature and possible importance of the site, a strategy was developed to allow the site to be

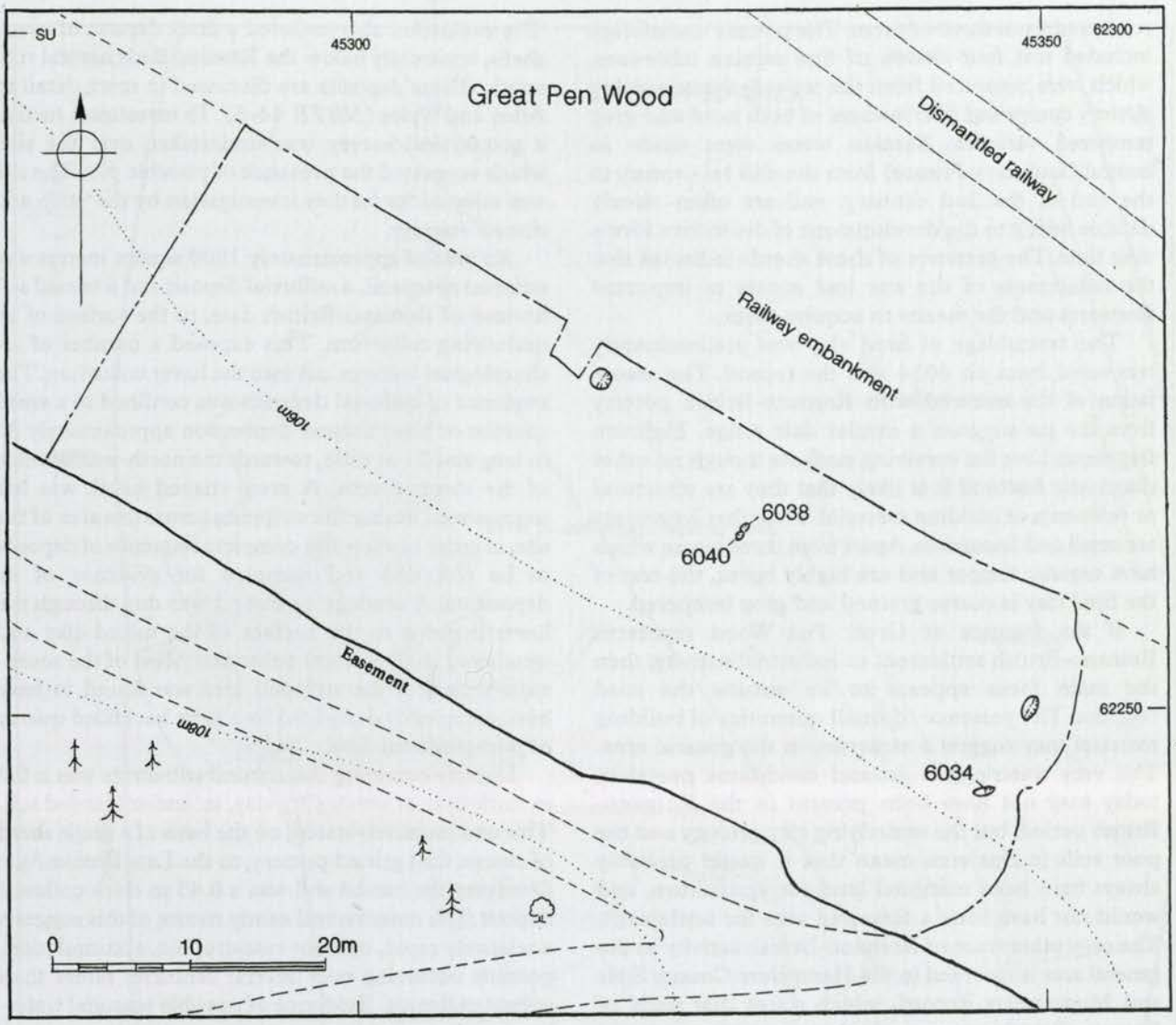

Figure 11 Great Pen Wood: site location and all features plan

preserved *in situ* beneath an embankment. Apart from the monitoring of the construction works, no further archaeological work was undertaken.

Technical Report
Finds: Loader, *NBTR* 29–30

Great Pen Wood: early Roman (AD 43–150)

OS Grid Reference SU 45200 62600

This site lay within pine woodland immediately adjacent to a disused railway embankment on flat, very waterlogged land at the south of the route (Fig. 11). The underlying drift geology was London Clay, which varied very little in height, between 105 and 105.2 m OD.

During the Stage 2 evaluation, three possible archaeological features were found in a single machine trench between Great Pen Wood and the dismantled railway line to the north. The features were not excavated during the evaluation because of very wet ground conditions and the area was therefore selected for further investigation by strip and record. An area of approximately 2000 square metres, centred on the evaluation trench, was stripped of topsoil following the removal of all tree stumps. Ditches and sumps were dug to drain ground water from the area of excavation. The underlying clay had been heavily disturbed by tree roots and a logging track.

A total of five archaeological features – the remains of pits – were identified. The pits were all sub-circular, between 0.50 m and 1.50 m in diameter, and survived up to 0.2 m in depth. Small quantities of tile, fired clay and pottery, datable to the 1st–2nd century, were

recovered from three of them. The pottery assemblage included just four sherds of fine samian tableware, which were recovered from the topsoil; the remaining pottery comprised coarsewares of both sand and grog tempered varieties. Samian wares were made in central Gaul (now France) from the mid 1st century to the end of the 2nd century, and are often closely datable owing to the development of distinctive forms over time. The presence of these sherds indicates that the inhabitants of the site had access to imported finewares and the means to acquire them.

The assemblage of fired clay was predominantly recovered from pit 6034 and the topsoil. The association of the material with Romano-British pottery from the pit suggests a similar date range. Eighteen fragments have flat surviving surfaces though no other diagnostic features. It is likely that they are structural or remnants of building material. The other fragments are small and featureless. Apart from three pieces which have organic temper and are highly burnt, the rest of the fired clay is coarse grained and grog tempered.

If the features at Great Pen Wood represent Romano-British settlement or industrial activity, then the main focus appears to lie outside the road corridor. The presence of small quantities of building material may suggest a structure in the general area. The very waterlogged ground conditions prevalent today may not have been present in the Romano-British period, but the underlying clay geology and the poor soils in this area mean that it would probably always have been marginal land for agriculture, and would not have been a favoured area for settlement. The only other trace of Romano-British activity in the general area is recorded in the Hampshire County Sites and Monuments Record, which states that finds of Romano-British pottery and other occupation material were 'unearthed' at Horris Hill approximately 1 km to the north-east.

Elmore Plantation: Romano-British (AD 43–410)

OS Grid Reference SU 4592 6777

This site lay on the south facing slope of the Kennet Valley, between the A4 to the north and the Kennet flood plain to the south, at between 87 m and 93.5 m OD (Fig. 12). The area was bisected by a trackway leading from the A4 to the River Kennet. To the east of this track the land was wooded, while that to the west was pasture. The underlying natural substrata comprised a mixture of sands and clays of the Reading Beds, with outcrops of weathered Upper Chalk.

Evaluation trenching identified a number of Romano-British features and a buried ancient topsoil within a thick sequence of colluvial (hillwash) deposits, apparently confined to a small area of the hillside. The evaluation also revealed a thick deposit of oyster shells, apparently below the Reading Beds natural substrata. These deposits are discussed in more detail by Allen and Wyles (*NBTR* 44–5). To investigate further a geophysical survey was undertaken over the site, which suggested the presence of possible pits. The site was selected for further investigation by the 'strip and record' strategy.

An area of approximately 1800 square metres was stripped of topsoil, a colluvial deposit and a buried soil horizon of Romano-British date, to the surface of an underlying colluvium. This exposed a number of archaeological features cut into the lower colluvium. The sequence of colluvial deposits was confined to a small coombe or bowl shaped depression approximately 30 m long and 23 m wide, towards the north-western side of the stripped area. A cross-shaped baulk was left unexcavated during the stripping across this area of the site, in order to allow the complete sequence of deposits to be recorded and sampled for evidence of its deposition. A sondage or test pit was dug through the lower deposits to the surface of the mixed clay and weathered chalk natural substrata. Most of the south-eastern part of the stripped area was found to have been completely destroyed by a large backfilled quarry of post-medieval date.

Directly overlying the natural sub-strata was a 0.2 m thick layer of sandy silty clay, an ancient buried soil. This was tentatively dated, on the basis of a single sherd of coarse, flint gritted pottery, to the Late Bronze Age. Overlying the buried soil was a 0.45 m thick colluvial deposit. The massive and sandy nature of this suggests a relatively rapid, but not catastrophic, accumulation, possibly occurring over several centuries rather than several millennia. Evidence of possible seasonal waterlogging was noted in the two lowest deposits.

Sealing this sandy colluvial deposit was a buried topsoil of Romano-British date. This sealed most of the archaeological features, which were cut into the underlying colluvium, and represents a period of stability caused by a local cessation, or decrease in the rate, of colluvial deposition. The buried topsoil was in turn sealed by further deposits, probably of colluvial origin. It is perhaps significant that no signs of waterlogging were evident in this Romano-British buried soil or the overlying colluvium, suggesting that drier conditions, more suitable for permanent habitation, now prevailed.

The formation of colluvium can be accelerated by human activity and colluvial deposits are often, therefore, taken as evidence of ploughing (Bell 1983; Allen 1992). However, the sandy local soils are highly prone to erosion (*cf.* Harris and Boardman 1990), and it is more likely that the footslope deposits of hillwash at Elmore Plantation are the result of a number of activities in the vicinity, particularly on the slope, including the removal of trees. This activity may be

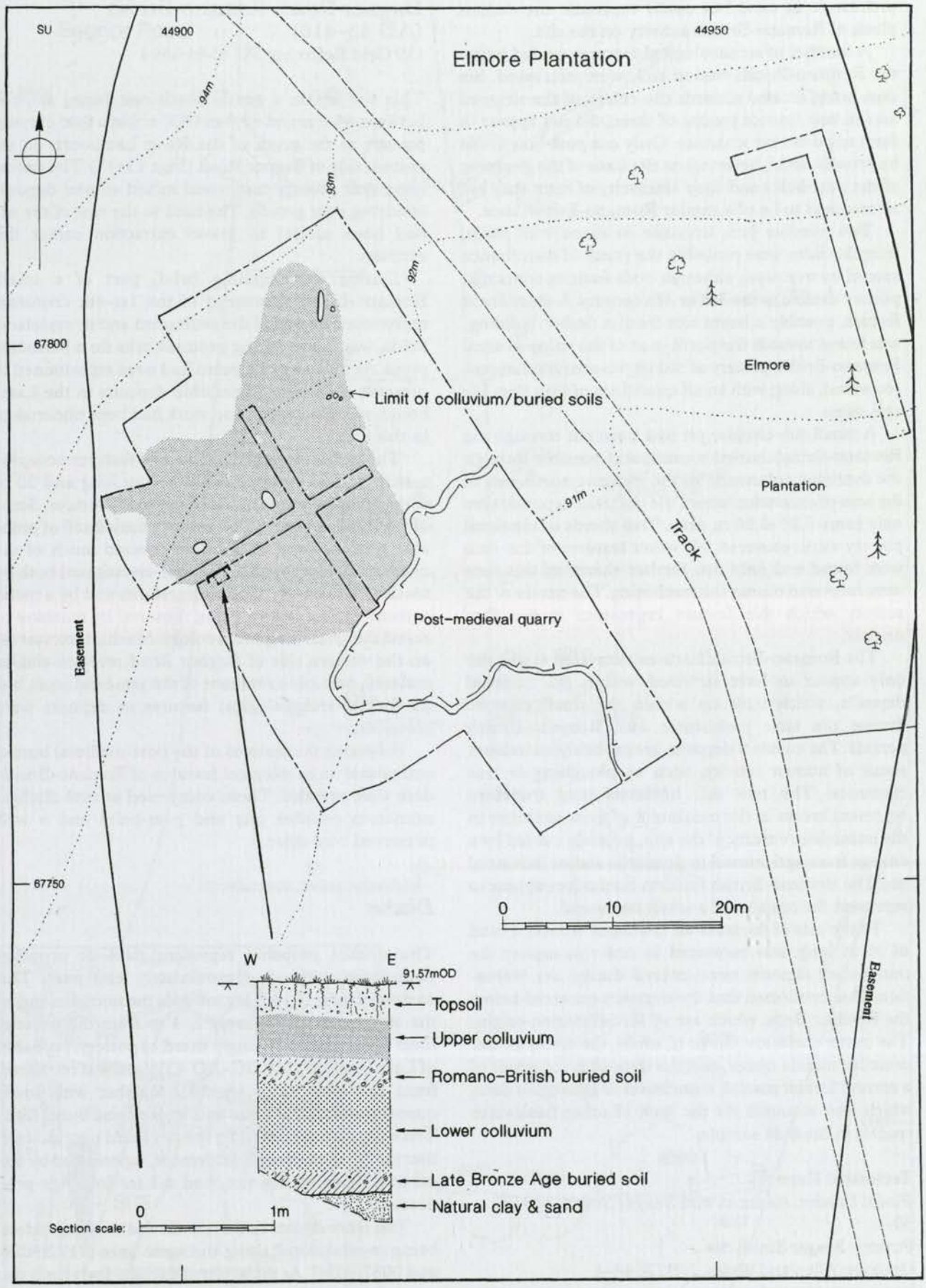

Figure 12 Elmore Plantation: site location and all features plan

prehistoric in date, but could represent the earliest phase of Romano-British activity on the site.

A number of archaeological features, sealed below the Romano-British buried soil, were excavated. Six post-holes, located towards the centre of the stripped area in two discrete groups of three, did not appear to form any coherent structure. Only one post-hole could be broadly dated; however, on the basis of the grouping of the post-holes and their similarity of form they are all assumed to be of a similar Romano-British date.

Two possible pits, irregular in shape with steep, irregular sides were probably the result of disturbance caused by tree roots, although both features contained pottery datable to the 3rd or 4th century. A short linear feature, possibly a beam slot from a timber building, was found towards the north-east of the stripped area. Romano-British pottery of 3rd or 4th century date was recovered, along with small quantities of iron slag, tile and stone.

A small sub-circular pit had been cut through the Romano-British buried topsoil, and possibly through the overlying colluvium, in the extreme north-east of the area of excavation where the colluvial deposits were only some 0.20–0.30 m deep. Two sherds of medieval pottery were recovered. No other features of this date were found and only two further sherds of this date were recovered during the machining. The nature of the activity which this feature represents is therefore unclear.

The Romano-British features excavated at this site only appear to have survived within the colluvial deposits, which built up within the small coombe during the later prehistoric and Romano-British periods. The colluvial deposits are probably an indirect result of human activity, such as ploughing or tree clearance. The two soil horizons may therefore represent breaks in the continuity of these activities in the immediate vicinity of the site, possibly caused by a change from agricultural to domestic and/or industrial use. The Romano-British features themselves appear to represent the remains of a small farmstead.

To the east of the track an L-shaped trench, a total of 39 m long, was excavated in order to expose the oyster-shell deposits encountered during the evaluation. This confirmed that the deposits occurred below the Reading Beds, which are of fluvial/marine origin. The oyster shells are *Ostrea cf. edulis*, the common flat or native marine oyster, and the deposit is the result of a natural former marine inundation of geological date; which also accounts for the lack of other freshwater species in the bulk sample.

Technical Reports
Finds: Loader, Andrews and Seager Smith, *NBTR* 30–2
Pottery: Seager Smith 30
Geology: Allen and Wyles, *NBTR* 44–6

Bagnor Road: Romano-British (AD 43–410)

OS Grid Reference SU 4544 6894

This site lay on a gentle north-east facing slope at between 85.0 m and 87.0 m OD, within a field of rough pasture to the south of the River Lambourn on the eastern side of Bagnor Road (Figs 13–17). The underlying drift geology comprised mixed alluvial deposits overlying river gravels. The land to the east of the site had been subject to gravel extraction earlier this century.

During the watching brief, part of a small, Romano-British farmstead of the 1st–4th centuries, represented by part of the settlement and its associated fields, was found during groundworks for a balancing pond. As the balancing pond had been repositioned to preserve the *in situ* Mesolithic deposits in the Lambourn valley, no evaluation work had been undertaken in this area.

The archaeological deposits and features occupied a strip of land approximately 110 m long and 20 m wide along the western side of the road corridor. Some of the features were sealed below a buried soil of probable post-medieval date which covered much of the northern half of the site. This was investigated both by machine trenching, hand dug test pits and by a metal detector survey before being removed by machine to reveal the underlying archaeology. Machine excavation on the western side of Bagnor Road revealed similar material, possibly a remnant of the same soil layer, but no further archaeological features or deposits were identified.

Following the removal of the post-medieval buried soil several archaeological features of Romano-British date were revealed. These comprised several ditches, numerous possible pits and post-holes and a well preserved corn drier.

Ditches

The ditches probably represent field or property boundaries, aligned approximately east–west. The earliest of these (9133) lay towards the northern end of the site, extending for only *c.* 3 m from the western limit of excavation. A single sherd of pottery, probably of Late Iron Age (100 BC–AD 43) date, was recovered from this ditch (Fig. 16, 35), together with small quantities of animal bone and worked and burnt flint. The early date suggested by the pot sherd may indicate that the Romano-British settlement, represented by the other features on the site, had a Late Iron Age predecessor.

Two other ditches had been allowed to silt up before being re-established along the same lines (9172/9028 and 9037/9036). At the south of the site, finds from the

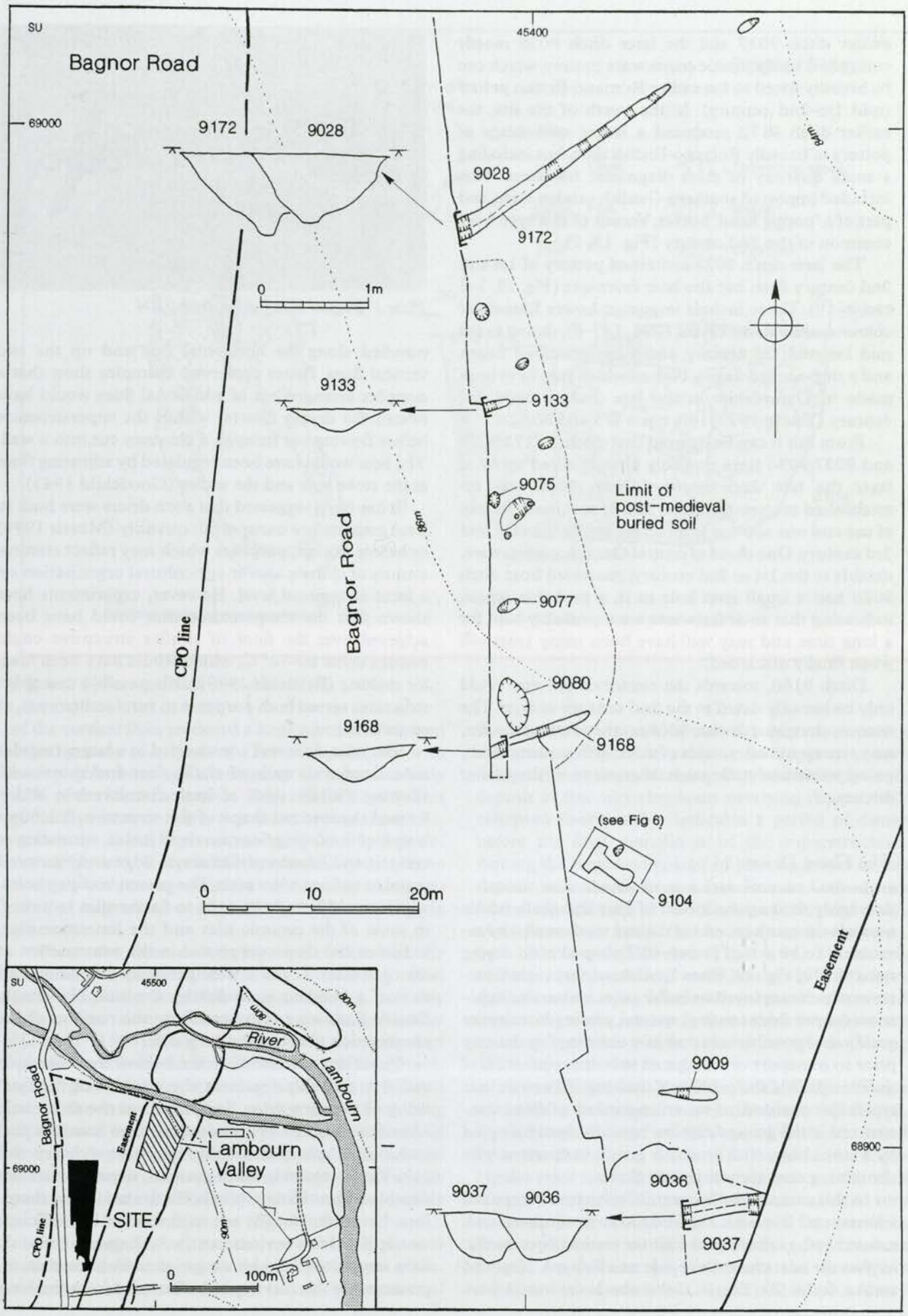

Figure 13 Bagnor Road: site location and all features plan

earlier ditch 9037 and the later ditch 9036 mostly comprised undiagnostic coarseware pottery, which can be broadly dated to the earlier Romano-British period (mid 1st–2nd century). In the north of the site, the earlier ditch 9172 produced a larger assemblage of pottery of broadly Romano-British date, but including a small quantity of more diagnostic finewares. This included imported southern Gaulish samian ware, and part of a 'poppy head' beaker. Vessels of this type were common in the 2nd century (Fig. 15, 9).

The later ditch 9028 contained pottery of 1st and 2nd century date, but also later finewares (Fig. 15, 1–6 and 8–19). These include imported Lower Rhineland colour-coated wares (Tyers 1996, 147–8), dating to the mid 1st–mid 3rd century, and a cup-mouthed flagon and a ring-necked flagon, both of which may have been made in Oxfordshire in the late 2nd or early 3rd century (Young 1977, 100, types W5 and W6).

From this it can be inferred that ditches 9172/9028 and 9037/9036 were probably already silted up by at least the late 2nd century. Ditch 9028 was re-established at some time after this. It eventually fell out of use and was allowed to fill up no earlier than the mid 3rd century. One sherd of central Gaulish samian ware, datable to the 1st or 2nd century, recovered from ditch 9028 had a small rivet hole in it, a probable repair, indicating that such finewares were probably kept for a long time and may well have been many years old when finally discarded.

Ditch 9168, towards the centre of the site, could only be broadly dated to the 2nd century or later. The narrow, elongated feature 9009, at the south of the site, may represent the remains of a 3rd–4th century ditch, on approximately the same alignment as the earlier ditches.

The Corn Drier

A roughly rectangular spread of flint and chalk rubble towards the southern end of the site was revealed by excavation to be a well preserved T-shaped corn drying oven (9104; Fig. 14, Plate 1). Corn driers were structures which employed a similar principal to the hypocaust (under floor heating) system, passing hot air over grain – and possibly other crops – either to dry the crop prior to transport or storage, or to halt germination of grain as part of the process of malting. The structures typically consisted of an arrangement of flues constructed in the ground, the fire beneath them being fed by a stoke hole, with an above ground superstructure containing one or more drying floors.

In this case, the below ground structure comprised a horizontal flue with a stoke hole at its southern end, crossed at the other by two shorter vertical flues, so that in plan the heat channels appear as a T-shape. Heat and smoke from the fire in the stoke hole would have

Plate 1 Bagnor Road: corn drier 9104

travelled along the horizontal flue and up the two vertical flues. Better preserved examples show that a complex arrangement of additional flues would have heated the drying floor(s) within the superstructure before flowing out through a chimney cut into a wall. The heat would have been regulated by adjusting flues at the stoke hole and the outlet (Goodchild 1943).

It has been suggested that corn driers were built to treat grain before transport in quantity (Morris 1979) or before storage, purposes which may reflect circumstances of climate and/or agricultural organisation on a local or regional level. However, experiments have shown that the temperatures that could have been achieved over the floor of similar structures could average some 60–70° C, which would have been ideal for malting (Reynolds 1979). It is possible that these structures served both purposes in rural settlements, as required.

The corn drier was constructed in a large irregular hole, lined with walls of chalk, flint and mortar, all showing distinct signs of heat discoloration, which formed the internal shape of the structure. A 1.60 m length of the drying floor survived intact, consisting of ceramic and limestone tiles set on edge and mortared together to form a low arch. The presence of peg holes, which would have been used to fix the tiles to a roof, in some of the ceramic tiles and the limestone tiles, indicates that they were reused in the construction of the corn drier. The tiles were probably originally used to roof a building at or nearby the site. No closely datable finds were recovered from the remains of the construction phase of the corn drier.

Quantities of charcoal in the base of the stoke hole and flue probably represent the remains of the final firing of the corn drier. Samples from the stoke hole identified a range of woods that were used as fuel including maple, hazel, holly, blackthorn/cherry and oak. These relatively close-grained, dense woods are capable of providing a hot, brisk fire and may, therefore, have been sought out in favour of less efficient woods. The local environment would almost certainly have supported a wider range of trees than that represented in the fuel deposits. Samples from the base

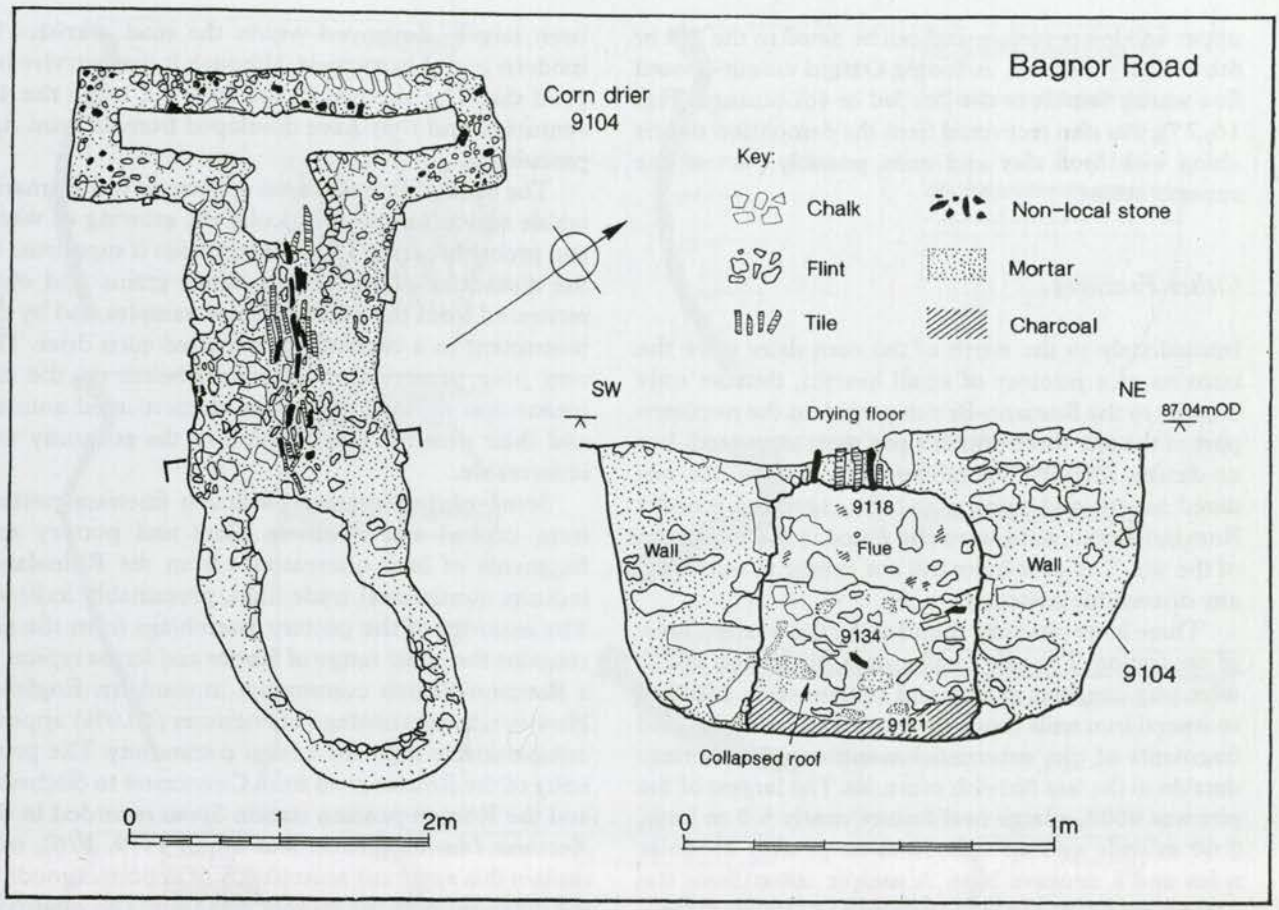

Figure 14 Bagnor Road: corn drier 9104

of the vertical flues produced a large number of charred cereal grains, mostly wheat (*Triticum spelta*) but with barley (*Hordeum* sp.) accounting for approximately 20% of the identifiable seeds (Ede, *NBTR* 47–50). This probably either indicates that the crop was a mixture, or that the debris represents two separate episodes of use of the drier. It is possible that the barley could have been a weedy component of a wheat crop, which was allowed to grow on to add bulk to the harvested grain amount.

From the floor and drying end of the drier the evidence indicates that it was used for drying wheat grain in spikelet form following harvesting, probably before fine sieving has occurred (as suggested by Hillman (1984, 5, fig. 3)). Some of the grain had sprouted, probably accidentally in storage. The percentage of grain showing sprouting is too low to indicate use of the drier for malting, at least in the final firing represented by the excavated deposit. Pottery recovered from the deposits representing the probable final use of the drier comprised a small assemblage of coarseware pottery, including a Black Burnished ware jar, datable to the late 3rd–4th centuries (Fig. 16, 31).

Following its final use, the corn drier appears to have been deliberately demolished. Thick layers of tile, masonry and mortar rubble, presumably remnants of the superstructure, overlay the deposits representing this final use. Parts of the drying floor appear to have collapsed into the underlying flue and stoke hole. A deposit of fine silty clay loam overlying the partially collapsed floor possibly indicates a period of disuse before the final demolition of the superstructure. Among the large assemblage of pottery found in this deposit were sherds from a late Roman Oxfordshire beaker type (Young 1977, 152, type C22), and a tall, ovoid jar with an upright neck and a very hooked rim, both of 4th century AD date (Fig. 16, 34). Two sherds of Oxfordshire parchment ware (Young 1977, 80), from the base of an open bowl with internal red painted decoration on the interior, a type which became more common from the mid 3rd century onwards (Young 1977, 80), were also found.

A small bronze coin (an *Urbs Roma*/Wolf and Twins coin minted in Lyons, France), datable to AD 332–4, was among the large assemblage of finds recovered from the demolition debris. The small size and irregular mint mark on this coin may indicate that this is a copy or forgery. Copies of bronze coins were very common in the 3rd–4th centuries in the northern Roman provinces, as official small change was in short supply. Another notable find from the demolition deposits was a spoon bowl (Fig. 17). This had a tinned

upper and lower surface and can be dated to the 3rd or 4th century. Pottery, including Oxford colour-coated fine wares, datable to the late 3rd or 4th century (Fig. 16, 25), was also recovered from the demolition debris along with fired clay and nails, possibly part of the superstructure.

Other Features

Immediately to the north of the corn drier were the remains of a number of small hearths, datable only broadly to the Romano-British period. In the northern part of the site three possible pits were excavated, but no datable material was recovered from these. An undated hearth and three post-holes, again of broadly Romano-British date, were also found in the same area of the site. The post-holes did not appear to represent any discernible structure.

Three large pits were found along the western limit of excavation. The two smaller ones (9075 and 9077) were very irregular in plan and contained, in addition to several iron nails (both structural and hobnails) and fragments of tile, substantial assemblages of pottery datable to the late 3rd–4th centuries. The largest of the pits was 9080, a large oval feature nearly 5.0 m long, 2.60 m wide and up to 0.50 m deep, with irregular sides and a concave base. A sample taken from the bottom fill produced large quantities of burnt grain – a mixture of wheat and barley – and chaff. As barley and wheat are unlikely to have been processed together, the grains may have either been deposited from more than one source, or accidentally burnt together (if both grains were used in a food dish, for example). The chaff may have been associated with the wheat grains, indicating a burning episode from the drying or parching of spikelets. As the quantity of chaff present was too great for the number of grains, however, it is likely that the deposit also contained an element of burnt crop processing waste (chaff and weed seeds), perhaps representing fuel for a domestic hearth.

A large quernstone fragment, several nails and a small assemblage of pottery, including a flagon or bottle with a moulded, collared rim datable to the 4th century (Fig. 16, 29) and sherds of a necked jar with a collared, hooked rim (Fig. 15, 7), were recovered from pit 9080 along with two bronze coins. Only one of the coins was closely datable, to AD 350–60, a very badly damaged copy of a *Fel Temp Reparatio* (Fallen Horseman 4) type, with a depiction of a soldier spearing a fallen horseman. The other, a small illegible *follis*, was only broadly datable to the 3rd or 4th century.

The Settlement

This site represents part of a settlement, probably a farmstead, of unknown size, which appears to have been largely destroyed within the road corridor by modern gravel extraction, although it may survive beyond this. The site was in use from the 1st to the 4th centuries, and may have developed from an Iron Age precursor.

The economic base of the settlement was primarily arable agriculture, in particular the growing of wheat and probably barley. This interpretation is supported by the quantities of wheat and barley grains and chaff recovered from the environmental samples and by the investment in a carefully constructed corn drier. The very poor preservation of animal bones on the site means that no information on domesticated animals and their possible contribution to the economy was recoverable.

Some of the finds, in particular fineware pottery from central and southern Gaul and pottery and fragments of lava quernstones from the Rhineland, indicate continental trade links, presumably indirect. The majority of the pottery assemblage from the site contains the usual range of fabrics and forms typical of a Romano-British community in southern England. However, the percentage of finewares (10.9%) appears comparatively high for a rural community. The proximity of the Roman road from Cirencester to Silchester and the Roman posting station *Spinis* recorded in the *Antonine Itinerary* (Rivet and Smith 1979, 176), may explain this apparent accessibility of imported goods to the inhabitants of the Bagnor Road site. The quality of the assemblage may imply that the settlement was something more than a small-scale, low-status rural farming community.

Most of the pottery, however, comprised a range of more functional coarsewares. Black Burnished ware, manufactured in the Poole Harbour area, is a common find on Romano-British sites in southern England, and the presence of pottery manufactured in the Oxfordshire and Alice Holt production centres, and smaller production sites in Berkshire is also unremarkable. Much of the pottery must have come from other, more local sources. These may include the Hampstead Marshall kilns, in use from the mid 2nd to 4th centuries (Rashbrook 1983). Possible production sites have also been identified at Kintbury, *c.* 6.5 km west of Newbury (Swan 1984, mf. 1.217), and Shaw, on the north-east outskirts of Newbury, although this may have been more involved in tile production. Slightly further afield, 2nd–3rd century kilns are known at Bradfield and Pangbourne (Swan 1984, mf. 1:214 and 217).

Illustrated pottery

Fig. 15

1. Everted rim jar, Black Burnished ware. Contexts 9053/9054, ditch 9028.
2. Necked jar, neck and girth grooves. Context 9053/9054, ditch 9028.

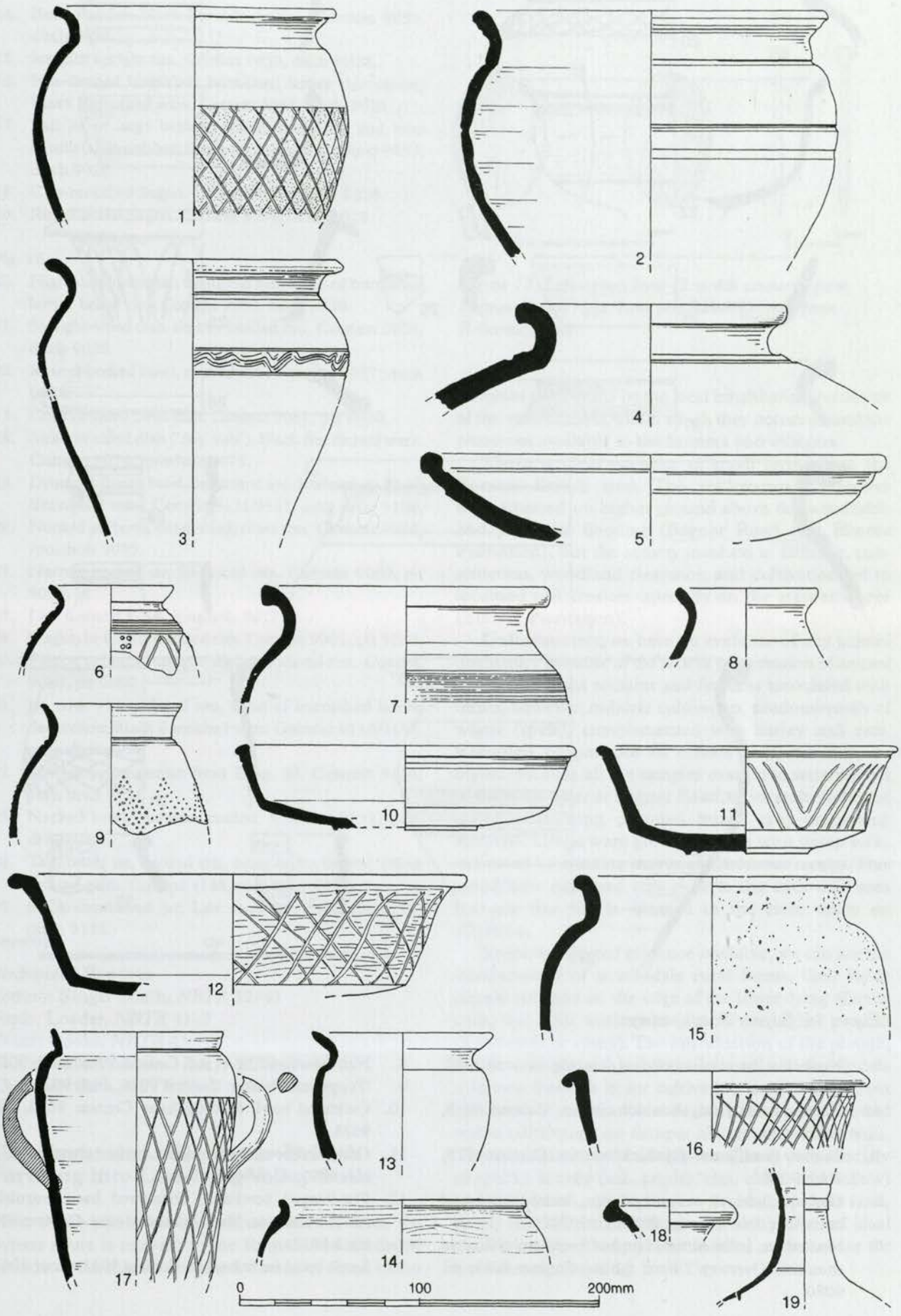

Figure 15 Bagnor Road: pottery

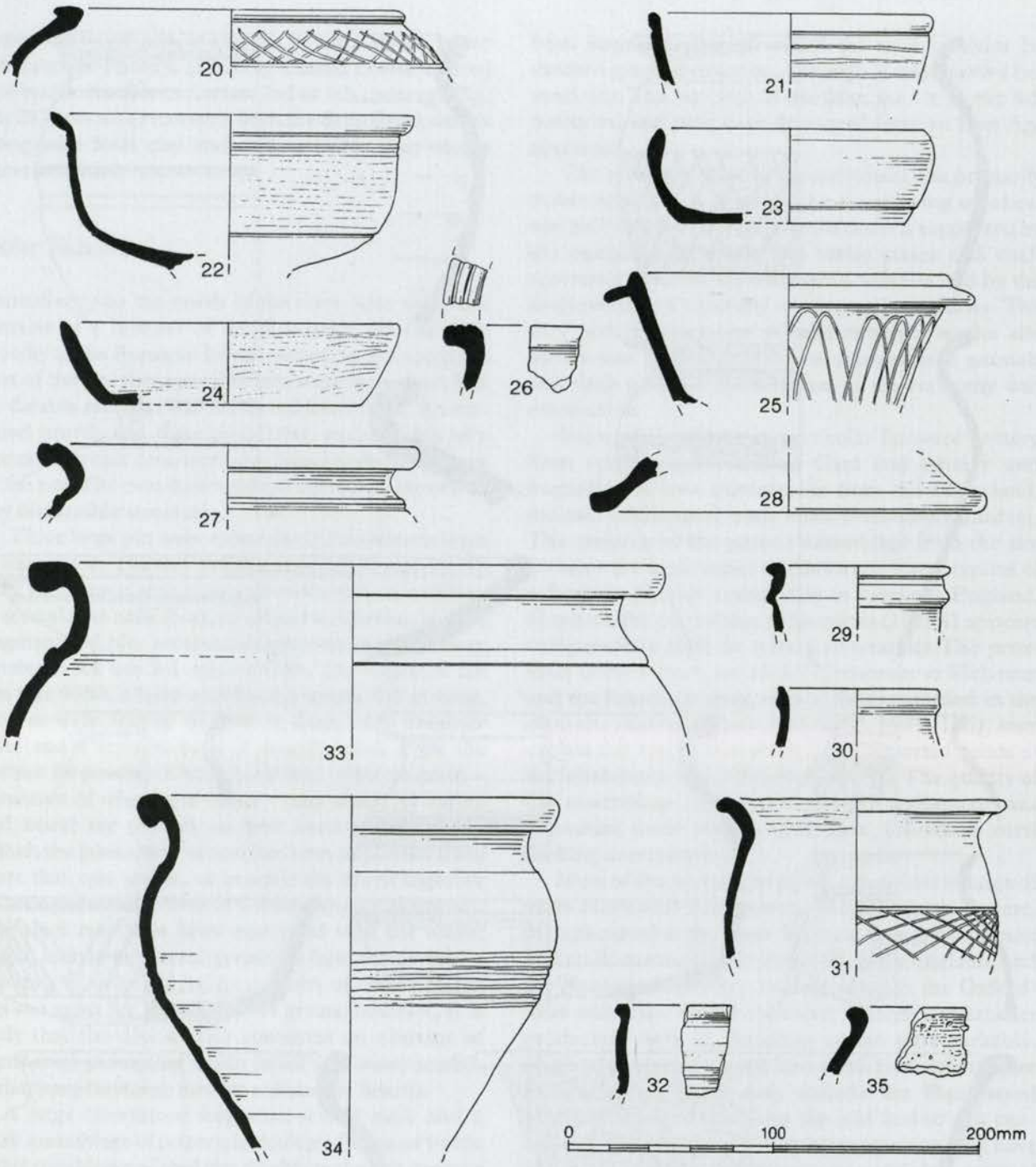

Figure 16 Bagnor Road: pottery

3. Necked jar, band of curvilinear combing. Context 9082, pit 9080.
4. Narrow-necked jar, shoulder cordon. Context 9015, ditch 9028.
5. Shallow bowl, internally thickened rim. Context 9015, ditch 9028.
6. Globular beaker, out-turned rim, incised lines and barbotine dots. Context 9015, ditch 9028.
7. Necked jar, collared rim, band of horizontal rilling on shoulder, Overwey/Tilford fabric. Context 9081, pit 9080.
8. Narrow-necked jar or jug. Context 9016, ditch 9028.
9. 'Poppyhead' beaker. Context 9016, ditch 9028.
10. Carinated bowl, footring base. Context 9053, ditch 9028.
11. Carinated bowl, footring base, incised chevrons. Context 9053, ditch 9028.
12. Flat-flanged bowl/dish, chamfered base, burnished lattice decoration, Black Burnished ware. Context 9053, ditch 9028.
13. Small ovoid jar or beaker. Context 9043, recut 9047.

14. Bead rim jar, Black Burnished ware. Context 9053, ditch 9028.
15. Jar with upright rim. Context 9053, ditch 9028.
16. Flat-flanged bowl/dish, burnished lattice decoration, Black Burnished ware. Context 9054, ditch 9028.
17. Tall jar or large beaker, 'pulled' bead rim and loop handle(s), burnished lattice decoration. Context 9054, ditch 9028.
18. Cup-mouthed flagon. Context 9054, ditch 9028.
19. Ring-necked flagon. Context 9054, ditch 9028.

Fig. 16

20. High-shouldered jar, triangular rim, band of burnished lattice below rim. Context 9053, ditch 9028.
21. Straight-sided dish, slightly beaded rim. Context 9056, ditch 9028.
22. Round-bodied bowl, everted rim. Context 9057, ditch 9028.
23. Convex-sided bowl/dish. Context 9081, pit 9080.
24. Straight-sided dish ('dog dish'), Black Burnished ware. Context 9074, ?posthole 9075.
25. Dropped flange bowl, burnished arc decoration, Black Burnished ware. Context 9131/9141, corn drier 9104.
26. Necked jar/bowl, out-turned, rilled rim. Context 9074, ?posthole 9075.
27. Narrow-necked jar, lid-seated rim. Context 9082, pit 9080.
28. Lid. Context 9076, ?posthole 9077.
29. Flagon or bottle, collared rim. Context 9081, pit 9080.
30. Flagon or bottle, upright, slightly collared rim. Context 9082, pit 9080.
31. Jar with widely flared rim, band of burnished lattice decoration, Black Burnished ware. Context 9118/9149, corn drier 9104.
32. Bowl copying samian form Drag. 30. Context 9118, corn drier 9104
33. Necked bowl, shoulder cordon. Context 9131, corn drier 9104.
34. Tall, ovoid jar, hooked rim, band of horizontal rilling around girth. Context 9148, corn drier 9104.
35. Slack-shouldered jar, Late Iron Age. Context 9132, ditch 9133.

Technical Reports

Pottery: Seager Smith, *NBTR* 32–41
Finds: Loader, *NBTR* 41–3
Coins: Cooke, *NBTR* 43
Charred plant remains: Ede, *NBTR* 47–50
Charcoal: Gale, *NBTR* 50–1

The Expansion of Romano-British Farming into Low-lying Valley Soils

Most of the palaeo-environmental evidence from the Bypass route is relevant to the Roman and medieval periods. From this we can gain a flavour of some of the

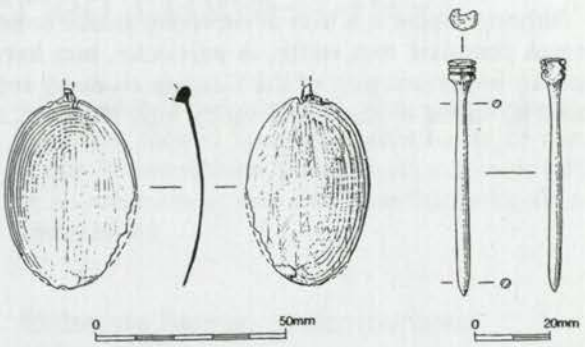

Figure 17 Left: spoon bowl (3rd–4th century) from Bagnor Road; right: bone pin (later Roman) from Enborne Road

activities performed by the local inhabitants, the nature of the environment within which they occurred, and the resources available to the farmers and villagers.

There is clear evidence of small farms from the Romano-British sites. The settlements themselves were situated on higher ground above the watertable and potential flooding (Bagnor Road and Elmore Plantation), but the activity involved in farming, construction, woodland clearance, and cultivation led to localised soil erosion especially on the steeper slopes (Elmore Plantation).

Unfortunately, we have no evidence of any animal husbandry because of the lack of preservation of animal bone. The plant remains and features associated with farms, however, indicate cultivation, predominantly of wheat (spelt), complemented with barley and oats. Recorded proportions of cereals may, however, be biased because all the samples examined were related to the corn drier at Bagnor Road, or its stoke hole, the latter containing dumped burnt crop-processing material. Crops were grown in fields with damp soils, indicated by stinking mayweed (*Anthemis cotula*). This could have occurred very close to the excavated area because the site is situated in the river valley on alluvium.

From the limited evidence available, we can see the development of small-scale rural farms, their fields largely situated on the edge of the lower-lying alluvial soils, but with settlement located on higher ground (footslopes or spurs). The introduction of the plough, which turns the soil, rather than the ard which only cuts a furrow through it, for cultivation and of a different (Romanised) agricultural regime, may have allowed viable cultivation on damper alluvial and valley soils. The combination of available woodland, with a variety of species locally (ash, poplar, elm, alder, and willow) and oak, hazel, maple, etc, on the slightly drier land, fertile and cultivable (though clay-rich) soils and ideal grazing and browse provide an ideal environment for low intensity farming.

Although there is a lack of surviving animal bone, we can postulate that cattle, in particular, may have been an important part of the farming economy and would be suited to the wetter valley soils. However, it is significant to note that samples of carbonised grain did not indicate processing for hay or animal bedding, and hence the suggestion that the economy was mixed remains speculative.

4. The Medieval Period (1066–1499)

Newbury itself does not appear in the Domesday survey and is first mentioned in a document of *c.* 1080. The documentary evidence suggests that it was founded, probably as a planned settlement, shortly after the Norman Conquest, by its Norman lord, Arnulf de Hesdin (Astill 1978). The town appears to have developed steadily throughout the 12th and early 13th centuries and thrived as a wool and cloth centre, possibly suffering a decline in the late 13th and 14th centuries. Wider political events at this time led to the construction of one of the area's most visible monuments: in 1396, Sir Richard Abberbury was granted a royal licence to fortify the castle on his manor at Donnington. The 15th century saw a revival in the town's fortunes, and Newbury reached its peak as a centre of wool and cloth production in the late 15th and 16th centuries.

Three sites of medieval date were found on the Bypass route. These were a small group of pits and ditches, possibly indicating a settlement near Hill's Pightle, and two pottery and tile production sites at Enborne Street and Wheatlands Lane.

The Enborne Street and Wheatlands Lane sites lie only some 550 m apart, separated by Reddings Copse. On both sites, the features were found to contain large quantities of pottery and tile dating to the 13th and 14th centuries, the fragile and poorly-fired condition of which suggested that it represented waste material from kilns. The features present on the sites might represent the remains of these kilns and/or associated structures into which the waste material had apparently been dumped. Given the close proximity of the two sites, their similar dating and nature, it is evident that they represent a dispersed ceramics industry, exploiting the London Clay. The results from these two sites are therefore considered together below.

The sites lay on either side of a low ridge of London Clay running from south-west to north-east between Red Hill Common and Wash Common. The Enborne Road site lay in an arable field (formerly three fields, The Pightle, Great Pigeons and Battens Meadow) on a south facing slope immediately below the crest the ridge, at between 108.7 m and 112.5 m OD. The other site lay either side of Wheatlands Lane. To the south it lay in an area of woodland (Redding's Copse) on a north facing slope at the toe of the ridge at between 97.5 m and 101.0 m OD, while to the north it lay on fairly flat land within an arable field (Sandy Ground) at between 95.0 m and 97.0 m OD. The underlying drift geology comprised London Clay to the south with mixed Reading Beds sands and gravels to the north.

Large quantities of medieval pottery and tile were recovered from both sites during all stages of the evaluation. Geophysical survey indicated the position of possible structures and pits, but subsequent trenching showed these anomalies to be of natural origin. In view of these findings, both sites were subject to investigation by strip and record prior to the road construction.

Enborne Street: earlier medieval (12th–13th century)

OS Grid Reference SU 4437 6405

A total area of approximately 1900 square metres was stripped of topsoil, revealing a number of features of medieval and post-medieval date. These comprised five ditches/gullies, two groups of intercutting pits and two possible clamp kilns with an associated spread of burnt material, all of medieval date, and five ditches of post-medieval date. (Fig. 18).

The Kilns

The two possible kilns (7004 and 7054) found at Enborne Street were represented by sub-circular, bowl shaped pits between 1.05 m and 2.60 m in diameter and approximately 0.20 m deep (Fig. 19). Both contained large quantities of charcoal and displayed signs of burning, causing a bright red discoloration of the surrounding natural clay.

A post-hole (7012) on the northern side of kiln 7004 cuts, and therefore post-dates, the backfilling of the kiln. On the western side of 7004 was a shallow, irregular feature, 7014; the relationship between the two features could not be discerned because of the very similar nature of their fills.

Immediately to the north-east of kiln 7054 was a thin (<0.05 m thick) layer of greyish-brown silty clay (7055) which contained large quantities (*c.* 80% of the layer) of charcoal. In addition to a small assemblage of 13th century pottery and tile fragments, 29 pieces of fired clay were also recovered from this deposit. The majority of these had smooth, flat surfaces and were blackened through heating or burning. It is possible that they represent the covering, lining or kiln furniture (material used as spacers to separate or hold the pots during firing) associated with one of the possible kilns. The spread of burnt material is likely to represent the fire debris 'raked out' of the kilns after a firing.

Samples of charcoal taken from the base of kiln 7004 consisted of oak sapwood and twigs, birch and alder. Oak and birch are high energy fuels, but alder wood burns slowly and with less heat. Ethnographic studies of pottery production employing similar firing techniques indicate the use of a wide range of fuels,

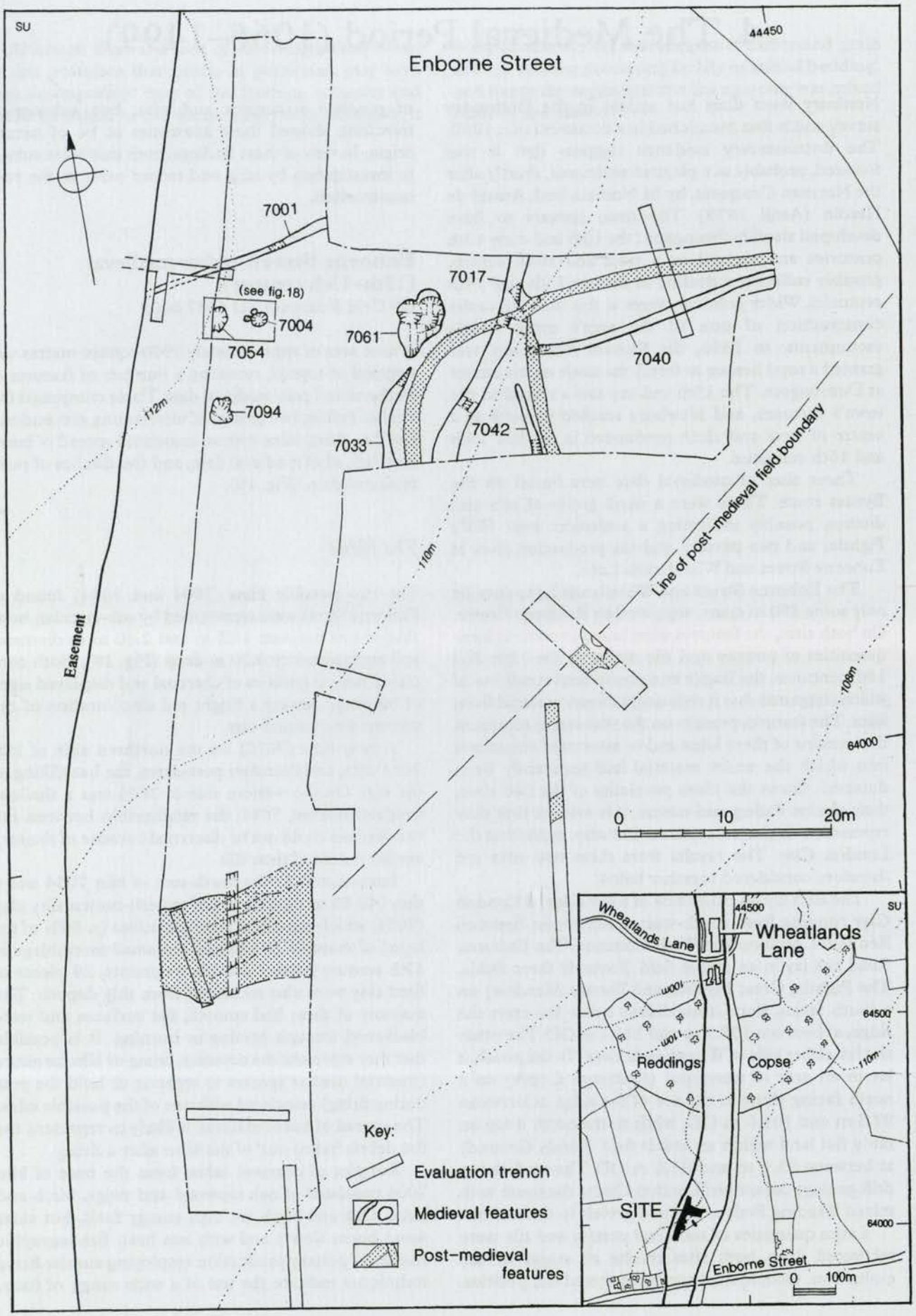

Figure 18 Enborne Street: site location and all features plan

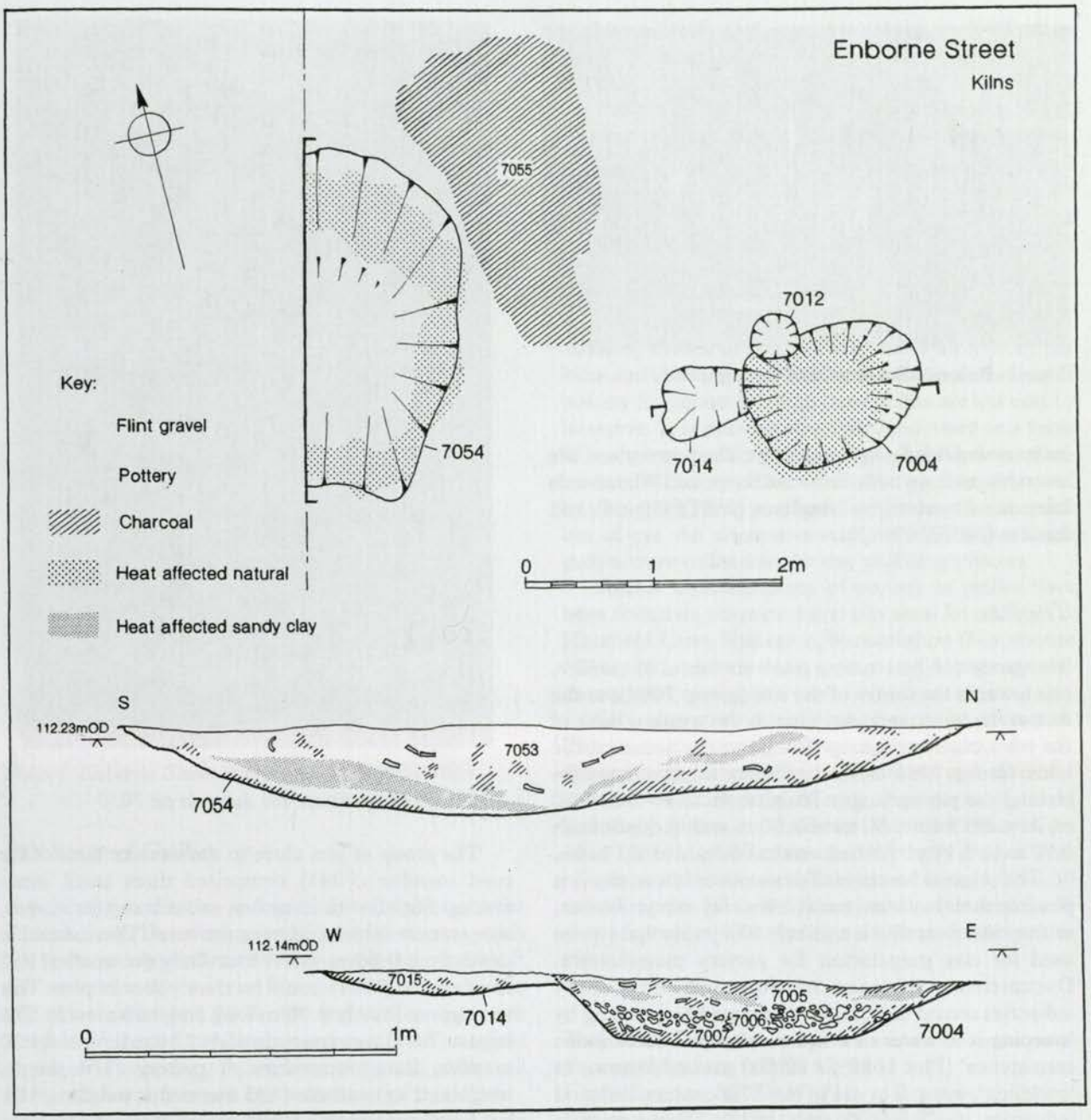

Figure 19 Enborne Street: possible kilns, plan and sections

including straw, animal dung, sawdust and twigs. The samples also contained a small quantity of charred cereals and weeds, which offer a glimpse of the agricultural economy of the potters (Ede, *NBTR* 71–3).

Although having the appearance of kiln waste, none of the pottery recovered from the possible kilns was demonstrably fired in them; it is more likely that they were filled with material from existing waste heaps. All of the pottery is datable to the mid–late 13th century and consists almost entirely of chalk-/flint-tempered wares.

The amount of subsequent damage due to ploughing on the site is uncertain. It is possible that, in both cases, almost the entire kiln had been destroyed and all that remained was the base of the stoke hole. However, it is more likely that the pits were the remains of simple 'clamp' kilns, in which the pots would have been stacked in a shallow pit with the fuel and covered with turves or some similar material for firing. Such kilns would not have required a superstructure. This interpretation is supported by the characteristically 'patchy' surface colouring of the pots themselves, which

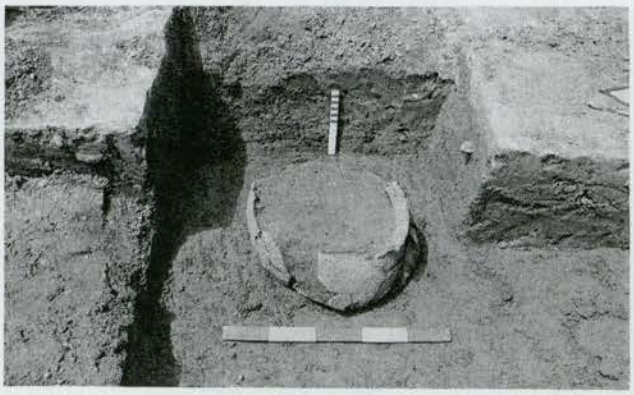

Plate 2 Enborne Street: necked jar in pit 3031

indicate variable firing conditions. The pottery and tile assemblages from both Enborne Street and Wheatlands Lane are discussed by Mepham (*NBTR* 52–66) and Loader (*NBTR* 67–71).

The Pits

Two groups of intercutting pits were found on the site, one towards the centre of the site (group 7061), to the east of the kilns, and one close to the western limit of the road corridor (group 7094), to the south of the kilns. Group 7061 comprised three intercutting sub-rectangular pits varying in length from 2.30 m to 3.00 m, in width from 1.50 m to 2.50 m and in depth from 0.70 m to 1.15 m. All had vertical sides and flat bases.

The original function of these pits is uncertain; it is possible that they were result from clay extraction but, as they intercut, this is unlikely. They may have been used for clay preparation for pottery manufacture. Documentary evidence of post-medieval pottery industries record that clay was prepared for working by 'steeping it in water in a square pit, till it be of a due consistence' (Plot 1686); a similar process, known as 'puddling', was still in use in the 19th century Verwood industries in Dorset (Young 1979). Whatever their original use, they were subsequently used as dumps for kiln waste, in the form of underfired tiles and pottery.

The earliest of the three pits (7071) produced relatively small quantities of pottery and tile, as well as charcoal of oak, birch, hazel, ash, and cherry, a similar combination of high energy fuel woods to that found with the kilns. The second pit (7031), the smallest of the three, produced over 9 kg of pottery, including a near complete necked jar or cooking pot (Plate 2). The latest (7030) contained very large quantities of underfired tiles, with one fill (7043) being comprised almost entirely of a 0.30 m thick dump of tile fragments (Plate 3): a 0.50 m wide slot excavated through this fill produced 30.9 kg (356 fragments) of tile.

Plate 3 Enborne Street: tile dump in pit 7030

The group of pits close to the western limit of the road corridor (7094) comprised three small intercutting pits, all with irregular, sub-rectangular shapes, steep concave sides and irregular bases. These varied in depth from 0.30 m to 0.70 m. Only the smallest and most recent (7027) could be clearly seen in plan. This was approximately 0.90 m long and 0.80 m wide. The largest (7024) was approximately 2.10 m long and 1.30 m wide. Large quantities of pottery (218 sherds; weighing 2 kg) and tile (425 fragments, weighing 31.6 kg) were recovered from this group of pits. These were smaller and shallower than the pits in group 7061, possibly indicating a different function.

The pit groups produced a very large assemblage of later 13th century pottery, mostly chalk-/flint-tempered wares, but with a significant percentage of flint-tempered wares (here defined as 'Kennet Valley' wares; see Mepham, *NBTR* 52–66). The poor condition of the assemblage indicates that it is largely kiln waste. The most common vessel forms comprise necked jars, necked bowls and bowls/dishes, together with a cauldron (Fig. 25, 52), a possible hearth cover or 'curfew' and a possible jug. In addition, there is one internally glazed dripping dish (Fig. 25, 67), and a slip-decorated jug (Fig. 25, 66), both in non-local fabrics.

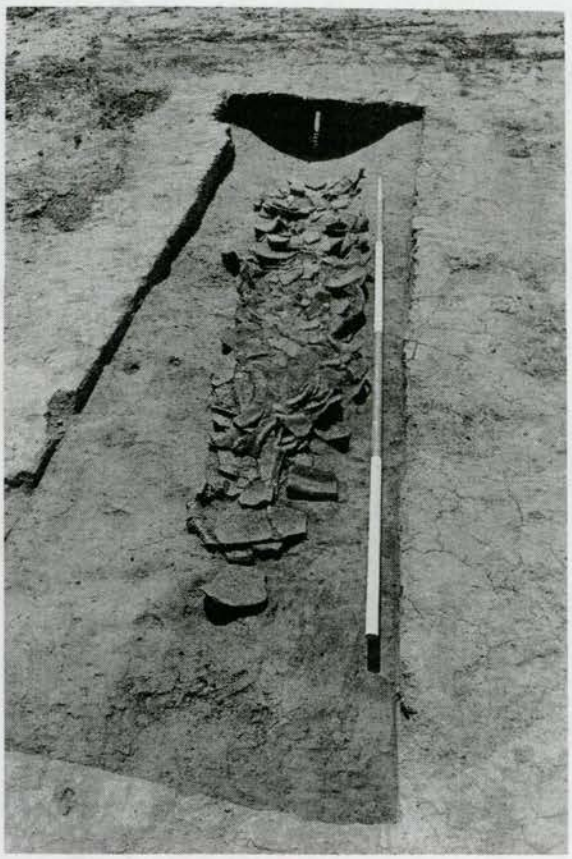

Plate 4 Enborne Street: pottery dump in gully 7033

Ditches and Gullies

A total of five ditches and gullies was datable to the 13th century. The most substantial of these was ditch 7017, on an approximate north–south alignment. It was traced for 20 m across the eastern part of the site and was on average 1.90 m wide and 0.80 m deep with a regular V-shaped profile. It was interpreted as a field or property boundary. Apart from two small gullies, all of the medieval features lay to the west of this ditch.

The two small gullies to the east of ditch 7017 were aligned at right-angles to each other, one north–south (7042) and one east–west (7040). They varied between 0.25 m and 0.50 m in width and were approximately 0.20 m deep with regular U-shaped profiles.

Two further gullies of 12th–13th century date were found to the west of ditch 7017. The most northerly of these (7001), on an east–west alignment, was traced for approximately 18 m in the strip and record area and in an earlier trial trench. It varied between 0.70 m and 0.90 m in width and between 0.20 m and 0.40 m in depth, becoming wider and deeper towards the west. Towards its western limit within the road corridor it contained a dense concentration of pottery (100 sherds, weighing 3.6 kg), although very few finds were recovered from elsewhere along its length.

Immediately to the south of pit group 7061 was a small curving gully (7033) on an approximately north–south alignment. It was between 0.50 m and 1.00 m wide and between 0.25 m and 0.40 m deep, becoming progressively wider and deeper as it continued down slope to the south. The northern terminal of this feature was almost completely filled with a dense deposit of pottery fragments (1723 sherds, weighing 19.5 kg) which terminated abruptly 2.0 m to the south of the terminal (Plate 4). Very little material was recovered from the remainder of this gully.

The two gullies to the west of ditch 7017 were presumably drains to keep ground water away from the kilns and working area. The localised concentrations of pottery fragments found in these gullies are less easy to interpret. It is possible that they functioned as a form of soakaway, possibly where they passed below structures or surfaces, or that waster dumps, since removed by ploughing, were positioned over them after they fell out of use. An alternative interpretation is that these gullies were utilised in the clay puddling process.

Similar concentrations of pottery in gullies have been found on other medieval kiln sites, for example at Harefield Lane, Nuneaton, Warwickshire (Moorhouse 1981, 100), where a drain constructed of pots was also excavated.

Several post-medieval ditches were also excavated. The three intercutting ditches in the south of the site appear to represent the establishment and maintenance, albeit on slightly differing alignments, of a field boundary shown on an Estate Map of 1775 and the 1841 Tithe Map. The two more northerly ditches were of comparable size to the field boundaries (1.00–1.50 m wide and 0.50–0.90 m deep) with similar regular V-shaped profiles. The function of these ditches is unclear.

Technical Reports
Pottery: Mepham *NBTR* 52–66
Finds: Loader, *NBTR* 67–71
Charred plant remains: Ede, *NBTR* 72–3
Charcoal: Gale, *NBTR* 73–4

Wheatlands Lane: earlier medieval (12th–13th century)

OS Grid Reference SU 444 647

Approximately half the width of the road corridor here had been disturbed by the railway embankment. A total area of approximately 4600 square metres to the west of this disturbed area was stripped of topsoil by machine on both sides of Wheatlands Lane. Tree roots had disturbed most of the area to the south of Wheatlands Lane, but the area to the north appeared to have suffered a degree of disturbance due to ploughing.

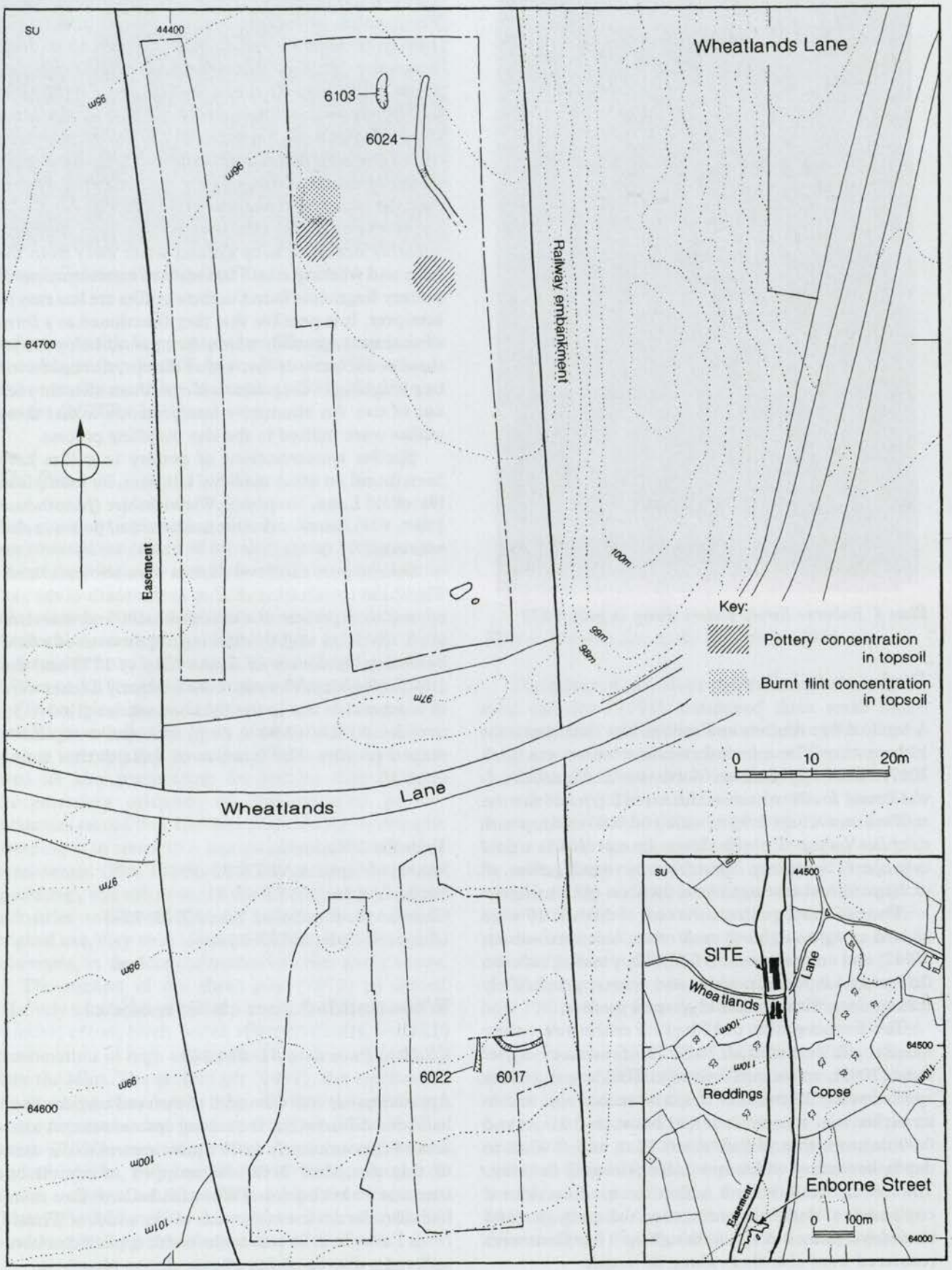

Figure 20 Wheatlands Lane: site location and all features plan

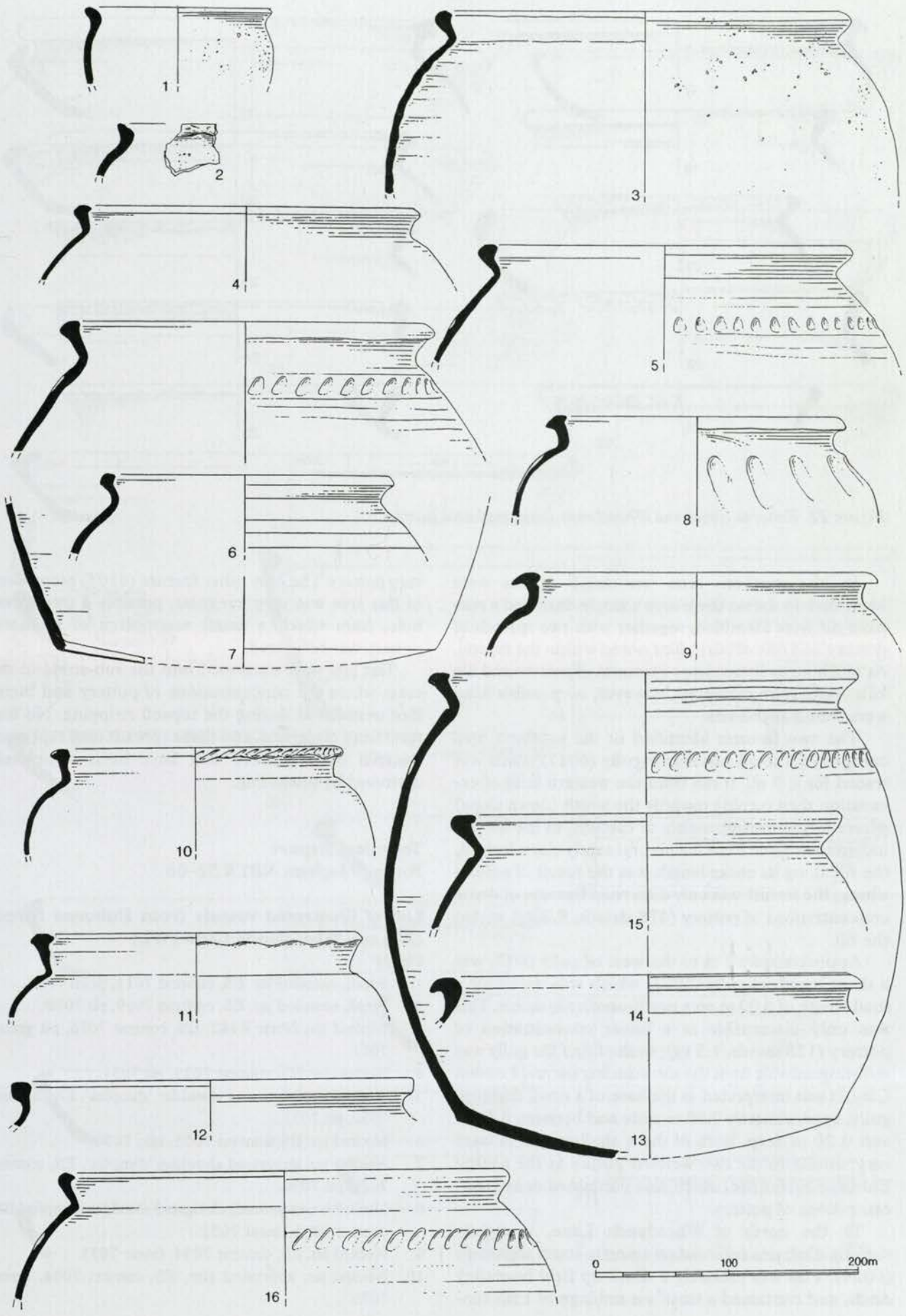

Figure 21 Enborne Street and Wheatlands Lane: medieval pottery

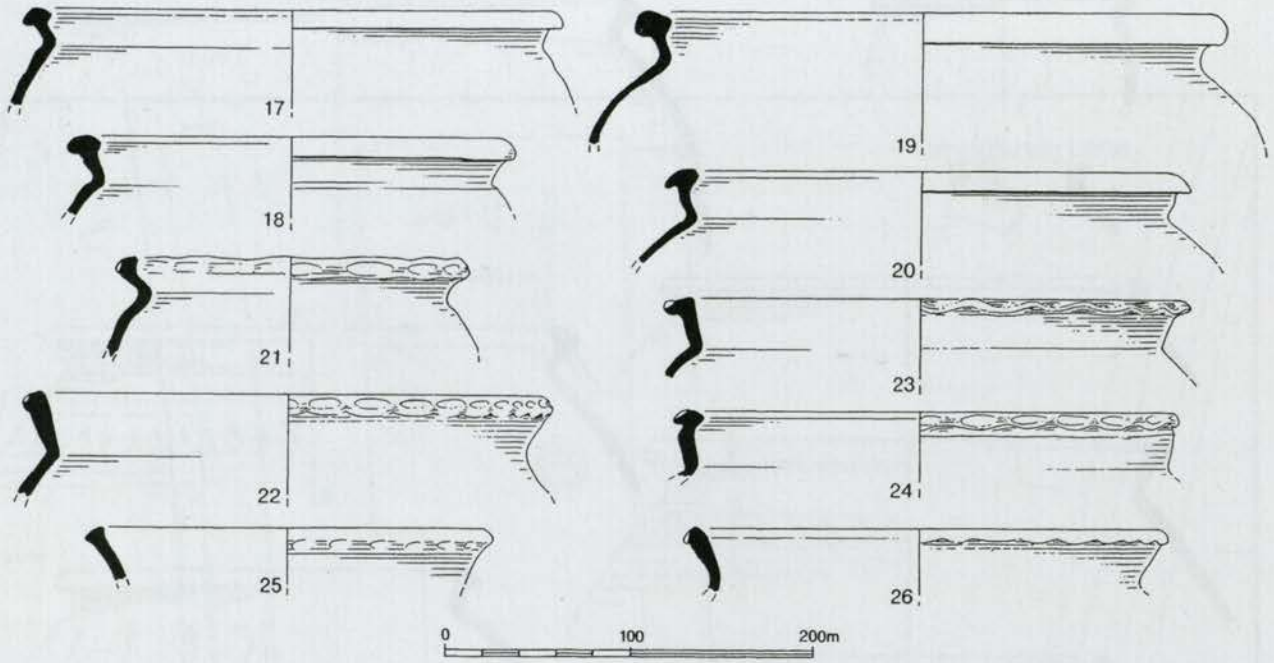

Figure 22 Enborne Street and Wheatlands Lane: medieval pottery

In the southern area two small gullies were identified. In the northern area a single ditch and a possible pit were identified, together with two spreads of pottery and one of burnt flint noted within the topsoil. As at Enborne Street, large amounts of pottery and tile kiln waste were recovered; however, no possible kilns were found at this site.

The two features identified in the southern area comprised a small curvilinear gully (6017) which was traced for *c.* 7 m. It ran from the western limit of excavation then turning towards the south (down slope) where it became impossible to discern, as the fill was indistinguishable from the natural sandy clays. Indeed, the fill along its entire length was the result of natural silting; the feature was only discerned because of dense concentrations of pottery (478 sherds, 5.2 kg) within the fill.

Approximately 2 m to the west of gully 6017, was a short length of gully (6022) which was traced for a total length of 6.00 m on a north–south alignment. This was only discernable as a linear concentration of pottery (128 sherds, 1.5 kg), as the fill of the gully was indistinguishable from the surrounding natural London Clay. It was interpreted as the base of a small drainage gully, approximately 0.90 m wide and between 0.10 m and 0.20 m deep. Both of these shallow gullies were very similar to the two western gullies at the nearby Enborne Street site, which also contained dense concentrations of pottery.

To the north of Wheatlands Lane, a slightly curving ditch was recorded on a north–south alignment (6024). This was probably a silted up field boundary ditch, and contained a small assemblage of 13th century pottery. The only other feature (6103) recognised in this area was very irregular, possibly a tree throw hole, from which a small assemblage of medieval pottery was recovered.

Test pits were excavated into the sub-strata in the areas where the concentrations of pottery and burnt flint were noted during the topsoil stripping. No features were discerned, and these spreads may represent material from features that have been completely destroyed by ploughing.

Technical Report

Pottery: Mepham *NBTR* 52–66

List of illustrated vessels from Enborne Street (ES) and Wheatlands Lane (WL)

Fig. 21

1. Small, rounded jar. ES, context 7011, ditch 7017.
2. Small, rounded jar. ES, context 7069, pit 7070.
3. Necked jar, fabric E442. ES, context 7016, pit group 7061.
4. Necked jar. ES, context 7019, pit 7031.
5. Necked jar, impressed shoulder 'dimples'. ES, context 7032, pit 7031
6. Necked jar. ES, context 7053, kiln 7054.
7. Necked jar, impressed shoulder 'dimples'. ES, context 7029, pit 7030.
8. Necked jar, impressed, elongated shoulder 'dimples' ES, context 7034, linear 7033.
9. Necked jar. ES, context 7034, linear 7033.
10. Necked jar, impressed rim. ES, context 7034, linear 7033.

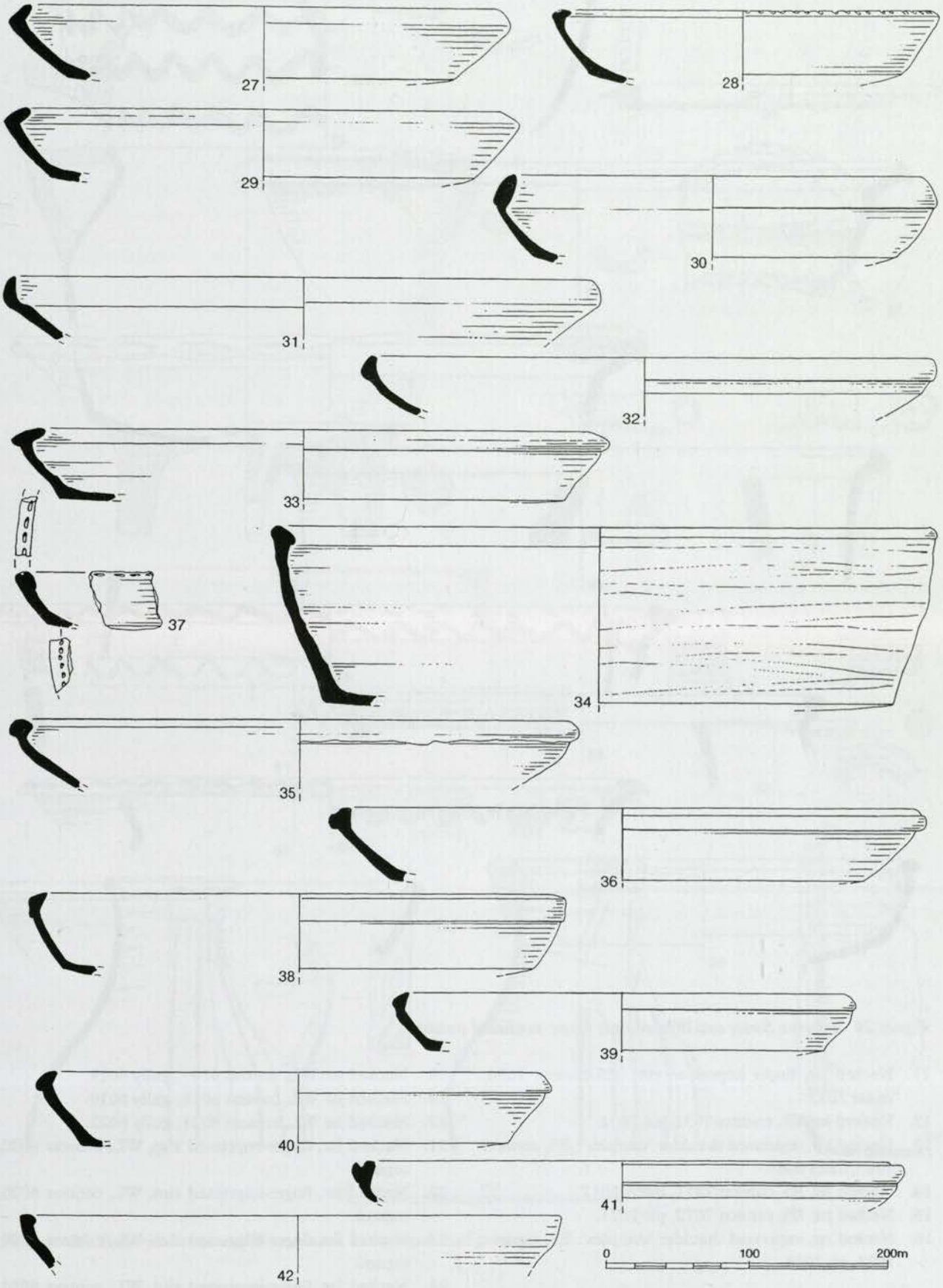

Figure 23 Enborne Street and Wheatlands Lane: medieval pottery

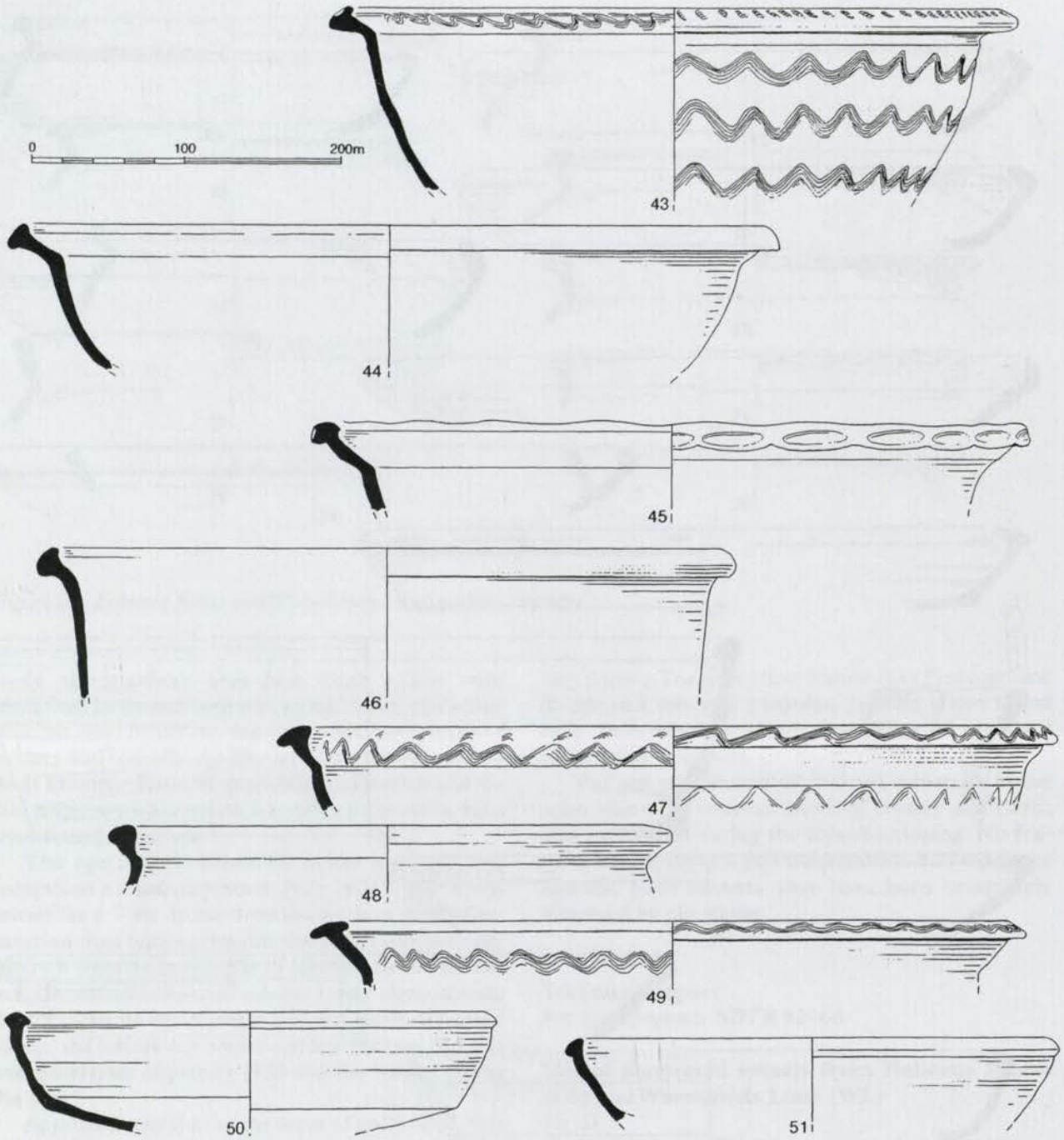

Figure 24 Enborne Street and Wheatlands Lane: medieval pottery

11. Necked jar, finger impressed rim. ES,context 7034, linear 7033.
12. Necked jar. ES, context 7032, pit 7031.
13. Necked jar, impressed shoulder 'dimples'. ES, context 8083, ditch 8084.
14. Necked jar. ES, context 7011, ditch 7017.
15. Necked jar. ES, context 7072, pit 7071.
16. Necked jar, impressed shoulder 'dimples'. ES, context 7023, pit 7024.

Fig. 22

17. Necked jar. WL, context 6016, gully 6017.
18. Necked jar. WL, context 6101, gully 6019.
19. Necked jar. WL, context 6018, gully 6019.
20. Necked jar. WL, context 6021, gully 6022.
21. Necked jar, finger-impressed rim. WL, context 6020, topsoil.
22. Necked jar, finger-impressed rim. WL, context 6020, topsoil.
23. Necked jar, finger-impressed rim. WL, context 6020, topsoil.
24. Necked jar, finger-impressed rim. WL, context 6020, topsoil.

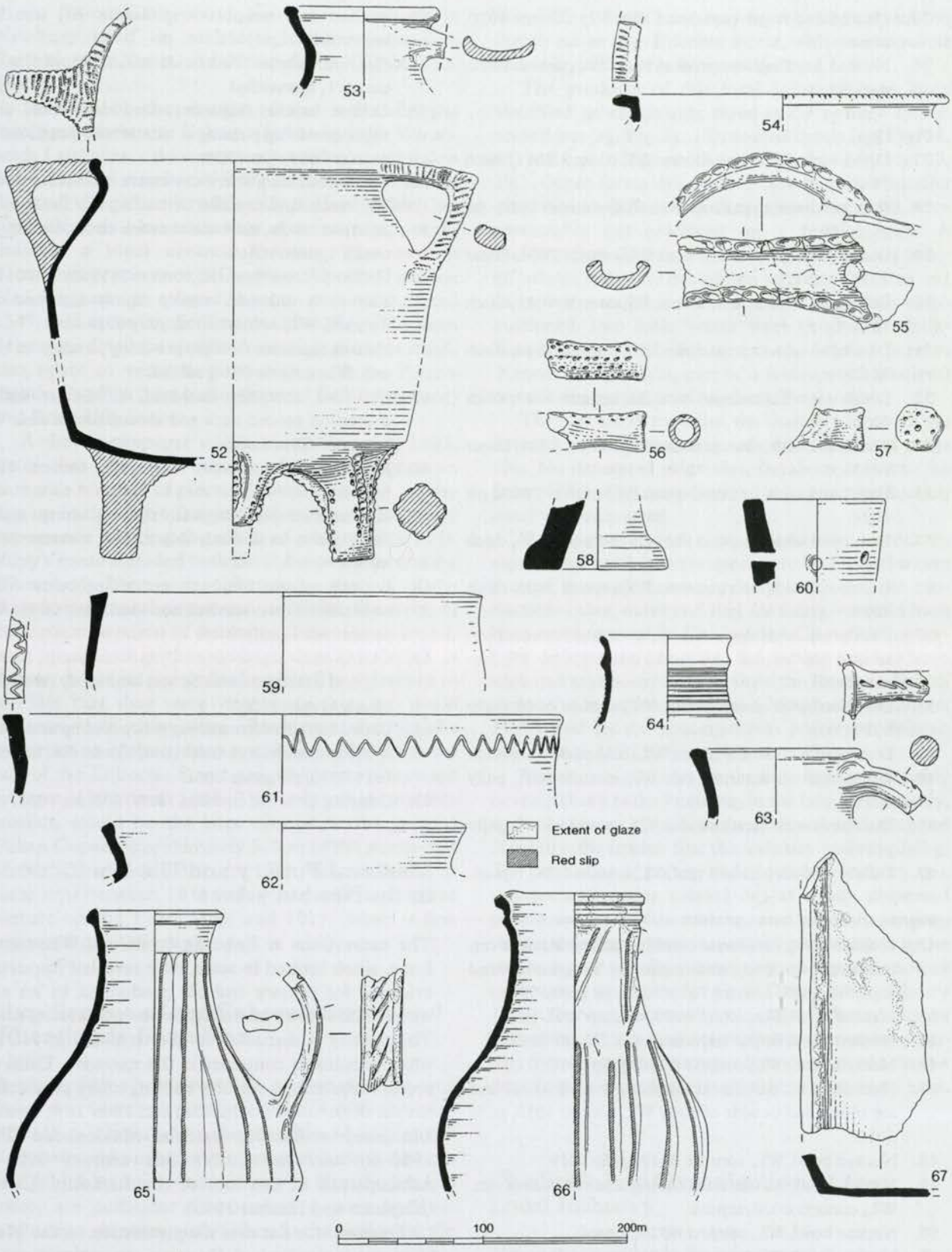

Figure 25 Enborne Street and Wheatlands Lane: medieval pottery

25. Necked jar, finger-impressed rim. WL, context 6020, topsoil.
26. Necked jar, finger-impressed rim. WL, context 6020, topsoil.

Fig. 23

27. Dish/bowl with inturned rim. ES, context 7011, ditch 7017.
28. Dish/bowl with inturned rim. ES, context 7016, pit group 7061.
29. Dish/bowl with inturned rim. ES, context 7034, linear 7033.
30. Dish/bowl with inturned rim. ES, context 7011, ditch 7017.
31. Dish/bowl with inturned rim. ES, context 7018, ditch 7017.
32. Dish/bowl with inturned rim. ES, context 7049, ditch 7051.
33. Dish/bowl with inturned rim. ES, context 7034, linear 7033.
34. Dish/bowl with inturned rim. ES, context 7023, pit 7024.
35. Dish/bowl with inturned rim. ES, context 7059, ditch 7091.
36. Dish/bowl with inturned rim. ES, context 7060, ditch 7090.
37. Dish/bowl with inturned rim, stabbed decoration around top of rim and underside of base. ES, unstratified.
38. Dish/bowl with inturned rim. WL, context 6018, gully 6019.
39. Dish/bowl with inturned rim. WL, context 6020, topsoil.
40. Dish/bowl with inturned rim. WL, context 6021, gully 6022.
41. Dish/bowl with inturned rim. WL, context 6018, gully 6019.
42. Dish/bowl with inturned rim. WL, context 6020, topsoil.

Fig. 24

43. Necked bowl, curvilinear combing around inside of rim and outside of body, and impressed 'maggots' around top of rim. ES, context 7016/7019, pit group 7061.
44. Necked bowl. EScontext 7079, ditches 7081/7083.
45. Necked bowl, finger-impressed rim. ES, unstratified.
46. Necked bowl. WL, context 6016, gully 6017.
47. Necked bowl, curvilinear combing around inside and top of rim and outside of body. WL, context 6018, gully 6019.
48. Necked bowl. WL, context 6018, gully 6019.
49. Necked bowl, curvilinear combing around inside of rim. WL, context 6020, topsoil.
50. Necked bowl. WL, context 6020, topsoil.
51. Necked bowl. WL, context 6023, ditch 6024.

Fig. 25

52. Cauldron, comb tooth decoration over rim and handles; applied, notched 'ribs' up each tripod foot. ES, context 7032, pit 7031.
53. Pitcher rim, stump of strap handle. ES, trench 1, unstratified
54. ?Jar rim, 'notched' decoration around top of rim. ES, trench 1, unstratified
55. Curfew handle, finger-impressed decoration along edges; pre-firing piercing at handle/body junction. ES, context 7005, kiln 7004.
56. Tubular handle, stabbed decoration in horizontal rows. ES, trench 1, unstratified
57. Solid rod handle, stabbed decoration on handle end. ES, trench 1, unstratified
58. Hollow pedestal base. ES,context 7018, ditch 7017.
59. Rim from unknown vessel, slightly inturned and flattened. WL, context 6018, gully 6019.
60. Plain upright rim, multiple pre-firing piercings in body wall. WL, context 6014, subsoil.
61. ?Jar rim, externally thickened, curvilinear incised decoration around neck and around top of rim. WL, context 6020, topsoil.
62. Jar rim, non-local sandy fabric. WL, context 6020, topsoil.
63. Rod-handled jug, diagonal slashing along top of handle, non-local sandy fabric. WL, context 6020, topsoil.
64. Jug with collared rim, horizontal 'rilling' below collar; no handle or spout survives, non-local sandy fabric. WL, context 6018, gully 6019.
65. Glazed and slip-decorated jug with strap handle; diagonal slashing on handle, non-local sandy fabric. ES, trench 1, unstratified.
66. Glazed and slip-decorated jug with pulled lip and stump of ?strap handle, non-local sandy fabric. ES, contexts 7016/7032, pit group 7061.
67. Dripping dish. ES, contexts 7019/7032, pit 7031.

Medieval Pottery and Tile Production in the Newbury Area

The excavations at Enborne Street and Wheatlands Lane, albeit limited in scale, have revealed important evidence for pottery and tile production in an area where such activity had not previously been suspected. The pottery is discussed in greater detail in *NBTR*, while a resumé is contained in this narrative. Until the present excavations, the only known pottery production sites in Berkshire were the 13th and 15th/ 16th century kiln group at Camley Gardens, Maidenhead (Pike 1965–6) and the early 13th century kiln at Ashampstead at the foot of the Berkshire Downs (Mepham and Heaton 1995).

Evidence for flat roof tile production in the Newbury area is also limited. Documentary sources record the establishment of a tile kiln at Highclere, to the south of Newbury, in 1291, although the manor there had been using tiles from at least 1268 (Hare 1991, 88). There is also documentary evidence that the same kiln produced pottery. Possible evidence for tile production,

in the form of kiln waste, has also been found in Newbury itself on archaeological excavations at Bartholomew Street and Cheap Street (Vince *et al.* 1997).

In view of the results of the archaeological investigations at the Enborne Street and the Wheatlands Lane sites, a documentary search was undertaken for this area. A number of field names and the name of the small village/hamlet of Crockham Heath, which lies approximately 1 km to the west of the route, appear to indicate a local ceramic industry. The earliest documentary reference to Crockham Heath (*Crokeham Hethe*) appears in a Land Revenue document, dated 1547, held at the Public Records Office, Kew. The same document details several field names in the area which also relate to ceramic production, such as Potters Pightle, Pug Pits (pug is clay prepared for brickmaking) and Brick Kiln Piece.

A short newspaper article, dated February 1885, states that 'On Mr. Valpy's estate at Enborne an immense number of pieces of Roman pottery ... were dug up in the clay a few years since, which had every appearance of being the refuse of pottery kilns', Mr. Valpy's estate included both the Enborne Street and the Wheatlands Lane sites, although no records of the exact location and circumstances of the discovery, or the current location of the material, have been found. It is possible that the pottery was misidentified as Roman due to its poorly fired nature. The reference to the fact that they were 'dug up in the clay' could indicate that they were discovered during the construction of the railway cutting immediately to the east of the Enborne Street site, which was excavated between 1882 and 1885. The only other possible location would be the large clay pit to the west of Oaken Copse, approximately 500 m to the north-east of the Wheatlands Lane site. This was excavated at some time between 1841 (when the site is recorded as pasture on the Tithe Map) and 1911 (when it first appears on an OS map).

Significance of the Enborne Street and Wheatlands Lane Sites

Very little of the pottery and tile recovered at Enborne Street was found physically associated with the kilns themselves. Nonetheless, the quantities of pottery and tile recovered from other contexts and features on both sites, which by their condition may be identified as kiln waste, are sufficient to postulate pottery and tile production on some scale either on the sites or in the near vicinity.

Both sites seem to represent relatively short-lived episodes of production in the latter part of the 13th century on the basis of the fabric types and vessel forms recovered. There is some evidence to suggest that the site at Wheatlands Lane may have been in operation slightly earlier than Enborne Street, with some possible chronological overlap between the two.

The products of this local industry have been identified as comprising three main pottery forms: necked jars (eg, Fig. 21, 13), necked bowls (eg, Fig. 24, 43) and bowls/dishes with inturned rims (eg, Fig. 23, 29.). Other forms are present but in much smaller quantities; these forms, such as jugs and curfews, were presumably not produced on a regular basis. A cauldron from Enborne Street (Fig. 25, 52) is a 'one-off' whose elaborate decoration suggests that this was an experimental piece, or was possibly specially commissioned. Two basic 'wares' were produced: chalk-/flint-tempered and flint-tempered, defined here as 'Kennet Valley' wares, part of a widespread medieval ware tradition in central southern England.

The tiles are all roof tiles, the majority of which are flat with a small percentage of plain, unglazed ridge tiles. No decorated ridge tiles, finials or louvers (the form of tiles often manufactured at pottery production sites) were recovered.

The pottery and tile production industry represented by these sites appears to be located where the raw materials necessary for pottery and tile production – clay, water and fuel for firing – would have been readily accessible. The London Clay of the underlying drift geology is suitable for potting and has been exploited at various locations since the Romano-British period, for example at Hamstead Marshall (Rashbrook 1983), and by the post-medieval pottery at Inkpen (Vince *et al.* 1997, 65).

The original stimulus for the industry can probably be traced back to the founding, in the late 11th century, and subsequent growth of the planned settlement of Newbury, the market that the industry was supplying. The production of pottery and tile in the Newbury area was probably being carried out at small, dispersed production sites. Tile making, and possibly potting, were seasonal occupations, normally undertaken in the summer and usually carried out alongside another occupation – such as farming (Drury 1981; Cherry 1991). The apparent small scale of the industry and the lack of the more sophisticated structures and technology found at other pottery production sites of a similar date would seem to indicate that this was the case here.

The Scale and Organisation of the Local Industry

Although no evidence for pottery production in this area of Berkshire had previously been recognised, it seems logical to suppose that such production must have taken place on some scale. The sites at Enborne Street and Wheatlands Lane are unlikely to represent

isolated production sites; rather they are likely to be part of a larger, dispersed local industry.

It might be expected, therefore, that other small production sites similar to Enborne Street and Wheatlands Lane existed at other points along the London Clay outcrop above the Kennet valley. A sherd concentration identified during fieldwalking in 1976–7 in a similar topographical position, approximately 1.5 km to the north-east of Wheatlands Lane (Lobb and Rose 1996, app. 5.3, PRN 3617), may be evidence of this. The possibility of pottery production here was not considered at the time (although the presence of 'Potter's Piddle' as a field name in Enborne parish was noted: *ibid.*, app. 2), but a re-examination of the sherds for the purposes of this analysis revealed a level of abrasion and condition generally consistent with the kiln waste recovered from Enborne Street and Wheatlands Lane. The small collection of sherds (88 sherds in total) consisted mainly of chalk-/flint-tempered wares with a smaller proportion of flint-tempered wares, in a ratio of approximately 5:1; vessel forms included jars (type 1) and bowls (type 3).

The archaeological evidence, albeit disturbed by ploughing and tree roots and in some cases ambiguous, indicates that the technology employed during pottery production on these sites would have been at the most basic level. Evidence for the kilns themselves is slight, but they are likely to have been simple 'clamp' kilns rather than formal structures. There is no evidence for any superstructure or internal kiln furniture; the pots would have been simply stacked within the clamp with the fuel, and discarded waste sherds may have been used to separate the pots within the stack.

The lifespan of such simple kilns is difficult to estimate. An estimate of five years for the life of each of the more formal structures at the Laverstock kilns outside Salisbury, based on one firing per week during the summer months (Musty *et al.* 1969), may be an over-estimate, but theoretically the clamp kiln could have functioned more or less indefinitely with regular cleaning out, since there was no superstructure to maintain. Although the ceramic evidence suggests a relatively limited timespan, this cannot be narrowed down on the basis of either fabrics or vessel forms within the broad period of the later 13th to early 14th century. A short lifespan might be explained by any one of a number of factors, including a change in the ownership of the holding or the exhaustion of the most easily accessible clay sources. With the latter point in mind, it is tempting to postulate a gradual movement along the plateau edge away from Newbury (ie, from Wheatlands Lane to Enborne Street) as clay sources were exhausted. It would be interesting to pursue this theory in areas of London Clay to the south-east of Newbury, but as yet no comparable evidence is known.

As for the associated features of the potters' working area which might be expected, there is practically no archaeological evidence. Several large pits at Enborne Street (above), later filled with kiln waste, could originally have functioned as clay puddling pits. The function of the narrow gullies, some of them densely packed with kiln waste, is more ambiguous; these could have resulted from clay extraction, or have been used for drainage, or possibly both. There is no evidence for workshop structures, although this could have been removed by subsequent ploughing.

This picture of an industry operating at a very basic level is supported by the ceramic evidence. The vessels themselves are handmade, although showing some degree of skill in the forming and finishing; there is no glaze and decoration is at a minimum. Clay 'recipes' are used which have the advantages of a relatively 'open' texture with inclusions that would strengthen the vessels against the thermal shock encountered during use as cooking pots while limiting the necessity to eliminate all accidentally occurring impurities in the clay or tempering agents. The impression gained is one of severely utilitarian, 'no frills' production of everyday kitchen wares, aimed at the lower and middle class market. These are basic vessel forms (jars and bowls) which could have fulfilled a multitude of different functions, not necessarily all purely domestic. Even less common and more specialised forms, such as the curfew and the cauldron (Fig. 25, 52 and 55), are simply adaptations of forms within the main repertoire; the necked bowl and the necked jar respectively.

The failure to take advantage of such technological improvements as the use of the wheel and more formal kiln structures is symptomatic of the early medieval pottery industry in England as a whole and is not unexpected here. It is consistent with the evidence from documentary sources of the generally low social and economic status of potters, who were drawn largely from the peasantry, and whose access to the capital necessary for investment in such technological advances was obviously limited. That this did not unduly affect the success of the local industry can be seen in the predominance of its products in Newbury itself.

While the manufacture of pottery and plain roof tiles at the same site is unusual, there was a tendency for the earlier tile centres to be associated with pottery sites (Hare 1991, 99). The documentary reference to the production of roof tiles and pottery at Highclere (see above), approximately 5 km to the south of the Enborne Street site, demonstrates that in this particular area it may have been a recurrent practice.

Hills Pightle: earlier medieval (12th century)

OS Grid Reference SU 4620 7000

This site lay within the base of a dry valley at between 107 m and 110 m OD, in an arable field with two 'sinkholes' immediately to the north. The underlying natural

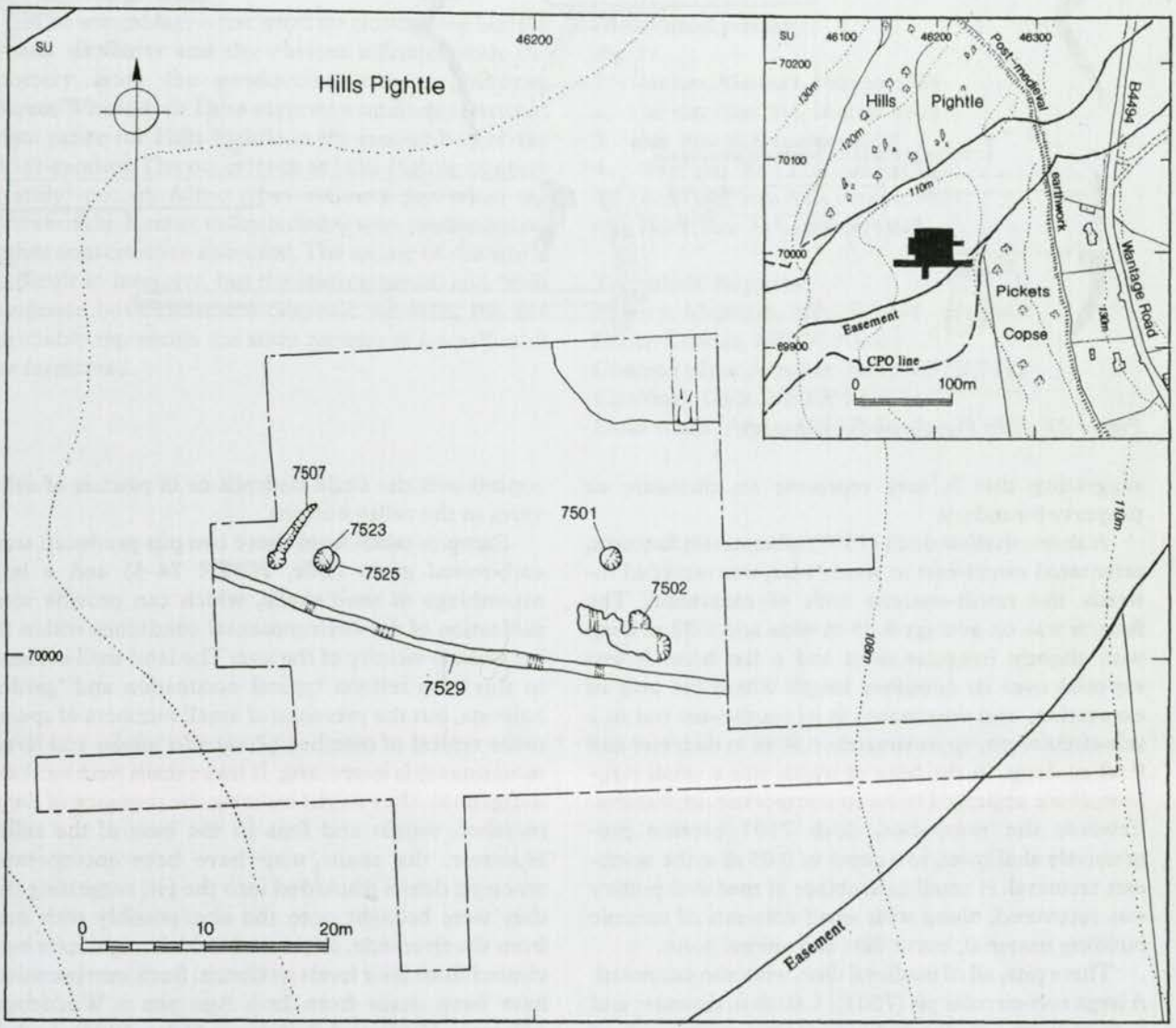

Figure 28 Hills Pightle: site location and all features plan

strata comprised a variety of interleaving fluvial deposits such as very pale brown weathered chalk, pale yellowish-brown sands containing sub-angular gravels, tabular flint beds and stiff orange-brown clays with only intermittent drainage. The presence of such varied natural strata and the proximity of the two sink-holes cause the dry valley to waterlog during wet periods.

Finds and possible features of 12th–13th century date were found in a number of Stage 2 evaluation trenches in this area. These were sealed below a depth of up to 1 m of colluvium. As a result of the evaluation findings, this site was subject to investigation by strip and record before road construction commenced. Natural drainage channels were redirected and an area of 4000 square metres (80 x 50 m) was stripped. Valley base deposits composed of topsoil, subsoil and colluvium to a depth in excess of 1 m were removed by machine.

Two ditches and three pits, all of medieval date, were excavated, along with two probably natural features which also produced small quantities of medieval pottery. All of the features were cut into the mixed natural sub-strata and were sealed below a thick series of colluvial and subsoil deposits, which lay below the modern topsoil.

The larger of the two ditches (7529) was traced from the eastern limit of excavation across the entire width of the stripped area and continued beyond the western limit of excavation. It varied between 0.80 m and 1.30 m in width and was between 0.25 m and 0.45 m deep, becoming narrower and shallower towards the west. A small assemblage of medieval pottery, probably of 13th century date, was recovered along with small quantities of ceramic building material, worked flint, burnt flint and animal bone. All of the other features encountered were located to the north of this feature,

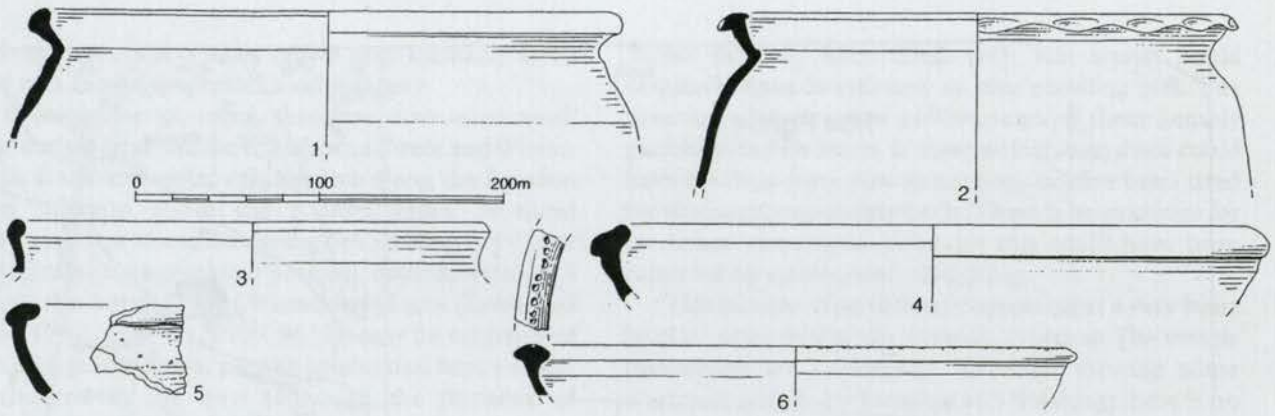

Figure 27 Hills Pightle: medieval pottery

suggesting that it may represent an enclosure or property boundary.

A short, shallow ditch (7507) of uncertain function, orientated north-east to south-west, was recorded towards the north-western limit of excavation. The feature was on average 0.85 m wide and 0.20 m deep with slightly irregular sides and a flat base. It was exposed over its complete length within the area of excavation, and terminated at its south-west end in a sub-circular pit, approximately 1.30 m in diameter and 0.40 m deep, in the base of which was a small post-hole; these appeared to be contemporaneous features. Towards the north-east, ditch 7507 became progressively shallower, to a depth of 0.05 m at the north-east terminal. A small assemblage of medieval pottery was recovered, along with small amounts of ceramic building material, burnt flint and animal bone.

Three pits, all of medieval date, were also excavated. A large sub-circular pit (7501), 1.80 m in diameter and 0.25 m deep, was located towards the eastern side of the site. The basal fill of pit 7501 comprised a 0.10 m thick layer of stiff, silty clay, possibly a deliberate clay lining, suggesting a storage function. The remainder of the pit was filled with a greyish-brown loam from which a small assemblage of medieval pottery was recovered.

Two intercutting sub-circular pits were recorded approximately 20 m to the west of this. The earliest of these (7525) was *c.* 1.20 m in diameter and 0.70 m deep, and contained a small assemblage of medieval pottery. Pit 7525 was partly cut away by pit 7523, which was 1.50 m in diameter and 0.60 m deep. A small assemblage of medieval pottery was also recovered from pit 7523, along with large quantities of burnt flint associated with a distinct charcoal deposit, and two fragments of burnt sarsen stone. The charcoal had come from the burning of a variety of different woods. All the trees represented, including oak, blackthorn or cherry, elder, hazel and hawthorn are likely to have been growing locally. Birch charcoal was also found and also probably grew in areas of leached topsoil over the chalk bedrock or in patches of colluvium in the valley bottom.

Samples taken from these two pits produced some carbonised grain (Ede, *NBTR* 74–5) and a large assemblage of snail shells, which can provide some indication of the environmental conditions within the immediate vicinity of the site. The land snail evidence in this case reflects typical occupation and 'garden' habitats, but the presence of small numbers of species more typical of marshes (*Zonitoides nitidus* and *Vertigo moulinsiana*) is interesting. If these snails were local and indigenous, they might indicate the presence of damp marshes, sedges and fens in the base of the valley. However, the snails may have been incorporated amongst debris discarded into the pit, suggesting that they were brought onto the site, possibly with mud from the river-side, or on reeds which might have been cleared from floor levels or thatch. Such interpretations have been made from Iron Age pits at Winklebury (Thomas 1977) and Balksbury (Allen 1995), both in Hampshire.

A shallow feature (7502) approximately 8.00 m long and 4.00 m wide with very irregular sides and base, containing small quantities of medieval pottery, worked flint, animal bone and a probable iron nail, was interpreted as a remnant subsoil which had accumulated in a slight depression in the natural sub-strata. A further natural feature in the north-east corner of the site appeared to be a small, shallow pond or animal 'wallow'. Two small sherds of medieval pottery were recovered from this along with two pieces of worked flint and a single piece of burnt flint.

The small assemblage of pottery recovered from this site (Fig. 27) has marked similarities with the larger assemblages from the production sites at Enborne Street and Wheatlands Lane. The most noticeable difference is in the condition of the pottery, which in this case is relatively well preserved, if fragmentary, indicating that this represents a normal domestic assemblage rather than kiln waste.

The assemblage is too small for close dating but the visual similarity and the obvious affinities with the pottery from the production sites at Enborne Street/Wheatlands Lane suggests a similarly restricted date range for Hills Pightle in the second half of the 13th century. The occurrence at Hills Pightle of other (sandy) pottery fabric types indicates that while the wares of the Kennet valley industry were predominant, other sources were also used. The nature of the site is difficult to interpret, but the environmental and finds evidence both indicate a domestic function; the site probably represents the scant remains of a small croft or farmstead.

Illustrated pottery

Fig. 27

1. Jar rim. Rim 325, context 6025
2. Jar rim. Rim 324, context 6025
3. Jar. Rim 347, context 6025
4. Bowl rim. Rim 176, context 7513
5. Bowl rim. Rim 323, context 6025
6. Bowl. Rim 348, context 6025

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Pottery: Mepham, *NBTR* 70–1
Finds: Loader, *NBTR* 70–2
Charred plant remains: Ede, *NBTR* 74–5
Charcoal: Gale, *NBTR* 76
Land snails: Allen, *NBTR* 76–7

5. Post-medieval and Modern Periods (1500–present)

Newbury grew rapidly in the later medieval period, expanding to the north so that Speenhamland was regarded as part of the town by the 17th century. The town received its first charter of incorporation in 1596 with main companies represented on the governing body: the clothiers, mercers, tanners, braziers and cloth workers (Astill 1978). By the end of the 16th century, however, the cloth industry on which the fortunes of Newbury had been built was suffering a major decline, from which it never fully recovered.

During the Civil Wars of the mid-17th century, Newbury witnessed significant action (Smurthwaite 1984). The first battle occurred on 20 September 1643 in the area between the new Bypass route and the modern southern extension of the town. The area is now registered by English Heritage as an Historic Battlefield. The King had intended to stop Parliamentary forces returning from Gloucester to London. Although they had the initiative, the Royalists made the tactical mistake of allowing their enemy to occupy the higher ground at Round Hill. Despite robust attacks mainly from Wash Common to the east, the Parliamentarians held their defensive positions and the King was denied a victory. As a result of heavy losses (including the King's secretary, Lord Falkland) and a shortage of ammunition the Royalists withdrew towards Oxford, permitting the Parliamentarians to proceed south of the Kennet to Reading and then London.

Before leaving Newbury, the King placed a garrison at Donnington Castle, which was strengthened with new earthworks, while positions potentially defensible by the enemy nearby were cleared. In July 1644, the castle was besieged. Until Royalists from the West Country could make an attempt to relieve it on 27 October, they positioned themselves between Speen and Newbury and at Shaw House but, in the afternoon, they were surprised by attacks first from the west and then from Clay Hill to the east. This, second battle of Newbury was indecisive; the attacks were abandoned, the King withdrew and the siege of Donnington Castle continued until the garrison was ordered to surrender on 30 March 1646.

The programme of archaeological work conducted in advance of the construction of the Newbury Bypass found no trace of these important historical events. Perhaps ironically, it is contemporaneous accounts of the battles which help us to corroborate the picture of the landscape derived from the archaeological evidence. These accounts tell us that during the first battle of 1643, the Royalists were unsuccessful largely because their cavalry was frustrated by the marshy ground on the Kennet floodplain, and the pattern of small fields and lanes to the south. Such eye-witness accounts fit comfortably with the picture of small dispersed rural farmsteads gleaned from the archaeological evidence.

The siege of Donnington Castle led to the destruction of many buildings and trees in attempts to aid its defence. No evidence of this was discovered on the route of the Bypass, probably because the events took place to the south and east of the castle. Similarly, the scene of the second battle was not impinged upon by the road. Possibly those displaced by the fighting sought refuge in Newbury itself, thus effecting a growth in the population of the town.

Newbury's location at the crossing of the Kennet saw it benefit from the development of new transport systems. In the 18th century, the town became a popular staging post on the London to Bath road and a large number of coaching inns opened in Newbury, and in particular at Speenhamland, to serve this trade. The opening of the Newbury–Kintbury section of the Kennet and Avon Canal in 1797 brought greater commercial development, however, with silk and paper mills and iron foundries active in the town in the 1830s. The Great Western Railway was opened in 1847 but did not transform the local economy to the same extent.

Two landscape features of post-medieval date were recorded where they were affected by the Bypass route. An earthwork boundary feature to the west of the Wantage road was identified and recorded during strip and record works at the nearby Hill's Pightle site. The earthwork extended for some 1400 m in total, and formed the boundary of fields to the west of the road; the absence of this feature on the 1730–1740 survey of Speen manor suggests that it post-dates the survey.

A photographic record was made during the watching brief of features associated with the former Southampton–Didcot railway line, which the Bypass route follows.

The Earthwork at Wantage Road

OS Grid Reference SU 4630 7010

A small ditch and bank earthwork was crossed by the road corridor to the west of the Wantage Road (Fig. 28, inset), close to the strip and record site at Hill's Pightle. The earthwork runs approximately north–south along the steep, heavily wooded eastern side of a small dry valley. Within the road corridor it lay at a height of

approximately 121 m OD. The underlying drift geology comprised mixed sand and clay Reading Beds.

The earthwork was examined during the strip and record phase of works, prior to the commencement of road construction. Much of its length within the road corridor had been severely disturbed by tree felling and subsequent stump removal. To complement the physical recording of the monument a limited desk-based study of maps and documents held in the County Records Office was undertaken.

A single machine trench was excavated across the earthwork at the best surviving point. The earthwork was found to comprise a broad shallow ditch, *c.* 2.50 m wide and 0.40 m deep, and a low bank *c.* 2.80 m wide and 0.40 m high on the western down slope side. No datable material was recovered from either the primary fill of the ditch or from the bank, although modern (20th century) pottery and fragments of concrete were noted in the uppermost fills of the ditch. Ash trees up to 1.0 m in diameter were noted growing on the bank to the north of the corridor, which suggest an earlier date than the finds recovered from the ditch.

The earthwork was traced for *c.* 300 m to the north where it turned to the north-west, crossing the dry valley and continuing up the western side of the valley. To the south it was traced for *c.* 1100 m to the northern edge of the village of Donnington. It was noted that the earthwork formed the western boundary of the properties and fields along the western side of the B4494 Wantage Road.

The current edition 1:10,000 OS map of the area shows the line of the earthwork as a continuous property/field boundary. The southern end of this same boundary was also noted on the 1730–1740 survey of Speen Manor, however, on this document it did not appear to form a continuous boundary. The area where it is crossed by the Bypass route lies beyond the northern extent of the survey.

It appears, therefore, that the earthwork is the remains of a lengthy property/field boundary and the presence of mature (*c.* 1.0 m in diameter) trees growing on the bank indicates that it is far from recent. However, the interrupted appearance of this boundary on the 1730–40 map probably indicates that the earthwork is later than this.

The Railways

The first railway to cross Berkshire was the line designed by I.K. Brunel and built by the Great Western Railway Company between 1836 and 1841 to link London, via Didcot and Swindon, to Bristol (Fig. 1). Branch lines from Reading reached out to Newbury and Hungerford by 1847, thus largely replacing water transport (the Kennet Navigation from 1723 and the Kennet and Avon Canal) as the principal means of conveying goods to the capital. In 1873 Parliament gave consent to a scheme to create a north–south route linking Oxford to Southampton, via Didcot (and its junction with the GWR), Newbury and Winchester (and its junction with the London and South Western line). Construction of the northern section as far as Newbury was delayed until 1879 but it opened in 1882, while the southern section as far as Winchester opened in 1885. The link to Southampton was never made.

The 12 mile (20 km) Lambourn Valley Railway which approached Newbury along the southern flank of the River Lambourn and through Speen, was completed in 1898. Its construction offers a salutary lesson to transport engineers because work was seriously delayed by the discovery of a major Anglo-Saxon cemetery at East Shefford, 12 km from Newbury.

The main line from Hungerford to Reading continues in use and is now crossed by a new bridge built for the Bypass. However, the Newbury and Didcot line closed in 1964 and the stretch of Lambourn Valley line from Welford to Newbury in 1972. The Bypass utilises the route of the dismantled Newbury to Winchester railway line, from the point where it leaves the existing A34 in the south as far as Enborne Road. During the programme of archaeological works a photographic record was made of any structures that might be connected with the railway, although no significant remains were encountered.

6. Discussion

The preceding chapters have summarised the archaeological fieldwork undertaken on the Newbury Bypass. This chapter seeks to discuss the results of the work and their significance, in a wider archaeological context.

The Bypass corridor creates a transect across a number of topographical/geological zones. The archaeological potential of some of these landscapes was already well established prior to the archaeological investigations, while little was known of that of others owing to a lack of previous archaeological work. The road corridor transect has permitted the investigation of a sample of these landscapes, which has provided valuable data which allow the perceived archaeological potential of the different zones to be re-examined. However, the restricted width of the transect means that, in many cases, the extent or nature of the archaeological sites remains uncertain as only those parts of sites or potential sites which were directly affected by the Bypass could be investigated. Nevertheless, the data provides an invaluable tool with which to review perceptions of human activity across varying landscapes over a long period of time.

Mesolithic

The earliest activity represented on the Bypass route comprised a dense concentration of Late Mesolithic flintwork recovered from subsoil and colluvial deposits overlying valley floor terrace gravels at the Lambourn Valley site alongside the possible *in situ* deposits located during the evaluation, which were preserved. Small quantities of Mesolithic flintwork were also found in later deposits during the evaluation and subsequent strip and record excavations elsewhere along the Bypass route.

The Mesolithic material excavated at the Lambourn Valley site comprised only worked flint and burnt unworked flint. Fortunately, it sits within a region which is rich in evidence for Mesolithic activity (Wymer 1977; 1978), making it possible to put them into a wider regional context.

The Kennet and Lambourn valleys around Newbury are well known for the presence of Mesolithic sites, which would have been occupied by hunter-gatherer groups exploiting local resources. These sites principally survive as flint scatters, which have often been disturbed by agricultural and other activity over the succeeding millennia; the survival of Mesolithic deposits *in situ*, though well attested locally, is rare nationally.

A number of Early Mesolithic sites are known at Thatcham, less than 5 km to the south-east. These lie on the edge of the terrace gravels overlooking the River Kennet floodplain, and provide evidence for flint-knapping and microlith production on site (Peake and Crawford 1922; Wymer 1962). There was also evidence for bone- and antler-working. Other Early Mesolithic sites have been excavated at Greenham Dairy Farm (Sheridan *et al.* 1967) and the adjacent Faraday Road (Wessex Archaeology 1997), 3 km south east of the Lambourn Valley site. These also lie on the terrace gravels.

In the Wawcott area, 7 km to the west of the Lambourn Valley site, over 50 possible sites, of both Early and Late Mesolithic date have been recorded. These were situated on the floodplain, on the edge of the terrace gravels and also on the lower slopes of the river valley (Froom 1963; 1965; 1970; 1972a; 1972b; 1976). It can therefore be seen that the Lambourn Valley sites sit in the same topographic position as a number of Early and Late Mesolithic sites in the area.

Environmental evidence from individual sites and from the wider Kennet valley region indicates that, in the earlier Mesolithic period, the floodplains supported a predominantly open fen vegetation with some willow scrub. The lengthy duration of open conditions in the floodplains may in part be due to the effects of the grazing of large animals such as red deer, aurochs, horse, elk and wild boar (Holyoak 1980). There is also some evidence for the burning of the fen vegetation during this period at Thatcham, which may be the result of deliberate management by the Mesolithic population to improve grazing and encourage the herds of large animals (*ibid.*). On the terrace on the edge of the floodplain, the Thatcham sites were located in small dry grassy clearings, within pine and hazel woodland. On the higher ground of the valley sides, small birch woods gradually gave way to pine and hazel woodland and later to elm and oak. By the later Mesolithic period alder carr had developed on the floodplain (*ibid.*), possibly due to reduced human intervention, and the higher ground had become well-wooded with elm and lime.

Both the Early and the later Mesolithic sites in the region appear to occupy similar topographical and environmental niches, with a number of the Thatcham and Wawcott sites having been interpreted as 'home base' sites in which a wide range of activities were carried out using a varied tool kit (Wymer 1962; Froom 1972a; 1972b; 1976). The Lambourn Valley site has also been interpreted as a 'home base' site of later Mesolithic date.

It seems that throughout the Mesolithic, a similar pattern of exploitation existed which concentrated in the river valleys. In contrast there is very little evidence for Mesolithic activity on the higher ground of the Berkshire Downs, despite the availability of good quality flint (Richards 1978). The density of the sites in the valleys, as well as the time span of occupation, may suggest that there was at least a semi-sedentary lifestyle exploiting the wide range of animal and vegetable resources available in the river and forest environments. It has been suggested (Clarke 1976; Mellars 1976) that the advantage of a river valley environment was the availability of storable food resources such as nuts, berries and roots together green water plants and other riverine resources during the difficult winter months when supplies of vegetable foodstuffs were at their lowest.

The density of Mesolithic sites in the Lambourn and Kennet Valleys appears to reflect not only the concentration of fieldwork in this area but also the great importance of this region in Mesolithic times. Further east in the Kennet Valley, the density of sites is much lower and in general the sites appear to be much smaller in size (Lobb and Rose 1996).

The evidence from the Lambourn Valley excavation comprised two concentrations of flintwork, which might indicate two separate 'sites' or just discrete areas of activity within a single site. The presence of a wider range of tools in one of the concentrations might suggest a broader range of domestic activities than that represented by the other, which seems to have been more involved with the manufacture of flint tools.

The possibly *in situ* deposits located to the west of the excavated area during the evaluations also seem to represent a site on which tools were made. As these deposits were not excavated, no more detailed comparison in terms of the date or nature of the activities represented can be made. It is not clear whether the Lambourn Valley assemblages can be seen as separate concentrations within one large site, perhaps resulting from a zoning of activities or occupation, or as discrete sites occupied at different times and possibly with differing functions.

Although the majority of known Mesolithic settlements in the Newbury area are confined to the valley floors, it is unlikely that activity in the Mesolithic would have been topographically restricted. Isolated finds of Mesolithic flintwork were also recovered from both the chalkland and valley sides during both the evaluation trenching and strip and record operations. Finds of this date are also recorded in the Berkshire Sites and Monuments Record in all of the topographic zones, although the majority of these lie in the valley floor zone. The hunter-gatherers of the time probably exploited resources in all topographic zones. The preponderance of settlement evidence from the valley floors might suggest that they represent home bases in favourable locations from which several resource areas might have been exploited on a seasonal basis.

These sites can be seen as either semi-permanent settlements, exploiting a wide range of raw materials and foodstuffs in the immediate environs, or as probable winter camps of more widely ranging groups exploiting the Kennet and Lambourn valleys as one part of a seasonal cycle. The evidence from the Lambourn Valley sites fits neatly into this established model of the Mesolithic settlement pattern.

Neolithic and Bronze Age

Evidence for Neolithic and Bronze Age activity along the Bypass route comprised the flint scatter at Curridge Road, Middle Bronze Age features at Swilly Copse, a group of Middle and Late Bronze Age features at Bath Road and colluvial deposits of Middle–Late Bronze Age date on the Lambourn Valley and Elmore Plantation sites. The absence of any certain evidence for settlement dating to these periods may reflect the often ephemeral nature of such sites, particularly those of Neolithic date, which leave little trace in the archaeological record and are particularly vulnerable to damage by agricultural activity. Alternatively, it may simply be that the isolated features located are peripheral to settlement sites beyond the road corridor.

The Berkshire County Sites and Monuments Record details finds of Neolithic polished flint axes in and around the village of Bagnor and a small assemblage of Neolithic pottery was recovered from the lower colluvium at the Lambourn Valley site. Although no features of this date were found, the presence of Neolithic material could perhaps indicate a settlement in the general area of Bagnor, possibly to the west of the Bypass route, where the majority of the findspots lie.

The absence of Early Neolithic activity is to be expected. The floodplain and gravel terraces of the Middle and Lower Kennet valley appear to have been abandoned during this period, possibly due to inundation (Lobb and Rose 1996). This may have been caused by large-scale woodland clearance on the Berkshire Downs and upstream in the upper Kennet valley (Butterworth and Lobb 1992), which could have resulted in a shift in population to the higher chalklands to the north. Some signs of activity during this period, in the form of an episode of woodland clearance, are known in the chalkland zone approximately 1km to the north-west of the route at Snelsmore Common (Waton 1982), although this was followed by woodland regeneration. On the other hand, on a national level, Early Neolithic settlement sites have rarely been recognised anyway.

The apparent low level of settlement activity of later Neolithic and Early–Middle Bronze Age date is more surprising, as numerous settlement sites of this date are known to the north of the area on the Berkshire Downs, and to the east in the Kennet floodplain towards Reading. The activity of this date within the Bypass corridor, represented by the flint scatter at Curridge Road and the few features at Swilly Copse, indicates that either traces of the settlement have been largely destroyed by agricultural activity, or that the focus of the settlement lay beyond the Bypass corridor.

The Middle–Late Bronze Age deposits at the Lambourn Valley and Elmore Plantation sites lie approximately 1.4 km apart on either side of a ridge of chalk, overlain by plateau gravels, between the Kennet and Lambourn valleys. These were the result of human activity, possibly the removal of tree cover, settlement activity or ploughing further upslope. The few features of Middle and Late Bronze Age date recorded at the Bath Road site lay on the top of the chalk ridge between Elmore Plantation and the Lambourn Valley site. These indicate the possible presence of a Middle–Late Bronze Age settlement in the area. The probable hearth and other possibly domestic features may even represent the few surviving traces of part of dispersed ridge top settlement of this date. It is possible that the activities represented by the Bath Road site were also responsible for the formation of the lower colluvium at the Elmore Plantation and the Lambourn Valley sites.

Evidence from several sites within the Kennet valley indicates an intensification of land-use in the Later Bronze Age and Early Iron Age. Settlement sites excavated to the east of Newbury, at Hartshill Copse (Miles and Collard 1986), Dunston Park and Coopers Farm (Barnes *et al.* 1995), were all situated on marginal land. This may reflect increasing pressure on land, perhaps because of soil exhaustion and population increase, necessitating expansion onto poorer soils and new areas. A similar pattern of expansion onto marginal land during this period has also been observed in the lower Kennet valley, close to its confluence with the Thames (Lobb and Rose 1996).

On Snelsmore Common, approximately 1 km to the north-west of the route, pollen evidence indicates woodland clearance in this period. There is also some evidence for clearance and reoccupation of land which had previously been cleared and left to regenerate in the Early Neolithic (Waton 1982). The possible settlement remains excavated on the Bath Road site appear to fit into this pattern of expansion onto the more marginal land of the plateau gravels.

Although all of the prehistoric sites were found to the north of the Kennet, isolated finds of worked flint and other material were found throughout the route during the evaluation. The quantity of finds was higher to the north of the Kennet, and relatively low to the south. This may reflect the heavy soils of the London Clays on the plateau to the south of the Kennet, which would have been difficult to plough and poorly drained, making the area one of marginal agricultural land. The chalkland zone may therefore have been a favoured area for settlement in the prehistoric period. However, the barrow cemetery at Wash Common does indicate that the area between the Enborne and Kennet was at least the focus of Bronze Age funerary activity. However, the distribution of findspots of this date recorded in the Berkshire County Sites and Monuments Record suggests that this was mostly confined to the higher ground of the spur of plateau gravels to the east of the Bypass route.

Iron Age

The complete absence of any features or artefacts of Early and Middle Iron Age date on the Bypass route reflects the apparent low level of earlier Iron Age activity in the Newbury area. Traces of Early and Middle Iron Age settlement are, for the most part, confined to the hillforts of the chalk uplands to the north and south of the route. The closest of these to the Bypass route is Bussock Camp, which lies approximately 1 km to the north. Other hillforts in the area include Grimsbury, 3.5 km to the north-east, the possible hill top enclosure at Borough Hill, 3.5 km to the north-west, Beacon Hill, 4 km to the south and Walbury Hill, 7 km to the south-west.

The only known traces of open settlement of this date in the area comprise a group of pits and hearths discovered during gravel extraction on Boxford common, approximately 2.5 km to the north-west (Peake and Coghlan 1932–5). All of these sites lie in the chalk uplands to the north and south of the route. An archaeological survey of the Kennet valley (Lobb and Rose 1996) proposed a shift in settlement away from the river valleys during this period. It is possible that that most of the population of the area was absorbed into hillforts in the Early–Middle Iron Age. A similar shift in settlement has been noted elsewhere in the south of England (Sharples 1991).

The lack of excavation of the hillforts in the area makes it difficult to assess their status in the landscape and the length of time over which they were occupied. If the hillforts all served a defensive function, or represented power bases, their frequency suggests a politically fragmented social organisation. This contrasts markedly with the centralised control represented by the Late Iron Age *oppidum* or tribal centre at *Calleva* (Silchester).

The last 150 years before the Roman Conquest was a time of rapid change. The hillfort centred settlement pattern of the earlier Iron Age gave way to new patterns of landuse which included the development of large centres or oppida, such as *Calleva*, and the appearance of small farming settlements, both enclosed and open (Cunliffe 1994).

Only one feature of Late Iron Age date was recorded on the Bypass route, a ditch on the Bagnor Road site. The Berkshire County Sites and Monuments Record lists several findspots of Late Iron Age material in the surrounding area and 36 sherds of Iron Age pottery were recovered from the upper colluvium and topsoil on the Lambourn Valley site. This may indicate the presence of a Late Iron Age settlement in the immediate area.

Several findspots listed by the County Sites and Monuments Record of Late Iron Age coins and pottery in the area, especially in the bottom and sides of the Kennet valley, suggests activity of this date in the area. A few sites of Late Iron Age date have been excavated in the Kennet valley to the east of Newbury. The most extensively excavated site, at Ufton Nervet, was occupied from the Late Iron Age to the 4th century AD (Manning 1974). Other sites of Late Iron Age date in the Kennet and Thames valleys also continue into the Romano-British period.

The very early date of some of the features recorded on the Romano-British site at Enborne Road, and the recovery of a Late Iron Age coin to the west of this site (M. Spanswick pers. comm.) possibly indicates a Late Iron Age settlement or farmstead precursor to the known early Romano-British settlement.

Many cropmark sites, with rectangular enclosures and associated field systems, are known on the river gravels along the Kennet valley (Lobb and Rose 1996). By analogy with excavated sites in the Upper Thames valley, many of these enclosures may date to this period, although the lack of excavated sites makes confirmation uncertain.

An important factor, which must have influenced the pattern, nature and economy of settlements in the Newbury area, is the rise in power of the tribal centre of *Calleva Atrebatum* at Silchester, approximately 18 km to the south-east, in the 1st century BC. This may have influenced the apparent increase in activity in the valley bottoms and valley sides in the Newbury area during this period.

The Romano-British Period

There is much in common between the Late Iron Age and the Romano-British patterns of land-use and settlement. The Roman conquest inevitably brought change, but it is the continuity which spans the 1st century AD that is most noticeable. *Oppida* developed into towns while rural farmsteads and settlements were maintained, many becoming 'Romanised' with the construction of masonry buildings, mosaics and hypocausts.

Four sites of Romano-British date were excavated in advance of the Bypass construction. The sites at Bagnor Road and Enborne Road appear to represent farmsteads of unknown size. The Bagnor Road site probably originated in the Late Iron Age and continued in use over most of the Romano-British period; the very early date of some of the features on the Enborne Road site possibly indicate that this was also the case here. The nature of the activity represented by the Romano-British remains recorded at Elmore Plantation is less clear, however, it is probable that this too was a farmstead. The very disturbed remains recorded at Great Pen Wood lay on the low plateau to the south of the Kennet valley. The heavy clay subsoil and waterlogged ground conditions would have made this an unpromising area for agriculture or settlement, however, the nature of the activities represented on this site is uncertain.

Many of the known sites and findspots of this date, listed in the County Sites and Monuments Record, appear to be clustered along the sides of the Kennet valley and along the Roman road between *Calleva Atrebatum* (Silchester) and *Cunetio* (Mildenhall, Wiltshire), both important transport routes during this period. Important Romano-British settlements in the Newbury area include the extensive settlement at Thatcham Newtown, which straddles the Roman Road, and the Roman roadside station called *Spinis*, which was probably sited somewhere in the vicinity of the present day village of Speen. The site at Thatcham Newtown was observed during building work in the 1930s (Harris 1937). The exact nature of this settlement is uncertain because of the way in which it was discovered, however, on the basis of its size, and the evidence for craft specialisation, it is suggested that this is a small town rather than a purely agricultural settlement. Pottery recovered from this site appears to indicate a 3rd or 4th century date.

The apparent concentration of Romano-British sites in and around Newbury can be explained to some extent by chance discoveries during construction work involved in the expansion of the town in the 19th and 20th centuries creating a bias towards the developed area. However, they must also reflect the density of settlement in the area. The distribution of sites and findspots appears to indicate a preferred location on the valley floor zone. The Enborne Road site is one of a number of known sites along the southern side of the Kennet valley which are spread at intervals of between 0.5 km to 1.5 km. All of these are on terrace gravels in the valley floor zone or, like Enborne Road, on the valley sides immediately above the valley floor. The Bagnor Road site also occupied a similar position within the Lambourn valley.

It is perhaps significant that the valley side settlements discovered on the Bypass route, are sited close to the base of the slope and are in an area where the well-drained terrace gravels are of very restricted size. Where the terrace gravels are more extensive, to the east of the route settlement appears to concentrate on

the valley floor. The site at Great Pen Wood provides some evidence for further expansion during the early Romano-British period into more marginal land.

The plateau gravels of the chalkland zone also appear to have been a popular settlement area in the Romano-British period, although they were probably not as densely populated as the valley floor zone. The results of fieldwalking surveys undertaken as part of the Kennet valley survey (Lobb and Rose 1996) suggest a number of sites on the edge of the plateau gravels to the north of the Kennet valley.

Whether on the valley sides or the valley floor, these settlements were utilising a range of land with varying potential from floodplain to plateau or chalkland. The potential of these areas as we know them today suggests that the floodplain would have been used for meadowland and the terraces and valley sides for cultivation. However, in the Romano-British period, their use may have been determined by other factors.

The distribution and size of the settlements in the Newbury area suggests an intensely farmed landscape, probably occupied by numerous small settlements, farmsteads and villas. The distribution and economic base of these was probably influenced by the proximity and authority of the Roman town of *Calleva Atrebatum* (Silchester) and the presence of the Roman road between *Calleva* and *Cunetio* (Mildenhall, Wiltshire), which crosses the Bypass route to the north of the Kennet valley. The Roman town would have provided a ready market for consumables, which may have encouraged the profitable production of surpluses in the Newbury area.

Understanding of the nature of the agricultural economy represented by the sites at Bagnor Road, Elmore Plantation and Enborne Road is severely hampered by the lack of preservation of animal bones. Environmental evidence from other sites within the Kennet valley suggests a predominantly pastoral economy with very limited arable (*ibid.*). However, the corn drier excavated at the Bagnor Road site and the plant remains recovered from this and other features indicate cultivation of cereals, predominantly of wheat (spelt), complimented with barley and oats. Weed seeds recovered from the same deposits suggest that at least some of these crops were grown on damp soils, possibly the valley bottom, which would have been more suited to pastoral agriculture. The importance of arable agriculture to the overall economy of the settlement cannot be estimated.

The slight traces of iron-working recorded at the Elmore Plantation site indicate at least small scale industrial activity, probably producing or repairing equipment for use within the settlement. Other industrial sites of this date known in the Newbury area comprise pottery kilns at Hampstead Marshall (Rashbrook 1983), tile kilns at Shaw (information in the County Sites and Monuments Record) and the craft specialisation noted at Thatcham Newtown (Harris 1937).

The Medieval Period

Evidence for post-Romano-British and Saxon settlement in the area around Newbury is very scarce. A few finds of early–middle Saxon pottery were recovered from shallow pits excavated at Enborne Gate Farm, approximately 1 km to the east of the route (Lobb and Rose 1996). Several local place names, such as Boxford, Donning-ton, Enborne, Hamstead, Greenham and Thatcham, are of Saxon origin, although no archaeological remains of this date have so far been located within or around these villages. A Saxon settlement is known from a 10th century charter at Speen. The place name Speen may be a survival of the Romano-British *Spinis*, if so this could imply a continuation of the settlement beyond the Romano-British period.

If small farming communities also continued into the Saxon period, the land units within which they functioned may well have survived with them, to be taken over in due course by the Saxons. It is clear from the charter evidence that by the 10th century, at the latest, the area was divided into estates which formed the basis for the medieval manors and parishes, which are still reflected in the present day parish boundaries. No features or deposits of post Romano-British or Saxon date were found within the Bypass corridor.

Three sites of medieval date were identified within the Bypass corridor. These comprised a small group of pits and ditches, possibly indicating a settlement in the general area, at Hill's Pightle and two pottery and tile production sites at Enborne Street and Wheatlands Lane. During the medieval period the area of the road corridor would have been part of the immediate hinterland of the market town of Newbury.

Newbury, or the 'new market town', is first mentioned in a grant of *c.* 1080 and probably developed rapidly after this date (Astill 1978). The countryside around Newbury was probably an area of nucleated settlements and dispersed farmsteads, with open fields and common meadowlands along the valley floors and sides, and areas of woodland and heathland on the more marginal plateau and chalklands (Lobb and Rose 1996).

The remains excavated at Hill's Pightle probably represent a small croft or farmstead, situated in a dry valley within the chalkland zone. Environmental evidence recovered from this site indicates the cultivation of cereal crops, primarily oats with some barley, wheat and rye, on the heavy, damp soils. Again, the lack of survival of animal bones means that the relative importance of arable and pastoral agriculture and thus the economic basis of this and other similar settlements in the area, cannot be estimated.

The discovery of the pottery and tile production sites at Wheatlands Lane and Enborne Street provided a valuable insight into the scale, importance and organisation of the pottery and tile production in the Newbury area and the wider region of the Kennet

valley and surrounding areas. Both sites appear to represent relatively short-lived episodes of production in the latter part of the 13th century, although there is some evidence to suggest that the Wheatlands Lane site may have been in operation slightly earlier than Enborne Street.

Potting and tile making were probably seasonal occupations, normally undertaken in the summer (Drury 1981; Cherry 1991) alongside other occupations – such as farming – and the presence of wheat, barley, rye and oat seeds recovered from some of the features indicate that this was almost certainly the case here.

Both the Wheatlands Lane and the Enborne Street sites lay on the low clay plateau to the south of the Kennet valley. The damp, heavy soils made this marginal land for agriculture, but the clay sub-strata, water and copses in this area provide all the raw materials for ceramic production. It is probable that these sites represent small farmsteads which supplemented their, probably poor, agricultural economy with seasonal pottery and tile production.

Review

The project enabled an examination of the way in which the changing patterns of land-use and settlement relate to the geological and topographic diversity of the Bypass route.

In the medieval period, documentary sources indicate that the settlements were situated within land units which ran from the valley floors to the chalklands to the north or the low plateau to the south. Within these units land-use was closely related to the topography, geology and soil type, which governed the agricultural potential of the varying localities. The series of Romano-British settlements along the valleys imply similar patterns of land-use. Late Iron Age settlement appears, superficially, to follow a similar pattern to that of the Romano-British period. Continuity of settlement between the Late Iron Age and Romano-British period is suggested on two sites dated to this period (Bagnor Road and Enborne Street), but little can be inferred from the sparse remains of Late Iron Age date discovered within the Bypass corridor.

During the earlier Iron Age, there appears to have been a decline in population and exploitation of the Kennet and Lambourn valleys, possibly as a result of a shift in settlement to the chalk downlands to the north and south of the route, or inundation of the valleys during this period (Lobb and Rose 1996). Late Neolithic and Bronze Age settlement activity along the route was generally confined to the chalkland zone to the north of the Kennet valley, although finds of this date within later deposits indicate fairly widespread activity on all geologies. Evidence from the Kennet Valley Survey (*ibid.*) supports this impression. Evidence for Late Neolithic and Bronze Age settlement in the valley floor zone was very sparse within the Bypass corridor: this is probably a reflection of the narrow strip of land sampled, rather than the actual settlement and exploitation patterns of the period.

No evidence of Early Neolithic activity was found within the Bypass corridor; the paucity of findspots of this date in the County Sites and Monuments Record appears to confirm the dearth of activity of this period in the general area. This may be because Early Neolithic activity was concentrated on the chalk downlands to the north and the more extensive terrace gravels of the Thames valley, in areas where extensive, light, well drained soils were available. This lack of evidence from the Early Neolithic contrasts sharply with the wealth of evidence from the Mesolithic period. Mesolithic sites excavated in the area suggest relatively permanent base camps on the valley floor exploiting the rich resources of the valleys and surrounding area.

The project also enabled an assessment of the validity of the data gathered during the Kennet Valley Survey (Lobb and Rose 1996). This was one of the largest fieldwalking campaigns ever carried out in southern England, and provided a wealth of data on potential sites in the Kennet valley. Three potential sites were identified by the survey within the Bypass corridor. At Enborne Road, cropmarks to the west of the Bypass route and fieldwalking within the Bypass corridor indicated the possible presence of a Romano-British site. This was confirmed during the evaluation and the site was preserved (see Enborne Road above). Prehistoric worked flint and Iron Age pottery were recovered during fieldwalking of the field that contained the Bath Road site. Although the site appeared to either have been largely destroyed by ploughing or to lie beyond the Bypass corridor, a small number of Bronze Age features were found in the fieldwalked area and Iron Age activity in the area was confirmed at the nearby Bagnor Road site. In only one of the areas of archaeological potential identified by the survey within the Bypass route, a possible cropmark site on the northern side of the Lambourn valley, were no archaeological features found. A number of natural features, probably erosion gullies of periglacial origin, were located during the stage 2 evaluation in this area, and it seems probable that the cropmarks were the result of these features.

Scatters of medieval pottery were recorded during the survey to the east of the Bypass route, along the same ridge of London Clay and in similar topographic positions to the Enborne Street and Wheatlands Lane sites. A subsequent re-examination of the finds suggested that these were possibly kiln waste similar to that found within the Bypass route.

The Effectiveness of the Evaluation

The archaeological investigations employed a staged approach to assess the likely impact of the Bypass on

archaeological remains and provide a means of planning the best way of dealing with the likely consequences. These stages of work employed a range of techniques to enhance existing knowledge of the archaeological resource, within the framework imposed by access restrictions. All existing material was reviewed to provide baseline data. This was then enhanced by field evaluation employing both intrusive and non-intrusive techniques to confirm the presence and significance of remains and allow the potential impact of the new road upon them to be mitigated.

A staged approach to archaeological evaluation in this way is now widely employed on larger scale developments, including roads. The intention is to distinguish the more important remains from lesser remains and to assess the need for their protection or the level to which they should be investigated. The latter is determined from the capability of specific sites to help resolve questions about the past. Thereafter, the resources necessary for proper investigation and commensurate with the site's importance can be marshalled. The principal advantage of this approach is flexibility, allowing resources to be targeted by selecting areas for investigation using specific techniques where appropriate, according to access, ground conditions, topographical zone, etc, and the archaeological questions posed.

The evaluation of a neces-sarily small sample by area of the route inevitably leaves scope for some sites to be missed, in particular where these sites are represented by a small number of features, where they are masked by deep soil deposits, or where features have been damaged by agricultural activity. The location of archaeological remains is not totally predictable and the methods of detection imperfect, consequently, on the Newbury Bypass, a small number of features which had not been found during the evaluation were recorded during the watching brief. At Bath Road, for example, a some Late Bronze Age features and a possible burnt mound were found, but the features were isolated and any wider archaeological site to which they relate must lie outside the Bypass corridor.

Only one archaeological site, part of the Romano-British farmstead at Bagnor Road, had been missed by the evaluation. This was discovered as a result of the need to relocate a balancing pond to allow the preservation of important Mesolithic remains, in an area which was peripheral to the main line of the road and which had not, therefore, been included in the evaluation trenching programme. Although part of the site had already been destroyed by modern quarrying activity, the surviving archaeological features were easily distinguishable and would probably have been located had the evaluation included this area.

Given the extent of the Bypass corridor, the discovery of only a single 'unexpected' site indicates that the evaluation proved successful in locating archaeological sites. This success was supported by the employment of the 'strip and record technique' in mitigation, which ensured that sites located by the evaluation were recorded over their full extent within the road corridor.

This general absence of archaeological discoveries during the watching brief, beyond a small number of isolated features, indicates that the level of archaeological activity across large parts of the route was relatively low, and further demonstrates the success of the evaluation and strip and record techniques in locating and defining the extent of sites.

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Archaeological Investigations on the A34 Newbury Bypass, Berkshire/Hampshire, 1991-7: Technical Reports

by Michael J. Allen, Phil Andrews, Peter S. Bellamy, Nicholas Cooke, Joy Ede, Rowena Gale, S.E. James, Emma Loader, Richard I. Macphail, Lorraine Mepham, Frances Raymond, Rachael Seager Smith and Sarah F. Wyles

Contents

Archaeological investigations along the route of the A34 Newbury Bypass employed a staged approach to assess the likely impact of the road on archaeological remains and allow appropriate mitigation strategies to be developed. This process confirmed the existence of archaeological remains at ten sites, ranging in date from the Mesolithic to the medieval period.

At Lambourn Valley, a 'home base' site of later Mesolithic date was excavated. Evidence for Neolithic and Bronze Age activity comprised a flint scatter at Curridge Road, Middle Bronze Age features at Swilly Copse, and a group of Middle and Late Bronze Age features at Bath Road.

Romano-British sites at Bagnor Road, Enborne Road and Elmore Plantation appeared to represent farmsteads of unknown size; the Enborne Road site included material of early Roman (pre-Flavian) date. Much-disturbed Romano-British remains at Great Pen Wood were of uncertain function.

Three sites of medieval date were investigated. The remains at Hill's Pightle probably represented a small croft or farmstead, situated in a chalkland dry valley. At Enborne Street and Wheatlands Lane the sites produced large quantities of pottery and tile dating to the 13th–14th centuries, and are thought to represent a dispersed ceramics industry exploiting the London Clay.

The bypass corridor crosses a number of topographical/geological zones, the archaeological potential of some of which was already well established, while little was known of that of others owing to a lack of previous archaeological work. The archaeological investigations have provided an opportunity to consider the evolution of the landscape and the part that people have played in its management and inhabitation. The results of the investigations are presented in a descriptive text intended to be understandable to a wide readership, with more detailed and specialist reports available as a separate volume.

Main text: *Archaeological Investigations on the A34 Newbury Bypass, Berkshire/ Hampshire, 1991–7* (V. Birbeck, 2000)

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