

Channel Tunnel Rail Link
Union Railways Ltd

Cobham Park Golf Course, Kent

ARC CGC 97

Archaeological Evaluation Report

Contract No. 194/870

Oxford Archaeological Unit
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UNION RAILWAYS LTD

Cobham Park Golf Course, Kent

ARC CGC 97

ARCHAEOLOGICAL EVALUATION

Contract No. 194/870

DRAFT REPORT

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COBHAM PARK GOLF COURSE, COBHAM, KENT

ARCHAEOLOGICAL EVALUATION

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COBHAM PARK GOLF COURSE, COBHAM, KENT

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SUMMARY

The Oxford Archaeological Unit was commissioned by Union Railways Ltd to conduct a field evaluation of 4.9 ha of land at Cobham Park Golf Course as part of a wider programme of archaeological investigations along the route of the Channel Tunnel Rail Link (CTRL). The site was located on the dip slope of the North Downs and included a small dry valley with a spur of higher land to the west. The Upper Chalk solid geology was overlain by Pleistocene drift deposits and more recent colluvium.

Seventeen evaluation trenches were excavated. A scatter of shallow archaeological features were identified on the spur of higher land, some of which contained pottery dated to the middle and late Bronze Age. Most of the pottery (c. 90%) came from a single middle Bronze Age deposit in the top of a ditch. Elsewhere pottery was more widely scattered. Burnt and struck flint was also present. The struck flint mostly represents a background scatter from earlier prehistoric activity, although the burnt flint is more likely to be associated with the Bronze Age occupation. There were no other finds and environmental remains were poorly preserved. The hill slopes and dry valley contained nothing of archaeological significance.

The present evaluation clarifies the findings from an evaluation trench excavated on the site in 1995, which located an apparently isolated assemblage of late Bronze Age pottery. It confirms the sporadic character of such deposits on an otherwise sparse site, which appears to represent light domestic occupation of a still ill-defined nature.

SECTION 1: FACTUAL STATEMENT

1 BACKGROUND

1.1 Introduction

1.1.1 The Oxford Archaeological Unit undertook an archaeological field evaluation (Fig. 1), between 1st and 8th September inclusive, on land south of the A2 at Cobham Park Golf Course, north of Cobham, Kent (NGR TQ 692695 approx., URL Grid Ref. 4920049500) on behalf of Union Railways Ltd (URL). The evaluation forms part of a programme of archaeological investigation along the line of the Channel Tunnel Rail Link (CTRL), the aim of which was to assess the effect of the construction of the new railway upon the cultural heritage of the site. An Environmental Assessment has been prepared (URL 1994). The site lies within Environmental Statement Route Window No.15.

1.1.2 The work was carried out according to a Written Scheme of Investigation, prepared by URL and agreed with the County Archaeologist and English Heritage, detailing the scope and methods of the evaluation, including this report. The area of the evaluation is shown in Fig. 2. The evaluation was targeted specifically to investigate an area where later prehistoric pottery had been recorded during an evaluation in 1995 for the reconfiguration of the golf course (Pre-construct Archaeology 1996), and where geophysical anomalies had been detected during investigations for the Rail Link itself (URL 1996a).

1.1.3 The 1995 evaluation had encountered a large deposit of pottery (116 sherds) and other finds described as belonging to the late Bronze Age / early Iron Age transition (Macpherson-Grant 1996). An additional trench excavated to examine the context of the find discovered nothing of interest, and the context of the deposit remained enigmatic. No other finds of archaeological interest were known from the area. The site lies immediately adjacent to the course of Roman Watling Street (OAU No. 1780 in URL 1994), which is thought to be followed by a lane to the south of the A2. Within a kilometre to the south-west lies Cobham Park Roman villa (OAU No. 1570).

1.2 Geology, Landscape and Landuse

1.2.1 The site lies on the dip slope of the North Downs. The land slopes from the south-west towards a dry valley in the north-east part of the site (from *c.* 89 m to 70 m OD). Although the Geological Survey Sheet 272 shows the geology to be Upper Chalk, with Thanet Sands to the west, this is in fact erroneous, and the site was found to lie on drift deposits of yellowish to reddish silt-clays with varying amounts of gravel. The gravel spreads were most extensive on the higher part of the site. The drift geology was overlain by deposits of colluvial silt, particularly in the dry valley where their thickness was not establishable within the permitted depth of the evaluation trenches. The date of the colluvium was not determined, although it appears likely that

it formed from the immediately post-glacial period onward. In some areas it was difficult to distinguish the Pleistocene silts from the colluvial silts.

- 1.2.2 The evaluation area forms part of the golf course of the Rochester and Cobham Golf Club, although at the time of evaluation this part of the course had become disused. The land was generally grassed with a scattering of trees and various golf course features. In historical times the site formed part of Cobham Park (a Grade II* Registered Park - OAU No. 2150) which originated as a medieval deer park. Details of the park were not documented until the mid-16th century (Tatton-Brown 1991), but the earliest estate map of 1641 shows that the site was within the 'Old Park' and appears to have been mostly wooded at that time. It seems likely that it was within the original deer park.

2 AIMS

The Written Scheme of Investigation specified the general aims of the evaluation and also the site specific aims, both of which are reiterated below.

2.1 General aims

- 2.1.1 To determine the presence/absence, extent, condition, character, quality and date of any archaeological remains within the evaluation area;
- 2.1.2 To determine the presence and potential of environmental and economic indicators preserved in any archaeological features or deposits;
- 2.1.3 To determine the local, regional, national and international importance of such remains, and the potential for further archaeological fieldwork to fulfil local, regional and national research objectives.

2.2 Specific aims

- 2.2.1 To determine the presence/absence etc. of any subsoil features or deposits of archaeological interest which may be associated with, or in close proximity to, anomalies recorded during geophysical prospecting;
- 2.2.2 To determine the presence/absence etc. of any subsoil features or deposits of archaeological interest which may be associated with, or in close proximity to, late prehistoric deposits and artefacts recorded during evaluation for reconfiguration of the golf course.

3 METHODS

3.1 General

- 3.1.1 A detailed statement on the methods used in the evaluation is contained in the Written Scheme of Investigation prepared by URL, and agreed with the

County Archaeologist and English Heritage. The following is intended only to amplify certain aspects of the evaluation methodology.

3.2 Survey

- 3.2.1 The trench locations were surveyed by P H Matts, Building & Civil Engineering Land Survey (Reading) based on a trench location plan provided by URL. Trenches 1922TT and 1917TT were subsequently repositioned to avoid disturbing a fairway and Trench 1915TT was moved away from the line of a water pipe. These new positions were resurveyed by P H Matts.
- 3.2.2 During the evaluation two new trenches were excavated under instruction from the Director's Representative (Trench 3076TT and the southward extension to Trench 3043TT). Their positions were measured by tape from the established trench pegs. The trenches have been digitally plotted using AutoCAD graphics programme (Fig. 2). All survey points are based upon the URL local grid rather than the National Grid.

3.3 Excavation

- 3.3.1 Seventeen trenches were excavated over the 4.9 ha site. All trenches were 30 m long and 2 m wide except the southern extension to 3043TT, which was excavated to a length of 27 m (sufficient to expose a ditch in the end of the trench).
- 3.3.2 The topsoil and upper colluvial soil layers were excavated by a 360° mechanical excavator using a toothless ditching bucket under close archaeological supervision. Machining stopped at the surface of the drift geology, or at a level within the lower colluvium which was judged to be archaeologically sterile, up to a maximum depth of about 1.2 m. In relation to the archaeological discoveries made it is judged retrospectively that machine-excavation was generally deeper than it need have been, although the possible presence of earlier remains would not have been resolved had machining proceeded more conservatively.
- 3.3.3 Archaeological finds were hand-retrieved from machine-excavated deposits on an opportunistic basis. Spoil heaps were also inspected for superficial finds but not rigorously searched.
- 3.3.4 Machine-excavation resulted in a generally clean trench base which was not hand cleaned except where archaeological deposits were suspected. Sample sections of all trench sides were cleaned and drawn. All suspected archaeological features were examined by hand-excavation.
- 3.3.5 At least nineteen definite water and electric pipes/cables were encountered during machine excavation. The attempts to avoid damage to these services in some instances meant that parts of trenches had to be left higher than was ideal for the recognition of archaeological features.

- 3.3.6 Bulk environmental samples were taken from two ditch fills (Appendix 3) containing charred remains.

3.4 Recording

- 3.4.1 Recording followed the standard OAU single context recording system (Wilkinson ed. 1992). A running sequence of context numbers was adopted for the whole site. Plans were drawn at 1:50 or 1:100 with uninformative trenches at 1:200. Sections were drawn at 1:20. All evaluation records were prefaced by the site code ARC CGC 97.

- 3.4.2 All trenches and archaeological features were photographed using colour slide and black and white print film.

4 RESULTS

4.1 Presentation of results

- 4.1.1 Descriptions of individual trenches are presented in Section 5. They are divided into those which contained pottery, those which did not contain pottery but which are within the general area of occupation, and the peripheral trenches. A summary of all contexts and finds is presented in the archaeological context inventory (Section 6) and Fig. 7 summarises the distribution of archaeological features and finds. Detailed reports on the pottery, flint and environmental indicators are contained in Appendices 1-3.

4.2 General Stratigraphy

Modern deposits

- 4.2.1 In all trenches the upper 0.25 m consisted of the modern turf and topsoil. This frequently overlay a thin gravelly layer within a dark soil matrix, which is likely to have been a dumped soil related to the preparation of the surface of the golf course. However, it is possible that it was the remains of the original soil which had been covered with more recent make-up.

'Dirty colluvium'

- 4.2.2 The modern soil overlay a compact yellowish-brown silt with occasional rounded pebbles and sub-angular flints (generally less than 5%). This soil was present in all the trenches, although it was thin in the trenches on the higher ground (eg. 1919TT, 3043TT and 3045TT). It was interpreted as a colluvial deposit and is referred to as the 'dirty colluvium' in this report as a useful shorthand term which distinguishes it from the lower colluvial deposits which had a 'cleaner' appearance.

- 4.2.3 The 'dirty colluvium' was machine-excavated. In every trench it was seen to be mottled with darker and softer pockets of silt which in some cases looked

like pits and post-holes but which were generally irregular. The explanation of these soil variations is not entirely clear, although it is possible that they were related to natural variations in the moisture retaining properties of the soil. Another possible explanation is that they were tree-root holes. One was examined by hand excavation (Trench 1915TT, Feature 34) with inconclusive results.

- 4.2.4 There were very few finds from this layer although a few struck and burnt flints and some small sherds of prehistoric pottery were recovered.

Lower colluvium and drift deposits

- 4.2.5 The 'dirty colluvium' overlay either drift deposits of brighter orange-brown clay-silt with gravel, or colluvial deposits of cleaner, orange or reddish-brown clayey silt. The two types of deposit were sometimes hard to distinguish. The upper surface of the lower colluvium and drift geology was frequently difficult to define (except where the geology was gravel) and there generally seemed to be a merging of deposits.

- 4.2.6 On some of the steeper slopes the lower colluvium contained soft and notably sandy layers. The earliest colluvium encountered was a clean bright clayey silt and was interpreted as possibly originating in the early Holocene. This was generally the level at which machine excavation ceased.

- 4.2.7 Where archaeological features were encountered they were found to directly underlie the 'dirty colluvium'. There did not seem to be a buried soil associated with these features, although the difficulty of defining precise soil boundaries has been mentioned and it is possible that interface layers defined in some of the trenches could be interpreted in those terms. The lower colluvial deposits contained no finds and are thought to be of little archaeological interest.

4.3 Summary of the archaeology

- 4.3.1 A scatter of archaeological features were found in the trenches on the higher part of the site. Pottery dating to the middle to late Bronze Age was recovered from some of these features and from the overlying colluvium. Small quantities of struck and burnt flint was also recovered in this area, from features/possible features and from the colluvium. It is unclear whether the struck flint was related to the Bronze Age occupation, although the burnt flint is considered likely to have been.

- 4.3.2 The features mostly consisted of shallow ditches, and there was at least one pit. The ditches were uniformly about 1 m wide and 0.3 m deep although the difficulty of defining the edges of these features may mean that they were slightly larger. Those in Trench 1914TT (Ditches 62 and 85) and Trench 3040TT (Ditch 63) contained pottery, in substantial quantities in Ditch 62 (Fill 60). Ditches in Trench 3045TT (Ditch 78) and Trench 3043TT (Ditch 107) were of a very similar form and are likely to be related to the same

occupation. There were other ditch-like features in Trench 3045TT which may have been archaeologically significant.

- 4.3.3 Pit 111 (Trench 3043TT) was a well-defined feature containing burnt flint, worked flint and a fragment of pottery and is likely to be of archaeological origin. Other small features containing no finds may also be archaeological, but this was unclear.

4.4 Site archive

- 4.4.1 The site archive has been compiled in accordance with the specification prepared by URL. It includes six electronic datasets for the Fieldwork Event, Contexts, Bulk Finds, Finds, Environmental Samples and Graphical Output.

5 TRENCH DESCRIPTIONS

5.1 Trenches containing prehistoric pottery (1914TT, 1919TT, 3040TT & 3043TT)

Trench 1914TT (Fig. 3)

- 5.1.1 The trench was excavated through topsoil (27) and 0.3 m of 'dirty colluvium' (28). Machining stopped at a brighter orange-brown clayey silt (30) which was interpreted as an earlier colluvium, perhaps of early Holocene date. Above 30, the section also showed a thin orange-brown clayey silt (29), which appeared to be an interface layer. Two shallow ditches, 85 and 62, were found aligned east-west. Both probably cut Layer 29.

- 5.1.2 *Ditch 85.* This was about 1.2 m wide and 0.3 m deep with a rounded base. Its lower fills (82-84) were yellowish-brown clayey silts, which were very similar to the 'natural' (30). The angle of Fills 82 and 84 (Fig. 3, Section 2) gives some suggestion of edge slumping or the erosion of a bank on the southern side of the ditch, although there was no other evidence of this. The upper fill (81) was a mid brown colour. A few sherds of late Bronze Age pottery came from 81, while pottery of middle Bronze Age character came from a lower fill (83).

- 5.1.3 *Ditch 62.* This was about 1.1 m wide and 0.3 m deep with a rounded base. The upper fill (60) was a brownish-orange clayey silt with a notable concentration of sub-angular flint nodules. This fill also contained exceptionally large numbers of sherds (Appendix 1) representing a small number of Deverel-Rimbury vessels (middle Bronze Age). The section (Fig. 3, Section 4) suggests that these might have occupied a shallow recut, although this was not particularly apparent during excavation. Struck and burnt flint was also recovered. The lower fill (61) was a cleaner silt which contained a few struck flints.

Trench 1919TT

- 5.1.4 The modern ground surface sloped from west to east (82.5 m to 80.4 m OD). The trench was excavated through topsoil (43) and a relatively thin deposit of 'dirty colluvium' (45), which deepened downslope. At the deeper eastern end of the trench the colluvium (44) was darker and sandier. This was partly machine-excavated, and then deepened by a hand-excavated sample. A tiny sherd of indeterminate later prehistoric pottery was recovered.
- 5.1.5 The underlying layer (48) which was a brighter brownish-orange deposit, probably represented the weathered interface with the drift geology (49). This was gravel in the western part of the trench and silt-clay downslope.
- 5.1.6 The only possible prehistoric feature was a smear of charcoal (46) only 40mm deep. It was without finds but was apparently sealed by the colluvium (45).

Trench 3040TT

- 5.1.7 The trench was excavated through topsoil (72) and up to 0.35 m of 'dirty colluvium' (66). At the southern end of the trench this deposit was notably pebbly (67), apparently reflecting variations in the drift geology which, at this end of the trench, was gravel. A single feature (Ditch 63) was encountered.
- 5.1.8 *Ditch 63.* This was aligned east-west and was 2 m wide and 0.3 m deep with a rounded base. The feature was not immediately apparent since, to avoid pulling up a water pipe which crossed the trench, machine excavation did not entirely remove the overlying colluvium. However, a hand-excavated sondage through Layer 66 revealed the ditch.
- 5.1.9 The upper fill (65) was indistinguishable from the overlying colluvium, which may have filled the top of the largely silted ditch. The main fill (64) was a yellowish-brown redeposited colluvium. A few sherds of Bronze Age pottery and struck and burnt flints were recovered.

Trench 3043TT (Fig. 4)

- 5.1.10 This trench was initially excavated east-west and was subsequently extended to the south to form a T-shape in an attempt to locate Trench 15 of the 1995 evaluation undertaken by Pre-Construct Archaeology. This was not found. Trench 3043TT occupied approximately level ground with a slight rise to the south and west.
- 5.1.11 The original east-west trench was one of the shallowest. This showed a modern turf and topsoil (92) over a distinctly gravelly layer (106) which may be related to the landscaping of the golf course. The underlying 'dirty colluvium' was relatively gravel-free at the eastern end of the trench (88), where it overlay the clayey silt drift geology (89). However, at the western end of the trench (90) it reflected the gravelly 'natural' (91). In the southern trench extension the colluvium was deeper (up to 0.3 m) and largely gravel-free (88).

- 5.1.12 No archaeological features were found in the east-west arm. Fragments of pottery (Context 115), which included a late Bronze Age cabled rim, were found apparently pressed into the drift geology (89), although it is possible that there was a shallow, undefinable feature here. A few sherds of similar date were retrieved from Layer 88 during machining.
- 5.1.13 In the southern trench arm two clear features were encountered, Ditch 107 and Pit 111. A possible post-hole (113) and an irregular feature, which may have been root disturbance (109), were also examined.
- 5.1.14 *Ditch 107.* This was aligned NW-SE, and was about 1.2 m wide and 0.3 m deep with a slightly asymmetrical cross-profile. Its single fill (108) was a yellowish-brown silt, which was very similar to the overlying colluvium (88). It was without finds. A soil sample (Sample 2) yielded nothing of significance (Appendix 3).
- 5.1.15 *Feature 111.* This was a probable pit on the edge of the trench. It was substantially truncated by machining leaving only a shallow depth to be hand-excavated. It had a dark greyish-brown fill (112) which contained a number of burnt flints, two struck flints and a sherd of Bronze Age pottery.
- 5.1.16 *?Post-hole 113.* This was an irregular sub-circular feature, 180 mm deep, with a brownish fill (114). It was without finds but sealed by colluvial Layer 88, the base of which showed charcoal flecking. It is unclear whether or not the feature was of archaeological significance.
- 5.1.17 *Feature 109.* This was a somewhat irregular feature whose edges were difficult to define. The fill (110), which was without finds, was distinctly browner than the fill of Ditch 107, suggesting that the feature might be non-archaeological. Although, it was overlain by colluvial Layer 88, it is considered possible that Feature 109 represented post-colluvial root disturbance which had penetrated into the trench at an angle.

5.2 **Other trenches on the higher ground (3041TT, 3042TT, 3044TT, 3045TT & 3076TT)**

Trench 3041TT

- 5.2.1 The stratigraphy comprised topsoil (69) over *c.* 0.5 m of colluvium (68), which became progressively cleaner and more clayey towards the base. This probably included an early Holocene component and overlay the drift geology which was a gravelly, reddish clay-silt.
- 5.2.2 There were no archaeological features. Three flint flakes and a fragment of burnt flint came from the upper part of Colluvium 68.

Trench 3042TT

- 5.2.3 A large modern feature filled with turf (possibly an old golf bunker) was encountered in the centre of the trench. The stratigraphy in the trench

comprised modern topsoil (96) over 0.25 m of 'dirty colluvium' (97). At the lower northern end of the trench this overlay a cleaner clayey silt (100), up to 0.2 m thick, which was probably an earlier colluvial deposit. The underlying drift geology was a bright yellow-brown silt with fine gravel.

- 5.2.4 A small possible feature (99) was found close to the trench edge. There were no finds from the trench.

Trench 3044TT

- 5.2.5 The trench occupied a slope which dropped from 90.46 m OD at the western end to 88.89 m OD at the eastern end. It was devoid of archaeological features or finds. Topsoil (93) overlay a relatively stony colluvium (94) and a thick deposit of largely stone-free colluvium (95). This reached a depth of nearly 0.8 m at the eastern end of the trench. The drift geology at the base of the trench (118) contained occasional patches of light grey (chalky?) silt with dark brown (manganese?) staining.

Trench 3045TT (Fig. 5)

- 5.2.6 This trench was on the highest part of the site. It was located slightly south of the surveyed trench pegs to avoid a known water-pipe, and then repositioned twice to avoid damaging further water-pipes and cables. Under the topsoil (73) and 0.2-0.25 m of 'dirty colluvium' (74) were encountered at least one, and possibly three, shallow ditches (87, 78 and 80). These cut the natural clay-silt (75 and 76).

- 5.2.7 *Ditch 87.* This was a shallow linear feature orientated east-west, 0.6 m wide and 0.2 m deep. It had a single fill (86) which comprised *c.* 25% pebbles, including a considerable number of burnt flints and some oak and hawthorn-like charcoal (Appendix 3 - Sample 1). Three struck flints were also recovered.

- 5.2.8 *Feature 78.* This was a possible shallow ditch orientated ENE-WSW, 1.6 m wide and 0.3 m deep with a broad, flat base. Its single fill (77) was a light orange-brown silt which contained three struck flints. It is unclear whether or not the feature was man-made and it is possible that it was a natural silted hollow.

- 5.2.9 *Feature 80.* This was a possible shallow ditch orientated NE-SW, approximately 1 m wide and 0.25 m deep with a slightly irregular profile. Its single light yellowish-brown fill (79) was without finds. It was unclear whether or not the feature was man-made.

Trench 3076TT

- 5.2.10 The trench was excavated to the drift geology (104) which was gravel at the slightly higher southern end and silty clay at the northern end. A ridge of 'dirty colluvium' (103) was left where a probable electric cable and metal water-pipe were encountered. Under the topsoil (102) the 'dirty colluvium' was up to 0.3 m thick. The northern three-quarters of the trench contained an

underlying cleaner colluvium (105). There were no archaeological features or finds.

5.3 Peripheral trenches (1915TT, 1916TT, 1917TT, 1918TT, 1920TT, 1921TT, 1922TT & 3046TT)

5.3.1 This group of trenches on the eastern part of the site and also one on the western side (Trench 3046TT) contained no identifiable archaeological features. The trenches were all on the hillslope and lower ground.

Trench 1915TT

5.3.2 The trench was machine-excavated to the drift geology (37). The main deposit of 'dirty colluvium' (36) was up to 0.6 m thick and overlay a reddish-brown colluvium (33) at the south-west end of the trench. A probable tree-root hole, or other relatively recent feature (34) was found cutting 36. It was without finds.

Trench 1916TT

5.3.3 The trench was positioned across a slight knoll, an artificial feature probably created from spoil from a nearby bunker. The main colluvial deposit (20) was about 0.5 m thick and overlain by a lens of gravely colluvium (31). The trench was generally machine excavated as far as a brighter reddish-brown clayey silt (116), which was probably an earlier colluvial layer. A few flints were collected from the spoil heap, probably all from Layer 20.

Trench 1917TT

5.3.4 This was a relatively shallow trench containing topsoil (38) over 0.3 m of 'dirty colluvium' (39). This overlay a more compact clayey silt (40), 0.2 m thick, which may have been an earlier colluvium or the interface with the underlying drift geology (41 and 42) which contained gravely bands. There were no archaeological features or finds.

Trench 1918TT

5.3.5 The 'dirty colluvium' (52) was about 0.3 m deep and overlay a more pebbly colluvium (53). This in turn overlay a reddish-brown silt (54) and clay (55) both of which were probably drift deposits. There were no archaeological features or finds.

Trench 1920 TT (Fig. 5)

5.3.6 Modern topsoil (21) and a gravely dump (22) overlay colluvial deposits 23, 24 and 26. These became progressively cleaner with depth. Layer 26, which formed a wedge at the deeper northern end, was notably sandy in texture. The colluvium reached a depth of about 0.7 m. The underlying deposit (117) was a brighter reddish-brown clay-silt which was probably an earlier colluvium. Some struck flint was recovered from colluvial Deposit 23 and flint from the spoil had almost certainly derived from this colluvium.

Trench 1921TT (Fig. 5)

5.3.7 A modern pit (12), containing brick rubble, was cut from beneath the topsoil (9). Colluvial deposits were machine-excavated to a depth of 1.2 m without the bottom being reached. The upper colluvium (13 and 14) unusually contained small chalk fragments. It was unclear from where these had derived, but possibly originated from disturbance to the geology further up the hill. These deposits overlay a chalk-free 'dirty colluvium' (15), and a more gravelly deposit (16). The lowest deposit examined was a firm clayey silt 17 which was very clean. This was not bottomed and the drift geology does not seem to have been reached in this trench. There were no archaeological features or finds.

Trench 1922TT

5.3.8 This, the easternmost trench of the evaluation, was positioned on a north-facing slope. Under the modern topsoil (1) was a succession of colluvial deposits. Layer 2 was rather greyish and pebbly and may have represented modern dumping. The underlying layer (3) was a 'dirty' reddish colluvium, and Layer 5 a cleaner orange-brown clayey silt with a pebbly lens (6) at its base. The lower colluvium (7) was darker and siltier. It was not bottomed, but exposed in a deeper sondage in the centre of the trench. The drift geology was encountered only in the southern 5 m of the trench. There were no archaeological features or finds.

Trench 3046TT

5.3.9 This, the westernmost trench of the evaluation, was positioned on a west-facing slope. It was excavated by machine to the drift geology (119). The depth of colluvium ranged from 0.1 m at the eastern end to more than 0.6 m at the western end, where the base of the colluvium was not reached. The 'dirty colluvium' (57) was similar to that found elsewhere and overlay a darker, sandier colluvium (58). There were no features or finds.

6 ARCHAEOLOGICAL CONTEXT INVENTORY

c/by = cut by

f/by = filled by

f/o = fill of

o/by = overlain by

U/S = unstratified

u/k = unknown

LBA = late Bronze Age

MBA = middle Bronze Age

modern = AD 1800 to present

Trench	Context	Type	Assoc.	Finds	No.	Date	Comments
1922	1	topsoil	over 2			modern	
1922	2	layer	over 3				colluvium
1922	3	layer	over 5				colluvium
1922	4	layer	u/k				root hole?
1922	5	layer	over 6				colluvium
1922	6	layer	over 7				colluvium
1922	7	layer	over 8				colluvium
1922	8	natural					gravel & silt
1921	9	topsoil	over 10				
1921	10	fill	f/o 12	not kept		modern	upper fill

Cobham Park Golf Course (ARC CGC 97) Evaluation Report

Trench	Context	Type	Assoc.	Finds	No.	Date	Comments
1921	11	fill	f/o 12	not kept		modern	
1921	12	pit	f/by 10 11			modern	
1921	13	layer	c/by 12			modern?	Dumping?
1921	14	layer	over 15				colluvium
1921	15	layer	over 16				colluvium
1921	16	layer	over 17				colluvium
1921	17	layer				early Holocene?	Colluvium
1916	18	topsoil	over 19	flint (U/S)	2	modern	
1916	19	layer	over 31	flint	5	modern?	possible dumping
1916	20	layer	under 31				colluvium
1920	21	topsoil	over 22	flint (U/S)	2	modern	
1920	22	layer	over 23			modern?	possible dumping
1920	23	layer	over 24 26	flint	3		colluvium
1920	24	layer	over 25				colluvium
1920	25	layer	over 117				colluvium
1920	26	layer	over 24				colluvium
1914	27	topsoil	over 28			modern	
1914	28	layer	over 60				colluvium
1914	29	layer	over 81				colluvium
1914	30	layer				early Holocene?	colluvium
1916	31	layer	over 20				colluvium
1915	32	topsoil	over 33			modern	
1915	33	layer	over 37				colluvium
1915	34	tree hole	cuts 36				
1915	35	fill	f/o 34				
1915	36	layer	over 33				colluvium
1915	37	natural					drift geology
1917	38	topsoil	over 39			modern	
1917	39	layer	over 40				colluvium
1917	40	natural?					drift geology?
1917	41	natural					drift geology
1917	42	natural					drift geology
1919	43	topsoil	over 44				
1919	44	layer	over 45	pot	1		colluvium
1919	45	layer	over 48				colluvium
1919	46	fill	f/o 47				w. charcoal flecks
1919	47	pit?	o/by 45?			Undated	poss. prehistoric
1919	48	natural silt	over 49				drift geology
1919	49	natural gravel					drift geology
1919	50	natural clay					drift geology
1918	51	topsoil	over 52			modern	
1918	52	layer	over 53				colluvium
1918	53	layer	over 54				colluvium?
1918	54	natural silt	over 55				drift geology
1918	55	natural clay					drift geology
3046	56	topsoil	over 57			modern	
3046	57	layer	over 58				colluvium?
3046	58	layer	over 59				colluvium
3046	59	natural					drift geology
1914	60	fill	f/o 62	pot flint	168 7	MBA	upper fill

Cobham Park Golf Course (ARC CGC 97) Evaluation Report

Trench	Context	Type	Assoc.	Finds	No.	Date	Comments
1914	61	fill	f/o 62	flint	8		lower fill
1914	62	ditch	under 28				E-W ditch
3040	63	ditch	under 66				E-W ditch
3040	64	fill	f/o 63	pot	2	MBA/LBA	lower fill
				flint	3		
				burnt flint	6		
3040	65	fill	f/o 63	pot	1	MBA/LBA	upper fill
				flint	2		
				burnt flint	2		
3040	66	layer	over 65				colluvium
3040	67	layer	over 72				pebbly colluvium
3041	68	layer	over 70	flint	3		colluvium
				burnt flint	1		
3041	69	topsoil	over 68			modern	
3041	70	natural					drift geology
3040	71	natural					drift geology
3040	72	topsoil	over 67 66	flint (U/S)	2	modern	
3045	73	topsoil	over 74			modern	
3045	74	layer	over 77 79 86				colluvium
3045	75	natural					drift geology
3045	76	natural					drift geology
3045	77	fill	f/o 78	flint	3		
3045	78	ditch?	under 74				poss. prehistoric
3045	79	fill	f/o 80				
3045	80	ditch?	under 74				
1914	81	fill	f/o 85	pot	4	LBA	upper fill
1914	82	fill	f/o 85				
1914	83	fill	f/o 85	pot	5	MBA	
				flint	2		
1914	84	fill	f/o 85				lowest fill
1914	85	ditch	under 29				E-W ditch
3045	86	fill	f/o 87	flint	3		
				burnt flint	32	sieved sample soil	
3045	87	ditch	under 74				E-W ditch
3043	88	layer	over 108 110 112	pot	1		colluvium
				flint	3		
				burnt flint	7		
				burnt stone	1		amorphous ?sandstone
3043	89	natural silt					drift geology
3043	90	layer	under 106				colluvium
3043	91	natural gravel	under 90				drift geology
3043	92	topsoil	over 106	flint	2		
3044	93	topsoil	over 94			modern	
3044	94	layer	over 95				colluvium
3044	95	layer	over 118				colluvium
3042	96	topsoil	over 97			modern	
3042	97	layer	over 98				colluvium
3042	98	fill	f/o 99				

Cobham Park Golf Course (ARC CGC 97) Evaluation Report

Trench	Context	Type	Assoc.	 Finds	No.	Date	Comments
3042	99	pit?	cuts 101				
3042	100	layer	over 101				colluvium
3042	101	natural silt					drift geology?
3076	102	topsoil	over 103				
3076	103	layer	over 105				colluvium
3076	104	natural					drift geology
3076	105	layer	over 104				colluvium
3043	106	layer	over 88 90				dumping?
3043	107	ditch	under 88				NW-SE ditch
3043	108	fill	f/o 107			sieved soil sample	
3043	109	tree hole?	under 88				
3043	110	fill	f/o 109				
3043	111	pit	under 88				prehistoric pit
3043	112	fill	f/o 111	pot	1	MBA/LBA	
				flint	2		
				burnt flint	8		
3043	113	post-hole?	under 88				
3043	114	fill	f/o 113				
3043	115	finds reference	under 88	pot	1	LBA	pottery reference
1916	116	natural	under 20			early Holocene?	colluvium
1920	117	natural	under 24			early Holocene?	colluvium
3044	118	natural	under 95				drift geology
3046	119	natural	under 57 58				drift geology

SECTION 2: STATEMENT OF IMPORTANCE

7 CONCLUSIONS

7.1 Extent of archaeological deposits (Fig. 6)

7.1.1 Archaeological features were found in a scatter of trenches in the central part of the site (Trenches 1914TT, 3040TT, 3043TT and 3045TT). The features comprised at least five (possibly up to seven) shallow ditches and at least one (possibly up to four) small pits/post-holes (Fig. 6). This suggests that occupation was limited to a spur of higher land about 250 m wide east-west and occupying more or less the full width of the evaluation corridor (70 m). It would presumably have extended further up the spur to the south. There was no evidence of archaeological activity on the eastern or western hill slopes or in the dry valley to the east.

7.1.2 There was no identifiable focus of activity. The density of archaeological features was light and some of the trenches even within the general area of occupation were without archaeological remains. It is possible, however, that some subtle features, such as post-holes, were not recognised.

7.2 Date and character

7.2.1 Pottery from Trenches 1914TT, 1919TT, 3040TT and 3043TT is dated to the middle and late Bronze Age (Appendix 1). The middle Bronze Age pottery was found in substantial quantities as an apparent dump of refuse in the top of Ditch 62 (Context 60) in Trench 1914TT. This assemblage of 168 sherds (3.3 kg) from a small number of vessels represents about 90% of the entire pottery assemblage from the site. Pottery of a similar date was also present in the lower fill of Ditch 85 (Context 83) in the same trench. Late Bronze Age pottery was found in smaller quantities in the upper fill of Ditch 85 (Context 81) and in Trench 3043TT. Pottery from Ditch 63 (Trench 3040TT) could be middle or late Bronze Age.

7.2.2 The nature of the archaeological remains indicates a domestic occupation although the precise form of this occupation is unclear. It would seem to be characterised by generally sparse shallow ditches and pits suggesting light settlement associated with enclosures. There was no identifiable focus to the occupation. However, it can be noted that the bulk of the cultural material in both the present and 1995 evaluations came in limited and apparently isolated concentrations which were fortuitously encountered. It is therefore possible that the impression of a light and unfocused occupation is misleading.

7.2.3 Struck flint was recovered from a number of trenches in the same general area of the site. The flintwork is not especially diagnostic and it is unclear how much was contemporary with the pottery. It is possible that most was residual from the late Neolithic/early Bronze Age periods. The sparse

flintwork need suggest no more than a background scatter, rather than earlier prehistoric occupation. However, it can be noted that a piercer and a serrated flake came from Feature 78 (Context 77) in Trench 3045TT, which yielded no diagnostically later prehistoric material, and it is possible that genuine earlier prehistoric features were present.

7.2.4 Small amounts of burnt flint was recovered from superficial layers and from several features. Large quantities came from Ditch 87 (Context 86) in Trench 3045TT. (Most were recovered from a sieved 40 litre soil sample and totals are not strictly comparable with the hand-retrieved finds). Some also came from Pit 111 (Trench 3043TT) and Ditch 63 (Trench 3040TT), where it was associated with Bronze Age pottery. It is possible that most of the burnt flint was associated with the later Bronze Age occupation, although it is frequently found in a wide variety of prehistoric contexts.

7.2.5 The 1995 evaluation trenches were not located. While the precise location of the deposit which contained the concentration of late Bronze Age / early Iron Age material is therefore unclear, there is no doubt that it would have been within the general area of activity defined in the current evaluation. It can be noted that the character of the 1995 pottery assemblage was slightly different to that of the most of the material from the current work (A Barclay, Appendix 1 para. 4.2), but it can be seen to fit within the late Bronze Age tradition. It included a “substantially complete” coarseware vessel. The associated finds included a spindlewhorl and a perforated clay slab, categories of material not encountered in the present evaluation.

7.2.6 No archaeological features were found to relate to the magnetic anomalies discovered by the geophysical survey, and it seems likely that these were the result of modern pipes and geological variations.

7.3 Environmental evidence

7.3.1 The environmental sampling programme indicates that charred plant remains are not abundant. Even where macroscopic remains were identifiable (Context 86, Ditch 87) they consisted only of charcoal of little archaeological interest or significance. It is possible that localised significant deposits do exist elsewhere on the site but are unlikely to be common.

7.3.2 Animal bones were not found on the site. It is possible that this is largely the result of soil conditions, although fragments of large bones might be expected to survive under mildly acidic conditions. Bones may therefore be present, albeit sparsely and in a degraded condition, elsewhere on the site.

7.3.3 Terrestrial snails were absent and there appears to be no potential for their survival on the site.

8 IMPORTANCE OF ARCHAEOLOGICAL DEPOSITS

8.1 Survival/Condition

- 8.1.1 The earliest estate map of Cobham Park (1641) suggests that the site was within the original deer park. The date of the park's origin is obscure and it is not documented before the mid-16th century. However, it is thought likely to have been created in the later medieval period or earlier (Tatton-Brown 1991). The site itself appears to have been largely wooded in 1641. The land appears to have been little disturbed in historical times apart from the creation of the golf course in 1919. The evaluation has suggested that, with the obvious local exceptions such as bunkers, this has resulted in little other than superficial disturbance. It is notable that, beneath the topsoil, no finds were recovered from colluvial deposits which post-date the later Bronze Age.
- 8.1.2 The ubiquitous presence of moisture-retentive silty patches in the 'dirty colluvium' has been mentioned (para. 4.2.3) and may be the result of tree-root disturbances. It is possible that these originated when the land was wooded in the 17th century and earlier. If so, it would indicate that the colluvial accumulation predates this woodland.
- 8.1.3 It is unclear whether the site has ever been ploughed. Its distance from the modern village of Cobham (over 2 km), a possible deserted medieval village (just under 1 km to the south-west [SMR information quoted in Pre-Construct Archaeology 1996]) and Cobham Park Roman villa (just under 1 km to the west), may suggest that the land has always been peripheral to settlement in the historical period and this would be confirmed by the lack of finds. All archaeological features, even those on the higher part of the site, were sealed by a layer which has been termed 'dirty colluvium'. Although this layer could be reasonably clearly defined in all trenches, it tended to have a diffuse and sometimes uneven interface with the underlying deposits, suggesting that soil boundaries had derived through natural weathering rather than plough-truncation.
- 8.1.4 The only places where plough-truncation looked likely was where the 'dirty colluvium' was unusually gravelly, reflecting the underlying geology. It was thought possible that this had resulted from ploughing up gravel, although this need not be the case, and natural weathering may have been responsible. Gravel within the topsoil and in bands just under the topsoil is thought likely to have been the result of recent landscaping. These deposits overlay the much more gravel-free colluvium and are unlikely to have been deposited by plough-action.
- 8.1.5 While plough-truncation of archaeological deposits seems to be unlikely, or at least not serious, on this site, there was no clear evidence of buried soils or positive features such as banks associated with the later Bronze Age occupation. It is possible that all such deposits had been eroded and weathered out, although it cannot be assumed that they are not present in some subtle form, perhaps in localised areas of the site.

- 8.1.6 The reference to pottery coming from a 'prehistoric land surface' in the report of the 1995 evaluation (Pre-Construct Archaeology 1996, para. 5.15.1) needs to be questioned in the light of the current evaluation. Apart from the unlikelihood of a substantial part of a ceramic vessel surviving within a palaeosol, the experience of the present work indicates that concentrations of cultural material occur in features whose edges are extremely difficult to detect, even under reasonably favourable soil conditions. A reinterpretation of the 1995 evidence would therefore suggest that the finds came from a feature such as a pit or ditch whose edges were effectively invisible. Alternatively, it is possible that the deposit was in a larger hollow such as a house-platform, although such features were not detected in the present evaluation.
- 8.1.7 In conclusion, the site seems to have been little disturbed by ploughing or other disturbances in the historical period and all features sealed by colluvium are of potential archaeological significance. Despite this, the site did not appear to be exceptionally well-preserved, and there was no unequivocal evidence for a buried palaeosol or upstanding features. However, it would be unwise on the present evidence to suggest that none exist, and it is clear, particularly from the 1995 evaluation, that there are occasional exceptional deposits of cultural material which are unusual to find in a Bronze Age domestic context.

8.2 Period

- 8.2.1 The site is broadly datable to the middle and later Bronze Age (between 1700 and 700 cal BC). It is unclear at present whether two or more discrete phases of occupation are represented, or whether there was a single phase of occupation spanning the middle of this date range. It is significant that there appears to have been no later occupation on the site, and that disturbances by later activity, including ploughing, appears to be minimal.

8.3 Rarity

- 8.3.1 Material of the later Bronze Age is increasingly being recorded in northern Kent, although the evidence is often fragmentary and the sites themselves difficult to assess. Cultural remains are often sparse and recognised, although not fully understood, through small-scale evaluations. Evaluation work by the OAU in connection with CTRL has recorded late and possibly middle Bronze Age pits and gullies at Singlewell (URL 1997a), late Bronze Age / early Iron Age boundary? features and a pit at White Horse Stone (URL 1997b), and dispersed Bronze Age activity at Hollingbourne (URL 1996b). Late Bronze Age pottery was also recovered from Boxley (URL 1997c) and the Tollgate area, Gravesham (URL 1995) probably indicating nearby activity. Thus, while domestic material of the general middle to late Bronze Age timespan is undoubtedly more common than was thought a decade ago (cf. Drewett *et al* 1988, Champion and Overly 1989), the sites yielding this material are not well understood even in terms of their basic dating.

Published excavations of sites of this period are rare particularly east of the Medway gap. Later Bronze Age settlements from Gravesend (Mudd 1994) and Hayes Common (Philp 1973) have been reported, and there are a few sites of similar date from east Kent (Macpherson-Grant 1992).

- 8.3.2 The site at Cobham Park Golf Course may not be a particularly rare type of site, but the nature of later Bronze Age occupation in northern Kent is so little understood, it is certainly of regional archaeological significance.

8.4 Fragility/vulnerability

- 8.4.1 The archaeological evidence is fragile, but under the current land use archaeological deposits are not particularly vulnerable. According to the current CTRL engineering proposals the area of archaeological interest as defined in the evaluation would be lost to permanent landtake for the railway formation.

8.5 Diversity

- 8.5.1 The archaeology on the site appears to be limited both in its chronological range and in the nature of the evidence. Features appear to be limited to shallow ditches and pits, while pottery and flintwork were the only cultural materials encountered.

8.6 Documentation

- 8.6.1 The 1995 evaluation by Pre-Construct Archaeology has added weight to the indications from the present work that some exceptional deposits of archaeological material exist on the site. Aerial photographs and geophysical survey have proved unsuccessful in enhancing the picture of the site, due to the subtleties of the archaeological evidence and the unresponsiveness of the geology.

8.7 Group value

- 8.7.1 Cobham Park Golf Course is one of a number of sites with evidence of later Bronze Age activity on the line of the Rail Link and its value would be enhanced when examined in this local and regional setting. In this context, it is possibly a relatively well-preserved site and uncomplicated by later activity with the attendant difficulties of deposit truncation and finds residuality.

8.8 Potential

- 8.8.1 The site appears to have potential as a relatively well-preserved sample of a later Bronze Age settlement, of a type whose nature is at present poorly understood in Kent. This potential is somewhat offset by the generally sparse distribution and limited range of the cultural evidence, together with the difficulty of defining archaeological features in this type of geology. It may

be a type of site like the South Downs late Bronze Age farmsteads (eg. Black Patch, Itford Hill) which had a limited range of features consisting of hut platforms, ring-post houses and enclosures (Drewett *et al.* 1988, 96-109).

- 8.8.2 The economic and environmental potential of the site would appear to be limited as carbonised remains were not shown to be significant, and snails and animal bones absent.
- 8.8.3 Despite a general sparseness of cultural remains, it is evident that exceptional deposits of material exist within the site. Pottery from such assemblages would be of regional significance, particularly if supported by radiocarbon dating. There is also the potential for localised deposits of other high-quality cultural and environmental evidence and these would also be of regional importance.

9 BIBLIOGRAPHY

- | | | |
|-----------------------------------|------|---|
| Barclay A J | 1994 | The Bronze Age Pottery, in Mudd A 'The excavation of a later Bronze Age site at Coldharbour Road, Northfleet'. |
| Champion T & Overy C | 1989 | <i>Archaeology in Kent</i> . A report compiled for the Historic Buildings and Monuments Commission. |
| Drewett P, Rudling D & Gardiner M | 1988 | <i>The South-East to AD 1000</i> . |
| Macpherson-Grant N | 1992 | A review of the Late Bronze Age Pottery from East Kent <i>Canterbury's Archaeology</i> , 55-63. Canterbury Archaeological Trust. |
| Macpherson-Grant N | 1996 | The Late Bronze Age/Early Iron Age transitional pottery from the Cobham and Rochester Golf Course 1995 (for Pre-Construct Archaeology 1996). |
| Mudd A | 1994 | The excavation of a later Bronze Age site at Coldharbour Road, Northfleet <i>Arch. Cant.</i> cxiv , 363-410. |
| Pre-Construct Archaeology | 1996 | 'An Archaeological Field Evaluation at the Rochester and Cobham Golf Club, near Cobham, Kent'. Report commissioned by Rochester and Cobham Golf Club. |
| Rayner D H | 1981 | <i>The Stratigraphy of the British Isles</i> . CUP. |
| Shepherd W | 1972 | <i>Flint; its origin and properties</i> . Faber & Faber. |
| Tatton-Brown T | 1991 | 'Cobham Hall; a new survey'. Report commissioned by |

Cobham Park School (2nd draft).

URL 1994 *Channel Tunnel Rail Link: Assessment of Historic and Cultural Effects. Final Report. (4 vols.).*

URL 1995 *Tollgate Cropmark Complex, Gravesham, Kent. Archaeological Evaluation Report.*

URL 1996a *Geophysical Surveys. Contract No. 194/580.*

URL 1996b *Land south of Snarkhurst Wood, Hollingbourne, Kent. Archaeological Evaluation Report.*

URL 1997a *West of Church Road, Singlewell, Kent. Archaeological Evaluation Report.*

URL 1997b *White Horse Stone, Aylesford, Kent. Archaeological Evaluation Report.*

URL 1997c *West of Boxley Road, Boxley, Kent. Archaeological Evaluation Report.*

Wilkinson D (ed) 1992 *Oxford Archaeological Unit Field Manual (unpub.)*

APPENDIX 1

MIDDLE AND LATE BRONZE AGE POTTERY

by Alistair Barclay, Oxford Archaeological Unit

1 Introduction

1.1 The evaluation produced a small assemblage (184 sherds, 3848g) that includes material of middle and late Bronze Age. The assemblage contains a significant group of Deverel-Rimbury type pottery of middle Bronze Age date.

2 Methodology

2.1 A rapid assessment and quantification (number of sherds, weight) of the evaluated assemblage was undertaken. No detailed record was made of fabrics during the assessment, although fabric group (eg. flint-tempered) was used as a broad chronological indicator for the prehistoric material. Given that there is a possible continuum between the flint-tempered fabrics of the later Bronze Age it was decided to use sherd wall thickness as a crude chronological indicator (cf. Macpherson-Grant 1996). The incidence of featured and/or decorated sherds was noted. Table 1 gives a correlation of the assemblage by fabric, wall sherd thickness and context. Table 2 gives a correlation of number and weight of sherds by period and date.

3 Character of assemblage

Middle Bronze Age

3.1 The middle Bronze Age pottery represents the bulk of the assemblage by weight. Most of this material was recovered from Context 60 but some also came from 81 (see Tables 1-2). The sherds from Context 60 are nearly all relatively thick-walled (between 10-20 mm) and the fabrics are tempered either with coarse calcined and crushed flint grit or, more rarely flint grit and grog. Similar fabrics occurred at Coldharbour Road, Gravesend (Barclay 1994, 386). Featured sherds include simple rims, slight shoulders, horizontal applied cordons, one example of an horizontal perforated lug and a small number of heavy base sherds. Nearly all of the material is plain with the exception of one sherd with ?finger-tip impressions. Most, if not all, of the sherds appear to come from Deverel-Rimbury Bucket Urns of sub-biconical form and somewhat similar material comes from Context 83. In addition some of the sherd surfaces appeared to have carbonised residues indicating use as cooking vessels. The average sherd size is recorded as approximately 20 g and given that the sherd count includes fresh breaks it is likely to be much higher. This, together with the fact that the sherds belong to only a few vessels, can be taken as an indicator of the close proximity of contemporary settlement.

- 3.2 In terms of date this material approximately belongs somewhere in the interval 1750-1150 cal BC. Comparable published assemblages in this part of north-west Kent are rare (see discussion below).

Indeterminate later Bronze Age

- 3.3 A number of plain sherds could be of either early or middle Bronze Age date. This includes material from Contexts 64, 65 and 112.

Late Bronze Age

- 3.4 The late Bronze Age pottery is represented by three featured sherds (Contexts 81, 88 and 115) and possibly a number of thin-walled (< 10 mm thick) body sherds in finer flint-tempered fabrics. A plain upright rim (Context 81) is from a simple jar of probable tub form (cf. Dolland's Moor, Folkstone - Macpherson- Grant 1992, fig 4). Such vessels are found in both transitional mid-late Bronze Age assemblages as well as those of the late Bronze Age (Barclay 1994, 390). A shoulder sherd from Context 88 is probably from a late Bronze Age jar or bowl. The cabled rim sherd from Context 115 is probably from a slack-shouldered jar and is a typical late Bronze Age form that can be paralleled at any number of sites in SE England. Both sherds have close parallels among the material recovered in 1995 (Macpherson-Grant 1996). Other thin-walled plain body sherds could be of either middle or late Bronze Age date.

Indeterminate later prehistoric

- 3.5 A small (1 g) and abraded sherd of pottery from Context 44 is in a fine flint and sand-tempered fabric. This is the only sherd in this fabric and while it could be contemporary with the other late Bronze Age material it could also be of early Iron Age date.

4 Discussion

- 4.1 The evaluation produced ceramic material of at least two date ranges: middle Bronze Age and late Bronze Age. The middle Bronze Age material is likely to date from 1750-1150 BC, while the later material would date from 1150-700 BC.

Comparison with the 1995 assemblage

- 4.2 The overall character of this assemblage is very different from the one recovered in 1995 from the Pre-Construct Archaeology evaluation (Macpherson-Grant 1996). There is no reason to doubt the identification of the latter as a late Bronze Age assemblage and there is a noticeable difference between the illustrated forms from the 1995 evaluation and the bulk of the present material. Most marked is the difference found between the relative sherd wall-thickness for the two sites (see above, Table 1 and Macpherson-Grant 1996). However, there is some overlap between these assemblages as two of the featured sherds from the 1997 evaluation can be closely paralleled amongst the much larger assemblage recovered in 1995.

General discussion

- 4.3 The 1997 evaluation extends the chronological range of material recovered in 1995 to the mid or mid/late Bronze Age transition, while it also produced further material of contemporary date.
- 4.4 The middle Bronze Age pottery is of some importance given the general lack of contemporary published assemblages from settlement sites in this area of Kent. Comparable material has been excavated from the OAU excavations at Gravesend (Mudd 1994) and from further west at Hayes Common (Philp 1973). Parallels can also be sought with the assemblages from the east of Kent summarised by Macpherson-Grant (1992). The late Bronze Age pottery is only represented by a few sherds. Tentatively it can be suggested that this material belongs to the earlier Plain Ware phase of the late Bronze Age rather than the Decorated Ware phase which marks the transition to the early Iron Age. The small late Bronze Age assemblage is an important addition to the increasing number of sites recorded from the northern part of Kent.

Table 1: Correlation of fabrics and wall-thickness by context.

Fabric inclusions	Flint				Flint & grog		Flint and sand	Total
	0-3 mm		>3 mm		> 3 mm		0-3 mm	
Sherd wall thickness	< 10 mm	> 10 mm	< 10 mm	> 10 mm	< 10 mm	> 10 mm	< 10 mm	
44 1919TT							1, 1g	1, 1g
60 1914TT				157, 3189g		11,377g		168, 3266g
64 3040TT			1, 17g	1, 5g				2, 22g
65 3040TT	1, 11g							1, 11g
81 1914TT	1, 17g			3, 29g				4, 46g
83 1914TT				5, 448g				5, 448g
88 3043TT	1, 23g							1, 23g
112 3043TT				1, 5g				1, 5g
115 3043TT	1, 26g							1, 26g
Total	4, 77g		1, 17g	167, 3676g		11, 77g	1, 1g	184, 3848g

Table 2: Correlation of all pottery by date and context

	Middle Bronze Age	Late Bronze Age	Indeterminate middle-late Bronze Age	Indeterminate later Prehistoric	Total
44 1919TT				1, 1g	1, 1g
60 1914TT	168, 3266g				168, 3266g
64 3040TT			2, 22g		2, 22g

65	3040TT			1, 11g		1, 11g
81	1914TT		4, 46g			4, 46g
83	1914TT	5, 448g				5, 448g
88	3043TT		1, 23g			1, 23g
112	3043TT			1, 5g		1, 5g
115	3043TT		1, 26g			1, 26g
Total		173, 3714g	6, 95g	4, 38g	1, 1g	184, 3848g

APPENDIX 2

THE FLINT

by Theresa Durden, Oxford Archaeological Unit

1 Introduction

1.1 A total of 112 pieces of flint was recovered from the evaluation, including 56 pieces/1340 g of burnt unworked flint. The struck flint assemblage therefore amounted to 56 pieces. The flint was collected from six evaluation trenches from a total of 13 contexts, with 10 pieces unstratified and attributable to trench only (see Table 4 below). Context 86 contained a higher number of pieces, as 26 pieces of flint were recovered from an environmental sample (Sample 1) which was sieved.

2 Methodology

2.1 The flint was catalogued according to broad artefact/debitage type (Table 3), general condition noted and dating attempted where possible. Unworked burnt flint was quantified by piece and weighed.

3 Raw material

3.1 The flint varies in colour and translucency and ranges through various shades of grey and brown, some being mottled. The cortex is generally thin and worn and pale brown in colour. It is likely this is flint derived from the gravels or clay-with-flints deposits which are found locally. Some chalk flint, darker grey with a white cortex, were also present. The chip from Ditch Fill 61 was struck from a piece of Bullhead flint. This is a distinctive flint recognisable by a thin orange band present under a dark grey or greenish cortex. This flint is often found in Sussex, Kent and south of London in the Bullhead Bed (Rayner 1981, 357; Shepherd 1972, 114). All struck flint was in fresh condition and most of the burnt flint was grey/white and heat-cracked.

4 The assemblage

Table 3: Assemblage composition

flakes	blades	blade-like flakes	chips	cores	retouched	total
34	1	4	1	4	12	56

- 4.1 The flint recovered was spread fairly evenly between the six trenches (see Table 4). The assemblage consisted mostly of broad flakes, with only one blade and four blade-like flakes present. Two flakes also bore dorsal blade scars. A mix of hard and soft hammers were used and broad, plain flake butts dominated, although some narrow butts were also present. One core face/edge rejuvenation flake was found in Trench 3040TT, Context 65, the upper fill of a ditch.
- 4.2 The four cores recovered consisted of three multi-platform flake cores, two from Trench 3045TT, Context 86 (ditch fill) and one from Trench 3043TT, Context 88 (colluvial layer), and one struck nodule from Trench 1914TT, Context 61 (ditch fill). All of these cores were haphazardly worked, poorly maintained and showed mostly short, squat removals.
- 4.3 Of the 12 retouched pieces, five were simple edge-retouched broad flakes. Other simple flake tools include a piercer from Ditch Fill 77 in Trench 3045TT, and a notched or waisted piece from Ditch Fill 61 in Trench 1914TT. Three serrated flakes were recovered: from modern Layer 19 in Trench 1916TT, Ditch Fill 77 in Trench 3045TT, and unstratified in Trench 1920TT. The example from Context 19 bore slight edge gloss. Two scrapers were also found; an end scraper from Ditch Fill 86 in Trench 3045TT and an end-and-side scraper on a broad, thin flake from Trench 1920TT (unstratified).

5 Discussion

- 5.1 There are few diagnostic pieces in the assemblage, though the presence of irregular flake cores and broad flakes would indicate a broad later Neolithic/earlier Bronze Age date. The small amount of blade-like material may be of Mesolithic/earlier Neolithic date. Serrated flakes are found in assemblages from the Mesolithic through to the early Bronze Age. In some instances, pottery was found in the same contexts as flint, notably in Context 60, which contained a considerable quantity of Middle Bronze Age sherds. It is possible that some of the flintwork on the site could be as late as this, though most of the material is likely to be earlier. It should be noted that the flint retrieved from machine-excavated layers undoubtedly represents a small sample of the material present in the topsoil and colluvium and is probably biased towards the better-worked, more easily identifiable pieces. There was no pottery earlier than the Middle Bronze Age, so the struck flint would appear to predate the features encountered in the evaluation, and should be considered as residual in these contexts. It should be noted that the flint recovered from the 1995 evaluation (Pre-Construct Archaeology, 1996) was attributed to the Middle-Late Neolithic and was also, therefore, considered

residual. The low frequencies of flints in the trenches suggests in any case that the material represents part of a general spread of background activity rather than a specific occupation or working area. The burnt flint, which is more likely to be indicative of occupation, was found in particular concentrations in some features (especially Ditch 87 in Trench 3045TT) as well as in colluvium. It is likely to be associated with the later Bronze Age occupation indicated by the pottery, although it can occur with any prehistoric activity.

Table 4: Flint frequencies per context

bu = burnt unworked flint

Trench	Context	No. of pieces
1914	60	7
	61	8
	83	2
1916	19	5
	u/s	6
1920	23	3
	u/s	2
3040	64	9 (inc 6 bu)
	65	4 (inc 2 bu)
	68	4 (inc 1 bu)
3043	88	10 (inc 7 bu)
	92	2
	112	10 (inc 8 bu)
3045	77	3

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	86	35 (inc 32 bu)
	u/s	2

APPENDIX 3

ENVIRONMENTAL INDICATORS

by Greg Campbell, Oxford Archaeological Unit, and Ruth Pelling, Oxford University Museum

1 Introduction and Methods

- 1.1 In order to assess the preservation of the various environmental indicators 40 litre samples from two ditch fills were collected. These were from Contexts 86 (Ditch 87, Trench 3045TT) and 108 (Ditch 107, Trench 3043TT).
- 1.2 Each was processed to extract the charred plant remains by flotation in a modified Siraf flotation machine, with the sample held on a 0.5 mm mesh and the flot collected on a 0.25 mm mesh. The mineral residue that remained following the processing was washed through a stack of 10 mm and 4 mm sieves. The coarse residue fraction (<10 mm) was sorted for bones and artefacts. The finest fraction (4-0.5 mm) was scanned to determine whether recovery of the charred material by flotation was satisfactory. No sample required bucket-flotation of the finest fraction.

2 Results

- 2.1 The flots were assessed by sieving through a stack of 4, 2, 1 and 0.3 mm sieves and then scanning each portion rapidly for charred remains under x10 and x20 binocular magnification.
- 2.2 Both flots were very small. Wood charcoal made up the bulk of the charred remains, but was badly preserved and broken up into small fragments. Only that from Context 86 contained identifiable charcoal. This was from oak (*Quercus*), with some hawthorn-like wood (Pomoideae).
- 2.3 Animal bone was absent from the samples, confirming the impression from the hand-retrieved finds that this material is either not present or not preserved.
- 2.4 Land and fresh-water snails were absent from the deposits.

3 Conclusions

- 3.1 It would seem, on the basis of these samples, that charred remains are not well-preserved on the site. Both the samples were from ditch fills, and it is possible that preservation may be better in other features.