ARCHAEOLOGICAL INVESTIGATIONS ON THE MOTORWAY SERVICE AREA, JUNCTION 8, M20 AT EYHORNE STREET, HOLLINGBOURNE

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with contributions by
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SUMMARY

The Oxford Archaeological Unit carried out a field evaluation and excavation at the proposed site of a motorway service area adjacent to Junction 8 of the M20 at Hollingbourne, on behalf of Esso Petroleum Ltd. following consultation with the County Archaeologist. The site (centred at N.G.R. TQ 824 552) is bounded on the south side by the M20 and on the north by the London-Folkestone railway. The underlying geology is predominantly Gault Clay with Folkestone Sands along the south edge of the site. The evaluation consisted of 37 trenches and the excavation of seven large areas which revealed evidence of prehistoric activity, predominantly of later Bronze Age date, and some limited Romano-British and medieval activity.

There is a general scatter of worked flint over most of the site, some of Mesolithic or Neolithic date but most is probably of later Bronze Age date. The main evidence for later prehistoric activity consists of a concentration (N.G.R. TQ 8244 5514) of later Bronze Age pottery associated with small pits, at least two of which are of late Bronze Age date.

There are only small amounts of Romano-British and medieval pottery from the site. The only dated Romano-British features were a single small ditch or gully containing Romano-British pottery, and a large ill-defined clay-filled feature, possibly a pond, which contained a large part of a single cooking-pot. It would appear that the centre of Romano-British activity was to the south of the present site close to and on the line of the M20. The medieval pottery comes mainly from a single pit which contained sherds from a twelfth- or early-thirteenth century cooking-pot and from a linear feature. This was one of a number of ditches laid out in a rectilinear pattern which were identified during the excavation. It is probable that these ditches are of medieval date.

INTRODUCTION

In March 1995 the Oxford Archaeological Unit (hereafter OAU) carried out an archaeological desk study as part of the Environmental Statement at Eyhorne Street, Hollingbourne in respect of a proposed motorway service area (MSA) on behalf of Esso Petroleum plc. After the grant of planning permission with an archaeological condition, a programme of fieldwork was undertaken which comprised a field evaluation in June 1995 followed by an excavation in October-November 1995. The development site lies on the north side of the M20 adjacent to Junction 8 at Hollingbourne, and is approximately 11 hectares in area. A strip up to 75 m. wide, which lies parallel and immediately adjacent to the motorway, and which forms part of the proposed route of the Channel Tunnel Rail Link (CTRL), was evaluated on behalf of Union Railways Ltd as a separate exercise (URL 1996). Further details of the excavations may be found in the site archive. The archive and finds will be deposited with Maidstone Museum and Art Gallery.

ACKNOWLEDGEMENTS

The author wishes to thank the developers, Esso Retail Ltd for their financial support of the fieldwork and costs of publication. Thanks are due to Peter Jeans of the Esso Petroleum Company, Jeffrey Stephenson of EPCAD Consultants, Keith Mason of Woods Warren Consulting Engineers and Stephen Gregory of Turnkey Design Partnership. Dr John Williams and Wendy Rogers of Kent County Council set the Brief and approved the Written Scheme of Investigation (WSI) for the fieldwork. At the time of the evaluation the site formed parts of two separate farms and thanks are due to the owners, Mr and Mrs. Parrett of Eyhorne Farm and Messrs. R.A. and N.J. Leggatt of Woodcut Farm, for allowing access for fieldwork. When the excavation took place the site had been purchased by Esso Retail Ltd. For OAU George Lambrick was responsible for providing consultancy services to Esso Petroleum for the Environmental Statement and the development and monitoring of the proposals for the fieldwork reported here. George Lambrick also commented on the text. Figures 1-11 were drawn by Lesley Collett and Figure 12 by Paul Hughes of the OAU graphics office. The processing of the environmental samples was supervised by Greg Campbell of the OAU, and the assessment undertaken by Dr Mark Robinson of the Environmental Archaeology Unit, Oxford University Museum.

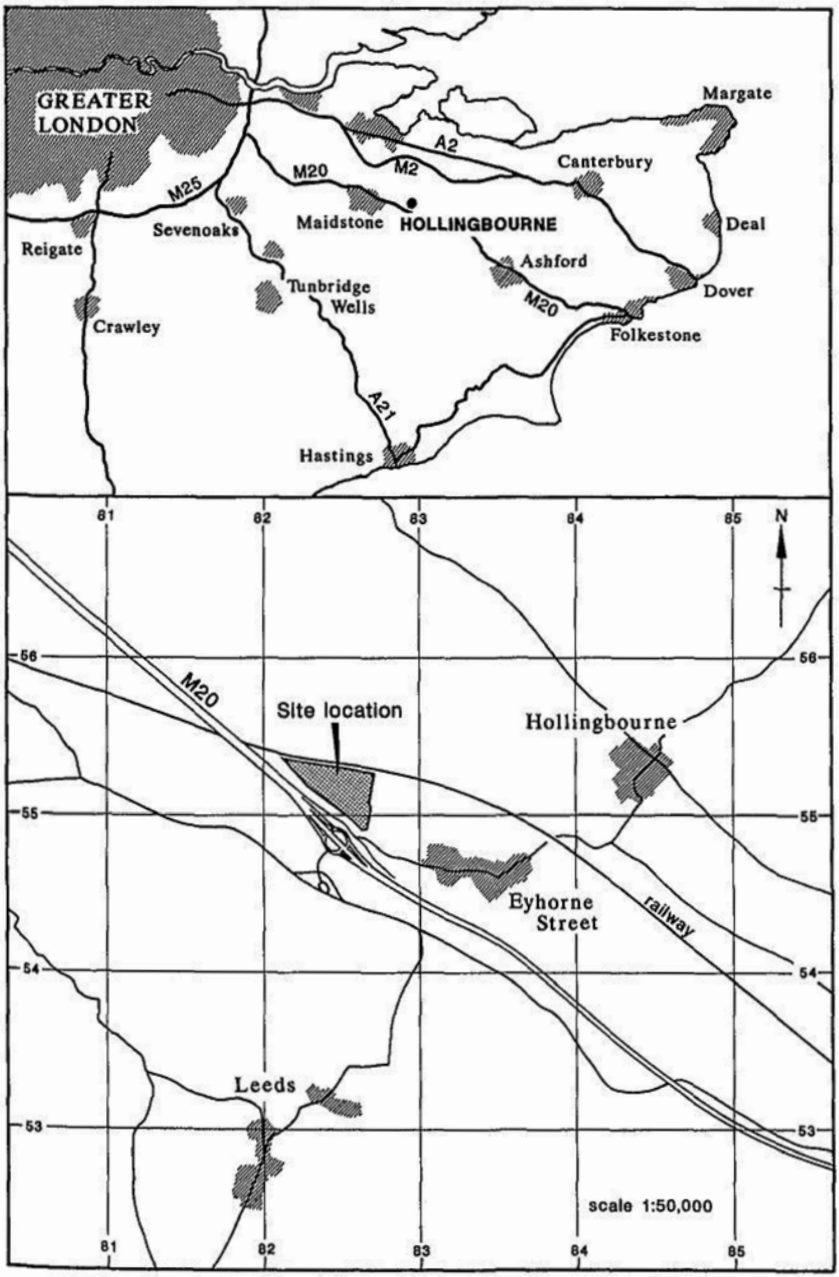

Fig. 1. Site location

LOCATION, TOPOGRAPHY, GEOLOGY (Figs. 1 and 2)

The site lies at the scarp foot of the North Downs, between the villages of Hollingbourne, Eyhorne Street and Bearsted (N.G.R. TQ 824 552). In plan the development site is an elongated triangle; its north side is bounded by the London–Ashford railway line and its south side by the M20. On the south side of the M20 the landscape opens out into a wide valley. The site lay across two fields and straddled an ancient trackway (a continuation of 'Musket Lane'), which is now a public footpath. The field to the west of the footpath had been previously under arable cultivation, while that to the east was under permanent pasture.

The elevation of the site is between 58 m. and 68 m. O.D. Generally the site slopes to the south and west with the highest point at the east end towards the north-east corner. The eastern field slopes down to the south and west towards the footpath where it levels out to form a small flat spur (centred on trenches 19-20 and 25-7). From here the ground falls away to the west, south , and south-east. Towards the west end of the site there is a shallow dry valley, which slopes west towards the motorway; trench 38 was located at the top end of this valley. The ground rises again west of the valley. There is a second dry valley to the south-east of the spur, but this lies mainly within the CTRL corridor and was not explored during the MSA fieldwork.

The site straddles the boundary between two geological deposits. The underlying geology is mainly Gault Clay, with Folkestone Sand beds which surface approximately along the line of the CTRL corridor to the south-west (Geological Survey of Great Britain (England and Wales), *Solid and Drift, Sheet* 288, 1976). The Gault Clay overlies the Folkestone Sand Beds and at the interface is a thin mixed deposit marked by the occurrence of a large sandstone gravel. Many trenches revealed mixed deposits with varying proportions of clay, sand and silt. In the dry valleys silty colluvial deposits were found to have accumulated.

ARCHAEOLOGICAL BACKGROUND AND PREVIOUS WORK

Both the National Archaeological Record and the Kent Sites and Monuments Record identify a number of sites in the general area of the development site. These are predominantly found on the sandy geology to the south of the motorway. Of particular note are a scatter of Mesolithic flint to the south-west (N.A.R. No. TQ 85 SW 6), and nearby the site of two late Bronze Age barrows, with early Saxon

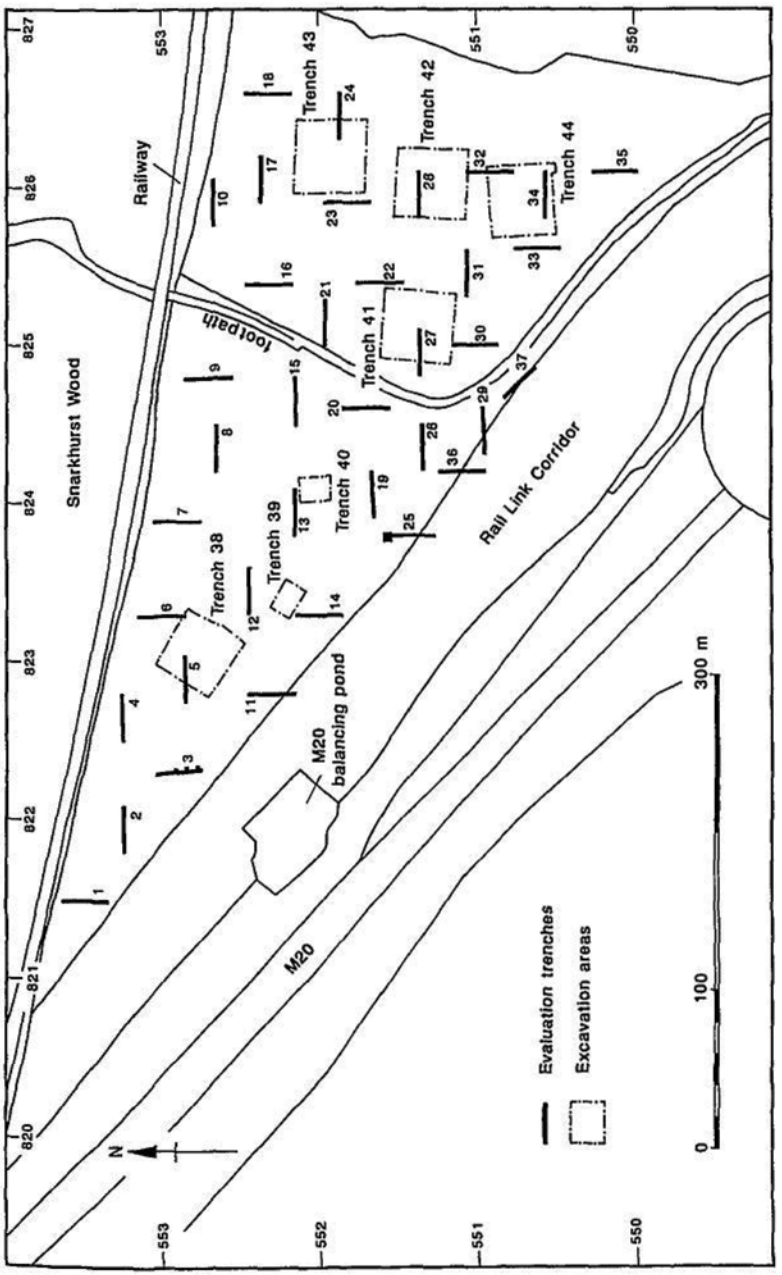

Fig. 2. Location of Evaluation Trenches (1-37) and Excavation Areas (38-44).

cremations (N.A.R. No. TQ 85 SW 5). A Romano-British burial group was found at Crismill Farm (N.A.R. No. TQ 85 NW 6) to the west of the site, and to the south a large Roman coin hoard (N.A.R. No. TQ 85 SW 13) was found. A possible Saxon inhumation cemetery has been identified further south (N.G.R. TQ 827 538).

More specifically, in the 1950s the construction of the Maidstone Bypass (now the M20), immediately adjacent to and south of the CTRL corridor (area centred around N.G.R. TQ 8227 5500), uncovered the probable site of an Iron Age and/or Roman settlement and pottery dated to the first and second centuries A.D. (N.A.R. No TQ 85 NW 11). A ditch containing late Iron Age pottery and a series of Iron Age burial urns were uncovered to the north of the road and to the south of the bypass excavations revealed the foundations of a small ragstone building, accompanied by first and early second centuries Roman pottery, as well as a late Iron Age kiln.

The present site was the subject of a fieldwalking survey as part of the background work for the Environmental Assessment of the route of the Channel Tunnel Rail Link. The results of that survey are not published here but the overall patterns of finds recovered are briefly outlined and related to the discoveries made during fieldwork on the MSA.

The surface collection survey by OAU on behalf of Union Railways Ltd. covered the CTRL corridor and part of the Motorway Service Area site to the north (BRB 1991; URL 1994; 1995); it did not extend into the area east of Musket Lane. Prehistoric worked flint included a flint knife, from within the area of the proposed MSA development. A flint scatter including a polished axe fragment was recovered in the field located at the intersection of the motorway and existing railway. Two small late prehistoric pottery scatters were found. One was found adjacent to the east corner of the M20 balancing pond, the other on the flat spur in the middle of the site. The latter can clearly be related to the concentration of late Bronze Age material found during the MSA evaluation.

Within the CTRL corridor the survey also produced a scatter of first century B.C. to first century A.D. late Iron Age to early Roman pottery; this concentrated in the strip adjacent to the M20 south-east from the balancing pond. The subsequent evaluation of the CTRL corridor revealed a section of substantial ditch with late Iron Age pottery, which can be related to the discoveries made in the 1950s. No comparable features or material were recovered from the MSA site.

There are no major medieval sites in the immediate area, although the surface collection for the CTRL produced a moderate scatter of

pottery, but not considered sufficiently marked to be recognised as a significant concentration. In both Eyhorne Street and Hollingbourne there are medieval buildings. All Saints, Hollingbourne is fourteenth-century in date and Hollingbourne Manor contains thirteenth-century elements. Eyhorne Street has two, possibly three, hall houses of fifteenth-century date. Approximately 1.5 km. to the north of the development area, close to Howe Court Farm, lie the remains of a medieval moated site, possibly a Manor House, at Ripple Manor.

SITE DESCRIPTION

Fieldwork Methodology (Fig. 2)

The fieldwork was undertaken in two stages. An evaluation comprising 37 trenches 30 x 1.90 m. (Fig. 2: nos 1-37) located a concentration of later Bronze Age material centred on trenches 25-27, 29 and 36 (OAU 1995a). OAU standard evaluation recording was used for these trenches, thus 1/11 denotes feature 11 within trench 1. Following consultation with the County Archaeologist and his staff, the decision was taken to investigate further those areas which would be most affected by landscaping during development. This did not include the area containing the main concentration of later Bronze Age material; this was located partly on the line of the bund which will separate the MSA from the Channel Tunnel Rail Link and partly under an access road, which with some engineering modification allowed these deposits to be preserved.

The excavation comprised seven large trenches (Fig. 2: nos 38-44). Single context recording was undertaken for these trenches but the trench prefix has been retained on the section drawings. Trench 38 measured approximately 40 x 40 m. (= 1600 sq. m.), trenches 39 and 40 each 20 x 15 m. (= 300 sq. m. per trench), and trenches 41-44 each approximately 45 x 45 m. (=2025 sq. m. per trench). A total of approximately 10300 sq. m. was stripped during the excavation. The topsoil was stripped from both the evaluation and excavation trenches under archaeological guidance using 360° tracked excavators. The evaluation trenches were backfilled on completion of recording, but the excavation trenches were left open and the spoil was moved to a single dump using 25 ton 6 x 6 dumpers. The spoil was stockpiled over the area which contained the concentration of later Bronze Age material to afford it protection.

Soil conditions

The modern plough-soil was a light friable loam varying in composition from a clay loam to a sandy loam and was between 200 and 360 mm. thick. In a number of trenches the modern plough-soil sealed a further loam layer which was interpreted as the remnant of an earlier plough-soil. This layer was generally 90-120 mm. thick, although occasionally as much as 200-250 mm. thick. The natural geology was sealed beneath this older plough-soil, except in those areas where colluvial deposits had accumulated. The natural subsoil was extremely variable in the area examined and much post-depositional damage was done to the pottery by the very tenacious nature of some of the soils (see below). The acid nature of the soil also meant that animal bone did not survive.

Report Structure

The results of the fieldwork were limited, but the presence of quantities of late Bronze Age pottery, and the absence of significant Iron Age or Romano-British material so close to a known site, justifies the publication of a brief report on the fieldwork. The stratigraphic description is limited to a summary of the major features, but the late Bronze Age pottery, the small quantity of Romano-British pottery the cremated human bone and the worked flint are also reported. These materials form the bulk of the finds recovered from the site.

Context references

Evaluation features and deposits are referred to by trench number and context number thus: trench 11 contexts 1, 2 etc. are labelled 11/1, 11/2 etc., trench 12 context 1, 2 etc. are labelled 12/1, 12/2, etc. In the subsequent excavation, contexts were recorded using a single sequence of numbers. In the published report these context numbers are prefixed with the trench number for consistency and clarity (38/001, 39/101, etc.)

Environmental data

The number of contexts suitable for environmental sampling was small, and therefore only a limited number of soil samples was taken for analysis - twelve samples during the evaluation and 16 during the excavation - most of these from deposits containing charcoal. Assessment of a selection of the samples (18 from 28) indicated that mollusca were absent and that the predominant charred material was

oak (*Quercus)* charcoal. Details of the soil samples and records of the sample processing can be found in the archive. Reference is made to the environmental assessment of samples from the Late Bronze Age pits (29/3 and 38/101), the possible cremations (14/5, 26/6, 31/6 and 42/405) and the Romano-British 'pond' (context 44/618) at the appropriate places in the following site report.

RESULTS

Struck flint

The earliest evidence from the site was a scatter of worked flint found on the surface of the natural geology, and occasionally, in the older plough-soil. The scatter of flint was very thin, and no concentrations were observed, although in the evaluation slightly more material was recovered from the eastern part of the site. The material was largely undiagnostic and consists of mainly unretouched flakes, pieces of irregular waste, cores and some relatively undiagnostic retouched forms. The dating of the material is difficult: much of it is probably of late Bronze Age date, some individual pieces may be of Neolithic or even Mesolithic date (see Bradley below).

Possible cremations

Four possible cremations were identified. The complete fills of the pits were removed as samples for the recovery of bone and other finds and for environmental assessment. Pits 14/6, 26/5 and 31/4 produced very small quantities of human bone about which little further can be said. Pit 42/405 produced a slightly greater quantity, and probably represented a single individual, possibly male. All these pits were small, only 26/5 (Fig. 6) was more than 0.20 m. deep, and only pit 26/5 produced any datable finds. These consisted of seven Late Bronze Age (hereafter LBA) sherds, but these are probably redeposited, since the feature is cut into a colluvial deposit (26/3) which also produced LBA pottery. The dating of the features is uncertain. Soil samples from pits 14/6 (fill 14/5), 26/5 (fill 26/6) and 42/405 (fill 42/404) produced charcoal. In the case of 14/5 this was oak (*Quercus*) charcoal, and in the case of 42/405, predominantly oak charcoal. Pit 26/5 produced large quantities of charcoal amongst which oak (*Quercus*) was dominant, but which also included sloe or cherry (*Prunus*). Pit 31/4 produced no charred material.

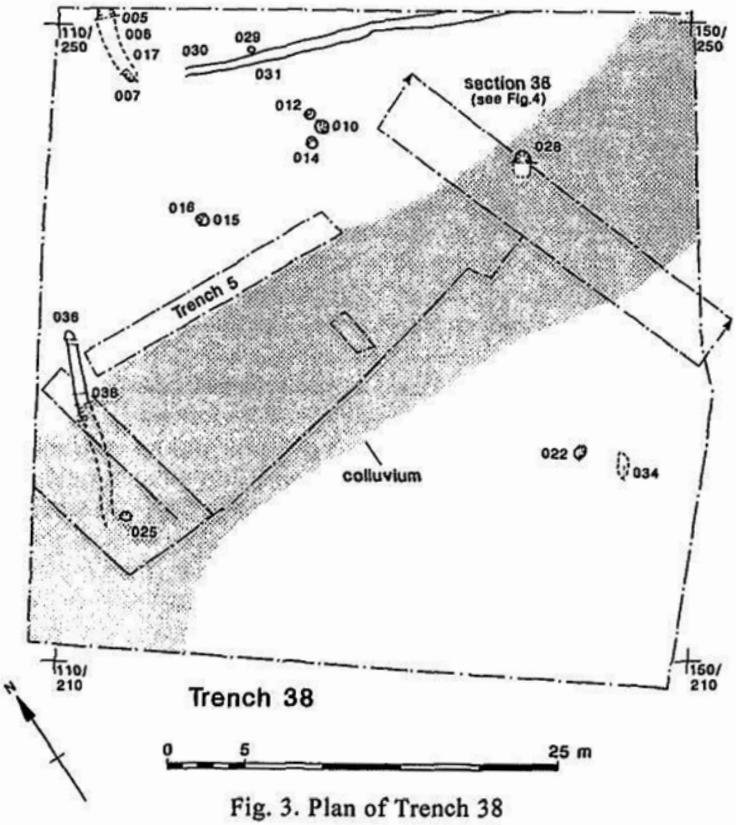

Fig. 3. Plan of Trench 38

Colluvial deposits (Figs. 3 and 4)

The site contained two small dry valleys or hollows partly filled by colluvial deposits. One valley lay to the east of the central spur, the other to the west. The eastern valley lay largely within the CTRL strip and was explored during the evaluation undertaken for Union Railways (URL 1996): it is not discussed here. The colluvial deposits in the western dry valley were initially explored in evaluation trench 3. The depth of the colluvium (0.90 m.) was determined by means of three test pits which were cut from trench 3. Two of these were machine-cut and one was hand-excavated and produced 10 sherds of LBA pottery from the main colluvial deposit (3/4). The colluvium was further investigated in trench 38 (Fig. 4). Its extent was established in plan (Fig. 3), although the edges of the deposits were not readily distinguishable. Sections were machine-cut across the colluvium and much of the exposed northern half of the deposit was machine-stripped

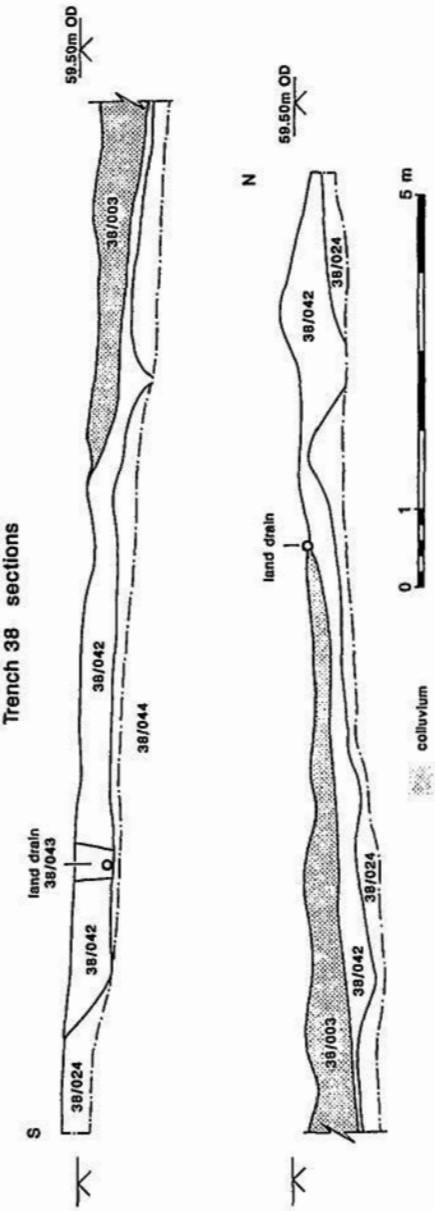

Fig. 4. Trench 38 sections (see Fig. 3 for locations).

under archaeological supervision. The purpose of this operation was to establish whether or not there were features, possibly of LBA date, sealed beneath the colluvium. One feature (38/36), a length of ditch or trench, had been identified apparently disappearing under the colluvium. When the colluvium was stripped no further evidence for the feature was found, and therefore its relationship with the colluvium remains unclear, but it is more likely to be later in date than the colluvium.

The date of the colluvial material is uncertain. Pockets of colluvial material were also found in hollows in trenches 25 (25/2) and 26 (26/3). In trench 26 the colluvium was sealed by the older plough-soil. In trenches 25 and 26, the survival of Late Bronze Age pottery suggests that the colluvium had not been heavily ploughed subsequent to deposition. Nonetheless, the presence of the LBA pottery can at best provide a *terminus post quem* for the deposition of the colluvium. Although the absence of later material is perhaps surprising given the presence of nearby late Iron Age and Roman and medieval occupation (see below), it is also the case that unstratified LBA material was more generally spread than material from these other periods. The absence of later material from the colluvium is not significantly different from its comparable sparseness in more recent plough-soils. While the activity which led to the deposition of the colluvium occurred during or shortly after the late Bronze Age, it could equally have occurred at almost any later period when pottery was finding its way onto the site.

Late Bronze Age evidence (Figs. 5 and 6)

The evaluation revealed evidence, consisting for the most part of a concentration of pottery, for late Bronze Age occupation mainly in the vicinity of evaluation trenches 19, 25, 26 and 29 (Fig. 5). A single Bronze Age feature (29/3, fill 29/4) was located (Fig 5). All that remained of this pit was a shallow circular cut 0.35 m. in diameter and 0.08 m. deep, but this was packed with 186 sherds of LBA pottery. A small soil sample from this pit was found to contain oak (*Quercus*) charcoal. Some evidence for LBA occupation was also recovered from trench 20 to the north, trenches 27 and 41 to the east and 36 to the south. This area was not excavated during the second phase of fieldwork.

In trenches 25 and 26 thin colluvial deposits (25/2 and 25/3, and 26/3) were found. These appear to have survived in slight hollows in the natural, and in all cases these deposits contained small quantities of Late Bronze Age pottery. In trench 26 this deposit was sealed by the older plough-soil.

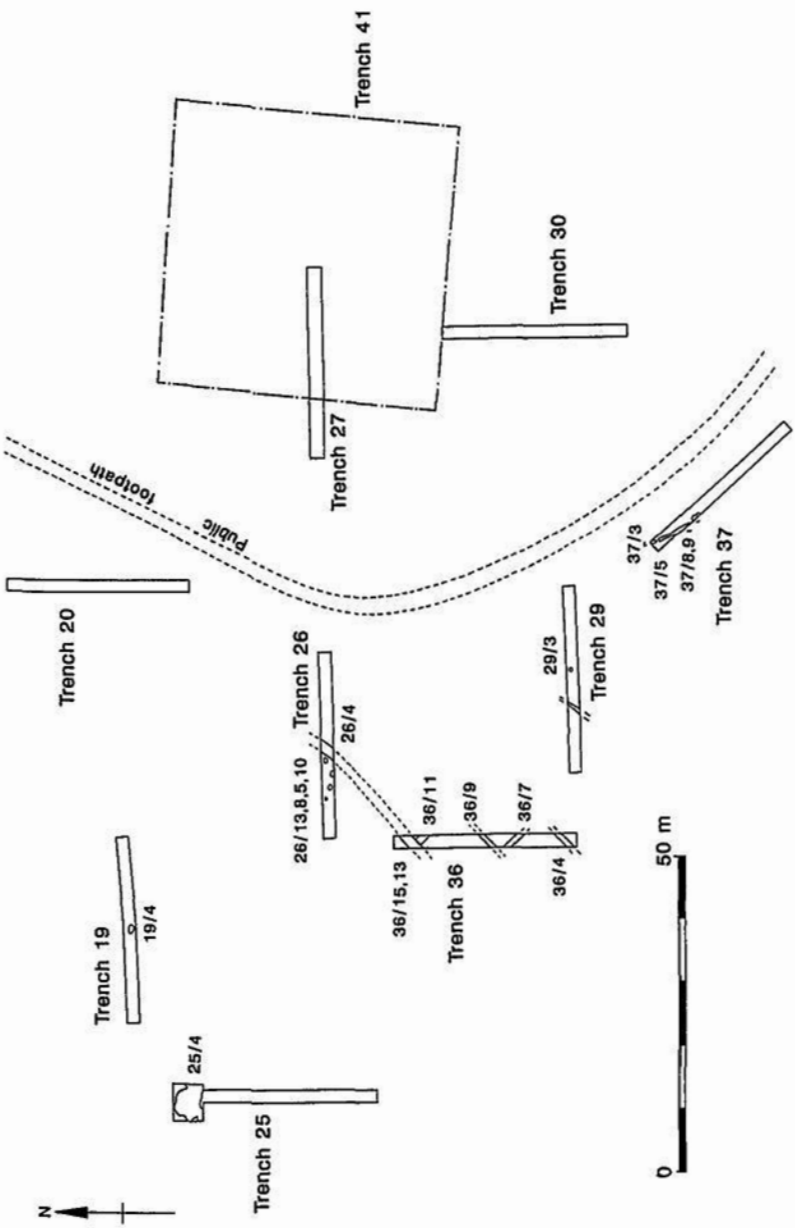

Fig. 5. Plan of Trenches 19, 20, 25-27, 29, 36 & 37 showing main features

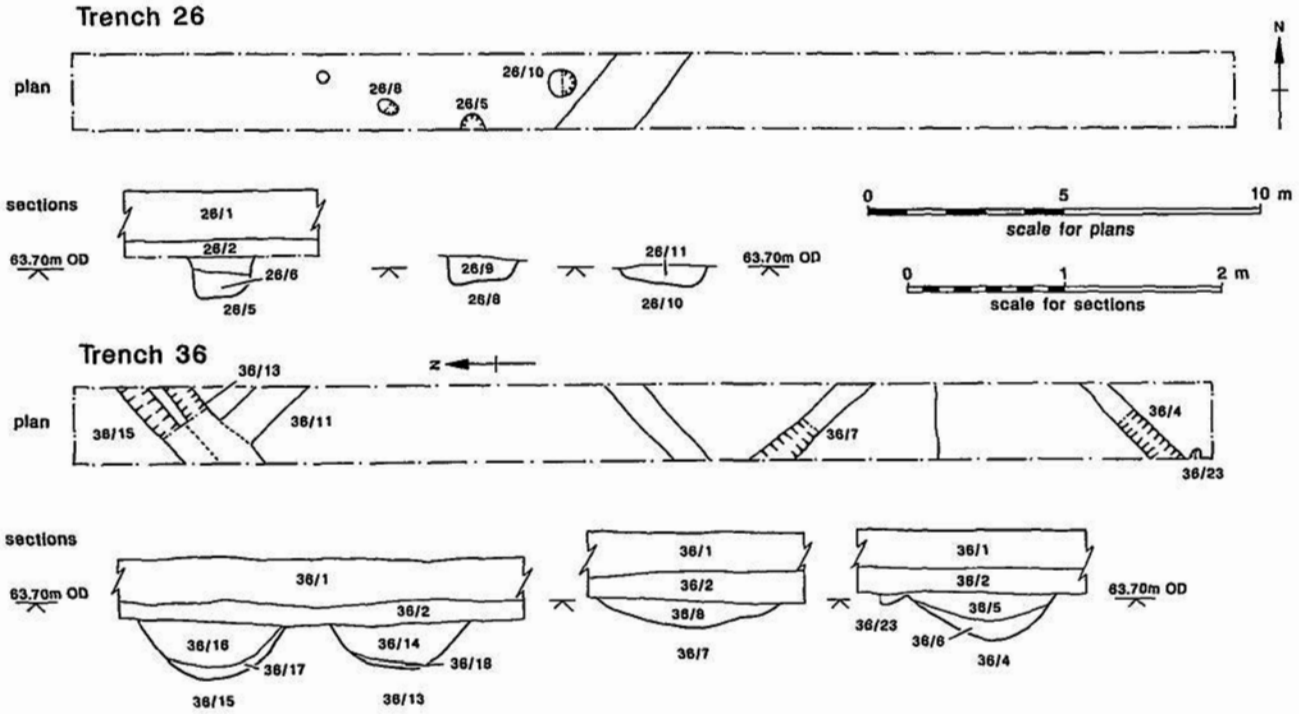

Fig. 6. Trenches 26 and 36 plans and sections

Fig. 7. Plan of Trench 39 and plan and section of Pit 101

In trench 26 (Fig. 6) a small number of small pits or possible postholes (26/13, /8 and /10), a possible cremation (26/5) and a linear feature (26/4) were found all containing LBA pottery. The linear feature was not excavated but appeared to be a continuation of the pair of parallel ditches (36/13 and /15) found in trench 36 (Fig. 5). The features in trench 26 were cut through the colluvial material and it is probable that the pottery which they contain is redeposited and that they date from after the Late Bronze Age. It is possible that the linear features were medieval in date (see below). There is no other material to date the features. In trench 27 the older plough-soil (27/2) contained small quantities of LBA pottery. This area was explored further by the stripping of trench 41, but little further evidence for late Bronze Age occupation was found.

To the west of the main LBA concentration, and down slope from the flat top of the spur, a second late Bronze Age pit 39/101 (fills 102-4, finds groups 119-123) was found during the excavation in trench 39 (Fig. 7). This pit was lined with pottery and at least three layers of sherds had been laid on the floor with their concave faces down. The sides of the pit were also carefully lined with pot. The pottery was remarkably only in its lack of diagnostic features. Unfortunately, the pit had been cut through by field drains twice, with the result that parts of the edge of the pit had been destroyed and most of the fill disturbed. For this reason, sampling the fill for environmental data was not thought worthwhile. Most of the fill was removed for finds recovery. Pottery was recovered but no charred material was found in sieving.

Small quantities of LBA pottery were found in other trenches, particularly on the down slope to the west of the spur. This material was almost certainly derived from the deposits and features on the spur and spread as a result of subsequent ploughing. Small amounts of LBA pottery and struck flint were found throughout the colluvial deposits in the dry valley, where they were explored in trench 38 (Fig. 3).

Iron Age/Romano-British (Figs. 8 and 9)

In trench 34, at the extreme east end of the development site, evidence for late Iron Age or early Roman occupation was recovered. A clay-filled feature (34/7) was sectioned. It was cut into Gault clay and backfilled with similar material. It was extremely difficult to define, but was found to contain a large part of a small Romano-British jar (context 34/6). This feature was further explored during the excavation (trench 44)(Figs. 8 and 9). It appeared irregular in plan and there was

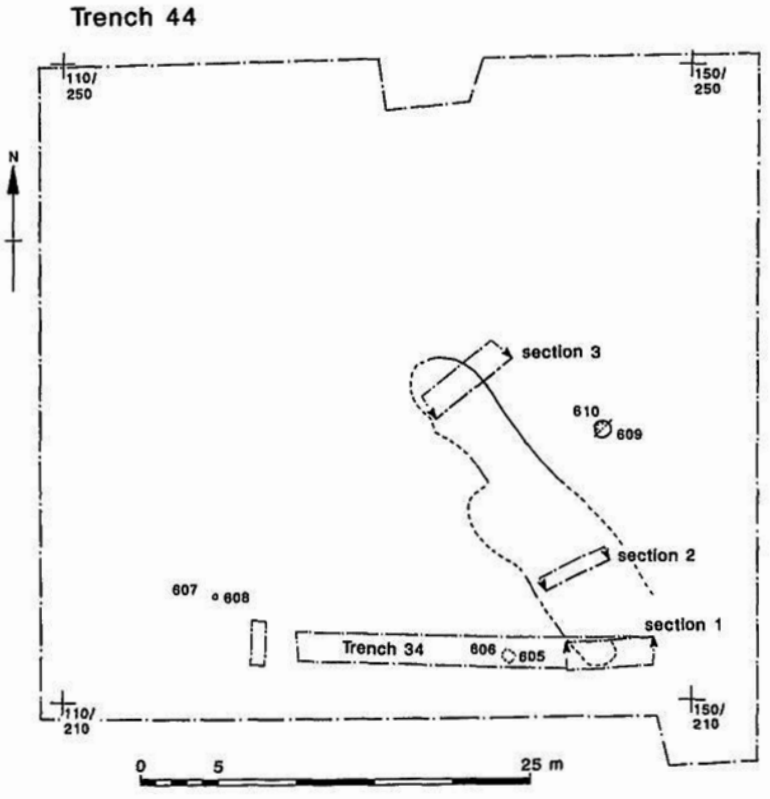

Fig. 8. Plan of Trench 44

a suggestion of more than one phase of activity. Two sections were cut by machine through the feature, and one of these confirmed that the feature was indeed of more than one phase, but it proved impossible to clearly define its limits (Fig. 9, section 1). Only a little additional Romano-British pottery was recovered. A sample taken from layer 618 produced large quantities of charcoal, with oak (*Quercus*) dominate, but alder (*Ulnus*) or hazel (*Corylus*) also noted. Trench 37, which lay to the south-west near the central spur contained a linear feature (37/3 = 37/5) which was possibly of Romano-British date (Fig. 10); it produced a single Romano-British sherd. Given the proximity to a known settlement site under the slip road to the M20 to the south (centred at N.G.R. TQ 8227 5500) it is perhaps a little

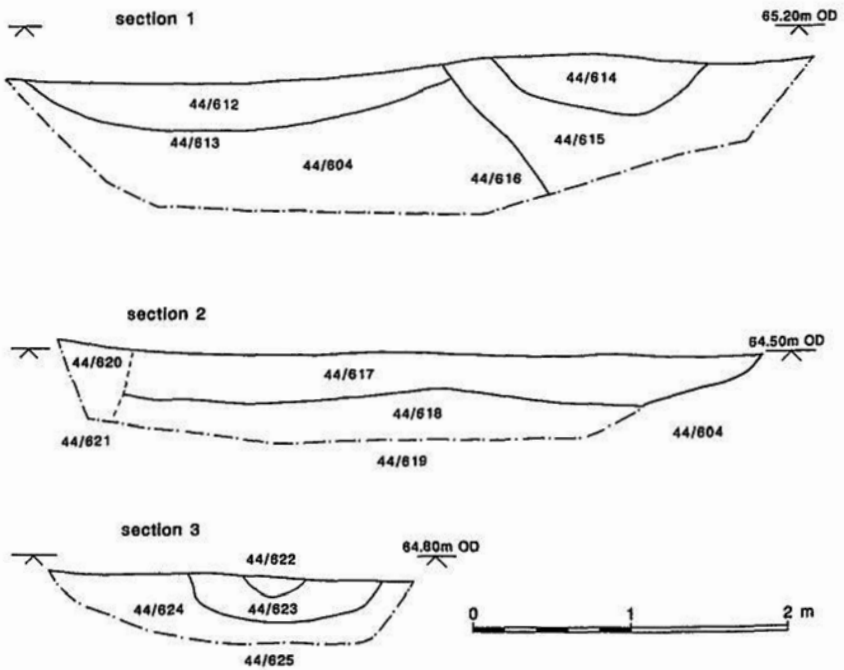

Fig. 9. Trench 44 sections (see Fig. 8 for locations).

surprising that so little Iron Age or Romano-British material was found.[1]

Linear features and medieval occupation (Fig. 10)

The small number of cut features recovered during fieldwork comprised for the most part slight gullies or ditches. The overall pattern of these features suggested that they represented field boundaries laid out in a rectilinear plan. The best evidence for the field boundaries comes from evaluation trench 36 where a series of six ditches was revealed

[1] The evaluation undertaken on the CTRL corridor also in general produced only limited Iron Age/Romano-British material, although in this case, a substantial ditch with well-preserved pottery was located.

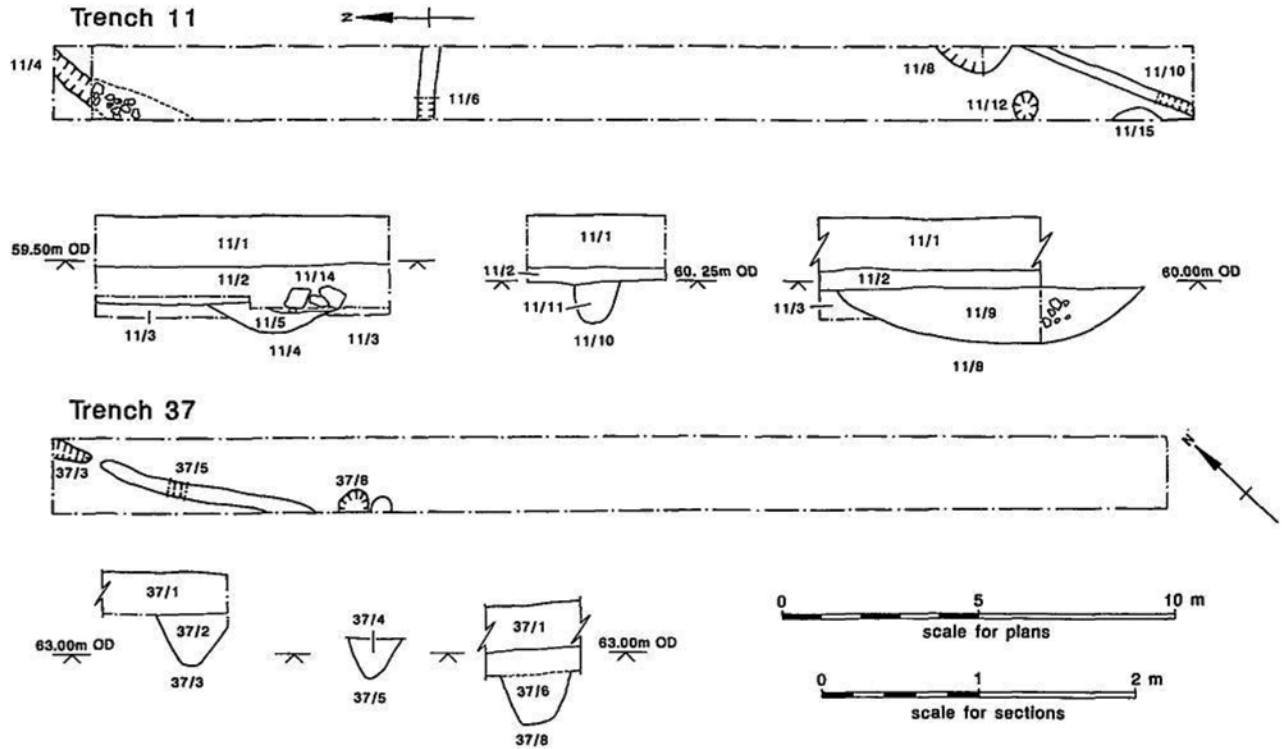

Fig. 10. Trenches 11 and 37 plans and sections.

(Figs. 5 and 6). This picture was confirmed by the results of the evaluation on the proposed line of the Channel Tunnel Rail Link to the south (URL 1996), where more boundaries were found laid out in the same pattern.

A linear feature (11/4, fills 11/5 and /14) at the north end of trench 11 (Fig. 10) in the western dry valley, on a similar alignment to the linear features found elsewhere on the MSA site, produced evidence for a medieval date. The upper fill (11/14) of 11/4 produced a large medieval sherd and pieces of ragstone. Other evidence for medieval occupation was found in the trench: the fill (11/9) of pit 11/8 produced seven medieval sherds of twelfth- to thirteenth-century date. There were also two undated pits. A medieval sherd was also recovered from one of the linear features (36/4; fill 36/5) in the trench 36. Details of the medieval pottery can be found in the site archive. It is probable that the rectilinear pattern of linear features which was uncovered both in work on the MSA and during the Rail Link evaluation is a field system of medieval date.

Later features

Much of the evidence recovered from fieldwork consisted of recent field boundaries and drains (see for example features 007 and 031 in trench 38).

FINDS

LATE BRONZE AGE POTTERY
Alistair Barclay

Introduction

The evaluation and excavation produced a total of 987 sherds (4093 g) of predominantly flint-tempered, hand-made prehistoric pottery of mostly Late Bronze Age date. This report discusses a selection of the assemblage recovered from the evaluation and excavation. The pottery under discussion has a probable date range within the Late Bronze Age (1150-700 cal B.C.). It includes a small number of featured sherds. There is a small number of sherds which could be of middle Bronze Age or Iron Age date, although neither the quantity nor the contexts are of significance.

On the whole the condition of the material was poor and many sherds had lost their original surfaces. The surface damage was

post-depositional caused by the sticky/tenacious character of the archaeological fills from which the pottery was recovered.

Methodology

Tables 1 and 2 give a quantification of the assemblage, by weight and sherd number, recovered from the excavation and the evaluation (excluding refitting fresh breaks and sherds less than 10 mm. in width/diameter). The pottery is characterised by fabric, form, decoration and colour. The sherds were analysed using a binocular microscope (x 20) and were divided into fabric groups by principal inclusion type. OAU standard codes are used to denote inclusion types. A = sand (quartz and other mineral matter), B= black sand, F= flint, G= grog, Q= quartzite, S= shell, L= voids (either leached shell, burnt organic or miscellaneous). Size range for inclusions: 1 = <1 mm. fine; 2 = 1-3 mm. fine-medium and 3 = <3mm. medium-coarse. Frequency range for inclusions: rare = <3 per cent, sparse = <7 per cent, moderate = 10 per cent, common = 15 per cent, and abundant = >20 per cent.

Fabrics

Twelve fabrics have been identified and these have been placed into six fabric groups:

Sand and flint-tempered

AF1 Sparse colourless quartz sand and sparse fine calcined flint.
AF2 Sparse colourless quartz sand and sparse medium calcined flint.
AFQ2 Sparse colourless quartz sand, sparse medium calcined flint and rare medium quartzite.

Black sand and quartz sand

BA1 Common coarse black sand and sparse coarse colourless quartz sand.

Black sand and flint-tempered

BF1 Common coarse black opaque sand and sparse fine calcined flint.
BF2 Common coarse black opaque sand and sparse medium calcined flint.

Flint-tempered

F1 Common fine calcined flint.
F2 Common medium calcined flint.
F3 Sparse coarse calcined flint.

TABLE 1: QUANTIFICATION OF PREHISTORIC POTTERY FROM EXCAVATION CONTEXTS (SHERD NUMBER, WEIGHT (g))

Trench / Context	Sand and flint			Black sand and sand	Black sand and flint		Flint			Leached shell	Grog		Total
	AF1	AF2	AFQ2	BA1	BF1	BF2	F1	F2	F3	S(L)2	GA2	GB2	
38/03		1, 4g				34, 97g		12, 89g	2, 20g		1, 3g		50, 213g
38/19								1, 7g					1, 7g
38/23	1, 4g	3, 19g						6, 29g		1, 2g			11, 54g
39/102-3								63, 54g					63, 54g
39/104								36, 74g					36, 74g
39/107		2, 2g				7, 5g							9, 7g
39/108				1, 1g		1, 2g							2, 3g
39/110		2, 3g			1, 2g	13, 17g							16, 22g
39/111		2, 3g					2, 1g						4, 4g
39/117			1, 5g										1, 5g
39/118		1, 3g						1, 8g					2, 11g
39/119								28, 102g					28, 102g
39/120								18, 100g					18, 100g
39/121								343,1415g					343,1415g
39/122								57, 682g					57, 682g
39/123								39, 170g					39, 170g
40/203						4, 19g		1, 1g				1, 2g	6, 22g
41/302		1, 3g				9, 48g		4, 29g					14, 80g
41/402						1, 5g							1, 5g
Total	1, 4g	12, 37g	1. 5g	1, 1g	1, 2g	69, 193g	2, 1g	609,2760g	2, 20g	1, 2g	1, 3g	1, 2g	701,3030g

Shell-tempered
S(L)2 Common medium shell platelets sometimes leached.

Grog-tempered
GA2 Sparse medium rounded grog or clay pellets and rare coarse colourless quartz sand.
GB2 Sparse medium rounded grog or clay pellets and sparse black opaque sand.

Tables 1 and 2 give the breakdown of fabrics by context. Two fabrics dominate the assemblages, the black sand and flint-tempered fabric BF2 and the flint-tempered fabric F2. Fabric BF2 accounts for 24 per cent by sherd number and 20 per cent by sherd weight of the total assemblage and fabric F2 accounts for 70 per cent by sherd number and 75 per cent by sherd weight. The remaining 10 fabrics (60 sherds) account for 6 per cent of the total assemblage by sherd number.
A local source can be suggested for most of not all the inclusions (quartz sand, black (glauconitic) sand, flint and shell) found in the fabrics. The mineral composition of the black sand is most probably glauconitic and these inclusions no doubt derive from the local Cretaceous geology, possibly from beds within the Lower Greensand (Gallois 1992, 29-38). Flint inclusions were nearly always calcined, angular and deliberately added as filler or opening material to the fabrics.

Assemblage Composition

The total assemblage from the fieldwork contained 20 featured sherds, which are discussed below; a selection is illustrated in Fig. 11. The remainder of the assemblage is summarised in Tables 1 and 2 and in the discussion section below. The majority of the featured sherds (16) were recovered during the evaluation, and only four in the excavation.

Two pits (29/3 and 39/101) which contained LBA pottery were excavated. No featured sherds were found in pit 39/101, but eight featured sherds were recovered from 29/3 (fill 29/4) in evaluation trench 29 (Fig. 11.3-8). These sherds consist of two rim sherds (Fig. 11.3-4), a decorated body sherd (Fig. 11.5), three sherds from a neck cordon (of which two are illustrated Fig. 11.6) and sherds from two bases (Fig. 11.7-8). The other featured sherds were recovered from colluvial deposits: 3/4 (two rims), 26/3 (base sherd and decorated body sherd), 26/7 (?spindle-whorl fragment), 27/4 (rim) and 38/3 (two rim sherds); from later pits: 26/11(rim) and 30/6 (rim); and from topsoil: 38/23 (two rims). The sherds selected for illustration are

TABLE 2: QUANTIFICATION OF PREHISTORIC POTTERY FROM EVALUATION CONTEXTS (SHERD NUMBER, WEIGHT (g))

Trench/ Context	Sand and flint		Black sand and sand	Black sand and flint		Flint			Flint and grog	Total
	AF1	AF2	BA1	BF1	BF2	F1	F2	F3	FG2	
3/2			1, 2g	1, 1g						2, 3g
3/4				5, 15g			6, 27g			11, 42g
5/2		1, 5g								1, 5g
6/us				1, 24g						1, 24g
13/5	5, 11g			1, 5g						6, 16g
17/2							1, 4g			1, 4g
19/3							1, 13g			1, 13g
20/7							2, 5g			2, 5g
25/2					3, 15g		3, 4g		1, 4g	7, 23g
25/6							1, 4g			1, 4g
26/3						7, 20g	9, 20g	3,14g		19, 54g
26/4							4, 7g			4, 7g
26/6					3, 8g		6, 5g		2, 7g	11, 20g
26/7				1,17g			2, 6g			3, 23g
26/9						1, 5g	1, 3g			2, 8g

Trench/ Context	Sand and flint		Black sand and sand	Black sand and flint		Flint			Flint and grog	Total
	AF1	AF2	BA1	BF1	BF2	F1	F2	F3	FG2	
26/11					2, 5g		1, 1g			3, 6g
27/2					1, 23g		1, 8g			2, 31g
27/4			1, 3g		8, 22g					9, 25g
28/1							1, 5g			1, 5g
29/4					149,541g		37,148g			186,689g
29/6							1, 3g			1, 3g
30/6					1, <1g	1, <1g	1, <1g			3, 3g
31/2				1, 7g			2, 3g			3, 10g
36/5							1, 4g			1, 4g
36/16			1, 1g				1, 8g		1, 4g	3, 13g
36/20				1, 5g						1, 5g
37/4									1, 3g	1, 3g
Total	5, 11g	1, 5g	3, 6g	11, 89g	167,615g	9, 26g	82, 279g	3, 14g	5, 18g	286,1063g

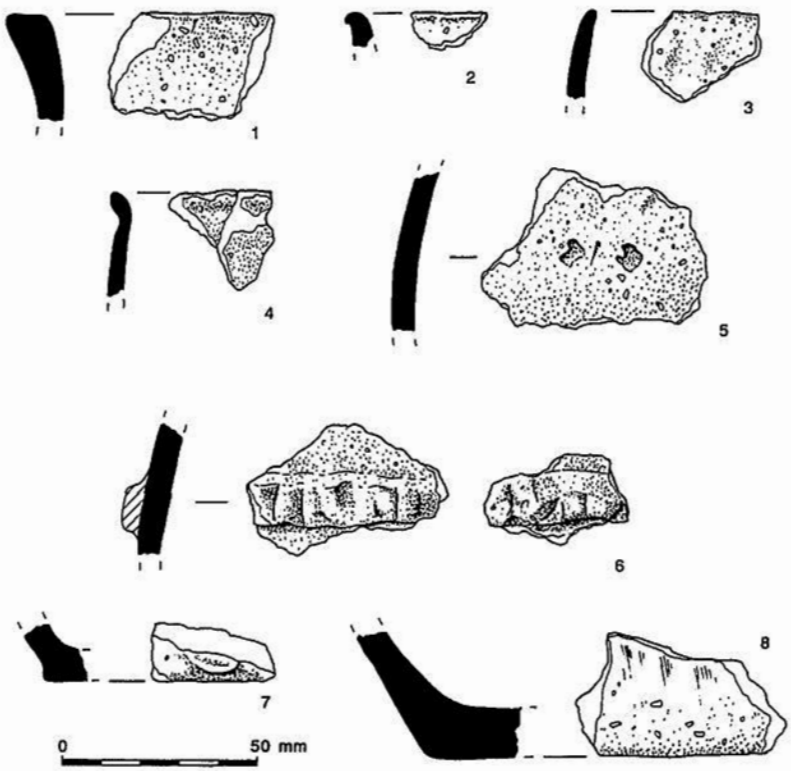

Fig. 11. Prehistoric Pottery

those from a single stratified group (pit 29/3, fill 29/2) with the addition of two rims from a small group (38/23) found sealed under topsoil in trench 38. The latter include a possible middle Bronze Age sherd (Fig. 11.1).

Forms and Decoration

A thickened squared rim (38/23) (Fig. 11.1) is from a coarse-ware vessel that could perhaps be middle rather than Late Bronze Age in date, and another featured sherd (26/3) is from a fine ware vessel and decorated with two parallel lines and oblique stab marks and could be transitional Late Bronze Age/early Iron Age in date.

The remaining featured sherds are of LBA date. The rims from contexts 3/4 (two), 26/11 (one), 27/4 (one) and 30/6 (one) are everted with the exception of one example from 3/4 which is slightly incurving

and similar to Fig. 11.3. The two rim sherds from context 38/3 are also everted. The possible spindle-whorl fragment has been made from a base sherd in fabric BF2 and is about one quarter complete with an approximate diameter of 60mm.

Two everted rims from 29/4 (Fig. 11.2 and 4) are from thin-walled vessels. One incurving rim (Fig. 11.3) is from a simple straight sided vessel and can be paralleled at Monkton Court Farm and, to a lesser extent at Coldharbour Road (Macpherson-Grant 1995, fig. 11.46-9; Barclay 1995, fig. 10.8). Three sherds possibly from shouldered jars have finger-tip decorated neck cordons (Fig. 11.6). Neck cordons are a fairly common feature on some Late Bronze Age jars (*cf.* Barrett and Bond 1988, fig. 21.28-9; Macpherson-Grant 1995, figs. 6.12 and 7.18; Smith 1988, fig. 11.24-5). One rounded body sherd (Fig. 11.5), probably from a globular-shaped vessel has a row of shallow ?finger-tip impressions (*cf.* Smith 1988, fig. 10.6 and 11.22-3). Two base sherds, one of which is slightly expanded by finger pinching, are probably from jars (Fig. 11.7-8).

Discussion

Only two features, pit 29/3 and pit 101 in trench 38, contained significant quantities of late Bronze Age pottery. Most of the illustrated pottery came from fill 4 in pit 29/3 which produced a total of 186 sherds. This group includes three sherds with decorated neck cordons and flattened, incurving and everted rim forms in flint-tempered fabrics which should all belong within a Decorated Ware assemblage of perhaps the ninth or eighth century cal B.C. (*cf.* Barrett 1980, 308). Noticeably absent from this pit group were the more angular shoulder sherds found in some 'late' Decorated Ware assemblages (Barrett 1980, Fig. 6).

Pit 101 (contexts 102-4, 119-23) produced 584 plain featureless body sherds which appeared to represent a deliberate dump of ceramic material. The absence of any featured material is of interest, although it can be noted that nearly all the sherds had lost their original surfaces making the identification of simple rim and decorated sherds difficult. It is possible that the sherds derive from a number of vessels of simple form and one possibility is the straight-sided or slightly rounded jar form that dominates some Late Bronze Age Plain Ware assemblages (*cf.* Bradley 1980). This material could be contemporary with the group from pit 29/3.

The rest of the prehistoric assemblage was recovered from later features (19/4 fill 3, 25/4 fill 2, 26/4, 26/5 fill 6, 26/8 fill 9, 26/10 fill 11, 29/5 fill 6, 30/4 fill 6, 36/4 fill 5, 36/15 fill 16, 36/19 fill 20, 37/5 fill 4, 38/19 fill 18 and 39/109 fill 108, 39/116 fills 117 and 118),

colluvial deposits (3/4, 13/5, 26/3, 26/7, 27/4, 38/03, 41/302), or topsoil (3/2, 5/2, 17/2, 20/7, 25/6, 27/2, 28/1, 31/2, 38/23, 39/107, 40/203 and 42/402) and irregular features interpreted as tree-throw holes (39/112, fills 110-11).

The small Late Bronze Age assemblage from the M20 is an important addition to the increasing number of sites recorded from the northern part of Kent. In 1980, Barrett was only able to list three sites from this region (1980, Fig. 1). Since his research a considerable number of Decorated Ware assemblages have been recorded in north-east Kent (Macpherson-Grant 1995, Fig. 19) and at least one further site has been found in north Kent near the Thames estuary (Barclay 1995).

Catalogue of illustrated sherds (Fig. 11)

Entries are set out as follows: brief description, fabric, external, internal and core colour, condition, trench and context number.

1. Simple flat rim. Fabric F2. Ext. dark grey: Int. dark grey: Core dark grey. Condition average. Tr 38 Cxt 23.
2. Small everted rim. Fabric F2. Ext. reddish brown: Int. reddish brown: Core reddish brown. Condition average. Tr 38 Cxt 23.
3. Incurving rim. Fabric F2. Ext. grey: Int. grey: Core grey. Condition average. Tr 29 Cxt 4.
4. Everted rim. Fabric BF2. Ext. yellowish-brown: Int. grey: Core yellowish-brown. Condition worn. Tr 29 Cxt 4.
5. Decorated body sherd. Fabric F2. Ext. reddish-brown: Int. grey: Core: grey. Condition average. Tr 29 Cxt 4.
6. Finger-tip decorated neck cordon (two sherds from the same vessel). Fabric BF2. Ext. pale reddish-brown: Int. grey: Core pale reddish-brown. Condition average. Tr 29 Cxt 4.
7. Finger pinched base sherd. Fabric F2. Ext. grey: Int. grey: Core grey. Condition average. Tr 29 Cxt 4.
8. Base sherd. Fabric BF2. Ext. yellowish-brown: Int. grey: Core yellowish-brown. Condition average. Tr 29 Cxt 4.

IRON AGE AND ROMANO-BRITISH POTTERY
Paul Booth

Some 77 sherds of Iron Age and Roman pottery weighing about 900 g were recovered from the evaluation and subsequent excavation of the site. Most of the material is probably datable to the first century A.D.

The pottery was generally in poor condition, quite fragmented and with some erosion of surfaces. Consequently, attribution of small fragments even to a broad period was problematical in some cases and it is possible that some tiny Roman sherds were missed.

Very few of the contexts from which the material derived were from significant features of Roman date. However, the bulk of the pottery, over half the sherd total (a somewhat notional 40 sherds - the exact figure is uncertain since the extent of fragmentation in the course of excavation cannot be judged precisely) and two-thirds of the weight, was from a single grog-tempered necked jar from context 34/6, which appears to be a fill of a pond. A first-century A.D. date for this feature seems almost certain, though it is impossible to be certain if it was pre- or post-Conquest.

This vessel aside, the other fabrics represented were broadly characteristic of the first-second century A.D. There was one flint-tempered sherd but grog-tempered (18 sherds), glauconite-rich (nine sherds) and quartz sand-tempered fabrics (10 sherds) predominated. This last group contained the only obviously 'Romanised' fabrics present; a single sandy reduced sherd was very likely a Canterbury product, and two further similar sherds may have been from the same source. Also in this group were single sherds of fine white and oxidised wares and a rather anomalous colour-coated rim (in a slightly oxidised fabric) from an unknown source, this being the only piece for which a later Roman date is likely. The majority of the remaining sherds, including a number which were probably hand-made, were broadly in the 'Belgic' tradition (in the sense of Thompson 1982, 4), though one of the glauconitic sherds, hand-made and quite thick-walled, might have been earlier. The occurrence in roughly equal quantities of both grog and other tempering traditions compares with the situation observed elsewhere in the area (e.g. at Loose and Teston, Pollard 1988, 31-32) and contrasts with that prevailing a little further to the south-east, e.g. at Sevington, near Ashford, where grog-tempering was dominant (Booth and Everson 1995, 426-28).

Only six vessels, including that from 34/6, were represented by rims. Most were probably jars, that from 34/6 being of Thompson's type B1-2, too poorly preserved for illustration, but apparently with a close parallel from Canterbury (Thompson 1982, 98, no. 6). Other jar types included a large storage jar and a bead-rimmed vessel (the latter in a quartz sand-tempered fabric). There was one possible dish in a glauconitic fabric. The rims appear typical of the range of forms in 'Belgic-type' fabrics. Only one (glauconite-tempered) sherd had furrowed decoration. The colour-coated rim was double lipped, perhaps from a jar or possibly from a flagon such as the Oxfordshire type C14 (Young 1977, 150-1), though it should be noted that the fabric of this sherd is not typical of that source.

WORKED FLINT
Philippa Bradley

Introduction

An assemblage of 170 pieces of worked flint and 181 pieces of burnt unworked flint was recovered from the evaluation (Bradley 1995) and subsequent excavation. The assemblage consists mainly of unretouched flakes, pieces of irregular waste, cores and some relatively undiagnostic retouched forms. The assemblage is summarised in Table 3, selected pieces are illustrated in Fig. 12 and described in the catalogue.

Raw materials

The raw material varied from dark brown to orange-brown in colour with a white or grey cortex. Cortication is generally light. This material generally has good flaking properties although some thermal fractures

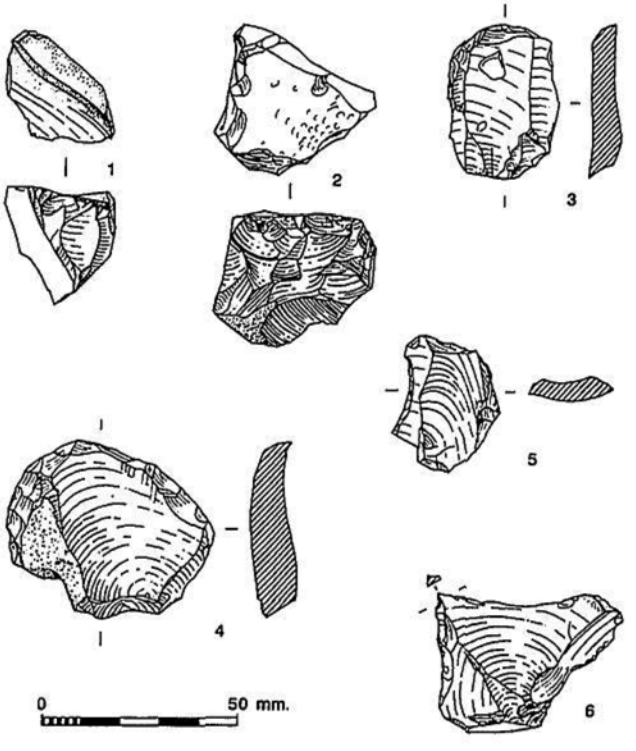

Fig. 12. Worked flint

TABLE 3: WORKED FLINT - ASSEMBLAGE COMPOSITION

	Flakes, blade-like flakes	Irregular waste	Chips	Cores, core fragments	Retouched Forms	Total	Burnt Unworked Flint
Evaluation	73	7	4	10	11	105	173
Excavation	55	-	-	3	7	65	8
TOTALS	128	7	4	13	18	170	181

TABLE 4: WORKED FLINT - CORE TYPOLOGY

	Multi-platform flake	Opposed platform blade	Keeled	Fragment	Total
Evaluation	3	3	1	3	10
Excavation	1	-	-	2	3
TOTALS	4	3	1	5	13

TABLE 5: WORKED FLINT - RETOUCHED FORMS

	Scraper	Denticulate	Notch	Retouched flake	Piercer	Misc. retouch	Total
Evaluation	1 end 1 end and side	1	1	1	-	6	11
Excavation	1 end and side 1 side	-	-	2	2	1	7
TOTALS	4	1	1	3	2	7	18

were noted. It would probably have been available in the locality. The burnt unworked flint was generally grey or white and heavily crazed; a few pieces were only lightly burnt and had a reddish tinge. Some of this material may be from recent agricultural practices such as stubble burning. Very little of the worked flint exhibited any degree of burning.

Technology and dating

No diagnostic retouched forms or debitage were recovered. However, two distinct episodes of reduction seem to be represented. A carefully knapped element consisting of opposed platform blade and flake cores (contexts 18/2, 24/2, 35/2; Table 4, Fig. 12.1), soft hammer-struck flakes (from for example 18/2, 22/2, 26/4, 34/4) and a neatly retouched scraper from context 28/1 may be Mesolithic or more probably Neolithic in date (Fig. 12.3) Another scraper from

context 38/3 (Fig. 12.4) is also probably Neolithic in date. A few soft-hammer struck flakes were recovered from the excavation along with approximately five blade-like flakes (for example, contexts 38/23, 40/203, 41/312).

A much cruder element, consisting of hard-hammer struck flakes and extensively worked cores, was also recovered (Table 4, Fig. 12.2). There was little evidence amongst the cruder element for platform preparation or careful control during knapping. A limited range of minimally retouched scrapers, piercers, a denticulate, a notch and retouched flakes was also recovered (Table 5, Fig. 12.5-6). Hinge fractures and incipient cones of percussion were frequently noted, indicating a loss of control during knapping (*cf* Brown 1992, 92). This material would not be out of place in a mid-late Bronze Age context. The quantities of burnt unworked flint may also support this date although some of this material may be the result of recent agricultural activity on the site. A single keeled core from context 22/2 *may* be of later Neolithic date.

Distribution

The flint was mainly recovered from the topsoil and subsoil. Where flint was recovered from features it seems to have been largely redeposited. The evaluation produced more flint from the eastern part of the site, whereas more flint was recovered from the excavation trenches in the west (trenches 38-40). Generally, the flint recovered from the excavation is similar in character to the material from the coincident evaluation trenches. Although the quantity of flint from the evaluation trenches in question is relatively small. Burnt unworked flint seems to be thinly distributed across the site apart from two features located in the evaluation (contexts 7/5 fill 6, 33/4 fill 3, 21 pieces and 140 pieces respectively) which produced some quantity of burnt material.

Discussion

The assemblage from Hollingbourne indicates two phases of activity: a small element of Mesolithic or more probably Neolithic flintwork and a quantity of mid-late Bronze Age material. The earlier material is characterised by relatively carefully worked cores (for example Fig. 12.1), soft-hammer struck flakes and blade-like flakes and neatly worked scrapers (Fig. 12.3-4). The mid–late Bronze Age material constitutes the majority of the assemblage and seems to represent knapping, hide working (scrapers and piercers) and a range of processing tasks (retouched flakes and some of the miscellaneous

pieces). The reduction in tool numbers in mid–late Bronze Age assemblages as well as the decline in craftsmanship is now well recognised (for example, Fasham and Ross 1978, 59; Healy 1981, 165-6; Ford *et al.* 1984, 167; Brown 1992, 92, and Montague 1995, 22).

Fieldwalking, undertaken for the Channel Tunnel Rail Link development (URL 1995), showed a concentration of flint in the eastern part of the field but west of the footpath crossing the site. The assemblage recovered from the evaluation and excavation is broadly comparable to that from the fieldwalking. The only retouched forms recovered from the fieldwalking were a fragment from a polished implement and a knife (URL 1995) both of which would date to the Neolithic or early Bronze Age. A small assemblage of relatively undiagnostic Neolithic/Bronze Age flintwork was recovered from evaluation of the Rail Link corridor to the south (Bradley 1996). Later Bronze Age flint industries are relatively rare in Kent, a fairly substantial assemblage was recovered from excavations at Coldharbour Road, Gravesend (Bradley 1995, 395). Other Bronze Age industries have been recovered from the region, including the North Ring, Mucking (Healey 1988, 25), East Northdown, Margate (Smith 1988, 267) and Lofts Farm, Essex (Holgate 1988, 280).

Catalogue of illustrated pieces

Entries are set out as follows: brief description, weight (cores only), trench and context number.

1. Opposed platform flake core, some blade-like scars. Abraded platform edge. 22 g. Tr 24 Cxt 2.
2. Multi-platform flake core, extensively worked with many hinge fractures and incipient cones of percussion. 54 g. Tr 42 Cxt 402.
3. End and side scraper, burnt. Neatly retouched, some edge damage. Scraping angle 55-70°. Tr 28 Cxt 1.
4. Side scraper, steeply retouched. Scraping angle 75-85°. Tr 38 Cxt 3.
5. Notch, broken. On a squat flake, retouched to form a semi-circular notch. Tr 28 Cxt 1.
6. Piercer, minimally retouched on LHS of a large, irregular flake. Point worn. Tr 39 Cxt 107.

THE HUMAN BONE

Angela Boyle

Introduction

Cremated human bone was recovered from three contexts during evaluation (pits 14/5, 26/6 and 31/6) and a further context when the area was excavated (deposit 404 from pit 405).

Methodology

The approach to the recording of the cremated deposits was based on the system devised by McKinley (1994) and used with some success on the large sample from the Anglo-Saxon cemetery at Spong Hill, Norfolk. It has also been used with considerable success in the analysis of the prehistoric assemblage from Barrow Hills, Radley (Boyle, forthcoming). The recording system employed can be defined as follows: each deposit was passed through a series of three Endicott laboratory test sieves with mesh sized of 10, 5 and 2 mm., beginning with the largest and ending with the smallest mesh size. The weight of bone present in each sieve size was calculated as a percentage of the total weight of the cremation. At each of the three stages the bone sample recovered was examined in detail and sorted into identifiable bone types which were defined as skull (including mandible and dentition), axial (clavicle, scapula, ribs and vertebrae), upper limbs and lower limbs. Where a distinction could not be made between upper and lower limbs, fragments were grouped under the heading 'longbones'. This is indicated in brackets in Table 7. Metapodials were recorded with the appropriate upper or lower limbs. Each of these samples was then weighed on digital scales and details of colour and largest fragments were recorded, also, where possible, the presence of individual bones within the categories was noted.

Discussion

The deposits of cremated bone from contexts 14/5, 26/6 and 31/6 are too small to warrant any further discussion. The results of their examination are detailed in Table 6. Cremation 404, whilst considerably larger than all the other deposits, is still by no means representative of a complete adult cremation, which can weigh from 1500 to 3500 g. As indicated in Table 7, bones from all parts of the body are represented, the largest category being long bone shaft fragments (84 g). Nearly 74 per cent of the deposit was unidentifiable. The cremation has been identified as the partial remains of an adult individual who on the very tentative basis of skull morphology may have been male. There is no evidence to suggest that more than one individual is represented.

CONCLUSIONS AND DISCUSSION

The evidence for late Bronze Age settlement concentrated on the flat spur in the middle of the Motorway Service Area is fairly clear. The

TABLE 6: HUMAN BONE – SUMMARY OF CREMATION DATA

Context type	Context no.	Weight	Identifiable bone	Age	Sex	MNI*	Degree of burning and distortion	Comments
Fill of pit 14/6	14/5	13 g	Skull vault and long bone shaft	??adult	?	1	Most fragments are grey-black, not well calcined	
Fill of pit 26/5	26/6	3 g	Possible distal phalange, costal rib facet	?	?	?	Mostly black, two blue-grey fragments	Most of fragments are probably animal, particularly the long bone shaft fragments
Fill of pit 31/4	31/6	29 g	Skull vault, long bone fragments	?	?	?	White and well calcined, minimal distortion	Charcoal, small stones, 2 flint fragments
Fill of pit 42/405	42/404	414 g (+360)	Skull vault, frontal bone, dentition, vertebrae, tibia, femur	adult	??M	1	Uniformly white and well calcined, transverse fissuring on small number of long bone fragments	

TABLE 7: HUMAN BONE – BREAKDOWN OF CREMATED BONE BY BODY WEIGHT PARTS

	10mm					5 mm					2 mm					% identi-fiable	Total weight
Context	Sk	A	Ul/Ll	Unid	Total	Sk	A	Ul/Ll	Unid	Total	Sk	A	Ul/Ll	Unid	Total		
14/5	1 g				1 g	2 g		(10 g)		12 g						100%	13 g
26/6							1 g	(1 g)	1 g	3 g						66%	3 g
31/6	2 g		(9g)		11 g				12 g	12 g				6 g	6 g	38%	29 g
42/404	22 g	1g	(84g)	27g	134 g	1 g			214 g	215 g	1 g			64 g	65 g	26%	414 g

nature of this settlement, however, remains unclear, since the focus of this activity was not investigated beyond the limited evaluation stage, but was preserved *in situ* beneath the MSA development, following national guidelines and discussions with the County Archaeologist. On this basis the results can only be discussed in very general terms. The only features which can be certainly dated to the Late Bronze Age are two pits (29/3 and 39/101) which produced a large proportion of the pottery from the site. No definite evidence for field boundaries or enclosures and no significant environmental data were recovered from the excavations. The relatively extensive distribution of LBA pottery across the site, contrasting with the much more localised presence of Roman and medieval material, might have resulted from manuring suggesting an involvement with at least localised cultivation, but this can only be very tentative: the apparent focus of settlement on the top of the slight spur central to the site could also have resulted in relatively extensive dispersal of material through later plough erosion and colluvial deposition.

Settlements of this period are fairly rare in Kent, and more particularly in the area south of the North Downs. There is more evidence of Late Bronze Age activity in north and east Kent, and various settlements have been investigated. At Netherdale Farm, Thanet, for example, field boundaries and/or enclosures were uncovered, while at Highstead, Chislet and Mill Hill, Deal, enclosures were investigated (Macpherson-Grant 1991; 1992). Excavations at Coldharbour Road, Gravesend, produced evidence for large-scale land division (Mudd 1995). The Chislet and Mill Hill enclosures are late in date and assigned to the late Bronze Age/early Iron Age transition. In the west of the county a Late Bronze Age site has been identified at Hayes Common (Philp 1973; Drewett *et al.* 1988). This site produced storage pits, loom-weights and quern-stones, and appears to have been a small mixed farming settlement.

By contrast there is a dearth of settlement evidence south of the North Downs, though there is a concentration of late Bronze Age metalwork in the Maidstone area (Champion 1982, fig. 14) at the head of the lower Medway valley. Otherwise there is only a thin scatter of single finds of metalwork (*loc. cit.* Drewett *et. al.* 1988, fig. 4.1).

Coastal finds, as at Minnis Bay (Worsfold 1943), East Northdown, Margate (Smith 1988) and most recently the Dover boat, suggest the importance of cross-Channel trade, while several LBA metalwork hoards are known, for example from the Hoo Peninsula and Isles of Thanet and Sheppey and the adjacent mainland. A few burials of late Bronze Age date were also found along the A2 (Macpherson-Grant 1980).

These contrasts in the distribution of material are probably misleading, reflecting the concentration of archaeological research rather than the real pattern of contemporary settlement. The Hollingbourne site, while not obviously of particular status or especially good preservation, is of regional significance because of its date and geographical position relative to the known distribution of LBA sites, although there is nothing from the evaluation and limited excavation to suggest that the site is intrinsically unusual in terms of settlements of this period. The relatively large amount of pottery recovered is largely attributable to the high concentration of pottery in two small pits. The results for the late Iron Age and Roman and medieval periods are too limited to warrant further discussion. It appears that the site is peripheral to nearby settlements of these periods.

BIBLIOGRAPHY

Barclay 1995	A.J. Barclay, 'The Bronze Age Pottery', in Mudd 1995, 385-93.
Barrett and Bond 1988	J.C. Barrett and D. Bond, 'The Pottery', in D. Bond 1988, 25-37
Barrett 1980	J.C. Barrett, 'The pottery of the later Bronze Age in Lowland Britain', *P.P.S.* xlvi (1980), 297-319
Bond 1988	D. Bond, *Excavations at the North Ring, Mucking, Essex: a Late Bronze Age Enclosure* (E. Anglian Archaeological Report, 43, 1988)
Booth and Everson 1995	P. Booth and P. Everson, 'Earthwork survey and excavation at Boys Hall Moat, Sevington, Ashford', *Arch. Cant.* cxiv (1994), 411-434
Boyle forthcoming	A. Boyle, 'The human remains', in A. Barclay and C. Halpin, *Excavations at Barrow Hills, Radley, Oxfordshire, Volume 1. The Neolithic and Bronze Age monument complex* (Thames Valley Landscapes Monograph no. 11, OAU)
Bradley, R. 1980	R. Bradley, 'Artefactual and environmental evidence', in R. Bradley, S. Lobb, J. Richards and M. Robinson, 'Two late Bronze Age settlements on the Kennet gravels: excavations at Aldermaston Wharf and Knight's Farm, Burghfield, Berkshire', *P.P.S.* xlvi (1980), 217-95
Bradley, P. 1995	P. Bradley, 'Struck flint', in Mudd, A. 1995, 394-99
Bradley, P. 1995	P. Bradley, 'Appendix 5: The worked flint', in OAU 1995b, 39-41
Bradley, P. 1996	P. Bradley, 'Appendix 1: Worked flint' in URL 1996, 20-22

BRB 1991 — British Railways Board, *British Railways Board Rail Link Project. Eastern Section Environmental Assessment. Specialist Study of Historic and Cultural Impacts*, vols. 1-3 (unpublished client report, Oxford Archaeological Unit, May 1991)

Brown 1992 — 'Worked flint - late Bronze Age, in J. Moore and D. Jennings, *Reading Business Park: a Bronze Age landscape* (Thames Valley Landscapes: the Kennet Valley, Volume 1, OAU), 90-3

Champion 1982 — T.C. Champion, 'The Bronze Age in Kent' in (Ed.) Peter E. Leach *Archaeology in Kent to AD 1500* (CBA Research Report no. 48, London), 31-9

Drewett, *et al.* 1988 — P. Drewett, D. Rudling and M. Gardiner, *The South-East to AD 1000* (London)

Fasham and Ross 1978 — P. Fasham and J. Ross, 'A Bronze Age flint industry from a barrow in Micheldever Wood, Hampshire', *PPS,* xliv, 47-67

Ford *et al.* 1984 — S. Ford, R. Bradley, J. Hawkes and P. Fisher, 'Flint-working in the Metal Age', *Oxford Journ. Archaeol.*, 3(2), 157-73

Gallois 1992 — R.W. Gallois *The Wealden District*, British Regional Geology, HMSO, London

Healy 1981 — F. Healy, 'Description and analysis (Flint Industry)', in F. Peterson, *The excavation of a Bronze Age cemetery on Knighton Heath, Dorset* (BAR 98 Oxford), 150-166

Healey 1988 — E. Healey, 'The flint', in Bond 1988, 23-5

Holgate 1988 — R. Holgate, 'The flint' in N. Brown, 'A late Bronze Age enclosure at Lofts Farm, Essex', *P.P.S.* liv, 276-80

Lambrick 1995 — G. Lambrick, 'Appendix 3: Pottery, Tile and Fired Clay' and 'Appendix 4: Catalogue of pottery', in OAU 1995b, 30-8

Macpherson-Grant 1980 — N. Macpherson-Grant, 'Archaeological work along the A2: 1966-74, Part 1:The Late Bronze and Early Iron Age Sites', *Arch. Cant.* xcvi (1980), 133-82

Macpherson-Grant 1991 — N. Macpherson-Grant, 'A Re-Appraisal of Prehistoric Pottery from Canterbury', *Canterbury's Archaeology* (1991), 34-47

Macpherson-Grant 1992 — N. Macpherson-Grant, 'A Review of late Bronze Age Pottery in East Kent', *Canterbury's Archaeology* (1992), 55-63

Macpherson-Grant 1995 — N. Macpherson-Grant, 'The Pottery', in D.R.J. Perkins, N. Macpherson-Grant and E. Healey, 'Monkton Court Evaluation, 1992', *Arch. Cant.* cxiv (1994), 237-316

McKinley 1994 — J. McKinley, *Spong Hill Part VIII The Cremations* (East Anglian Archaeology, Report no. 69)

Montague 1995 — R. Montague, 'Flint' in I. Barnes and R.M.J. Cleal, 'Neolithic and Bronze Age Settlement at Weir Bank Stud Farm, Bray', in I. Barnes, W.A. Boismier, R.M.J. Cleal, A.P. Fitzpatrick and M.R. Roberts, *Early Settlement in Berkshire: Mesolithic-Roman occupation sites in the Thames and Kennet Valleys* (Wessex Archaeology Report no 6, Salisbury), 20-24

Mudd 1995 — A. Mudd, 'The excavation of a later Bronze Age site at Coldharbour Road, Gravesend', *Arch. Cant.* cxiv (1994), 363-410

OAU 1995*a* — Oxford Archaeological Unit, *Esso Petroleum Limited: Proposed MSA Development, Junction 8, M20, Hollingbourne. Section 5: Archaeological and Cultural Heritage* (unpublished OAU client report, January 1995)

OAU 1995*b* — Oxford Archaeological Unit, *Esso Petroleum Limited: Proposed Motorway Service Area adjacent to Junction 8, M20, Hollingbourne, Kent: Report on the Archaeological Field Evaluation* (unpublished OAU client report, July 1995)

Pollard 1988 — R.J. Pollard, *The Roman pottery of Kent* (Kent Archaeological Society, Monograph Series v, Maidstone)

Smith 1988 — G.H. Smith, 'A Beaker (?) Burial Monument and a Late Bronze Age Assemblage from East Northdown, Margate', *Arch. Cant.* civ (1988), 237-89

Thompson 1982 — I. Thompson, *Grog-tempered 'Belgic' pottery of South-eastern England* (BAR 108, Oxford)

URL 1994 — *Union Railways Limited, Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects,* vols. 1-4 (unpublished OAU client report, November 1994)

URL 1995 — Union Railways Limited, *Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects, Supplementary Fieldwork Report,* vols. 1-2 (unpublished OAU client report, March 1995)

URL 1996 — Union Railways Limited, *Channel Tunnel Rail Link: Land south of Snarkhurst Wood, Hollingbourne, Kent (TIS 192/084-10413): Archaeological Evaluation Report* (unpublished OAU client report, February 1996)

Worsfold 1943 — F.H. Worsfold, 'A report on the later Bronze Age site excavated at Minnis Bay, Birchington, Kent, 1938-40', *P.P.S.* ix, 28-47

Young 1977 — C.J. Young, *Oxfordshire Roman pottery* (BAR 43, Oxford)